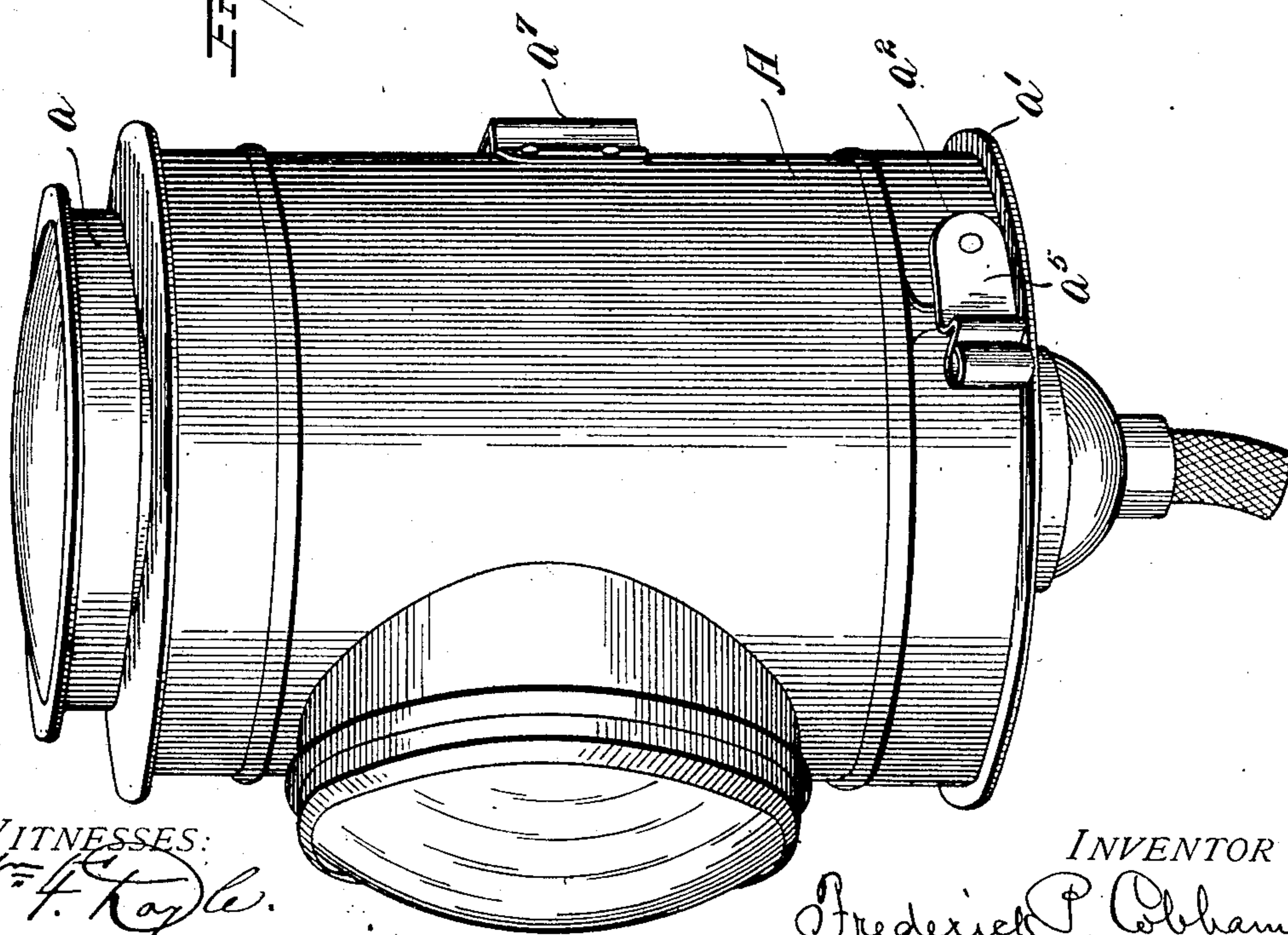
