

(No Model.)

W. B. ESSICK.
CONDUCTOR SUPPORT AND INSULATOR.

No. 503,039.

Patented Aug. 8, 1893.

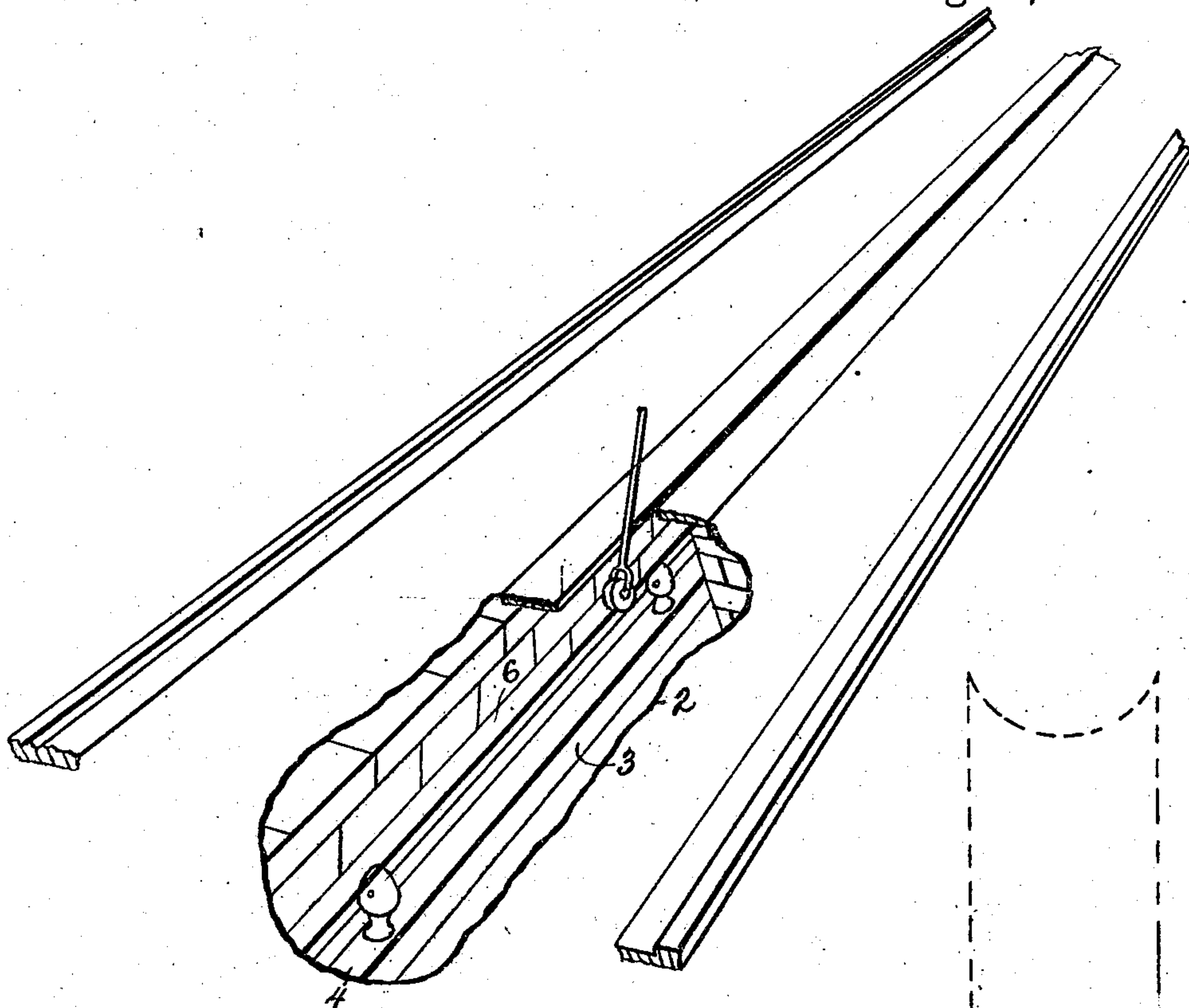


Fig. I.

