Aug. 14, 1928. 1,680,969

W. P. BRIGGS

CUT-OUT AND PLUG

Filed Aug. 4, 1926

Fig. 1.

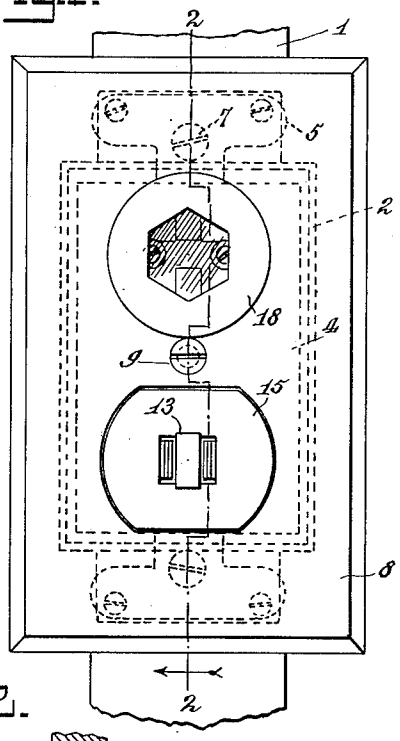


Fig. 3.

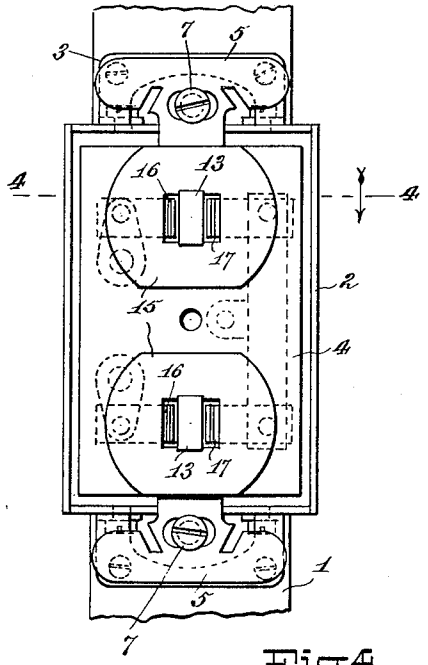


Fig. 2.

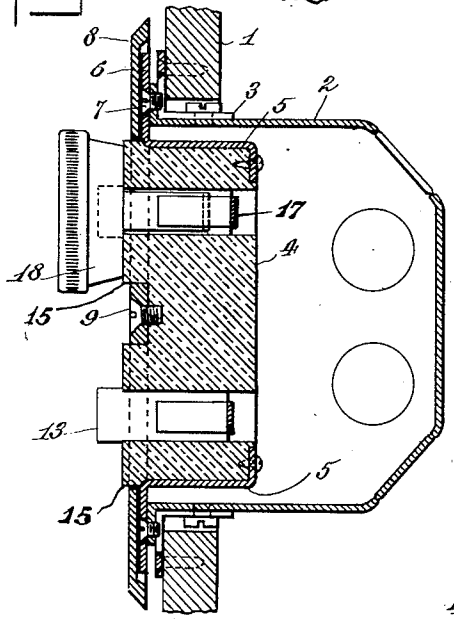


Fig. 5.

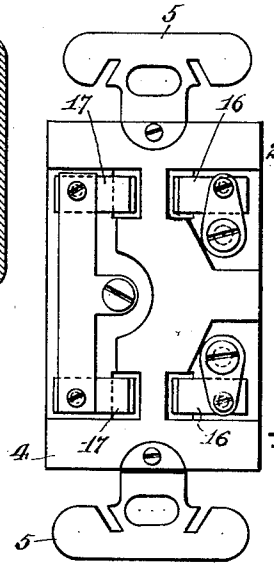
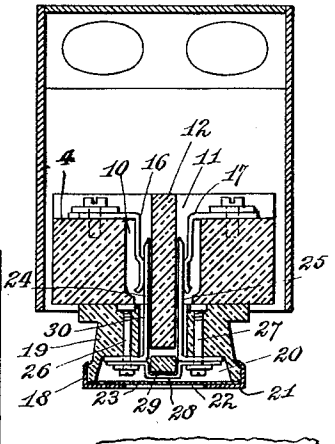


Fig. 4.



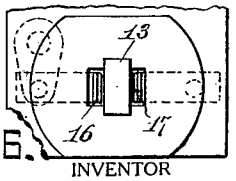


Fig. 6.

WITNESSES

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UNITED STATES PATENT OFFICE.

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CUT-OUT AND PLUG.

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This invention relates to what are known as cut-outs and to fuse plugs therefor, the object being to provide an improved construction both of a cut-out and fuse plug whereby no intentional or accidental overloading of the wires may be made when the plugs are changed or new ones provided.

Another object of the invention is to provide an improved fuse plug and cut-out wherein a special structure is presented which will prevent anything but a correct fuse plug from being used.

A still further object of the invention is to provide an improved cut-out and fuse plug wherein the chances of tampering with the parts successfully is reduced to a minimum.