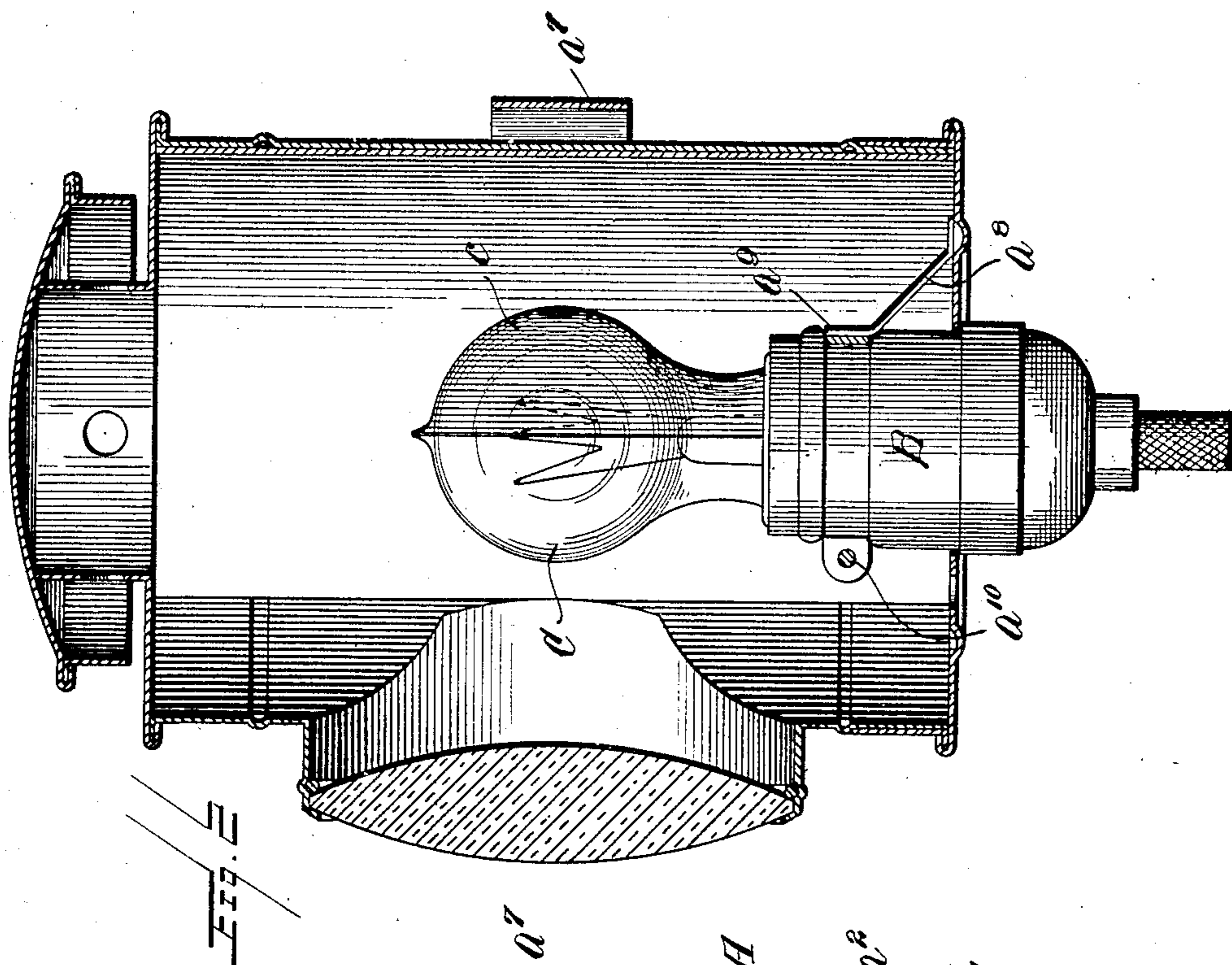


