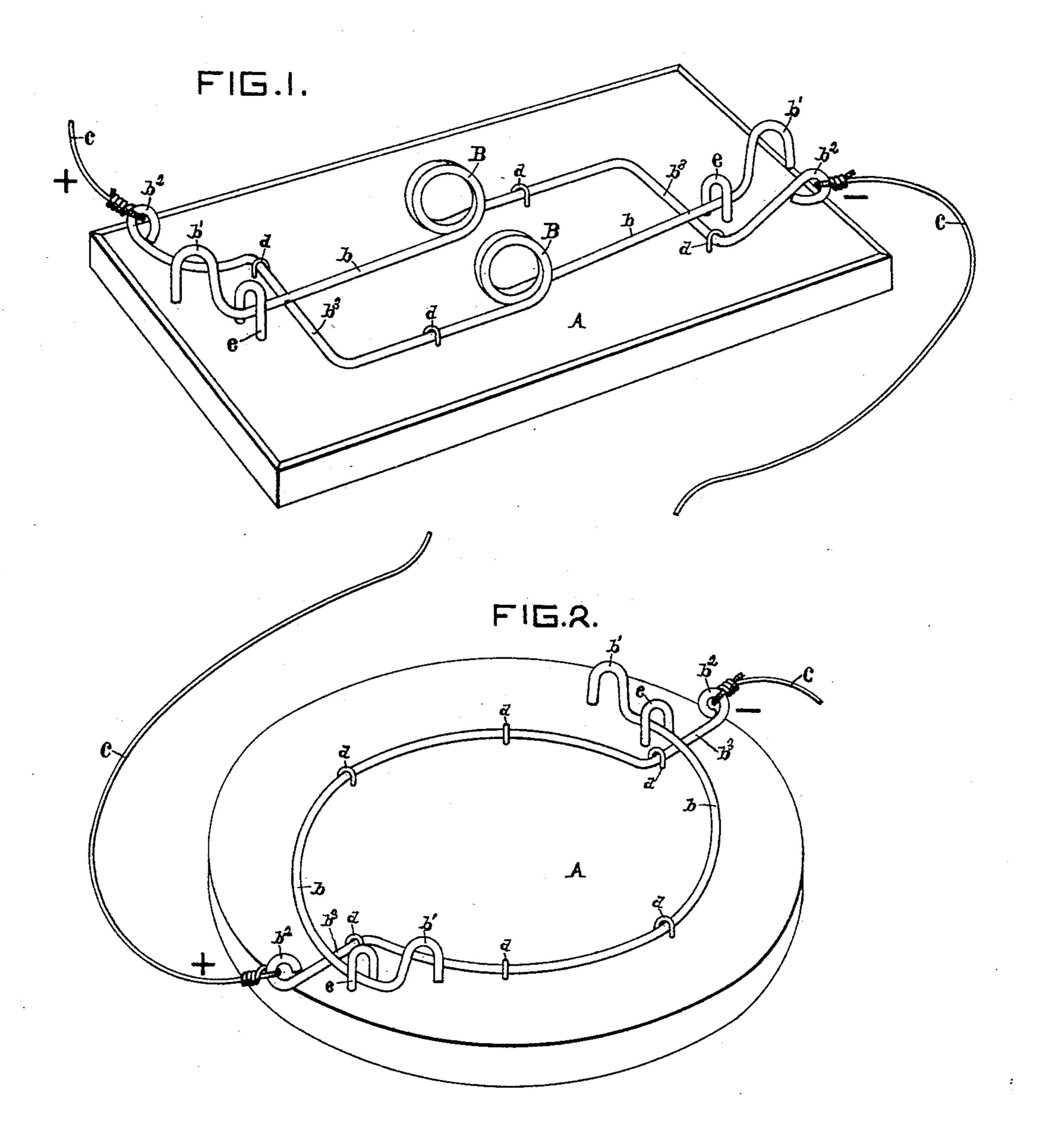
(No Model.)

## J. PAWLOWSKI.

HOLDER FOR ELECTRIC ARC LAMPS.

No. 395,755.

Patented Jan. 8, 1889.



Witnesses. Frank L. Million

Frank. L. Millword.

Jacob Pawlowski
By his Attorney Geoffmay

## United States Patent Office.

JACOB PAWLOWSKI, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO ANDREW WINTER, OF WEST COVINGTON, KENTUCKY.

