

No. 898,086.

PATENTED SEPT. 8, 1908.

W. BOEHM.
MULTIPLE ELECTRIC FUSE CUT-OUT.
APPLICATION FILED JUNE 8, 1907.

Fig. 1.

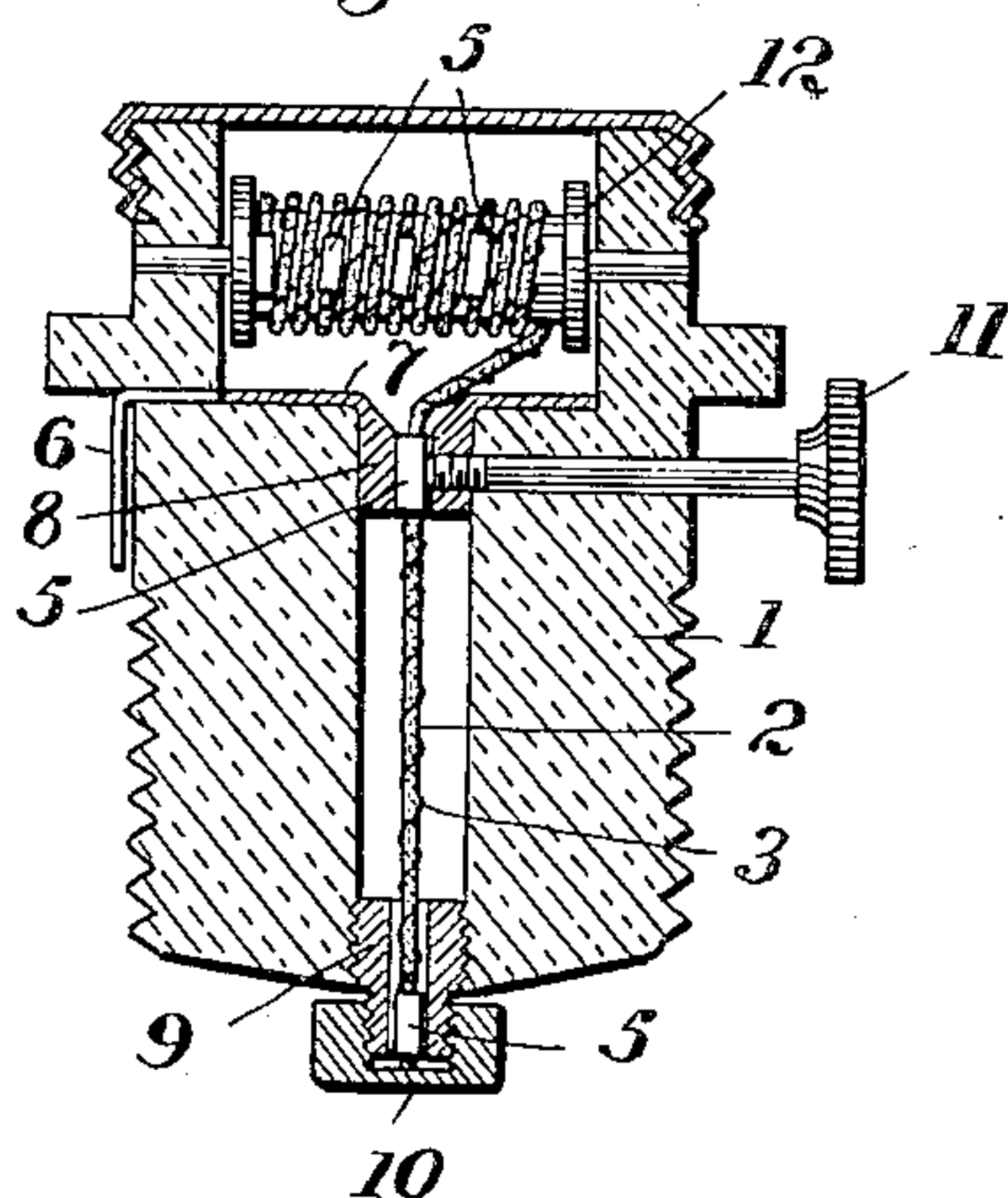


Fig. 2.

