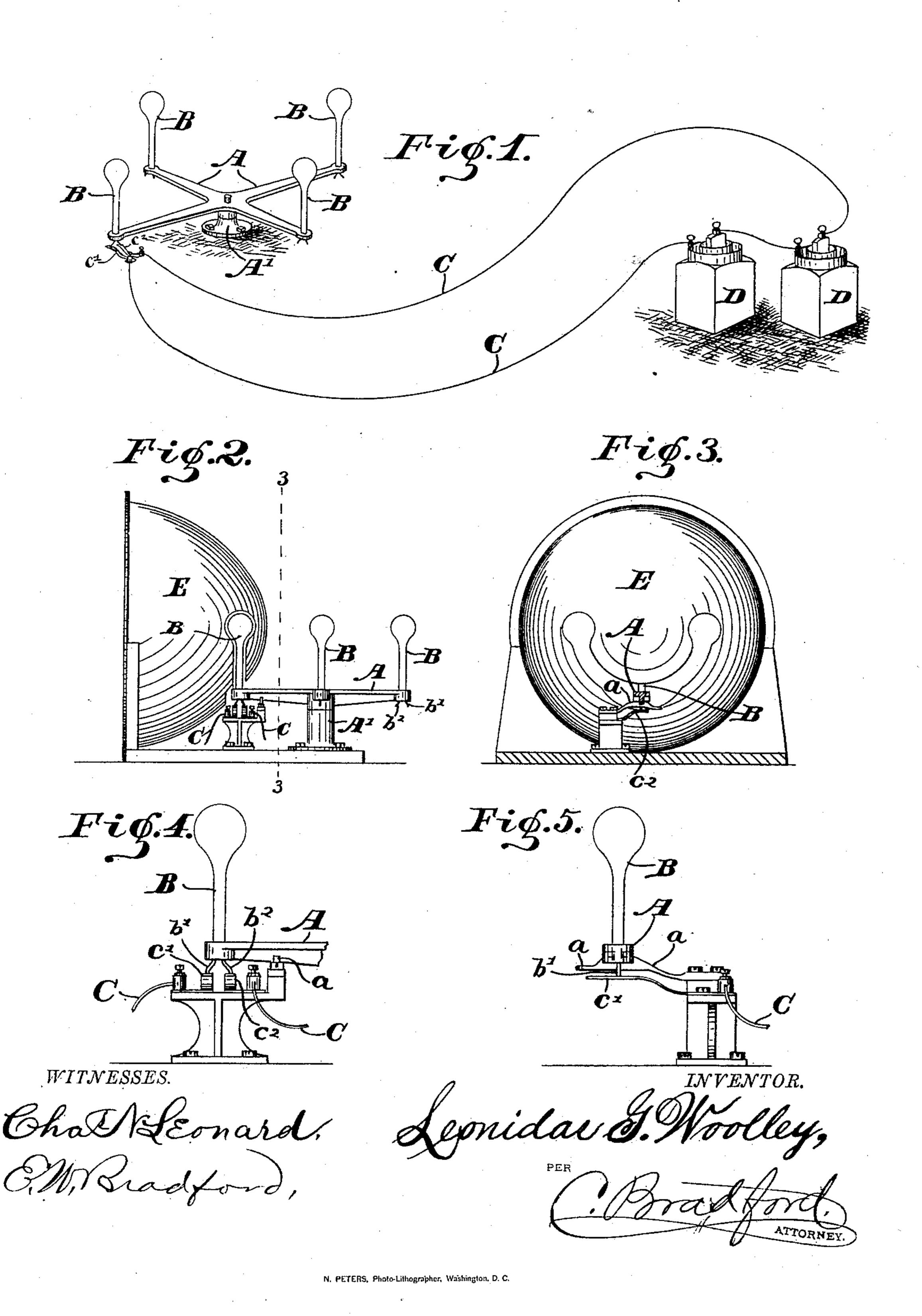
## L. G. WOOLLEY.

## HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

No. 341,620.

Patented May 11, 1886.



## United States Patent Office

LEONIDAS G. WOOLLEY, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO HENRY H. McGAFFEY AND CHESTER BRADFORD, BOTH OF SAME PLACE.

