

J. ERIKSON.
ELECTRIC CUT-OUT.
APPLICATION FILED MAR. 5, 1902.

NO MODEL.

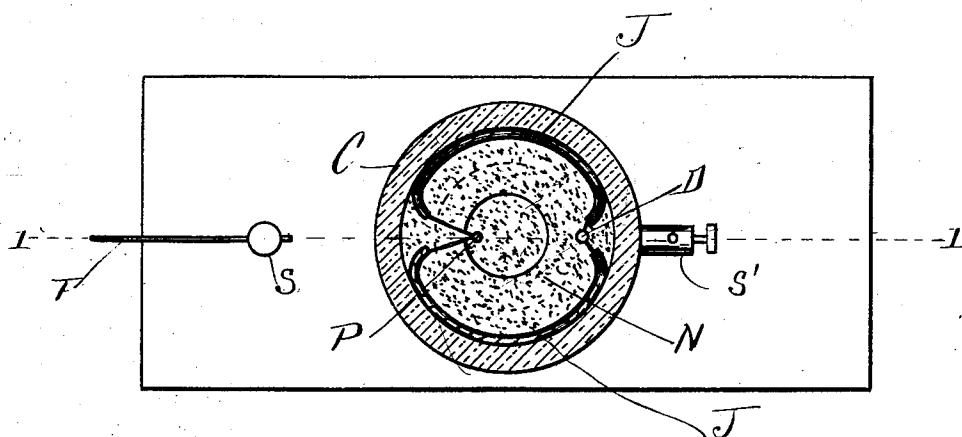


Fig. 2.

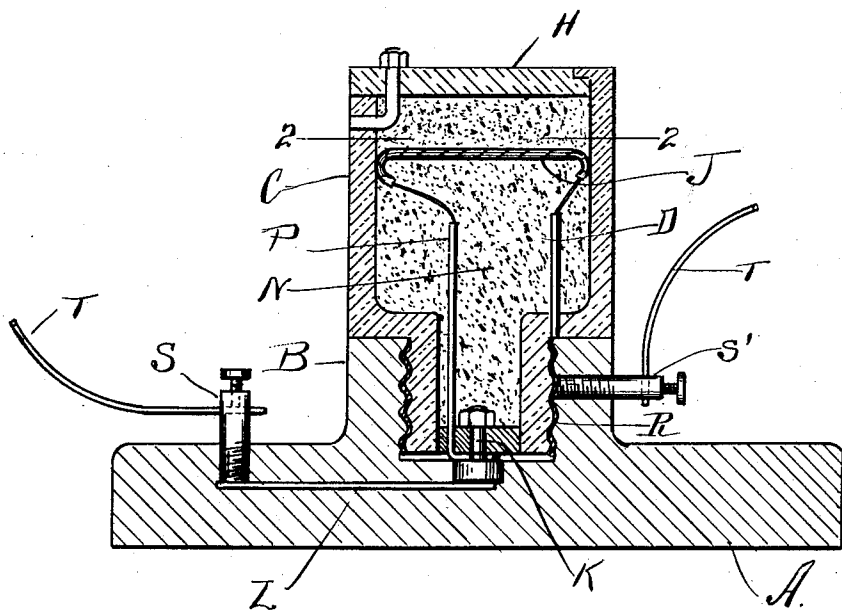


Fig. 1.

Witnesses

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UNITED STATES PATENT OFFICE.

JOHN ERIKSON, OF PROVIDENCE, RHODE ISLAND:

ELECTRIC CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 740,745, dated October 6, 1903.

Application filed March 5, 1902. Serial No. 96,751. (No model.)

To all whom it may concern:

Be it known that I, JOHN ERIKSON, a resident of the city of Providence, in the county of Providence and State of Rhode Island, have
 5 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
 10 letters of reference marked thereon, which form a part of this specification.

This invention relates to the class of electric cut-outs used to break a circuit when the current becomes too strong for safety and to
 15 indicate upon slight inspection whether the break has taken place or not. It is fully explained and illustrated in this specification and the annexed drawings.