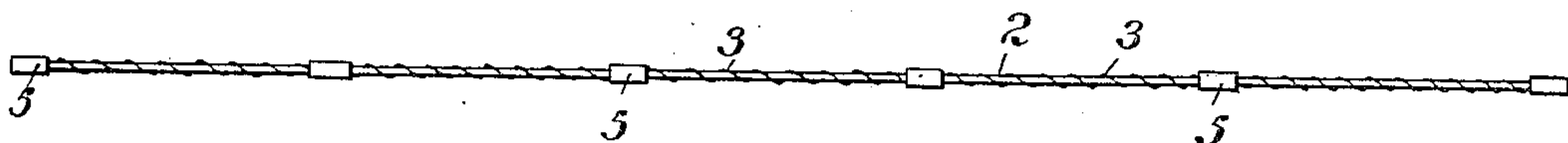
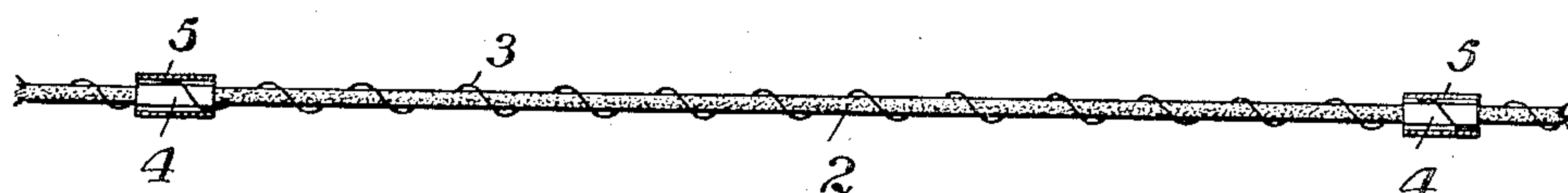


Fig. 3.



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MULTIPLE ELECTRIC FUSE CUT-OUT.

No. 898,086.

Specification of Letters Patent.

Patented Sept. 8, 1908.

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To all whom it may concern:

Be it known that I, WILHELM BOEHM, a subject of the Emperor of Germany, and resident of Berlin-Charlottenburg, Germany, have invented certain new and useful Improvements in Multiple Electric Fuse Cut-Outs, of which the following is a full, clear, and exact description.

The fusible cut-outs commonly employed in electric work are generally destroyed and have to be discarded after one operation or use thereof. It has been heretofore proposed to provide a multiple device, or one which could be used to automatically break an electric circuit a plurality of times, but such fuses have been objectionable because the maximum number of times that they could be employed was extremely limited and their construction has been both difficult and expensive. Such fuses have also been objectionable because it was impossible to readily repair the same.

The object of the present invention is to provide a multiple fuse cut-out which may, by a slight adjustment, be adapted for a large number of operations and will be described in connection with the accompanying drawings, in which,

Figure 1 is a sectional view through a fusible cut-out plug constructed in accordance with the present invention; Fig. 2 is a detail view of the fuse removed from the plug; Fig. 3 is a detail on an enlarged scale of one section of the fuse.

Referring to the drawing, 1 designates the body of the plug or holder for a fusible cut-out which may be of any suitable style and is formed of porcelain or other insulating material. As the invention may be employed with plugs of various styles the drawing merely illustrates the body thereof conventionally. The fuse proper consists of a core 2 of asbestos or other non-combustible material about which is wound a fusible wire 3. This wire is soldered at intervals between metal sleeves or bands 4, 5, surrounding the core 2, the inner bands 4 being held securely on the non-combustible core. Each section of the fuse wire is of such length as to extend between the contacts in the plug. As shown the lateral or side contact 6 is electrically connected as at 7 with a plate 8 within the plug and the other contact is made in the form of a split sleeve 9 and a nut 10 adapted to be screwed upon the exposed end of the sleeve 9 and hold the sections thereof to-

gether and in contact with one of the bands 5 of the fuse. A set screw 11 is adapted to hold the next band 5 of the series against the contact 8 and the circuit is therefore completed through the fusible wire 3 between the contacts 8, 10. The fuse is made of such length that it will include, say twenty sections, each long enough to extend from the contact 8 to the contact nut 10 and the body thereof is coiled upon a spool or spindle 12 of insulating and non-combustible material which is supported in a suitable pocket or chamber in the plug 1.

