

(No Model.)

A. H. MULLIKEN.

SIGNAL LANTERN.

No. 386,715.

Patented July 24, 1888.

Fig. 1.

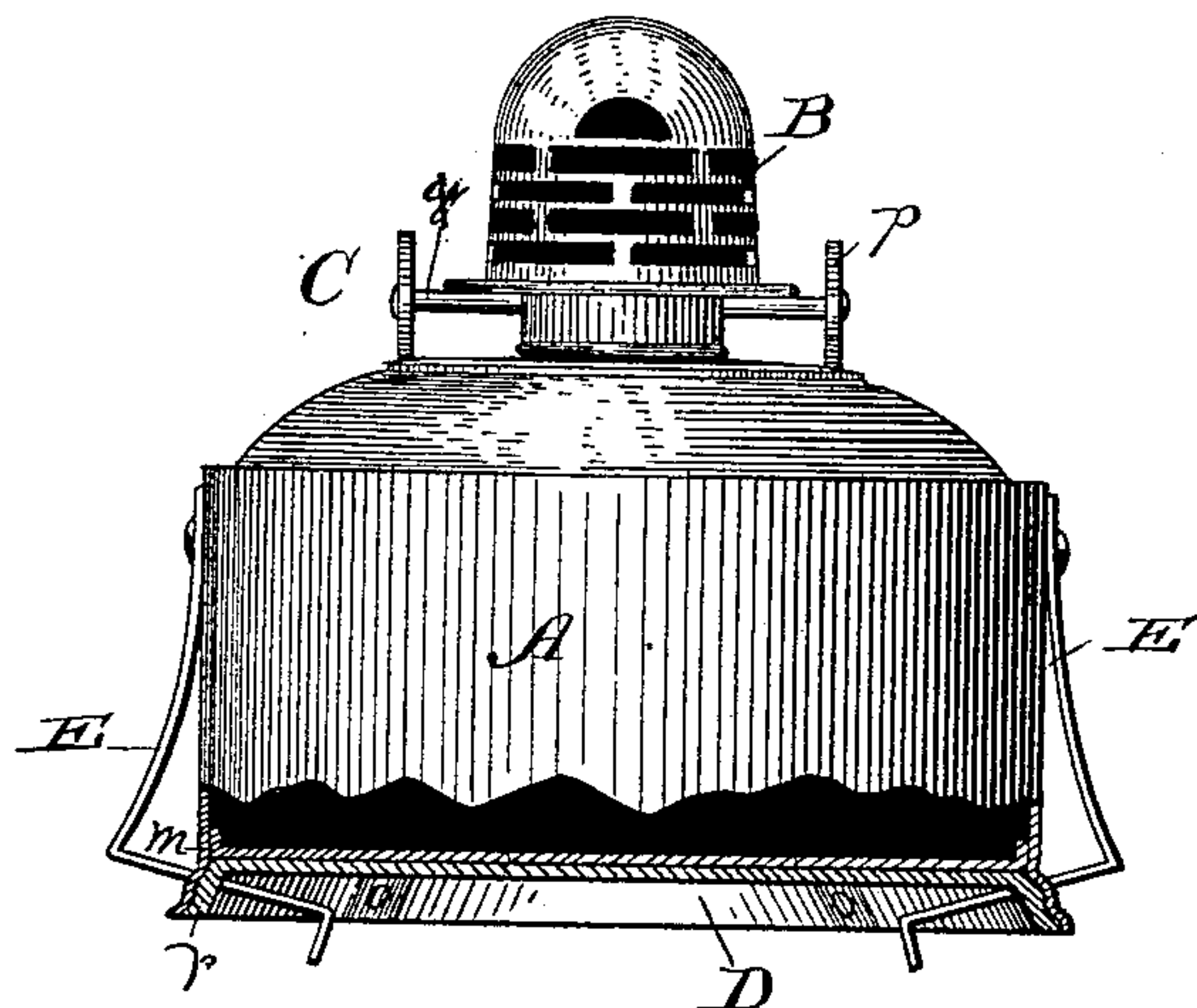
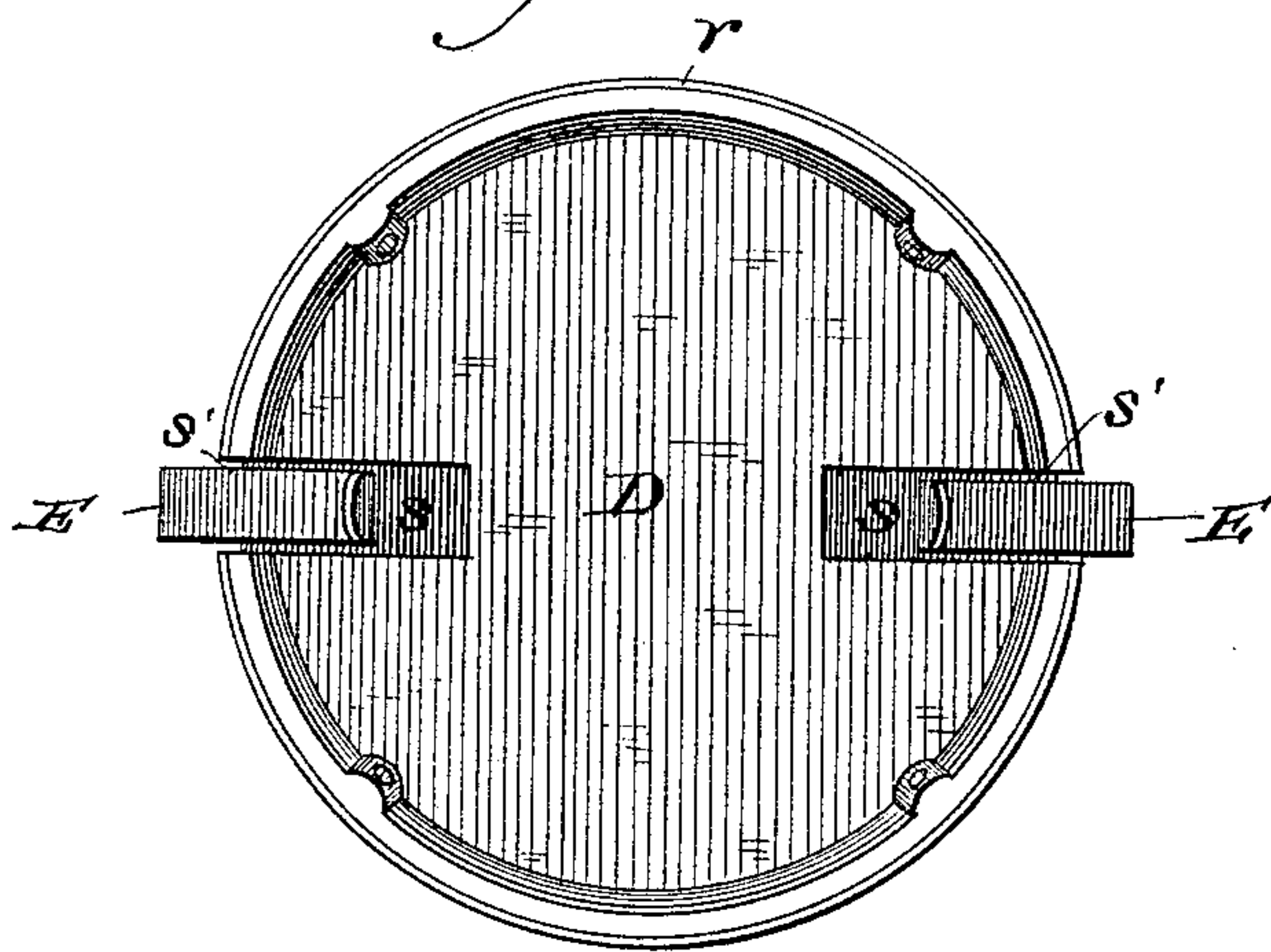


