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F. J. GARLICK

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BATTERY POST CLAMP

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Fig. 1.

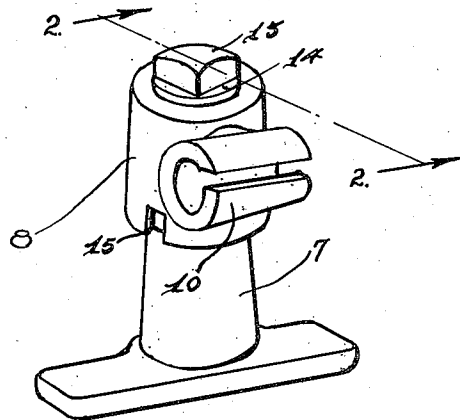


Fig. 2.

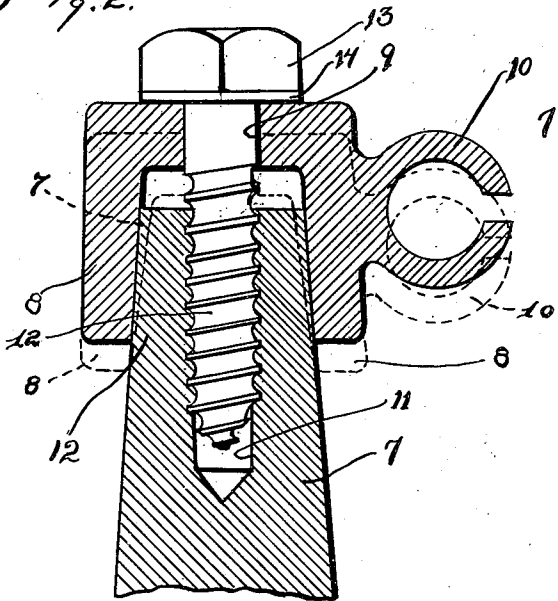
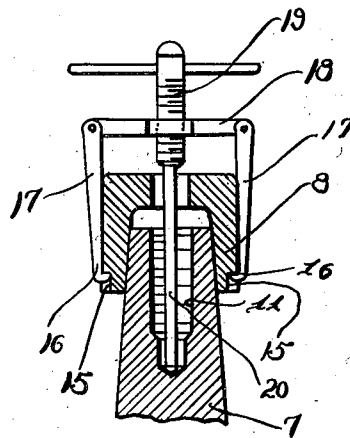


Fig. 3.



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BATTERY-POST CLAMP.

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My invention relates to a new and useful improvement in a battery post clamp adapted for connecting the cable to the terminal post of a battery. Various types of devices have been provided for this purpose, but after they have been in use for a while they become corroded and it is quite difficult to remove them from the battery post. Frequently, on account of this difficulty in removing, the battery post itself becomes damaged, so as to require replacement.

The present invention has, as its object, the provision of a battery post clamp which may be easily and quickly mounted on the battery post, and which will eliminate corrosion, so that at all times the removal of the connection from the battery post may be easily and quickly effected.

Another object of the invention is the provision of a battery post connection of this class which will be simple in structure, economical of manufacture and highly efficient in use.

Another object of the invention is the provision of a cup shaped connection adapted for positioning in inverted position over the battery post and secured to the battery post by a threaded member threaded through the base of the cup shaped portion and into the battery post.

Another object of the invention is the provision of an attaching means of this class whereby, as the cup shaped member is forced downwardly on the battery post, the post is brought into clamping relation with the threaded member so as to lock it against undue removal.

Other objects will appear hereinafter.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

The invention will be best understood by a reference to the accompanying drawings which form a part of this specification, and in which

Fig. 1 is a perspective view of the invention applied to a battery post.

Fig. 2 is a fragmentary sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a central vertical sectional view showing the removing tool adapted for use with the connection.

In the drawings I have shown a battery post 7 to which the cable is connected for conducting the electricity to desired points for use.

In the invention I have provided a cup shaped member 8 which is tapered on its inner side as shown in Fig. 2 and provided in its bottom with a centrally disposed opening 9. Mounted on the side of the cup shaped member 8 is a split sleeve 10 in which the cable is positioned and soldered or otherwise suitably secured. The use of this sleeve is quite well known and the method of attaching the cable therein is also quite well known.

Formed in the post 7 is a centrally disposed longitudinally extending socket 11 which is interiorly threaded for the reception of a screw 12 which is projected through the opening 9 formed in the base of the cup shaped member 8. Positioned between the head 13 of the screw 12 and the outer surface of the base of the cup shaped member is a washer 14.

When it is desired to mount the cup shaped member 8 on the base 7 it is positioned in inverted position over the end of the cup shaped member, as shown in Fig. 2, and the screw 12 is threaded into the socket 11, thus forcing the cup shaped member 8 downwardly on the tapered post 7 and effecting a very secure connection. As the cup shaped member is forced downwardly on the post 7 a squeezing of the post inwardly is effected because of the tapered formation of the interior of the cup 8 and the post 7, thus tending to reduce the size of the socket so as to bind closely the screw 12.

I have shown in Fig. 2 in dotted lines, the cup shaped member moved downwardly and have indicated the forcing of the post 7 inwardly. In removing the attachment from the post 7, a slight backward turn of the screw 12 may be taken. The cup shaped member 8 may then be rotated on the post 7 so as to move outwardly of the post, after which the screw 12 is released for easy turning with the fingers.

In constructing the cup shaped member 8 I prefer to use non-corrosive material, such as lead, or alloy of lead. The post 7 is usually made of lead, and with the attachment member made of a non-corrosive material, the difficulties resulting from corrosion of these parts are eliminated. Since the post 7 is made of a soft material, it is necessary, for practical operation of the invention, that the squeezing effect of the post be obtained, as otherwise the threads would readily strip from the interior of the socket 11, and a holding of the attachment member

8 thereon would be impossible. The member 8 is provided at diametrically opposite points on its outer surface with pockets 15 provided for the reception of angularly turned gripping portions 16 formed on the arms 17 which are pivotally carried by the cross beam 18. Threaded through the cross beam 18 is a screw 19 having a reduced extension 20 which extends into the socket 11. This tool is provided for assisting in removing the member 8 from the post 7, should a binding of these members be effected after long use. By threading the screw 19, it is evident that the beam 18 will serve to lift the cup shaped member outwardly from the post 7.

While 7 I have illustrated and described the preferred form of construction, I do not wish to limit myself to the precise form of structure shown, but desire to avail myself of such modifications and variations as may come within the scope of the appended claim.

Having thus described my invention what I claim as new and desire to secure by Letters Patent is:

A lifting device of the class described adapted for use with a battery post connection having recesses formed at its opposite side, and an opening formed in its center and adapted for insertion over a post having an axial socket formed therein, comprising: a cross arm; a stem threaded in said cross arm, and engaging in said socket; an arm pivotally mounted at each end of said cross arm and having its free end laterally turned for engaging in said recesses; a reduced extension on said stem extending beyond said free ends and engageable with the base of said socket, the threading of said member in said arm effecting a removal of said attachment from said post.

In testimony whereof I have signed the foregoing.

FRED J. GARLICK