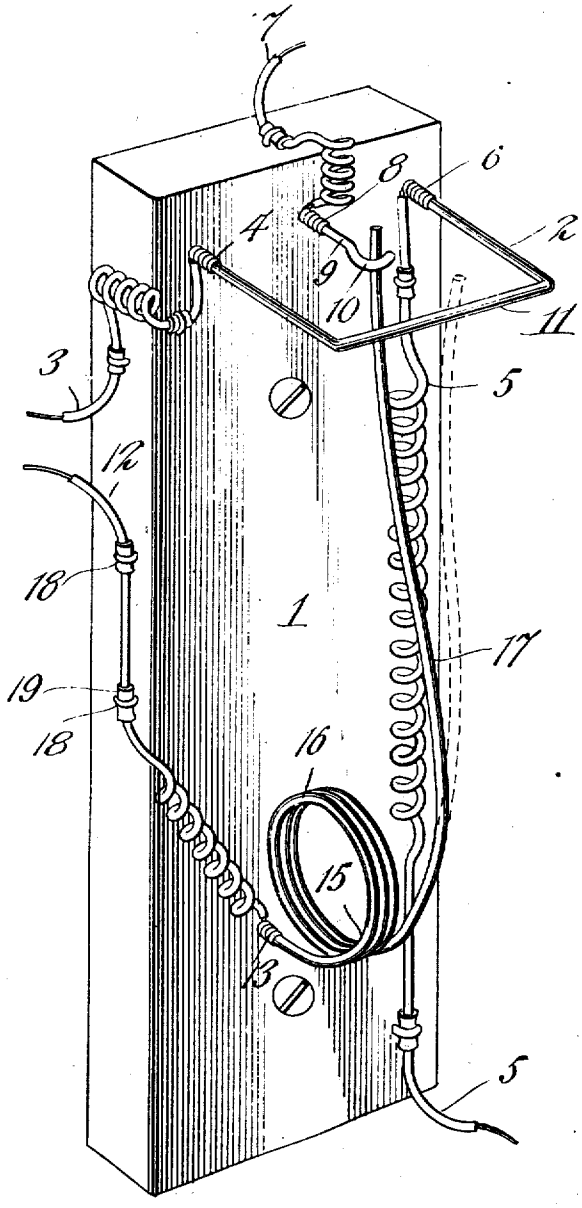
No. 860,481. PATENTED JULY 16, 1907.

E. O. JACKSON.

ELECTRIC CUT-OUT.

APPLICATION FILED FEB. 6, 1907.

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UNITED STATES PATENT OFFICE.

EVERETT O. JACKSON, OF STILLWELL, ILLINOIS.

ELECTRIC CUT-OUT.

No. 860,481. Specification of Letters Patent. Patented July 16, 1907.

Application filed February 6, 1907. Serial No. 356,092.

To all whom it may concern:

Be it known that I, EVERETT O. JACKSON, a citizen of the United States, residing at Stillwell, in the county of Hancock and State of Illinois, have invented new and useful Improvements in Electric Cut-Outs, of which the following is a specification.

The invention relates to an improvement in switches or cut-outs for telephones, telegraphs and similar circuits, whereby to provide a simple means for disconnecting the instrument from the main line in the event of an electrical storm and thereby prevent damage to the instrument.

The main object of the present invention is the provision of a simple form of switch carrying a fixed ground connection and having the service terminal arranged for manual disconnection when desired, said service terminal being normally under tension to automatically engage the ground in the event of such disconnection.

The invention will be described in the following specification, reference being had particularly to the accompanying drawing, in which:—The drawing represents a perspective view of a cut-out constructed in accordance with my invention.

In the drawings, wherein is shown the preferred embodiment of the details of structure, 1 represents an insulated base designed to be secured to a suitable fixture in any desired manner. On this base, near the upper end, is arranged a metallic loop 2, preferably of inverted U-shape with the terminals inserted in series in the base. The loop 2, which is preferably of substantial wire forms the grounding loop of the cut-out, the grounding conductor 3 of the instrument being connected to one arm of the loop, preferably by winding the terminal of said conductor about the arm, as at 4. A grounding conductor 5 is similarly connected at 6 to the opposite arm of the loop, thereby effectively grounding the instrument as is necessary for instruments arranged in grounded circuits. The service conductor 7 leading to the instrument is also connected to the base, and is terminally wound at 8 about the relatively lower end of a hook 9. The hook is arranged within the plane of the loop 2, with its hook portion 10 disposed some distance below the cross bar 11 of the loop. The service conductor from the source of current supply, as 12, is also secured to the base, and terminally coiled at 13 about a contact member 15. The contact member comprises a single length of wire mounted in a socket in the base 1 adjacent the lower end of said base, said member being, immediately adjacent its connection with the base, formed to provide spring coils 16. From the coils the contact memb projects in the form of an arm 17, with its upper term nal so arranged as to permit its engagement with t hook 10. The respective wires or conductors are pr erably secured to the base through the medium of st ples 18, the conductor being provided with insulati sleeves 19 to be engaged by the staples, thereby pr viding additional insulation at this point.

In use the cut-out is arranged as illustrated in t drawing, with the terminal of the arm 17 engaged b neath the hook 10. The service current then ente the instrument through the conductor 7, hook 9, a 17, and conductor 12, the grounding from the inst ment being through conductor 3, loop 2, and conduct 5. In the event of an electrical storm or other distur ance, the arm 17 is manually disengaged from the ho 10 and released, whereupon the spring coils 16 op ate to automatically force said arm into engageme with the cross bar 11 of the loop 2. The service c rent is thus effectively grounded and the instrume disconnected, thereby preventing its damage by el trical energy generated by a storm, or other means.

The invention provides a simple form of cut-c designed to be quickly and conveniently operated disrupt the service conductor and automatical ground the live portion thereof.

Having thus described the invention what is claim as new is:—

1. A cut-out comprising a loop arranged in the groun conductor, a spring member forming a part of the serv conductor, and means for normally maintaining s spring member to form a continuation of the service c ductor.

2. A cut-out comprising a loop arranged in the groun conductor, a spring member forming a part of the serv conductor, and means for normally maintaining said spr member to form a continuation of the service conduct said member being arranged to automatically engage grounding loop when disconnected from the service c ductor.

3. A cut-out comprising an insulated base, a loop m ber secured thereon, grounding conductors electrically gaging the loop member, a hook secured on the base forming one terminal of a service conductor, and a spr arm secured on the base and forming an additional minal of the service conductor.

4. A cut-out comprising an insulated base, a loop m ber secured thereon, grounding conductors electric engaging the loop member, a hook secured on the base forming one terminal of a service conductor, and a spr arm secured on the base and forming an additional minal of the service conductor, said spring member be designed to engage the hook to complete the service c ductor or to engage the loop to ground the serv conductor.

5. A cut-out comprising an insulated base, a loop

cured thereon, grounding conductors connected to the loop, a hook secured to the base in the plane of the loop, a service conductor connected to the hook, an arm mounted in the base and formed with a spring coil, a service conductor connected to the arm, the free terminal of the arm being arranged to engage the hook beneath the cross bar of the loop, whereby upon disconnection of the arm from the hook electrical engagement of the arm and loop will be automatically effected.

In testimony whereof, I affix my signature in of two witnesses.

his
EVERETT O. × JAC
mark

Witnesses:
THOMAS JACKSON,
TILFORD HOWARD.