

(No Model.)

2 Sheets—Sheet 1.

H. F. EDWARDS.

METHOD OF SUSPENDING ELECTRIC LIGHTS.

No. 355,443.

Patented Jan. 4, 1887.

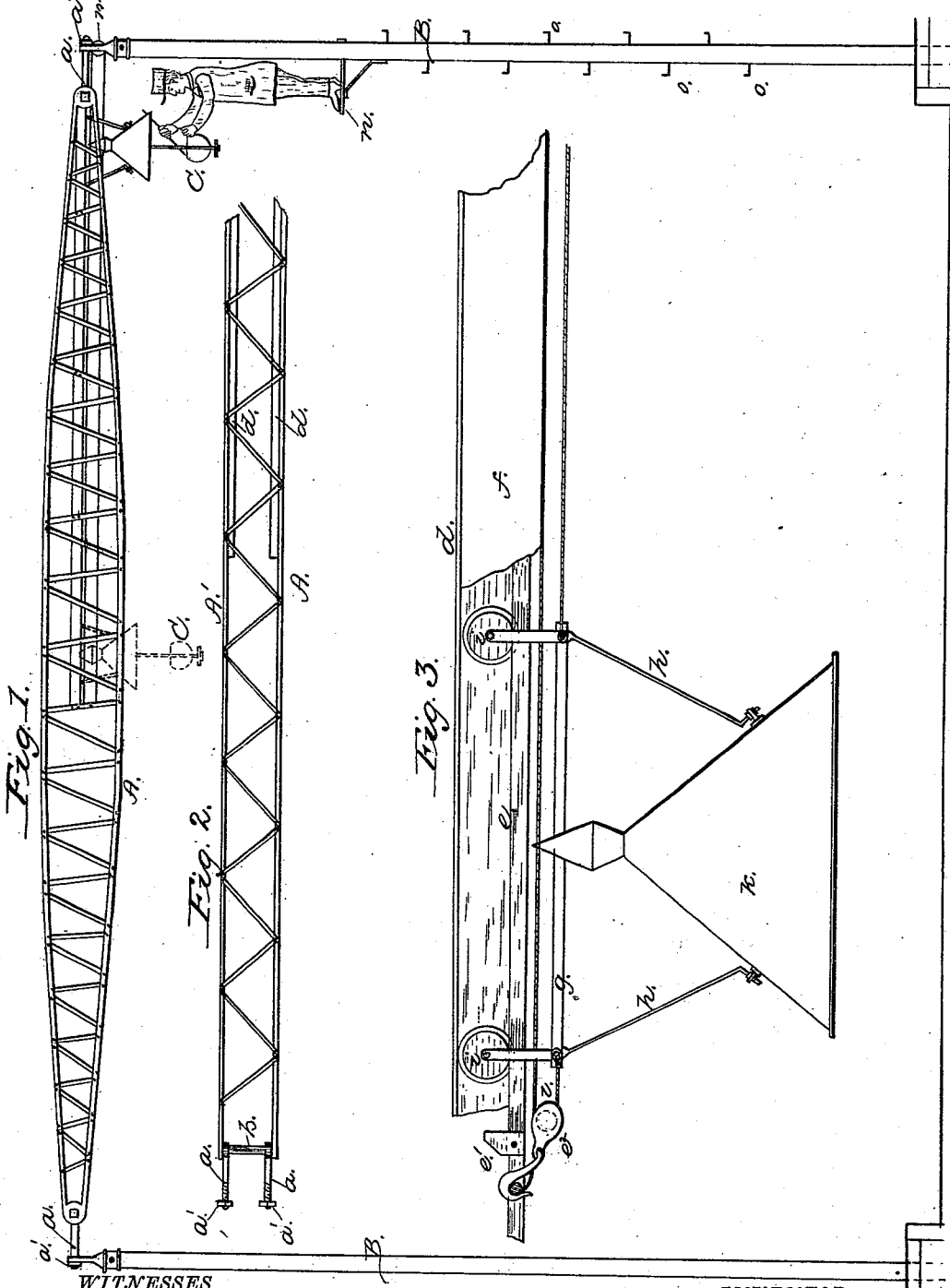


Fig. 1.