No. 869,550.

PATENTED OCT. 29, 1907.

F. P. COBHAM.
ELECTRIC LANTERN.
APPLICATION FILED JAN. 3, 1907.

2 SHEETS—SHEET 1.



WITNESSES:


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J. K. Moore

INVENTOR

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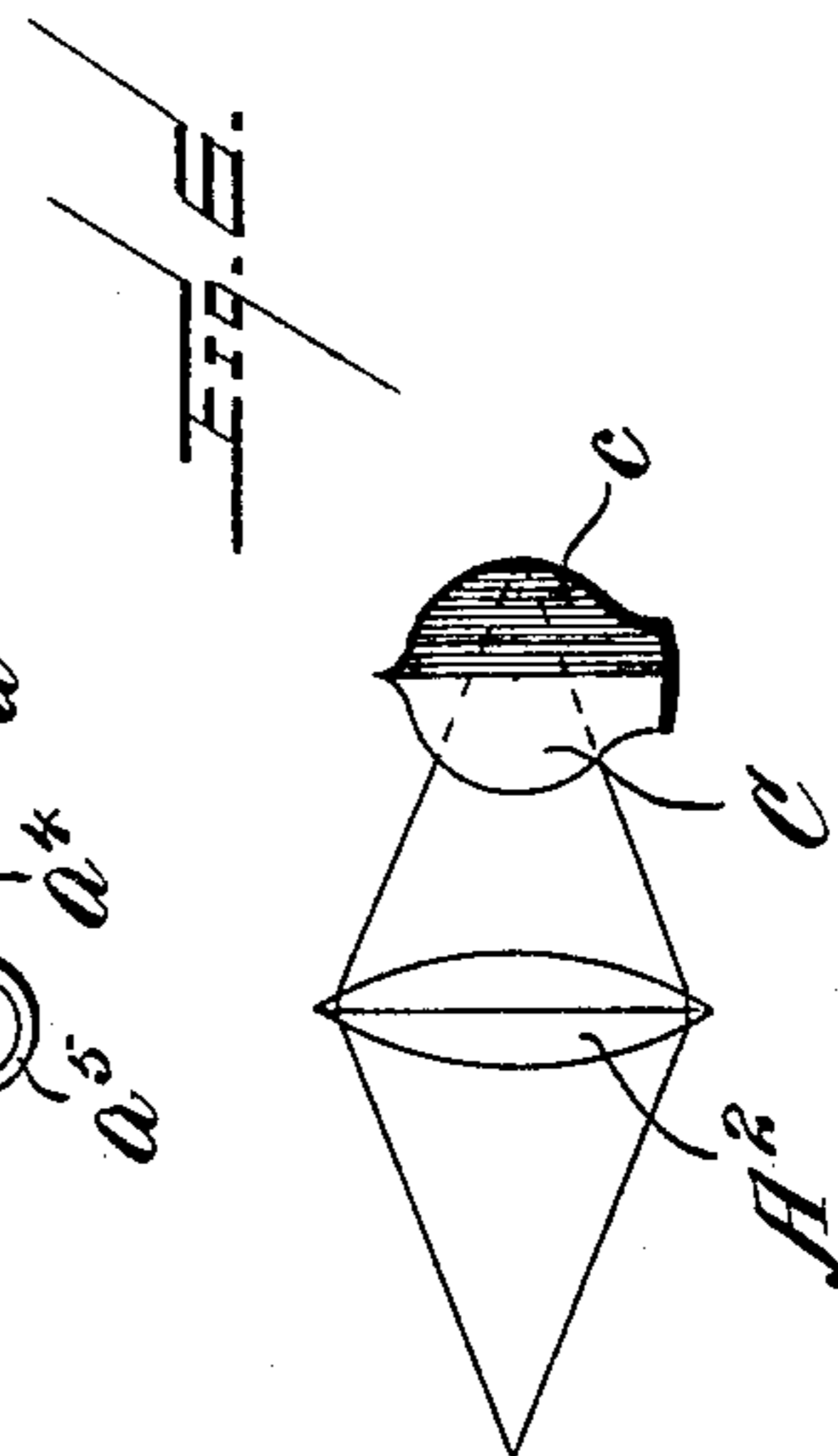