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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SIGNAL-LANTERN.

SPECIFICATION forming part of Letters Patent No. 386,715, dated July 24, 1888.

Application filed October 24, 1887. Serial No. 253,182. (No model.)

To all whom it may concern:

Be it known that I, A. HENRY MULLIKEN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Lamps, of which the following is a specification.

My invention relates to improvement in the class of signal-lanterns used in connection with
10 railroads.

The oil-pots of lanterns of the class referred to are commonly formed, for the sake of cheapness in the manufacture and for the attainment of other advantages, by "drawing" the sheet
15 metal of which they are composed into proper form to produce them, whereby they are seamless, except as to the bottoms, which are adjusted in suitable grooves provided to receive them at the bases of the "drawn" portions. The
20 sheet metal, to permit it to be drawn readily into the desired shape, must be quite thin, and as the rough usage to which such devices are inevitably and notoriously subjected by employees who have to handle them commonly
25 has the effect of bending and distorting the shape of the thin metal circular flange which extends below the bottom around the base of the oil-pot, air-inlet spaces are formed between the flange and the body of the lamp into
30 which the oil-pot is inserted, which admit air at undesirable points, and permit the production of sufficient draft to extinguish the light. Although the lanterns of the class, and in the connection referred to, are commonly subjected
35 to very severe usage, as by being thrown about with more or less violence, which necessarily injures them in the manner stated, mere handling of the oil-pots, to insert them into the lantern-bodies or globe portions, frequently produces bending of the thin metal base-flanges
40 in the grasp of the hand of the operator.

My object is to provide effective means for preventing unintentional extinguishment of the light, by the formation of air-inlet spaces,
45 as above set forth.

In the drawings, Figure 1 shows an oil-pot in broken sectional elevation provided with my improved re-enforcing-base, and Fig. 2 is a bottom view.

50 A is the oil-pot provided at its base with the ordinary flaring flange *r*.

B is the burner, and C the wick raising and lowering mechanism, comprising a spindle, *q*, extending through the burner near its base, and projecting therefrom equal distances at
55 opposite ends, at each of which it carries a button, *p*, and provided with the ordinary toothed wheel device, (not shown, but of common construction,) which extends through the side of the wick-tube into the path of the wick,
60 and serves the usual purpose of engaging with the wick to produce raising and lowering thereof by turning the spindle in the proper direction for the purpose.

To prevent bending or indentation of the
65 flange *r* with use, and thus avoid impairment to the operation of the lamp, as described, and injury to its appearance, I insert inside the circular base-flange a disk, D, of stiff material—preferably metal—which may be secured
70 in position against the oil-pot bottom *m*, as shown, or in any other suitable manner. The disk may be slotted at opposite sides of its periphery, as shown at *s*, in line with the ordinary slots *s'*, provided with a base-flange, *r*, to
75 admit the bent ends of the ordinary springs E, which serve to support the oil-pot in the usual manner in the lantern-body; but I do not limit myself to such construction. If desired, also, the metal disk, for the sake of
80 lightness, may be hollow around its center, as shown, and provided with a peripheral flange conforming to and fitting against the inner side of the base-flange *r* of the oil-pot.

The peripheral flange of the disk D is perforated at intervals to admit the rivets which
85 secure it to the base-flange *r*, and where perforated the metal is thickened or formed into lugs, as shown, in the casting, whereby weakening of the disk by the provision of the per-
90 forations is avoided.

By employing the plate D it may be unnecessary to provide the usual flange, *r*, when the plate could be secured directly to the bottom
95 of the oil-pot.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination, a lantern oil-pot, A, having a permanent closed bottom, *m*, and a strengthening-plate, D, secured over the under surface of the bottom *m*, substantially as
100 described.

2. In combination, a lantern oil-pot, A, having a permanent bottom, *m*, and a base-flange, *r*, and a plate, D, fitting within and secured to the base-flange, and extending to or substantially to the junction of the base-flange with the oil-pot, substantially as described.

3. In combination, a lantern oil-pot, A, having a permanent bottom, *m*, and a base-flange, *r*, and a plate, D, hollowed out on its under side, producing a peripheral flange which con-

forms to and fits within the base-flange *r*, and provided with perforated lugs at intervals, where the rivets are inserted to secure it to the base-flange, and with slots *s* to admit the springs E, substantially as described.

A. HENRY MULLIKEN.

In presence of—

JULIUS W. DYRENFORTH,
CHAS. E. GAYLORD.