(No Model.)

R. G. DAVIS & A. M. TORRANCE.

ELECTRIC CUT-OUT.

No. 557,257. Patented Mar. 31, 1896.

Fig. 1.

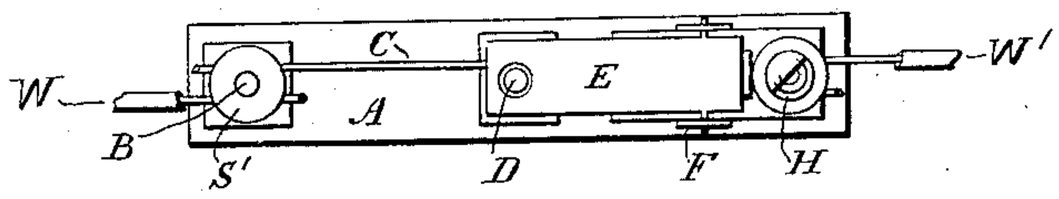

Fig. 2.

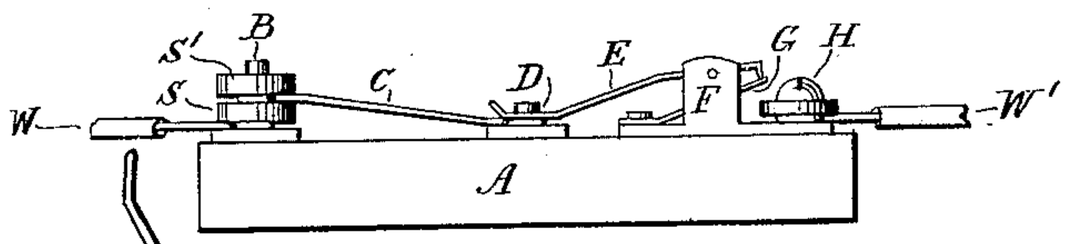

Fig. 5.

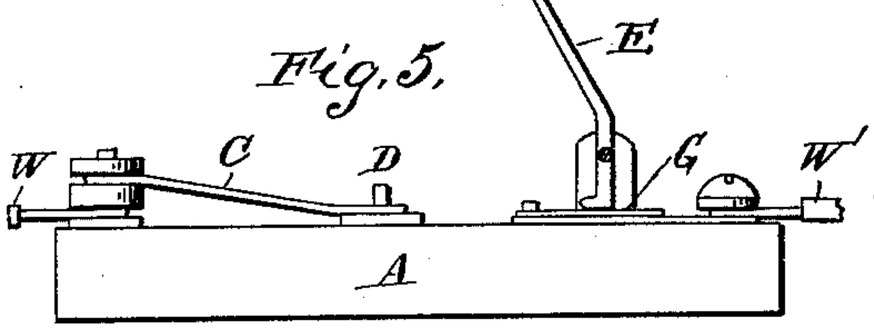

Fig. 6.

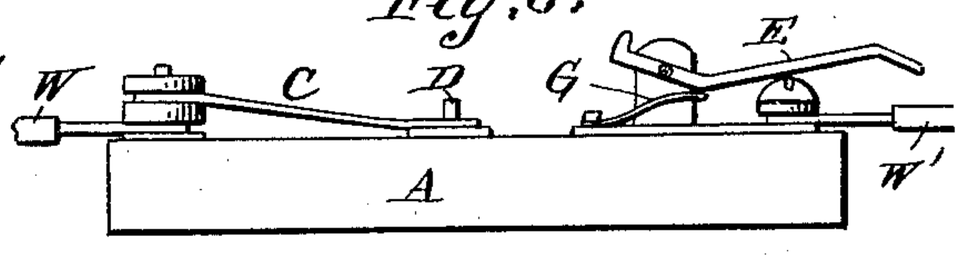

Fig. 3.

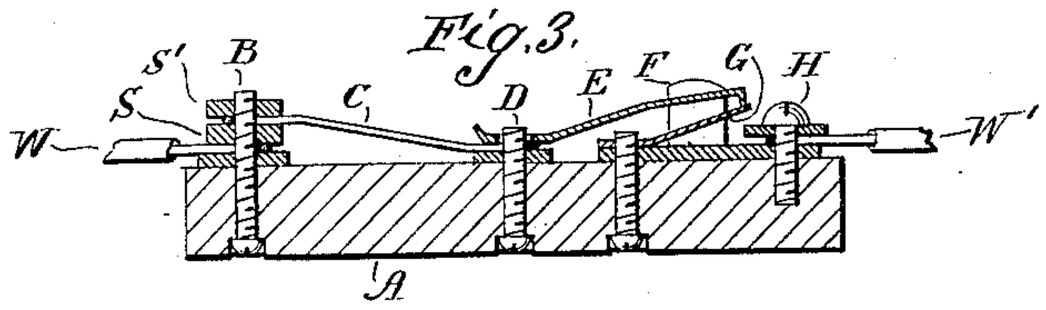

Fig. 4.

