No. 636,379. Patented Nov. 7, 1899.

J. ERIKSON.

ELECTRIC CUT-OUT.

(Application filed Feb. 11, 1899.)

(No Model.)

Fig. 1.

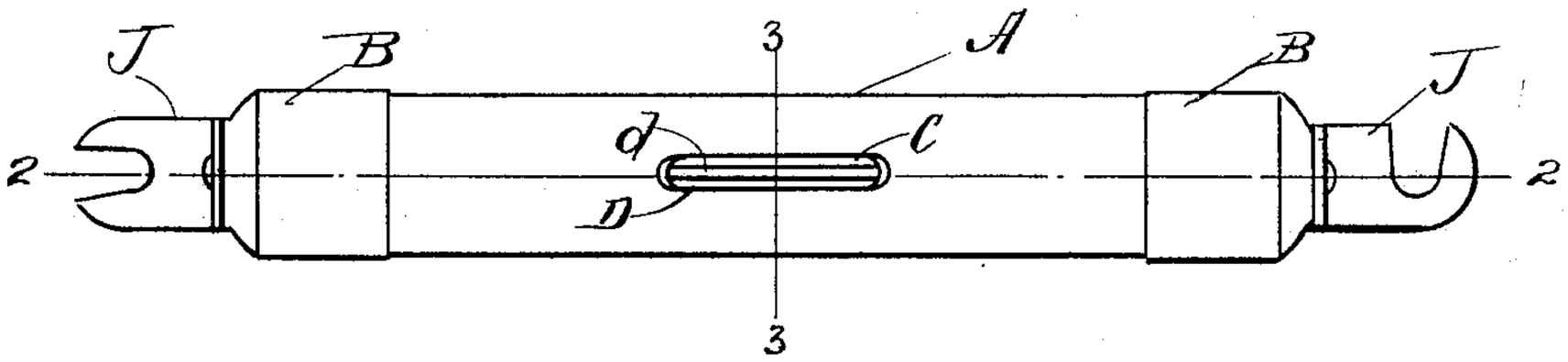


Fig. 2.

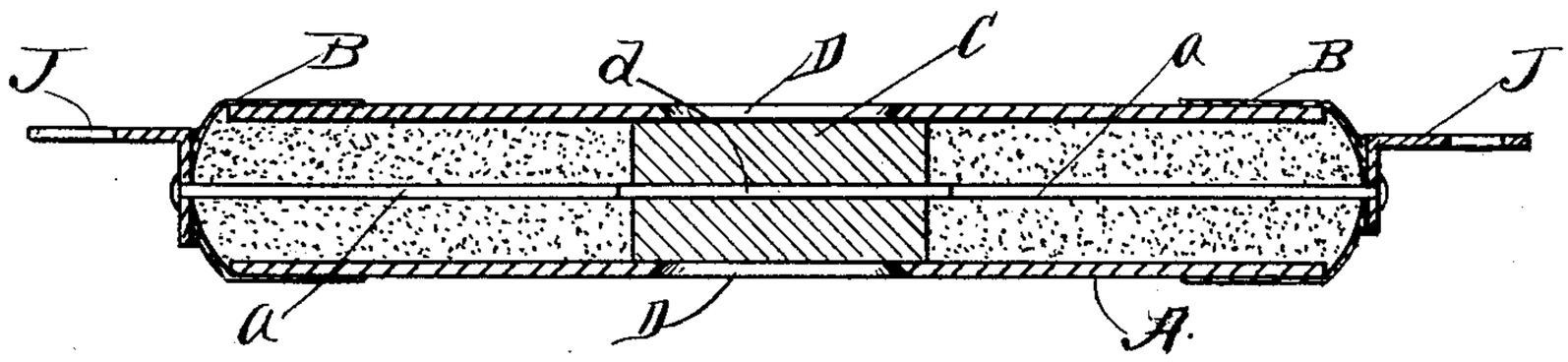
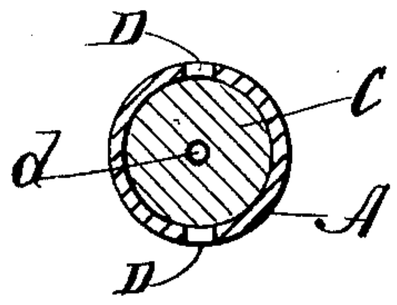


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN ERIKSON, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF THREE-FIFTHS TO BYRON T. POTTER AND HOWARD E. BARLOW, OF SAME PLACE.

ELECTRIC CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 636,379, dated November 7, 1899.

Application filed February 11, 1899. Serial No. 705,231. (No model.)

To all whom it may concern:

Be it known that I, JOHN ERIKSON, of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Electric Cut-Outs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to the class of electric cut-outs used to prevent fires or injury to motors from excessive currents of electricity.

The object of this invention is to improve electrical cut-outs of the class called "safety" cut-outs, so that when two or more cut-outs are used on one circuit and the current becomes so strong that one of them is fused it shall be possible to ascertain which one it is, so as to replace it without having to break open at random any or all of the cut-outs to ascertain that point.

Figure 1 represents a front elevation of the cut-out. Fig. 2 shows a longitudinal section of the device, taken through the center on line 2 2 in Fig. 1. Fig. 3 is a cross-section taken on line 3 3 in Fig. 1.

The construction is as follows:

A represents a tube made of some practically non-conducting incombustible material, such as fibrin, and B B are caps fitted to go tightly on the ends of the tube A. A knee-shaped clip J is attached to each of the caps B by soldering, and short pieces of wire *a a* are put in each half of the tube, and their outer ends are made fast in the caps B and clips J by soldering. The inner ends of the two wires *a a* are connected together by a short piece of fusible wire *d* by soldering. Openings D D are made in each side of the tube A at about its middle lengthwise, so as to give a view of the interior of the tube at that place.

The fusible wire *d* opposite to the openings D is inclosed in a cylinder of glass C or some other transparent non-inflammable substance, having a hole made through it of a size to just receive the wire, or the hole in the cylinder may be a little larger than the wire *d* and be filled full around the wire with saltpeter or some other substance the appearance of which will be changed by the fusion of the wire *d*, the object being to enable any one to see through the openings D D, by the appearance of the fusible wire *d* or of the substance surrounding the wire, which one of the cut-outs has been fused and not be obliged, as at present, to open the several cut-outs at random and in so doing spoil the cut-outs that are still intact. The parts of the tube or case A between the ends of the glass cylinder C and the caps B are filled with some incombustible substance, like steatite gypsum, to render the cut-out safe from communicating fire when the wire is fused. The cylinder C may be made of other transparent or semitransparent substances, such as horn, or of gums, like gum-arabic or British gum, or preparations of sugar, like rock-candy, which are sufficiently transparent to show the wire without being inflammable enough to communicate fire from it when fused and that can be formed directly on the wire.

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

In a safety electric cut-out the combination of a fusible wire, a transparent cylinder or case surrounding said wire, a filling in said cylinder, that will be visibly changed by the fusing of said wire, a tube or case to inclose said wire and its cylinder, one or more openings made in the side or sides of the case, caps on the ends of the tube or case, wires connecting said fusible wire with the caps, substantially as described.

In testimony whereof I have hereunto set my hand this 8th day of February, A. D. 1899.

JOHN ERIKSON.

In presence of—
BENJ. ARNOLD,
E. B. READ.