In case the operative section of the fuse between the contacts 8 and 10 is destroyed by the passage of an excessively heavy current the usefulness of the cut-out is not entirely destroyed because a new section of the fuse may be readily positioned between said contacts. That is, by loosening the screw 11 and removing the nut 10 the projecting end of the non-combustible core may be engaged and thereby the fuse drawn longitudinally through the plug, unwinding from the spool 12 until the ring or band 5 previously engaging the collar 8 is properly positioned within the sleeve 9 and the next band or ring of the fuse is brought against the contact 8 when the screw 11 and nut 10 may be adjusted to properly complete the circuit. In case the entire length of fuse has been used it will be seen that a new one may be readily coiled about the spool 12 and passed into the longitudinal passage of the plug, thus quickly restoring the device to its normal condition.

Having thus described the invention what I claim and desire to secure by Letters-Patent is,

1. The herein described multiple electric cut-out consisting of a plug-like body of non-conducting material having a passage extending through one end thereof, a fuse within the passage comprising a plurality of independent sections, a contact having a member on the outside of the body and having within said passage two relatively adjustable members between which the fuse passes, and a second contact engaging the fuse and closing one end of the passage, each section of the fuse having a non-combustible core and being of such length as to extend from one contact to the other.

2. The herein described multiple electric cut-out consisting of a plug-like body of non-conducting material having a passage extending through one end thereof, a fuse within

the passage comprising a plurality of independent sections, a contact having a member on the outside of the body and having within said passage two relatively adjustable members between which the fuse passes, and a second contact having an inner tubular member arranged within the passage and receiving one end of the fuse, and a clamping member extending to the outside of the body and engaging said inner member to hold it in electrical connection with the fuse, each section of the fuse having a non-combustible core and being of such length as to extend from one contact to the other.

3. The herein described multiple electric cut-out consisting of a plug-like body of non-conducting material having a passage extending through one end thereof, a fuse extending through the passage and comprising a plurality of independent fusible sections and a non-combustible core, a spool supporting the body of the fuse at the inner end of the passage, and two contacts arranged to detachably engage the same section of the fuse within the passage and each having a member extending to the outer surface of the body.

4. A multiple electric cut out consisting of a suitable body having two separated contacts, a fuse comprising a non-combustible core, a plurality of fusible sections each of such length as to extend from one of said contacts to the other, and metal bands connecting the terminals of the fusible sections with said core, and means for detachably holding

said bands in electrical connection with the contacts.

5. A multiple electric cut out consisting of a suitable body provided with two separated contacts, a fuse consisting of a non-combustible core, a plurality of metal rings or bands secured to said core at intervals corresponding to the distance between said contacts and a fusible wire connecting said bands, and means for holding the bands at the ends of any section of said wire in electrical connection with said contacts.

6. The herein described fuse for a multiple electric cut out consisting of a flexible core or body of non-combustible material, a plurality of contacts secured at intervals throughout the length of said body, and a plurality of sections of fusible wire connecting said contacts.

7. The herein described fuse for a multiple electric contact consisting of a flexible core of non-combustible material, a plurality of metal bands secured to said core at suitable intervals, fusible wires extending between said bands and additional rings or bands surrounding those aforesaid and the terminals of said fusible wires and electrically connected therewith.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILHELM BOEHM.

Witnesses:

SIEGBERT KANTOROWICZ,
CHARLOTTE BARUCH.