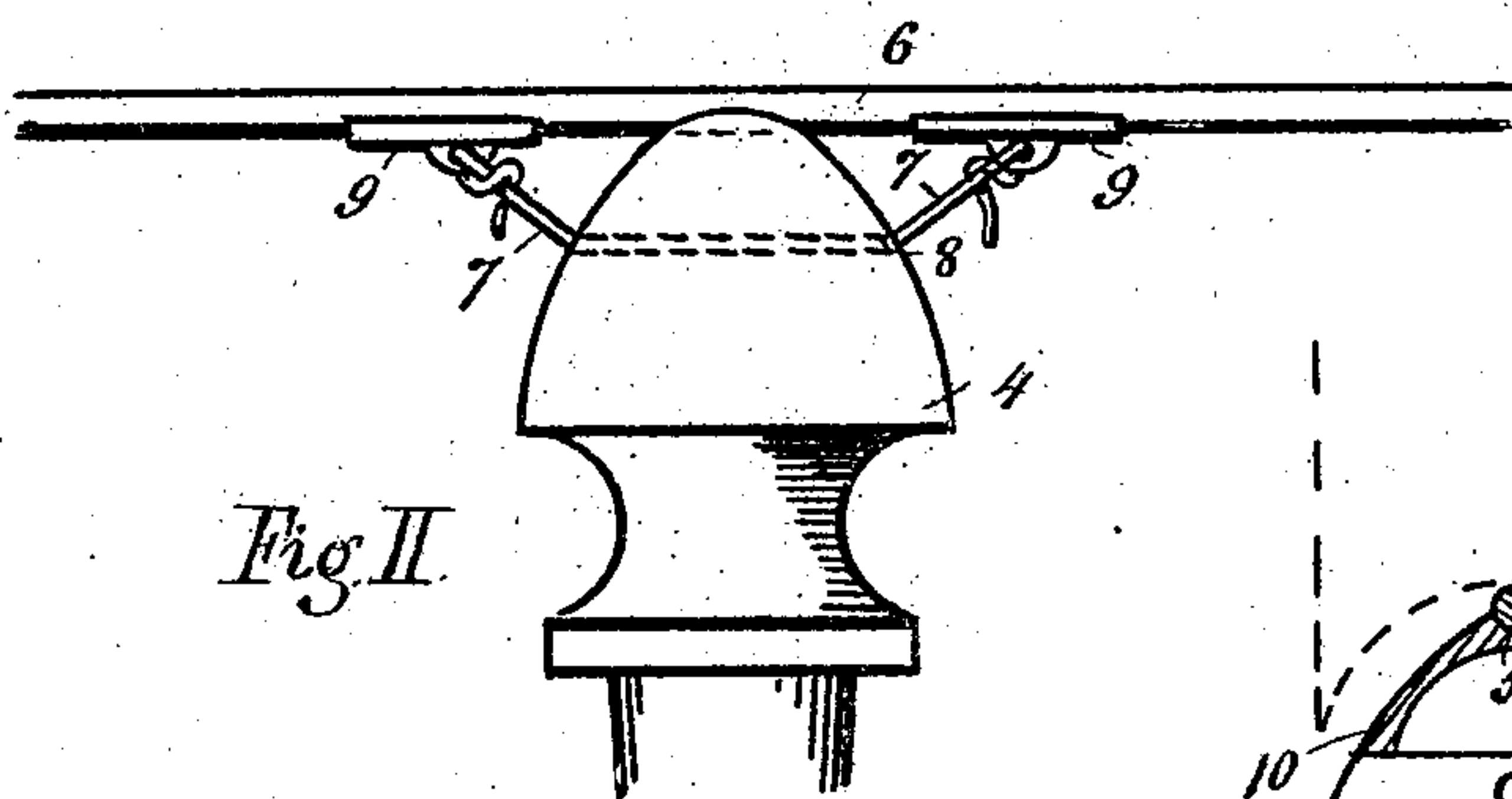


Fig. II.