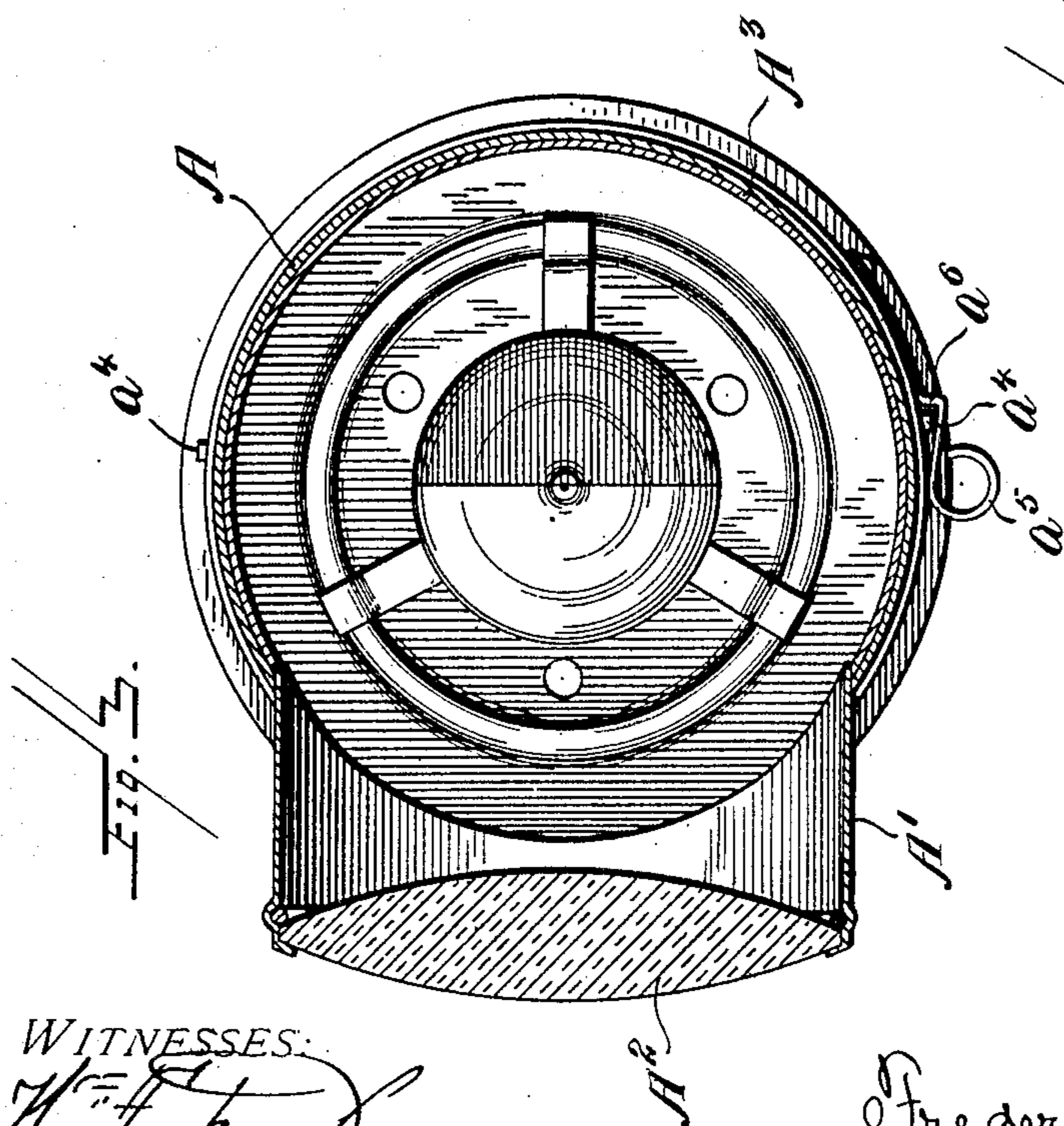
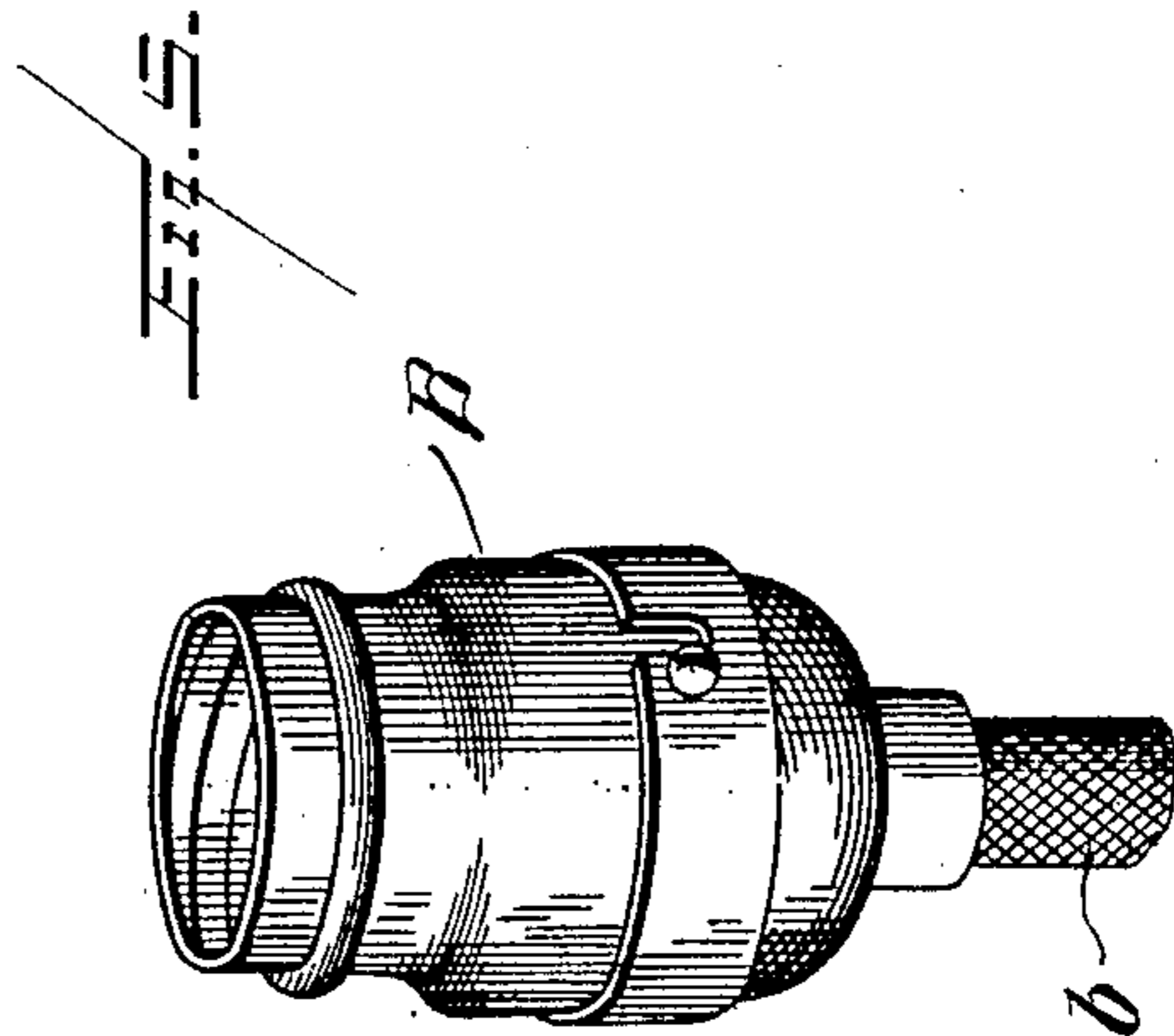
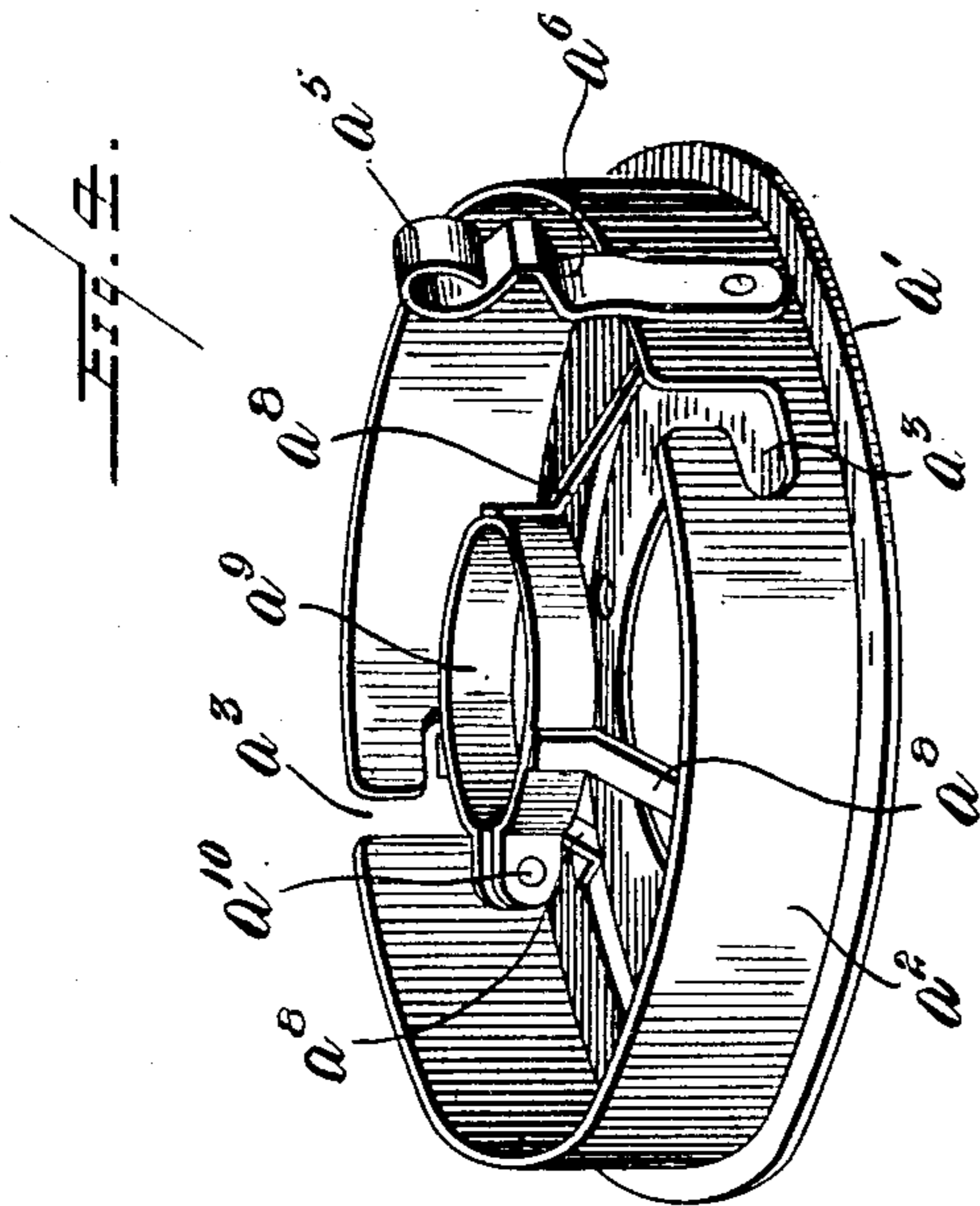
BY  Attorney

