Oct. 1, 1929. L. GROSS 1,729,613

ELECTRICAL CONNECTER

Filed Dec. 17, 1925

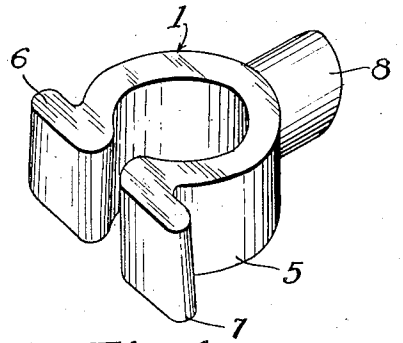


Fig. 1

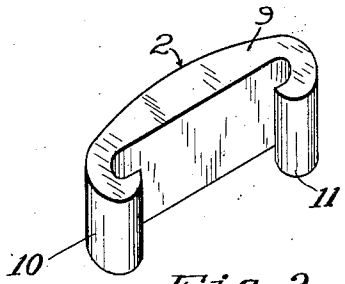


Fig. 2

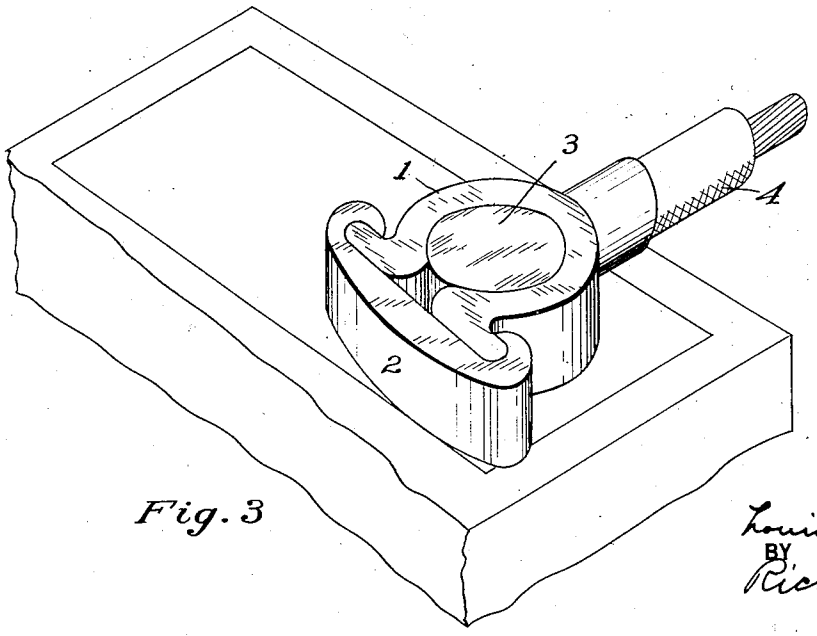


Fig. 3

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UNITED STATES PATENT OFFICE

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ELECTRICAL CONNECTER

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This invention relates to an electrical connecter. It is particularly adapted for connecting terminal posts such as are used on storage batteries to the conductors of electric circuits.

Heretofore connecters for battery terminals have been provided in which a ring of metal is placed around the terminal post and united thereto by being "burned on". This produced a good electrical contact, but was objectionable on account of the difficulty of applying and removing the connecter. Connecters have also been provided in which a split ring is placed around the terminal post, the split being bridged by a bolt, and the bolt tightened to restrict the opening of the ring, causing it to grip the post. These connecters were more readily applied than those that were "burned on" but the fumes of the sulphuric acid used in the battery soon corrodes the bolts, rendering removal of the connecters difficult, frequent replacement of the bolts necessary, and loosening of the connecters, with attendant poor electrical contact, common.

One object of the present invention is to provide an improved connecter for battery terminals which will be free from the disadvantages of prior connecters.

Another object of the invention is to provide a connecter which will consist of few and simple parts.

Another object is to provide a connecter which may be made entirely of material which does not corrode easily.

Another object is to provide a connecter which may be readily applied to a terminal post or removed therefrom, easily adjusted for variations in terminal posts, and will furnish and maintain a good electrical contact.

Another object is to provide a connecter which may be readily and economically manufactured.

This invention contemplates a connecter comprising two interlocking parts which may be placed around a battery terminal post or the like and caused to grip the same by being moved relative each other, both of which parts may be made of lead or other relatively non-corroding material.

In the accompanying drawings, one practical embodiment of the invention is shown by way of illustration—

Fig. 1 is a perspective view of one part of the connecter;

Fig. 2 is a perspective view of the other part, and

Fig. 3 is a perspective view of the parts assembled and applied to a storage battery of conventional design.

In the embodiment shown, the connecter comprises two interlocking parts, a split ring 1 and a clamp or shackle 2 for restricting the ring to cause it to firmly grip a battery terminal post 3 or the like. Means are provided for permanently connecting an electrical conductor 4 to one of the interlocking parts, here shown as the ring.

The split ring comprises a cylindrical band 5 provided, adjacent the split, with outwardly extending, substantially tangential flanges 6 and 7. Opposite the split, the band is provided with a hollow boss 8 for the reception of the end of conductor 4 which is secured therein in any well known or other desired manner. The outer ends of the flanges 6 and 7 converge upwardly as shown in Fig. 1.

The clamp comprises a bar portion 9 which terminates in inwardly directed jaws 10 and 11, adapted to engage the flanges 6 and 7 as shown in Fig. 3. The inner surfaces or recesses of the jaws conform to the flanges and the ends of these recesses taper or converge at substantially the same angle as the ends of the flanges, but are slightly closer together.

It will be seen that if the lower or wider end of the clamp be slid over the upper or narrower ends of the flanges, and the clamp be then forced down in respect to the ring, that the flanges will be wedged toward each other, restricting the opening of the ring, and causing it to grip the post 3 more tightly as the clamp is moved down, producing a firm mechanical and good electrical connection between the post and connecter.

The connecter is removed by sliding the clamp up and off from the flanges. Should the ring stick to the post, it may be readily

loosened as by prying the flanges apart with a screw driver.

If the terminal post should be too small for the connecter to grip tightly, the clamp may be shortened by bending the bar 9 slightly and will correspondingly further restrict the opening of the ring.

The parts of the connecter can both be readily made of lead, but are preferably made of an alloy of lead with sufficient antimony to give the alloy strength and rigidity, and which does not corrode readily in the presence of fumes from the batter. However, any desired material may be used.

While I have described one embodiment of the invention with some particularity, I do not intend to be limited to the precise form shown and described, but claim as my invention all modifications and variations thereof which come within the scope of the appended claim.

I claim:—

An electrical connecter comprising a short ring having thick walls of soft heavy metal and adapted to surround a binding post, a longitudinal opening through one side of said ring, an outwardly and radially directed hollow boss integral with said ring on the side opposite to said opening, adapted to receive an electrical conductor, a tangential flange of the same height and thickness as said ring extending in a reverse direction on each side of said opening, outer ends on said flanges converging longitudinally of said ring, and a thick clamp made of soft heavy metal adapted to bridge said opening, said clamp having inturned ends constituting jaws conforming in shape and taper to said flange ends, and adapted, when forced upon said ends, to clamp said ring about a binding post.

In testimony whereof I hereunto affix my signature.

LOUIS GROSS.