

No. 746,437.

PATENTED DEC. 8, 1903.

J. ANTIGA.
HANGER FOR TROLLEY WIRES.
APPLICATION FILED JULY 1, 1903.

NO MODEL.

Fig. 1.

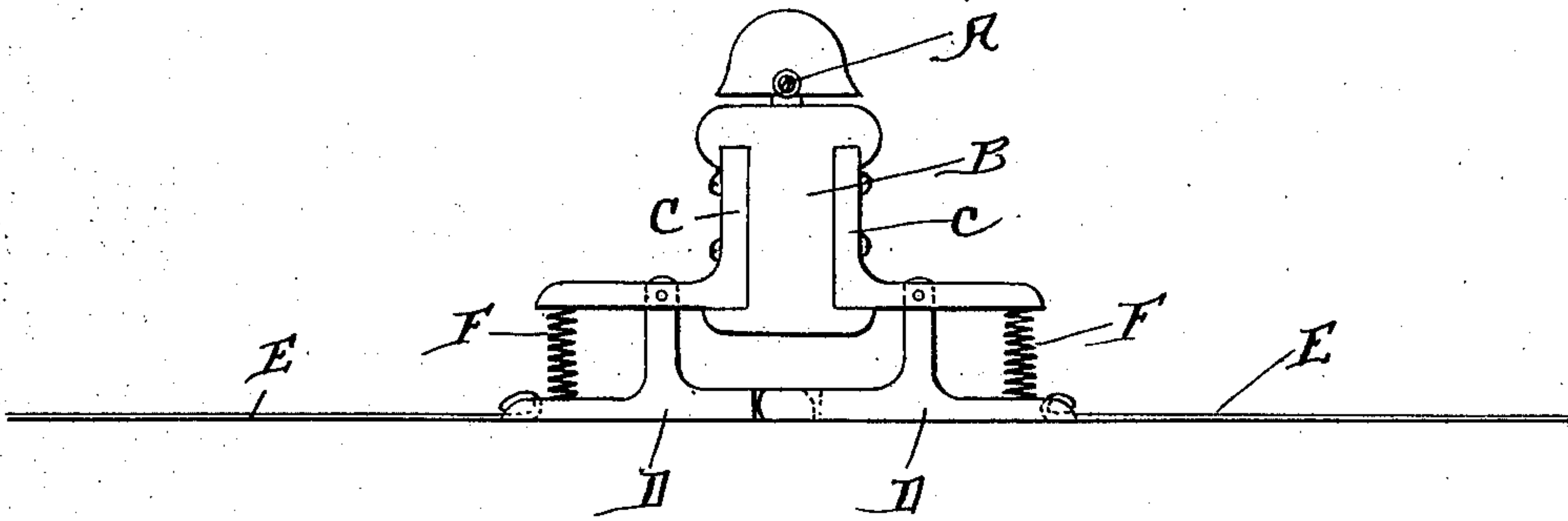


Fig. 2.