Figure 1 shows a vertical section taken
 20 through the center of the apparatus on line 1 1 in Fig. 2. Fig. 2 is a horizontal section of the apparatus, taken through on line 2 2 in Fig. 1.

The construction and mode of operation of
 25 the cut-out are as follows:

A is a block which holds the parts of the apparatus and by which it can be attached to the side of a room or table. A socket B is made
 30 in its upper side to receive the stem of the case C, which has a screw-thread made in it, provided with a metallic shell R to screw into the socket in the block B.

The case C is preferably made of glass and has a bolt K at the lower end of the stem
 35 which rests on one end of the connecting-wire L, the other end of the wire L having connection with a binding-post S, inserted in the block A on one side of the socket B and in which one end of the circuit-wire T is held.

A short stout wire P has its lower end held
 40 under the head of the bolt K. Another like wire D is connected to the metallic shell R, and a binding-post S' is screwed through the neck of the block A, coming in contact with the metallic shell, making electrical connection therewith, and in this binding-post is
 45 held the other end of the circuit-wire T.

A fuse-wire J is carried around from the wire D to the wire P close to the inner surface of the glass and preferably in both directions (see Fig. 2) to divide the current
 50 and give greater safety and also that the con-

dition of the wire may be seen from either side of the case C. The fuse-wires J J are wound with tissue-paper or some material
 55 that will show the effect of the heat of an overcharge in the fuse-wire, and the space in the case between the two wires P and D is filled with some non-conducting substance like asbestos, lime, &c., to prevent short-circuiting of the current between the wires. A
 60 suitable cover H is provided for the case C, one that can easily be removed in case the inclosed parts of the cut-out should need to be repaired or replaced at any time.

The operation of the apparatus will be easily understood from the description of its construction, for as long as the current of electricity passing through the circuit-wires
 70 T T and the fuse-wires J is not higher than what the fuse-wire is intended to carry there will be no change, but should the current be increased in intensity the fuse-wire J would be fused and the discoloration of the covering of the wire would be plainly indicated to
 75 observation on either side of the case C, and where there are more than one cut-out on a line there would be no difficulty in determining which one was affected.

Having thus described my invention, what
 80 I claim, and desire to secure by Letters Patent, is—

1. In an electric cut-out the combination of a glass case, a neck on said case with an outside surface of conducting material, a
 85 block having a socket on it to receive said neck, a fuse-wire extending around close to the inner surface of the case, binding-posts, means for connecting said binding-posts with each end of said fuse-wire, a covering dis-
 90 colorable by heat for said fuse-wire, substantially as described.

2. In an electric cut-out the combination of a glass case, the two ends of circuit-wires entering said case, a fuse-wire wound with a
 95 material discolorable by heat and carried around against the inner side of said case and connected to said circuit-wires, substantially as described.

3. In an electric cut-out the combination
 100 of a transparent case, two portions of a circuit-wire entering said case and insulated from each other, a two-course fuse-wire running close to each side of the case to divide

the electric current, either or both of said fuse-wires so arranged as to be plainly visible and so indicate when they are blown, substantially as described.

- 5 4. In an electric cut-out the combination of a transparent case, two portions of a circuit-wire entering said case and insulated from each other, a two-course fuse-wire for the purpose of dividing the electric current, running substantially around the inner side
10 of said case, either or both of said fuse-wires arranged to be plainly visible in said case and so indicate when they are blown, substantially as described.
- 15 5. In an electric cut-out the combination of a transparent case, two portions of a cir-

cuit-wire entering said case and insulated from each other, a two-course fuse-wire for the purpose of dividing the electric current, running substantially around the inner side
20 of said case, said fuse-wire being covered by a material discolorable by heat, either or both of said fuse-wires so arranged as to be plainly visible and so indicate when they are blown, substantially as described. 25

In witness whereof I have hereunto set my hand this 3d day of March, A. D. 1902.

JOHN ERIKSON.

In presence of—

BENJ. ARNOLD,
J. E. ARNOLD.