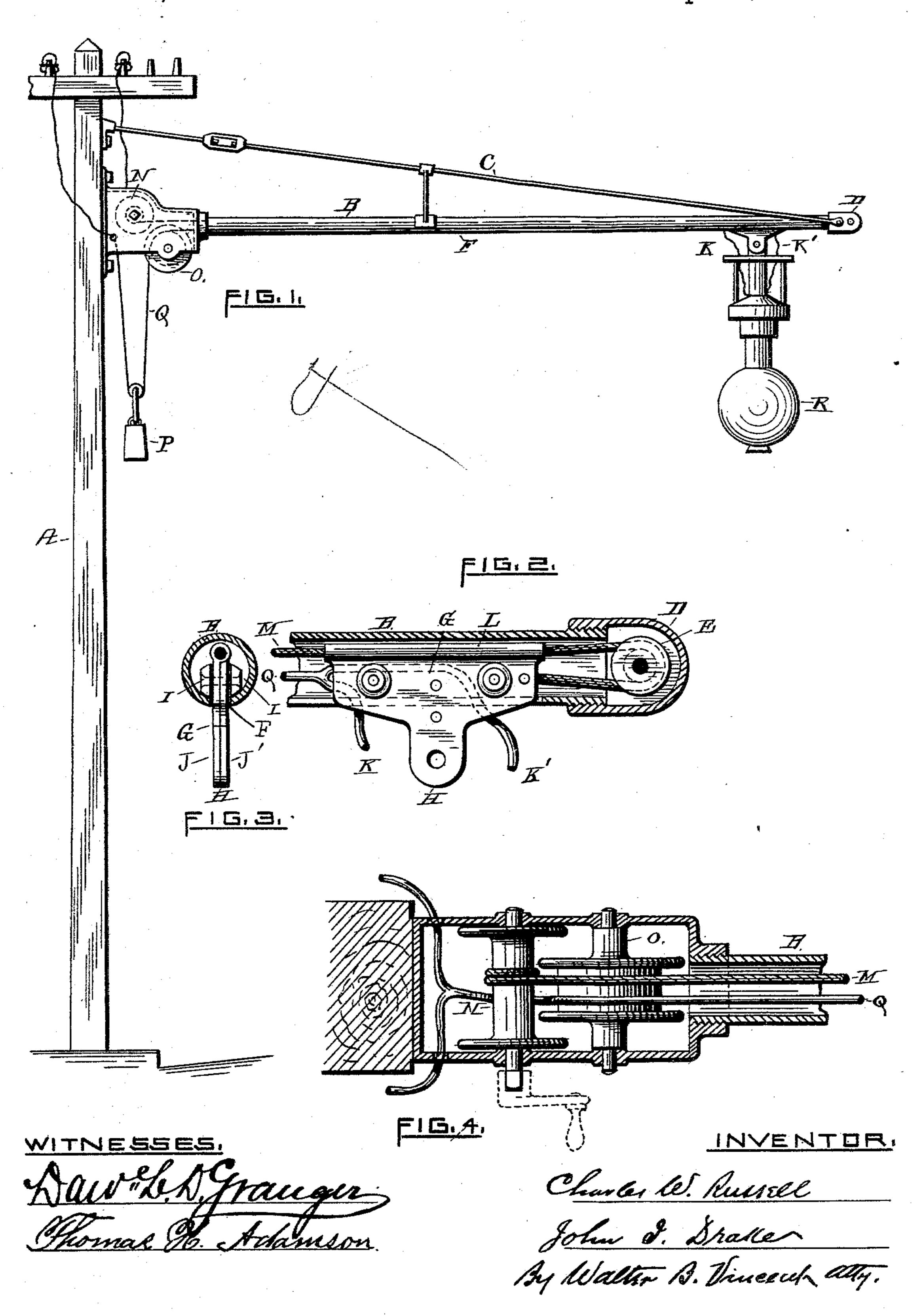
C. W. RUSSELL & J. I. DRAKE.

DEVICE FOR SUPPORTING AND OPERATING ELECTRIC LIGHTS.

No. 401,304.

Patented Apr. 9, 1889.