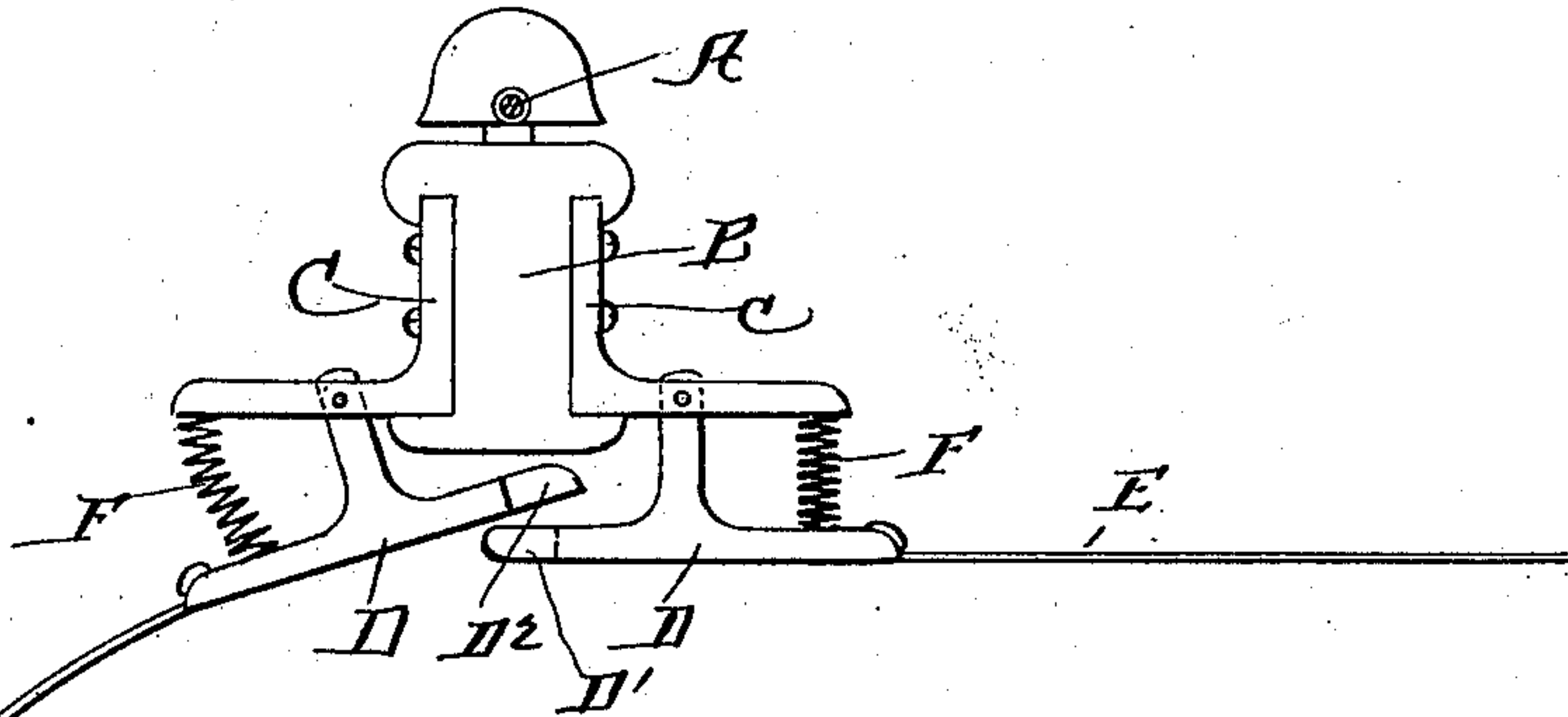
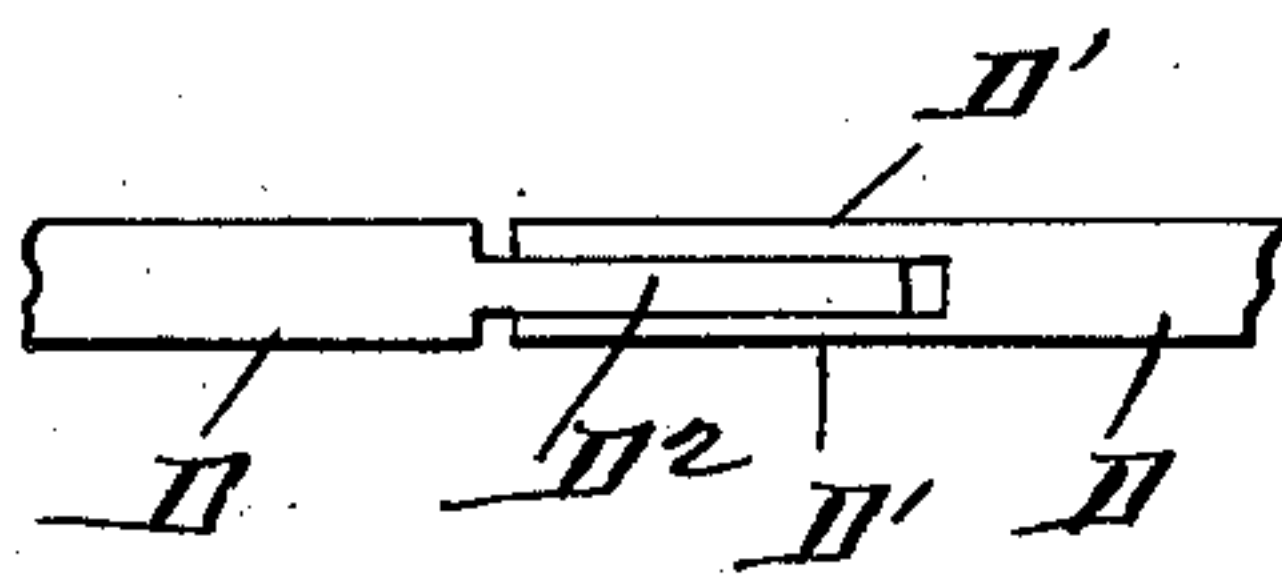


Fig. 3.