## HOLDER FOR INCANDESCENT ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 341,620, dated May 11, 1886.

Application filed November 16, 1885. Serial No. 182,905. (No model.)

To all whom it may concern:

Be it known that I, Leonidas G. Woolley, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new and useful Improvements in Holders for Incandescent Electric Lamps, of which the

following is a specification.

The object of my said invention is to produce a holder for incandescent electric lamps to upon which several of said lamps may be mounted and so arranged as to be brought successively into use, and thus, in the event the one in use at any particular time be broken or otherwise rendered useless another can at once be brought into position to take its place, as will be hereinafter more particularly described.

Referring to the accompanying drawings, which are made a part hereof, and on which 20 similar letters of reference indicate similar parts, Figure 1 is a general view illustrating my said invention; Fig. 2, a side elevation thereof; Fig. 3, a sectional view looking toward the left from the dotted line 3 3 in Fig. 2; Fig. 4, a detail view on an enlarged scale, similar to a portion of Fig. 2; and Fig. 5, a view of the same parts shown in Fig. 4 as seen from the left.

In said drawings, the portions marked A represent the holder carrying the lamps; B, said lamps; C, the wires of the electrical circuit; D, cells of battery, and E a portion of a reflector such as is used with a locomotive

electric headlight.

The holder A is constructed of metal, and may be in the form of a spider having two, three, four, or more arms, or of a disk, and upon these arms or around the disk are mounted the lamps B. The holder is mounted and adapted to revolve in a base, A', and a suitable catch or stop, a, is provided, by which it may be held in either of the desired positions.

The lamps B are ordinary incandescent electric lamps, and are suitably mounted in the holder A at equal distances from its pivot. The wires or points b' b² project therefrom in the usual manner, so as to be adapted to come in contact with contact springs attached to the ends of the wires C or to their binding-posts, as shown. The wires C form the usual

electrical circuit, and terminate in or are connected with contact-springs c'  $c^2$ , as usual.

D indicates the battery or dynamo-electric machine, which is the source of the current, 55 and may be of any usual or preferred form or character. Two cells of battery are shown; but a dynamo-electric machine is generally

used and preferred.

This invention being designed principally 60 for use with locomotive electric headlights, a portion of a reflector, E, is shown in connection therewith, to illustrate the relative positions of the several parts when in use. The invention, however, is not confined to use in 65 this connection, but may be used wherever desired.

The operation is as follows: The lamps being in place and in use, should the one in use become broken or disabled in any way from 70 further service, the catch a is disengaged, the holder A swung around until another lamp is brought into proper relation, the catch or stop permitted to re-engage, and the light is produced as before, thus saving the time 75 which would be necessary to take out and replace the broken lamp; and, also, the lamps being properly set before being put in use, all risk of defective connections is obviated, as might be the case were the lamps to be set 80 while the apparatus is in position for use or by inexperienced persons.

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

1. A revoluble holder or support for incandescent electric lamps, carrying two or more lamps at equal distances from its pivot, whereby should the lamp in use become inoperative another could by turning said holder 90 be brought into operative position.

titable catch or stop, a, is provided, by hich it may be held in either of the desired ositions.

The lamps B are ordinary incandescent electric lamps mounted thereon, and an electrical circuit terminating in contact-springs adapted to engage with and operate either of said lamps as they are respectively brought into position, substantially as set forth.

3. The combination of a revoluble holder, several incandescent electric lamps mounted 100 thereon, an electrical circuit terminating in contact-springs adapted to engage with and

operate either of said lamps as they are respectively brought to position, and a catch for holding said revoluble holder in position.

4. The combination of the revoluble holder 5 A, two or more lamps, B, mounted thereon at equal distances from its pivot, having points or wires  $b^2 b^3$ , an electrical circuit having contact-springs  $c' c^2$ , adapted to engage with said points or wires as the lamps are respectively brought into position, and means for securing

the holder in the desired position, substantially as set forth.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 30th day of October, A. D. 1885.

LEONIDAS G. WOOLLEY. [L. s.]

In presence of— C. Bradford, Charles L. Thurber.