United States Patent Office.

CHARLES WARD RUSSELL AND JOHN I. DRAKE, OF PROVIDENCE, RHODE ISLAND.

DEVICE FOR SUPPORTING AND OPERATING ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 401,304, dated April 9, 1889.

Application filed June 27, 1888. Serial No. 278,362. (No model.)

To all whom it may concern:

Be it known that we, CHARLES WARD RUSSELL and JOHN I. DRAKE, both of Providence, in the State of Rhode Island, have made certain new and useful Improvements in Devices for Supporting and Operating Electric Lights; and we do hereby declare that the following specification, taken in connection with the drawings making a part of the same, is a full, clear, and exact description thereof.

Figure 1 is a view of our complete device in elevation. Fig. 2 is a vertical longitudinal section of arm, showing carrier and interior mechanism. Fig. 3 is a cross-section of arm and end view of carrier. Fig. 4 is a horizontal section of arm-base, showing mechanism for imparting motion to the carrier.

The object of our invention is to provide a device for suspending electric lights over the street so as to escape the interference of objects immediately surrounding the pole supporting the same, and also to afford a convenient and satisfactory means for changing the position of the light for the purpose of making repairs, &c., and at the same time protecting the operating parts from the weather; and it consists in the construction and arrangement of devices hereinafter described.

In the drawings, A, Fig. 1, is a perpendicular pole set near the sidewalk in the usual way. From the pole A, and attached thereto at the desired height, is a hollow horizontally-projecting arm, B, having a suitable brace-rod, C. The outer end of the arm B terminates in a head-piece, D, which contains a loose pulley, E. The arm B has a longitudinal slot or opening, F, to permit the movement of the carrier G, which has a projecting ear, H, and travels by means of beveled wheels I within the arm B.

The carrier G is made in two parts, J J', which are held together by means of rivets or screws, and is provided with passage-ways between the two parts for the conducting-wires K K'.

M is a belt or cord, one end of which is at- arm B and belt M, of the carrier G, having a

tached to the reel N and passes within the bar B, through a horizontal sleeve, L, at-50 tached to one part of the carrier, and around the pulley E, the other end being secured to the outer end of the carrier G. The base of the rod B is enlarged and made hollow to accommodate the reel N, and also a loose pulley, O, which sustains the belt and the united wires K K' and protects them from the wearing or cutting action of the sharp edges over which they would otherwise be drawn.

P is a weight upon the cable Q, which at 60 that point is composed of the united conducting-wires K K' and serves to keep the parts taut and assists in drawing in the light when required.

R is the lamp, which is suspended from the 65 ear H of the carrier G.

Taking the parts in the position shown in the drawings, the person in charge of the lights, whenever any adjustment or repairs are necessary, ascends the perpendicular 70 pole, A, and, taking hold of the cable Q, pulls in the light, the carrier G traveling upon its wheels I and the ear H passing through the longitudinal slot F, as will be readily understood. When it is desired to again return 75 the light to its former position, a crank is adjusted to the shaft of the reel N, as shown in dotted lines, Fig. 4, and upon being turned in the proper direction will carry the light outward through the action of the belt M. 80 The two parts of the carrier in their adjustment to each other clamp and securely hold the conducting-wires K K' in such a manner that they will not slip during the pulling in of the light. The sleeve L, through which 85 the belt M passes, serves both to protect the belt from undue wear and injury and to prevent its interference with other parts of the mechanism.

What we claim as our invention, and desire 90 to secure by Letters Patent, is—

1. The combination, with the projecting arm B and belt M, of the carrier G, having a sleeve, L, for the passage of the belt.

2. The combination, with the projecting 95 arm B and belt M. of the carrier G. having a

sleeve, L, for the passage of the belt, and ways for the passage of the conducting-wires, as set forth.

3. The combination, with the hollow slotted projecting arm B, of the belt M, supported on pulleys therein, and a carrier, G, having the sleeve L for the passage of the belt, and the

inclined pulleys for riding in the arm B, as set forth.

CHAS. WARD RUSSELL.
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Witnesses:

WALTER B. VINCENT, THOMAS H. ADAMSON.