Feb. 23, 1932. E. W. MISSEL 1,846,037

OUTLET PLUG

Filed May 28, 1930

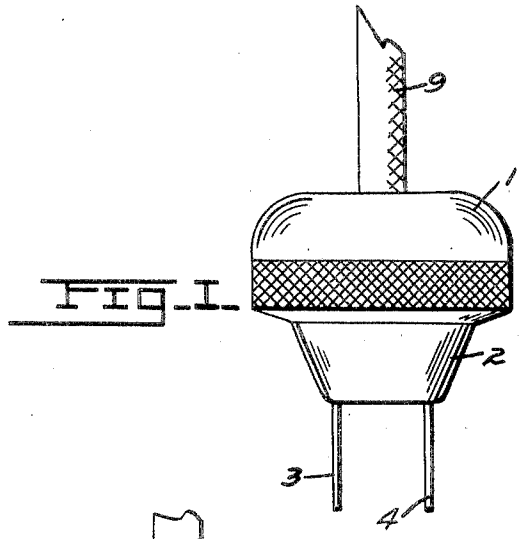


Fig. 1.

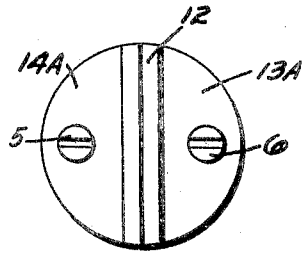


Fig. 5.

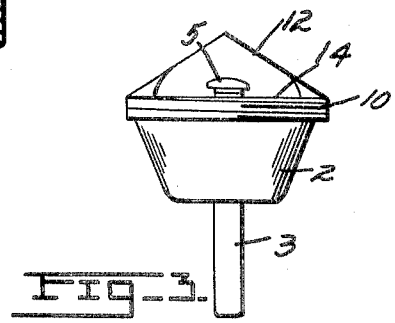


Fig. 3.

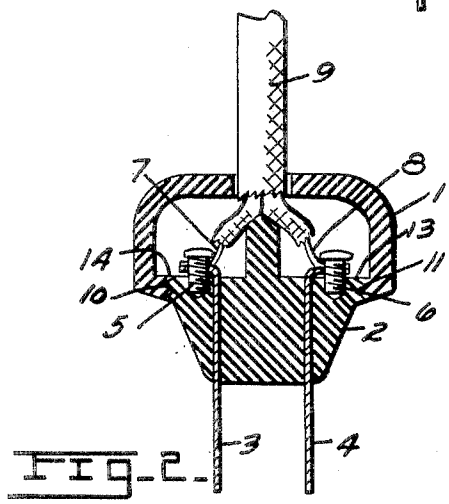


Fig. 2.

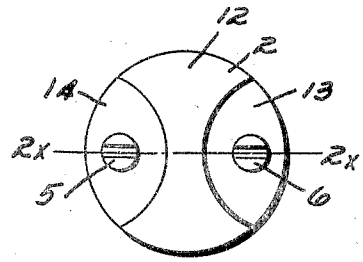


Fig. 4.

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UNITED STATES PATENT OFFICE

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OUTLET PLUG

Application filed May 28, 1930. Serial No. 456,434.

The object of this invention is to provide a new and improved form of safety outlet plugs.

Another object of the invention is to make the plug so that the wires leading out therefrom are more effectively separated and cannot come into contact with each other so as to cause a short circuit.

Another object of the invention is to provide for the easy assembling of the plug.

Another object is to provide an undercut surface on the plug which serves as a handle by which the plug is more easily pulled out from the socket thus avoiding any strain on the wires that would tend to pull them loose from the connections.

These and other objects of the invention will be illustrated in the drawings, described in the specification and pointed out in the claim at the end thereof.

In the drawings:

Figure 1 is a side elevation of the plug assembly.

Figure 2 is a section through the complete plug on the line $2x$, $2x$ of Figure 4.

Figure 3 is a side elevation of the male member of the plug.

Figure 4 is a top plan view of the member shown in Fig. 3.

Figure 5 is a top plan view of a modified form of the member shown in Figure 4.

In the drawings like reference numerals indicate like parts.

In the drawings reference numeral 1 indicates the cap or female member of the plug. 2 indicates the male member of the plug. The male member has a body that is exposed outside of the plug when assembled which body has the shape of a truncated cone. At the top the male member is cone shape, and this cone shaped top is cut away to form the flat decks 13 and 14 which are separated by the cone shape member 12 which serves as a partition between the decks 13 and 14 and thus forms a pocket on either side of the partition.

Through the body of the male member extends the contact members 3 and 4 which members are stiff brass and extend through and project beyond the base so that they can be inserted in the outlet socket. These contact members are fastened to the decks 13 and 14 by the screws 5 and 6. These screws are also adapted to fasten to the contact members the wires 7 and 8 of the lead in cable or lamp cord 9. The base is provided with a male thread 10 and a female member is provided with a female thread 11 which engages with the male thread 10 of the base.

The cap 1 is made large enough so as to enclose a chamber with ample space between it and the top of the male member of the plug where the contacts are located. As shown in Figure 4, the top of the male member is cut out on either side of the cone or partition 12 as though by a reamer to form the decks 13 and 14, and as shown in Figure 5 the cone is cut with parallel valves as though by a saw or by a mill to form the semi-circular decks 13A and 14A. In either case the mutilated cone shape member 12 forms a partition between the pockets formed on either side of it, and prevents the wires on either side from getting crossed and making contact with the wires on the other side.

The cone shape surface of the exposed part of the base together with the cap 1 forms an undercut surface which can be grasped effectively by the fingers in pulling the plug out of the socket. With plugs now in use, the operator will ordinarily not take hold of the plug itself, but will take hold of the wires in pulling the plug out of the socket. This puts a strain on the wires with the possibility always of pulling the wires loose from one or more of the binding screws and thus causing a short circuit. By making the plug in the manner shown, the body of the plug affords a convenient handle that reduces or completely removes this possibility of pulling the wires loose.

It will also be understood that the male and female members will be made of bakelite or some other form of insulating material that is easily molded just as commercial plugs are now made.

I claim:

In an outlet plug, the combination of a male member, a cap threaded thereon, a conical partition extending centrally across the

top of the male member inside of the cap, an arcuate portion being cut out on either side of the partition forming a deck, a contact member extending from each of said decks out through the body of the male member, a hole in the top of the cap through which lead wires are adapted to extend to the contact members on either side of said partition, said contact members each having an end turned down over its deck, said ends having openings therein, said decks having threaded openings therein, screws passing through the openings in the contact members and engaging with the threaded openings in the deck and adapted to clamp the contact members to the body portion, and adapted to clamp the lead wires against the contact members.

In testimony whereof I affix my signature.

MRS. EMMA W. MISSEL.