Fig. 2.

Fig. 3.

WITNESSES

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INVENTOR

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(No Model.)

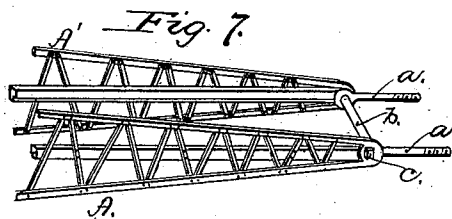
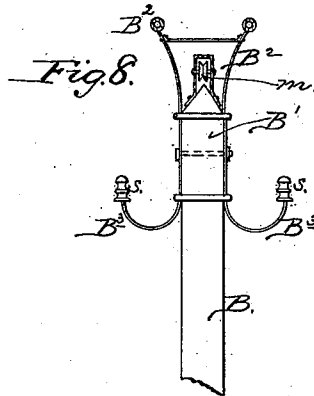
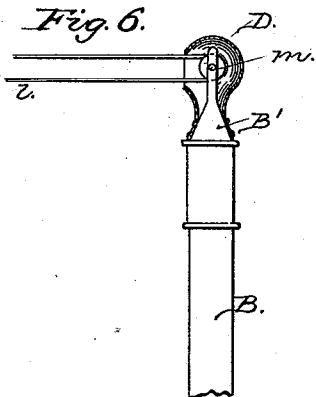
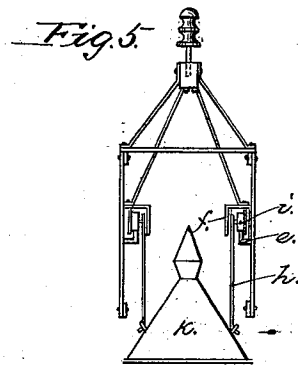
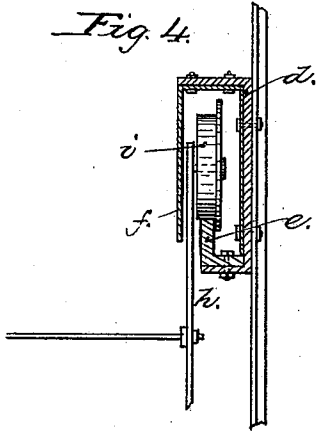
2 Sheets—Sheet 2.

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WITNESSES  
*P. W. Hale,*  
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 By *Fred W. Royce,*  
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# UNITED STATES PATENT OFFICE.

HENRY F. EDWARDS, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO THE AMERICAN ELECTRICAL WORKS, OF SAME PLACE.

## METHOD OF SUSPENDING ELECTRIC LIGHTS.

SPECIFICATION forming part of Letters Patent No. 355,443, dated January 4, 1887.

Application filed May 7, 1886. Serial No. 201,444. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY F. EDWARDS, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Methods of Suspending Electric Lights; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My present invention has for its object to provide a novel means for suspending electric lights over the center of a street or square, whereby the electric lamp may be maintained in the desired position between the two sides of the street, or drawn back to one side thereof for the renewal of the carbons or for necessary repairs, the construction being such that the lamp and its operative mechanism are protected from the direct action of the elements, and the lamp rendered easy of access at all times; and my invention consists, essentially, of the details of construction and general arrangement of parts, as will be hereinafter fully described, and specifically designated in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of a structure embodying the principle of my invention; Fig. 2, a top plan view of the same, and Figs. 3 to 8 detail views thereof.

Similar letters of reference occurring on the several figures indicate like parts.

In carrying out my invention the truss or structure intended to span the street or square may be made of any suitable material and of the desired shape, but is preferably composed of a light iron truss, as represented in the drawings. At each end of said truss, and between its side pieces, A A', are placed eyebolts *a* and a hollow pipe, *b*, through which a bolt, *c*, is passed to secure the parts together to provide a ready and convenient means for attaching the truss to the top of the poles B, or to the sides or tops of buildings. Upon each inner side of the truss, and rigidly secured to the struts thereof, is provided an angle-iron

frame, *d*, upon the lower portion of which the angle-iron track, *e*, is secured.