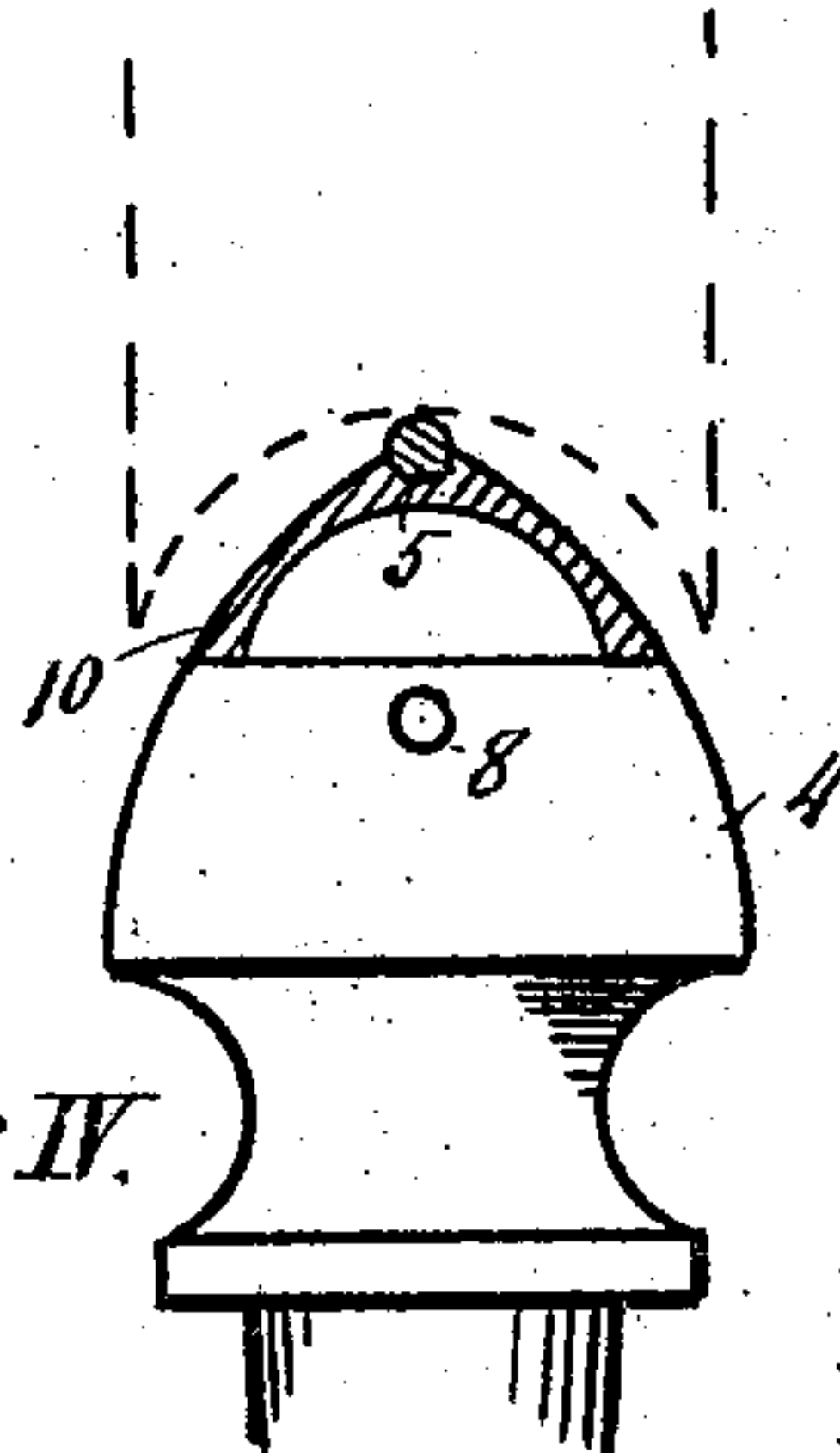


Fig. IV.