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

FREDERICK P. COBHAM, OF JAMESTOWN, NEW YORK, ASSIGNOR OF ONE-HALF TO
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ELECTRIC LANTERN.

No. 869,550.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed January 3, 1907. Serial No. 350,652.

To all whom it may concern:

Be it known that I, FREDERICK P. COBHAM, a citizen of the United States, residing at Jamestown, in the county of Chautauqua and State of New York, have in-
5 vented certain new and useful Improvements in Electric Lanterns; 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.

10 My invention consists in the novel features herein-after described, reference being had to the accompanying drawings which illustrate one form in which I have contemplated embodying my invention and said invention is fully disclosed in the following description
15 and claims.

Referring to the drawings, Figure 1 is a perspective view of my improved electric railway car signal and hand lantern. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view of the same.
20 Fig. 4 is a perspective view of the bottom of the lantern detached. Fig. 5 is a perspective view of the lamp socket detached. Fig. 6 is a diagrammatic view representing the relations of the lamp reflector and lens.

The object of my invention is to provide a simple and
25 cheap yet powerful lantern for use particularly in connection with electric cars, which may be attached to the car body and used as a signal or rear light, and in case of an accident may be detached from the car and used in the hand for signaling purposes or to throw
30 light above, under or around the car to assist in making repairs or for any other purposes for which a light may be desired.

In carrying out my invention I make a lamp body A, preferably of cylindrical shape having a permanent top
35 a and a removable bottom a', the latter being provided with an annular flange a² adapted to slip over the lower portion of the lamp body, and provided with bayonet slots a³ to engage pins a⁴ on the body A to facilitate its quick removal, and yet secure the bottom in position,
40 and I also provide the bottom with a latch a⁵, pivoted to flange a² (see Figs. 1, 3 and 4) having a shoulder a⁶ to engage one of the pins a⁴ and prevent the accidental disengagement of the bottom. The body A is also provided with means for attaching it to a car, or other sup-
45 port, in this instance a metal strap a⁷, constructed to slip over a bracket secured to the supporting part. The body A is also provided on its front side opposite the strap a⁷ with a circular hood A' of usual form to support in vertical position a high power lens A². In order to
50 give the fullest possible reflection of the light rays which may be emitted within the body A, I prefer to have its entire interior vertically disposed surface bright, which may be accomplished by plating the interior surface of the body A with nickel or other suitable

metal and burnishing the same, but I prefer to place 55 within the body A a sheet A³ of metal curved to fit within the body of the lamp and having its inner surface burnished and preferably plated with nickel or other metal taking a high polish. This reflecting sheet A³ may be slipped out of the body A for the purpose of 60 polishing it when desired.