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UNITED STATES PATENT OFFICE.

JUAN ANTIGA, OF MEXICO, MEXICO.

HANGER FOR TROLLEY-WIRES.

SPECIFICATION forming part of Letters Patent No. 746,437, dated December 8, 1903.

Application filed July 1, 1903. Serial No. 163,858. (No model.)

To all whom it may concern:

Be it known that I, JUAN ANTIGA, a citizen of the Republic of Mexico, residing at Mexico city, Mexico, have invented a certain new and useful Improvement in Hangers for Trolley-Wires, of which the following is a specification.

My invention relates to a new and useful improvement in hangers for trolley-wires, and has for its object to provide an improved hanger which is so constructed that if the trolley-wire is broken at any point the hanger will operate to cut off the current from the broken section of the wire at both ends of the section, thus preventing any damage being done by the grounding of the broken wires.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side elevation of my improved hanger in its normal position; Fig. 2, a similar view to Fig. 1, showing the hanger in the position it would assume when a section of wire upon one side of the hanger had become broken; Fig. 3, an under side plan view of the meeting ends of the movable members of the hanger.

It is a well-known fact that when a trolley-wire is broken from any cause whatsoever and the broken wire descends toward the ground great damage is generally caused before the main station can be notified and the current cut off, and while this is more especially true of trolley-wires it is also true of all wires over which a current of high potential passes in which the ground is used for the return of the current. With my improved hanger I obviate this disadvantage by automatically cutting off the current from the broken wire instantly and before the wire reaches the ground.

My hanger may be supported or suspended in any manner desired from a cross-wire A or any other suitable support.

B is the body of the hanger and is the portion which is connected directly to the support A. This body B may be made of any suitable insulating material desired. Secured upon each side of the body B are the right-angle brackets C, the vertical members of which are secured to the body, the horizontal members extending outward in opposite directions from each side of the body.

D represents the movable or switch members of the hanger, and each of these members is in the form of an inverted T. The vertical member of each switch member D is pivoted to one of the horizontal members of the bracket C at a point inside of the ends of the horizontal members of the brackets, and when the hanger is connected and in its normal position the horizontal portions of the switch members lie in line with the wire, the trolley-wire E being connected to the outer end of each horizontal portion of the switch members. The inner end of the horizontal portion of one switch member is bifurcated, as indicated at D', and the inner end of the horizontal portion of the other switch member is in the form of a knife or tongue D², adapted to enter the bifurcated portion of the other switch member when the parts are in their normal position.

F represents springs interposed between the outer ends of the horizontal members of the brackets C and the outer ends of the horizontal portions of the switch members.

When the trolley-wires E are drawn taut from one hanger to the other along the line, the tension of the wire will act so as to keep the horizontal portions of the switch members in alinement, and therefore these two movable portions of the hanger will be electrically connected with one another by means of the knife-switch in the center; but should one of the sections of wire between the hangers become broken the tension of the wire will be removed, and the spring F will then act upon one side, so as to throw the outer end of the horizontal portion of that switch member downward and rock that switch member upon its pivot, so as to bring the inner ends of the switch members out of electrical connection with one another and therefore cut off the current from the broken wire, as shown in Fig. 2.

Of course I do not wish to be limited to the exact construction here shown, as different modifications of this principle could be made without departing from the spirit of the invention.

Having thus fully described my invention, what I claim as new and useful is—

In a hanger for electric wires, an insulated body, horizontal brackets extending outward from each side of the body, two switch members, each in the form of an inverted T, the vertical portion of each switch member being pivoted at its upper end to one of the brackets inside of the outer end of the same, trolley-wires connected to the extreme outer ends of the horizontal portions of the switch members, the inner end of the horizontal

portion of one switch member being bifurcated, the inner end of the horizontal portion of the other switch member being formed with a tongue or knife adapted to normally enter the bifurcated portion of the other switch member, and springs interposed between the outer ends of the brackets and the outer ends of the horizontal portions of the switch members, as and for the purpose specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

JUAN ANTIGA.

Witnesses:

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