

(No Model)

A. J. CLARK.
CIRCUIT BREAKER FOR ELECTRIC WIRES.

No. 585,507.

Patented June 29, 1897.

Fig. 1.

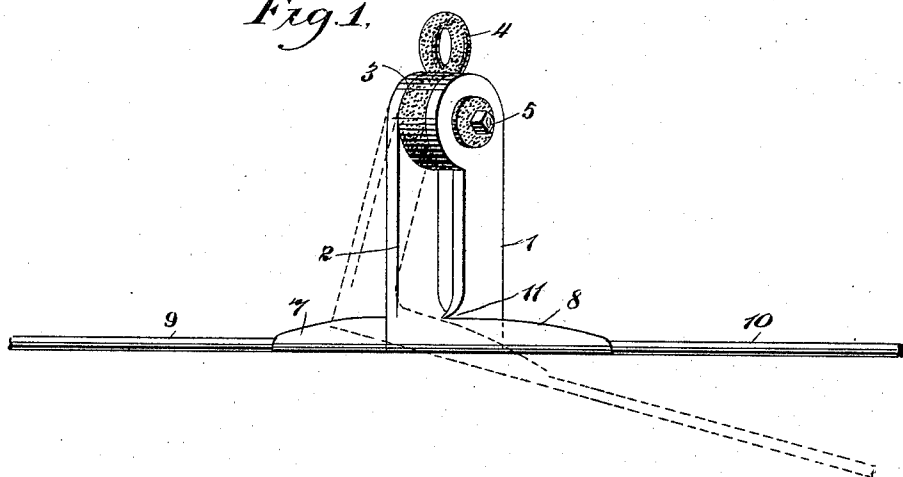


Fig. 2.

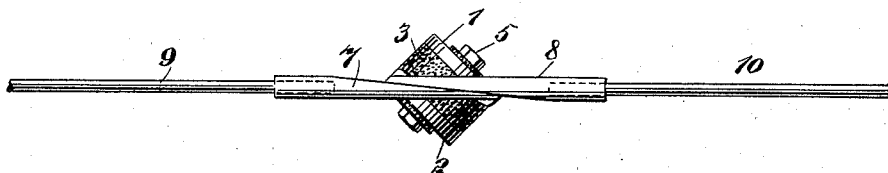


Fig. 3.

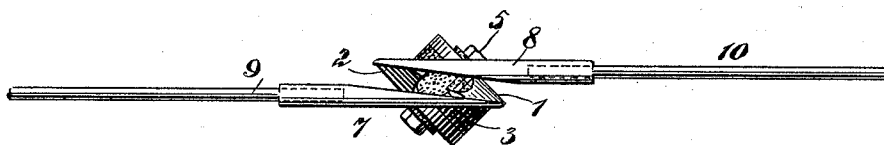
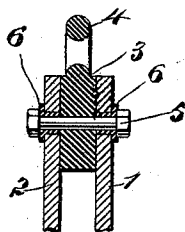


Fig. 4.



WITNESSES:

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ANDREW J. CLARK, OF LEXINGTON, KENTUCKY, ASSIGNOR OF ONE-FOURTH
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CIRCUIT-BREAKER FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 585,507, dated June 29, 1897.

Application filed November 21, 1896. Serial No. 612,975. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. CLARK, of Lexington, in the county of Fayette and State of Kentucky, have invented a new and Improved Circuit-Breaker for Electric Wires, of which the following is a full, clear, and exact description.

This invention relates to devices for automatically breaking the circuit of an electric wire—such, for instance, as a trolley-wire—should the said wire be broken; and the object is to provide a simple device which will not only serve as a hanger for the wire, but which will operate quickly to break the circuit should a wire be broken, so that its ends will fall downward.

I will describe a circuit-breaker embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a bottom plan view thereof, showing the device in its closed position. Fig. 3 is a bottom plan view showing the device in its open position, and Fig. 4 is a longitudinal section of the upper portion of the device.

The circuit-breaker comprises two vertical levers 1 2, pivotally connected at their upper ends to a block 3, of insulating material. This block 3 is here shown as provided with a ring 4, with which a suspending wire may be engaged. The levers 1 and 2 are pivoted to the block 3 by means of a bolt 5, and surrounding this bolt 5, in the openings through the levers 1 and 2, insulating-bushings 6 are placed.

Extended at right angles from the lower ends of the levers 1 and 2 are contact-plates 7 and 8, and to the under sides of these contact-plates 7 and 8 the ends of wires 9 and 10 are secured by means of solder or otherwise. It will be seen that the horizontal axis of the levers 1 and 2 is arranged at an angle of about forty-five degrees with relation to the length of the wires 9 and 10—that is, such axis extends at an obtuse angle across the plane of the wires or of the contact-plates 7 and 8.

The levers 1 and 2 cross each other at the lower end, so that when the wires 9 and 10 are in their normal position the contact-plates 7 and 8 will be drawn closer together, as indicated in Figs. 1 and 2. Should one of the wires 9 or 10 be broken, however, the falling of the same, owing to the described angle of the lever-axis, would cause one of the levers to swing relatively to the other lever, as indicated in dotted lines in Fig. 1, and this swinging movement of the lever will separate the contact-plates 7 and 8, as plainly indicated in Fig. 3, thus breaking the circuit.

The lower end of each lever is provided with a lug 11, and these two lugs will interlock, as plainly indicated in the drawings, when the wires are in their normal positions. These lugs will cause the contact-plates to engage closely together, but their engagement will not be strong enough to hold the contact-plates together when the strain of the wire is released.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A circuit-breaker for a suspended electric wire, comprising vertical levers, each having a contact-plate extended from its lower end and at right angles to the levers, and a block of insulating material to which the upper ends of the levers are pivoted, the longitudinal axis of the pivot being arranged at an obtuse angle transversely to the contact-plates, substantially as specified.

2. A circuit-breaker for a suspended electric wire, comprising vertical levers having contact-plates extended at right angles from the lower ends, and to which the current-carrying wires are attached, a block of insulating material to which the upper ends of the levers are pivoted, the longitudinal axis of said pivot being at an obtuse angle transversely of the contact-plates, and lugs on the lower portions of the levers, adapted to interlock when said levers are in their closed positions, the said levers being crossed at their lower ends, substantially as specified.

ANDREW J. CLARK.

Witnesses:

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