The bottom a is provided with means for holding an electric lamp, of the incandescent type, and permitting the lamp to be rotated within such holding means. In this instance I have shown the bottom a provided 65 with brackets a⁸ permanently secured thereto as by riveting or otherwise, and supporting a divided ring clamp a⁹, the ends of which are provided with a clamping screw a¹⁰ to tighten it upon a lamp socket, B, of ordinary construction, shown in detail in Fig. 5, so as 70 to hold the socket which extends partly within and partly without the lantern body, by frictional contact firmly in position, but permitting the socket to be turned when necessary to secure the proper position of the lamp. 75

C represents the lamp proper which is screwed into the socket B in the usual manner, and is provided with a reflector permanently applied thereto. The globe of the lamp is preferably of substantially spherical 80 form and about one half of the globe is coated with suitable mirroring material, and backed as at c by the well known processes used in making mirrors, the materials being applied directly to the globe of the lamp, and producing a concave reflector immediately in rear of the filament of the lamp. After the lamp is inserted 85 in the lamp socket, the bottom a is applied to the lamp, and the socket B is turned so as to bring the reflecting portion c at the rear of the lamp, and in line with the lens A². The socket B is provided with the usual connecting insulating corded wire b, of any desired length, 90 terminating in a suitable plug or connector (not shown) by means of which connection may be made with the wiring of the car for supplying light or other suitable source of electrical current.

It is obvious that the light from the lamp will be 95 concentrated by the reflecting portion c of the globe, upon the lens, and thus a very intense light is given forth which will be projected a very considerable distance. The light emitted laterally will also be caught by the surface of the auxiliary reflector A³ and thus 100 practically all the light rays of the lamp will be projected from the lantern.

When used with electric cars, this lamp is intended to be connected to any desired part of the car, and may be used as a rear, side or front signal light if desired, 105 or its use may be confined to emergency cases. In case of an accident the lantern may be removed and used in the hand as a signal lamp at considerable dis-

tance from the car, and may also be used to throw a strong light on top of or beneath or around the car to facilitate emergency repairs, etc.

It is important that the lamp socket B should be
 5 rotatively supported in the lantern, as the threading of the connecting portions of electric lamps which enters the socket is not absolutely uniform and if the socket were rigidly supported a lamp might be screwed in and when in final position the reflecting portion
 10 might and very likely would not be in the proper position with respect to the lens. By my construction the correct position of the lamp is insured.

While this lantern is adapted particularly for use in connection with railway cars provided with elec-
 15 tric power for lighting it may also be used in other places, as around stations, in and around buildings, etc., wherever its use is found convenient or desirable.

What I claim and desire to secure by Letters Patent is:--

20 1. In an electric lantern, the combination with the cylindrical main body open at the bottom, and provided at one side with a lens aperture and a lens fitted therein, of a removable bottom having an annular flange for engaging the main body, and provided with a clamping ring
 25 rigidly secured thereto, for adjustably holding an incan-

descent lamp socket, said bottom being provided with an aperture below said socket, substantially as described.

2. In an electric lantern, the combination with the main body, of a removable bottom, provided with a central aperture to permit the insertion of an electric lamp
 30 socket, a horizontal clamping ring located above said aperture, supports connected to said bottom, and to said clamping ring, and means for detachably securing said bottom to the main body of the lantern, substantially as described. 35

3. In an electric lantern, the combination with the cylindrical main body, provided with a lens aperture in one side, and a lens fitted in said aperture, of a curved reflector fitted within said main body, in rear of said lens, a removable bottom for said main body provided with a
 40 central aperture for the passage of a lamp socket there-through, a clamping ring located above said aperture, supports secured to said ring and to the main body, a lamp socket frictionally held by said ring and having portions
 45 extending through said aperture, and an incandescent electric lamp fitted in said socket, and having a portion of its globe provided with reflecting material, substantially as described.

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

FREDERICK P. COBHAM.

Witnesses:

M. LAVERN CLAPP

G. H. WADE.