In the accompanying drawing—

Figure 1 is a plan view of a cut-out disclosing an embodiment of the invention, one of the fuse plugs being omitted for better disclosing the general structure.

Figure 2 is a sectional view through Figure 1 on line 2—2.

Figure 3 is a plan view of the structure shown in Figure 1 with both plugs removed and the outer plate removed.

Figure 4 is a sectional view through Figure 3 on line 4—4.

Figure 5 is a rear view of the cut-out with the box or housing removed.

Figure 6 is a fragmentary plan view of a modified form of socket to that shown in Figure 1.

Referring to the accompanying drawing by numerals, 1 indicates a support of any desired kind to which the box or housing 2 is secured in any suitable way, as for instance, through the use of a bracket 3 and suitable connecting screws. The cut-out is provided with a body 4 of insulating material which carries a bracket 5 at each end and each of said brackets is provided with a turned over section 6 so as to receive the respective screws 7 which extend therethrough and through a turned over part of box 2 whereby these brackets are clamped firmly to the box and as these brackets are rigidly connected with the body 4 with screws or other means, said box is firmly held in place. An ornamental plate 8 is mounted on the outer part of body 4 and held in place by a suitable screw 9, said plate covering the extension 6 and associated parts so that a smooth appearing structure will be presented as shown in Figure 1. In the drawing the body 2 is provided with two sockets so as to receive two fuse plugs but it will be evident that the same may be formed with only one socket or with more than two. As the sockets are identical and also the fuse plugs are identical, the description of one socket and one plug will apply to all.

As indicated in Figure 4 the body 4 is provided with openings or passage-ways 10 and 11 separated by a division wall 12, said division wall projecting an appreciable distance beyond the front surface of the body 4 so as to provide an abutment or bridge 13. Also a raised portion 15 is formed on body 4 for each of the sockets, the respective raised portions projecting through the plate 8 a short distance as indicated in Figure 2. Contacts 16 and 17 extend into the respective passage-ways 10 and 11 and at their inner ends are connected to a source of current supply. The passage-ways 10 and 11 with their contacts and associated parts form a receptacle or socket designed to receive part of the plug, which in the present instance, is a fuse plug but if desired, the connections from contacts 16 and 17 could be changed and an ordinary lighting plug might be used so that the device could be converted from a cut-out into a receptacle for use with floor lamps or other fixtures. Associated with the cut-out structure is a plug 18. This plug is provided with a body 19 of insulating material having a recess 20 in the outer end covered by a metallic plate 21 having a window 22 which in turn is closed by a transparent member 23 of isinglass or other desired material.

In constructing the body 19, a passage-way 30 is provided, said passage-way accommodating the contact prongs 24 and 25. These contact prongs at their outer ends are bent over so as to receive the respective clamping bolts 26 and 27, said bolts extending through the ends of the substantially U-shaped fuse 28, said fuse fitting over a bridge 29 formed integral with the body 19. It will be noted that the bridge 29 is substantially the same width as the division wall 12, said division wall being adapted to be inserted into the passage-way 30 between the prongs 24 and 25 or rather the plug fits over the extension 13 of the division wall 12 so that the parts will appear as shown in Figure 4. By varying the width of the passage-ways 10 and 11 and also the width of the contact prongs 24 and 25, a proper regulation may be se-

cured in the use of a proper size fuse. As an example, the fuse shown in Figure 4 and the respective passage-ways 10 and 11 are of a size to accommodate a fuse carrying ten amperes. If a fuse is desired which will carry more amperage, another plug must be secured with prongs 24 and 25 much wider and such a plug could not fit into the sockets. This would necessitate changing of the sockets and the provision of proper wiring for carrying the heavier current. However, if a narrow set of prongs were used, they might be readily inserted. In this way no more current is allowed to pass through the receptacle than the prescribed amount regulated by the proper size fuse.

In Figure 6 a fragmentary plan view of a socket is shown which is provided with passage-ways 10 and 11 much narrower than those shown in Figure 3 and, consequently, the plug used in Figure 3 could not be used in this receptacle.

From the various details set forth it will be evident that means have been provided for causing the use of a fuse plug having the correct size fuse. It will also be evident that through the use of the projection 13, means have been provided which will prevent or reduce to a minimum the short circuiting of the receptacle and consequent elimination of functioning of the fuse.

What I claim is:

1. In a cut-out a body formed with a pair of passage-ways extending entirely therethrough axially, terminals extending in said passage-ways from the inner ends thereof, a division member between said terminals, said division member projecting beyond the outer surface of said body for forming a projection and a raised portion surrounding said passage-ways and said division member.

2. In a cut-out a body formed with a pair of prong receiving passage-ways extending entirely through the body, a pair of terminals extending into said passage-ways from the inner end of said body, a division wall arranged between said terminals, said division wall projecting beyond the face of the body and presenting a projection, and a substantially annular raised portion surrounding said projection and said passage-ways.

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