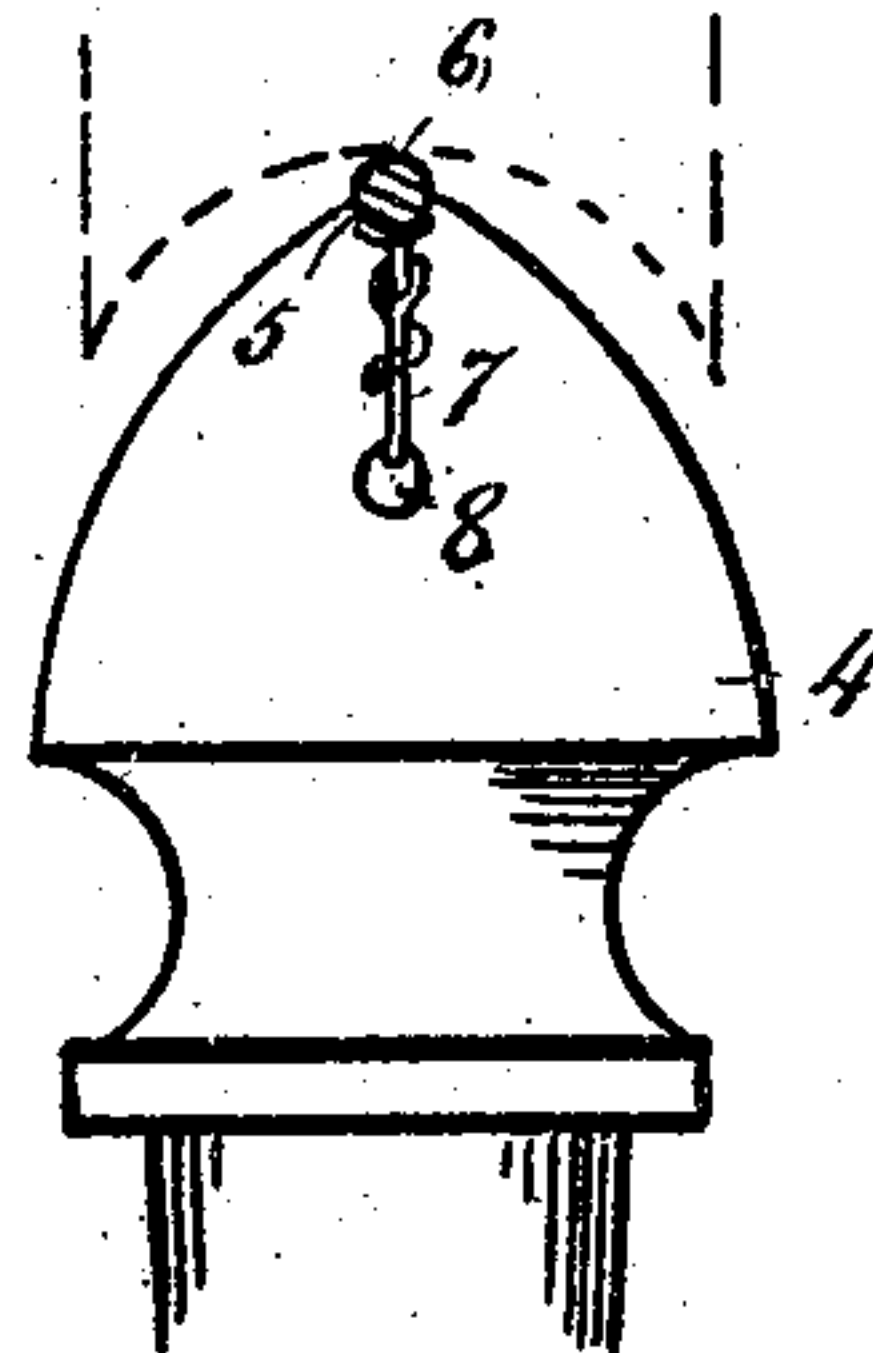


Fig. III.

Witnesses

R. S. Millar

L. M. Adams

Inventor

W. B. Essick

By C. Bailey Atty

UNITED STATES PATENT OFFICE.

WILLIAM B. ESSICK, OF MANLEY, NEBRASKA.

CONDUCTOR SUPPORT AND INSULATOR.

SPECIFICATION forming part of Letters Patent No. 503,039, dated August 8, 1893.

Application filed February 1, 1893. Serial No. 460,611. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. ESSICK, a citizen of the United States, residing at Manley, in the county of Cass and State of Nebraska, have invented a new and useful Improvement in Insulators and Supports for Underground Trolley-Wires, which improvement is fully set forth in the following specification and accompanying drawings, in
10 which—

Figure I is a perspective view of the interior of an underground conduit showing a trolley wire provided with my improved insulator and support; Fig. II, a detail, partly in
15 section, showing the application of the invention; Fig. III, a transverse view, and Fig. IV, a modified form of the insulator and support.

My invention relates to improvements in apparatus used in conjunction with the trolley system of electric motors for railway and street cars, and its object is to obviate the numerous and valid objections to the prevailing method of suspending the conducting wires overhead, and to provide means where-
25 by they may be easily and effectively insulated and supported in underground conduits.

The peculiar features of my device will be readily understood by reference to the accompanying drawings in which 2 designates a
30 section of an underground tunnel or conduit and 3 a beam suitably fixed in the bottom thereof. The beam may be made of wood properly prepared for the purpose. The insulator and support 4 is made of glass or other
35 suitable non-conducting material, and is inserted in the beam or otherwise attached thereto. A shallow groove or channel 5 in the top of the insulator forms a seat for the conducting wire 6 which is held securely in its
40 place by a stay or brace 7 extending through

an orifice 8 in the body of the insulator and directly beneath the conducting wire. The ends of the stay are suitably attached to shoes 9 which are soldered or otherwise fastened to the conducting wire.

If a stronger support be desired, a cast metal saddle 10 may be fitted to the top of the insulator as shown in Fig. IV. If there should be curves in the line, it is only necessary to increase the number of insulators to the extent
45 required for the purpose.

It will be understood that I do not confine myself to the form of the device as shown in the drawings, it being obvious that a variety of forms may be adopted without departing
55 from the principle involved in the invention.

What I claim as new is—

1. The insulator for underground trolley wires, comprising the support of non-conducting material, having an opening extending
60 therethrough, in combination with the conducting or trolley wire, and a brace extending through said opening and bracing said conducting or trolley wire in position, substantially as set forth.

2. The insulator for underground trolley wires, comprising the support of non-conducting material, having an opening extending
70 therethrough, in combination with the conducting or trolley wire, shoes secured to said wire and a brace passed through said opening and connecting with said shoes, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of
75 witnesses.

WILLIAM B. ESSICK.

Witnesses:

J. M. SUTTER,
H. E. PANKONIN.