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ELECTRIC CUT-OUT.

SPECIFICATION forming part of Letters Patent No. 557,257, dated March 31, 1896.

Application filed July 5, 1893. Serial No. 479,555. (No model.)

To all whom it may concern:

Be it known that we, ROBERT G. DAVIS, of the city of Brooklyn, county of Kings, and State of New York, and ALBERT M. TORRANCE, of North Bennington, county of Bennington, and State of Vermont, have invented a new and useful Improvement in Electrical Cut-Outs; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings.

The object of our invention is to provide a simple, cheap, and efficient cut-out; and it consists in the peculiar arrangement of the parts employed, affording in a simple and safe manner great facilities for the replacing of the fuse without the formation of an arc between the terminals.

In the accompanying drawings the same reference-letters indicate the same parts in all figures.

Figure 1 illustrates a plan view of the cut-out; Fig. 2, a side elevation; Fig. 3, a longitudinal sectional elevation through Fig. 2; Fig. 4, a modification of said cut-out. Fig. 5 is a side elevation showing the pivoted arm held open by the spring. Fig. 6 is a side elevation showing the pivoted arm thrown open to its fullest extent.

A is an insulating-base of any suitable non-conducting and non-combustible material and of any desired shape, adapted to be secured to the wall, ceiling, or any other suitable support in any suitable manner.

B is one terminal or binding-post to which one wire, W, of the circuit is connected, preferably by being bent or looped around the same, and securely held in place by the binding-nut S.

C is a fusible conductor, one end of which is connected to the terminal or binding-post B, preferably by being bent or looped around the said binding-post B, and securely held in place between the binding-nuts S S′. The other end of said fusible conductor is connected to the contact-post D.

E is an arm made of any suitable conducting material, pivoted at or near one end in a suitable frame F, of conducting material. We prefer to construct this arm as a spring-arm by employing the spring G, though we do not desire to be limited to the employment of a spring, as all that is necessary, without departing from the nature of our invention, is that the arm E shall be so arranged that its free end may be brought in contact with the contact-post D or thrown out of contact with it at pleasure.

H is the other terminal or binding-post, passing through the base of the frame F and adapted to hold the other wire, W′, of the circuit.

Fig. 4 shows a modification of our invention, where we dispense with the binding-post B and employ two arms E with their frames F, binding-posts H, and contact-posts D, and connect the ends of the fusible conductor C to the contact-posts D D, respectively.

The circuit will be completed when the free end of the arm E is in engagement with the contact-post D and all the other parts are in contact, and the current will be broken or cut out when the engagement is broken either when the fusible conductor is burned or destroyed or the arm E is thrown out of contact with the contact-post D, and the circuit may be instantly broken or completed at any time without the formation of an arc between the contacts.

To replace the fusible conductor C when burned or destroyed, the pivoted arm E is raised until the end which engages with the spring G has depressed said spring to the point of greatest depression, whereupon the spring then acts to hold the pivoted arm E in its open position, as shown in Fig. 5, so that no arc can be formed. The pivoted arm may be revolved still further, if desired, until its longer portion rests on the binding-post H, as shown in Fig. 6. A new fusible conductor C is then inserted in the place of the one burned or destroyed. Then the operator revolves the pivoted arm E in the reverse direction to that first described, just beyond the point of greatest depression of the spring G, Fig. 5. At this point, and while the pivoted arm E is still so far removed from the contact-post D as to prevent the formation of an arc, the op-

erator removes his hand from the pivoted arm E, whereupon the spring G, acting on the pivoted arm E, throws it into engagement with the contact-post D and holds it there, and the circuit is again completed.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination of two terminals adapted to be connected to a circuit, a contact-post intermediate the two terminals, a fusible conductor connecting one terminal with the contact-post, an arm pivoted intermediate its ends, connected with the other terminal, and adapted to be thrown into, or out of, engagement with the contact-post at pleasure, a spring secured at one end, and having its free end in contact with the shorter portion of the pivoted arm, and arranged to have a tendency, in its normal position, to hold the pivoted arm in contact with the contact-post, and when the pivoted arm is revolved away from the contact-post, and beyond the point of greatest depression of the spring, to hold the pivoted arm in its open position, substantially as set forth.

2. The combination of terminals adapted to be connected to a circuit, contact-posts intermediate the terminals, a fusible conductor connecting the contact-posts, pivoted arms connected with the terminals, and adapted to be brought into, or thrown out of, engagement with the contact-posts at pleasure, springs secured at one end and having their free ends in contact with the shorter portions of the pivoted arms, and arranged to have a tendency in their normal position to hold the pivoted arms in contact with the contact-posts, and when the pivoted arms are revolved away from the contact-posts, and beyond the point of greatest depression of the springs, to hold the pivoted arms in their open position, substantially as set forth.

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