## HOLDER FOR ELECTRIC-ARC LAMPS.

SPECIFICATION forming part of Letters Patent No. 395,755, dated January 8, 1889.

Application filed September 15, 1888. Serial No. 285,445. (No model.)

To all whom it may concern:

Be it known that I, Jacob Pawlowski, a citizen of the United States, and a resident of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Holders for Electric-Arc Lamps, of which the following is a specification.

wires c. The portion of the holder between the coil B and eye  $b^2$  has a double bend, forming the part  $b^3$ , which, when the two members of the holder are secured upon the board by the staples d, crosses the plane of arm b, so that when the lamp (not shown) is disconnected the arm b of one member springs up

My invention is an improved holder and automatic cut-out for electric-arc lamps. Its object is to provide a convenient hanger for arc lamps which, should any lamp of the series be dislodged from its position by a storm or by any accident, will of itself instantly and automatically close the circuit and prevent the other lamps in the circuit from being affected. By means of my invention I am also enabled to readily remove any lamp desired without disturbing the others.

The invention will first be described in connection with the accompanying drawings, and will then be particularly referred to and

pointed out in the claims.

In the drawings I have indicated two forms of my holder, the principle being the same in each. It is evident that many other forms may be employed.

Figure 1 is a perspective view, in inverted position, of my preferred form of lamp-holder. 3° Fig. 2 is a similar view of a modified form.

The board A, to which the metallic holders are attached, is preferably of wood, of any convenient shape to be attached to a mast or other object. Upon this board are secured 35 two metallic spring-holders similar in construction, but attached with their holding ends pointing in opposite directions. Each holdingarm of one member crosses some portion of the opposite member, with which it is held in electrical connection by spring action when the lamp is lifted or thrown off, but which is held out of electrical connection by the weight of the lamp when the lamp is in position.

In Fig. 1 each member of the holder is formed of a piece of spring-wire having a coil, B, intermediate the two ends. The spring-arm b upon one side of the coil terminates in a hook, b', upon which one ring of the spring lamp is hung. The opposite end of the wire is

formed into an eye,  $b^2$ , to receive the circuitwires c. The portion of the holder between the coil B and eye  $b^2$  has a double bend, forming the part  $b^3$ , which, when the two members of the holder are secured upon the board by 55 the staples d, crosses the plane of arm b, so that when the lamp (not shown) is disconnected the arm b of one member springs up and bears upon the cross portion  $b^3$  of the opposite member, thus keeping the circuit closed, 60 and this will result whether the lamp be dislodged from both hooks b' or from only one of them. When the lamp is in position, the arms b of the holder are drawn down until stopped by the staples or keepers e, the curtent being then through the lamp.

The form shown in Fig. 2 differs from that shown in Fig. 1 in that the coil B is omitted and the opposite members of the holder have their arms b curved to cross and make contact with the poles  $b^3$ . The tension of the curved spring-arms b in this figure, as in Fig. 1, holds them in contact with poles  $b^3$  when the lamp is dislodged. So long as the lamp is in position the arms and poles are held out 75

of contact.

The metallic holders are of course good conducting material, one being the positive and the other the negative pole of the lamp,

as indicated by the signs + -. I claim—

1. A holder for electric-arc lamps, consisting of two lamp-supporting members of conducting material and forming, when the lamp is in operative position, its opposite poles, the 85 lamp-holding end of each member crossing the plane of the opposite member, the two members being held normally in electrical connection, but arranged to be disconnected by the weight of the lamp when in position 90 and automatically returned to the normal position when the lamp is disconnected, substantially as shown and described.

2. The combination, substantially as specified, of the board A, the two metallic holders, 95 each consisting of a rigid part secured to the board and a spring holding-arm, the metallic holders being so formed that the spring-arm of each member crosses the rigid part of the opposite member, and the tension of the spring 100

being to hold the opposite members in electrical connection, whereby the circuit is closed through the lamp when in operative position and automatically closed through the holder when the lamp is disconnected.

3. The combination, substantially as specified, of the board A, the two spring-wire hold-

ers B  $bb'b^2b^3$ , and staples d, for securing them to the board, and the keeper e, to limit the movement of the arms bb.

JACOB PAWLOWSKI.

Witnesses:

GEO. J. MURRAY, FRANK L. MILLWARD.