The carriage for carrying the lamp C is preferably composed of a light square frame-work, *g*, secured to the central parts of four pendent rods or hangers, *h*, the upper ends of which in their turn are provided with flanged wheels *i*, adapted to move upon the tracks *e*, while their lower ends are suitably secured to the hood or upper part, *k*, of the lamp, as fully shown in Figs. 3 and 4 of the drawings. Directly above the wheels *i*, and rigidly secured to the frame *d*, is provided an overhanging cover or frame, *f*, which serves not only to protect the wheels and track from snow or ice, but also effectually prevents the wheels from leaving the track, thereby obviating all danger of the carriage or lamp becoming blocked or dismantled at any point. At the extreme outer end of the tracks *e* are provided suitable blocks *e'*, for stopping the lamp-carriage at that point, while a suitable pulley, *e''*, is provided for the reception of the outer portion of the rope *l*, which moves said lamp-carriage back and forth, the upper portion of said rope preferably running freely within an inclosing pipe or tube, while the lower ends are secured to the carriage-frame *g*, as fully shown in Fig. 3.

Upon the upper portion of one of the poles B is provided a suitable pulley, *m*, over which the rope *l* passes within convenient reach of the attendant who cleans and repairs the lamp, a suitable stand or support, *n*, being provided near the upper part of said pole for his reception, and which is accessible by means of the foot-irons *o* upon the post, as fully shown in Fig. 1.

Although the truss or frame-work may be secured in position to span a street or square by attaching its ends to buildings on either side, yet I preferably employ the poles B for such purpose, said poles being composed of either wood or metal, or a combination of both, and provided with a cap, B', in the upper end of which is journaled the pulley *m*, while projecting upwardly and outwardly from said cap are provided arms B'', having openings in their upper ends for the reception of the bolts *a* upon the ends of the truss, which is rigidly secured in place by the nuts *a'*. Projecting outwardly from the lower part of the cap B'—

one on each side—are provided arms  $B^3$ , having insulators  $s$  for carrying wires. At suitable distances apart upon the top of the truss or structure are affixed suitable insulators for  
 5 conducting wires from one side of the street to the other.

The pulleys  $e^2$  and  $m$ , for receiving the rope which operates the carrier, may be protected from the action of the elements by suitable  
 10 sheet-metal hoods.

The essential features of my invention being as described, it will be seen that the construction generally is especially adapted for locating the electric light directly over the  
 15 center of a street or square, or over the centers of two streets crossing each other, and at the same time serves the additional purpose of a general carrier for wires of all kinds.

Having thus described my invention, I claim  
 20 as new and useful—

1. The herein-described truss or structure for suspending electric lights across streets or squares, consisting of the truss adapted to be  
 25 secured at each end to buildings or poles, and provided with a covered track for the reception of a carriage for the electric lamp, substantially as specified.

2. A truss or structure for suspending electric lamps, consisting of the metallic truss pro-

vided with a covered track, a carriage for the  
 30 electric lamp, and means for operating the same, and a series of insulated arms for carrying the wires, substantially as and for the purpose specified.

3. In a truss or structure for suspending  
 35 electric lights, the covered track  $e$ , lamp-carriage  $g$ , lamp  $C$ , pulleys  $e^2$  and  $m$ , and rope  $l$ , substantially as specified.

4. In a device for suspending electric lights, the poles  $B$ , provided with caps  $B'$ , having  
 40 affixed thereto the arms  $B^3$ , having openings for the reception of the bolts  $a$  upon the ends of the truss or frame to secure the same in position, substantially as specified.

5. In a truss for suspending electric lights,  
 45 the poles  $B$ , provided with cap  $B'$ , having affixed thereto the arms  $B^3$ , for the reception of the ends of the truss, pulley  $m$ , for the inner end of the rope  $l$  of the carriage-frame, and the arms  $B^3$ , for carrying the wires, substan-  
 50 tially as specified.

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

HENRY F. EDWARDS.

Witnesses:

FRANK E. HARRINGTON,  
 WALTER S. BELCHER.