Jan. 19, 1937. A. W. HANSEN 2,068,452

BOLTLESS BATTERY TERMINAL CLAMP

Filed Aug. 6, 1935

Fig. 1

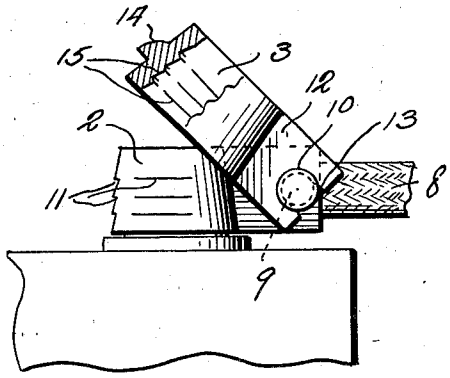


Fig. 2

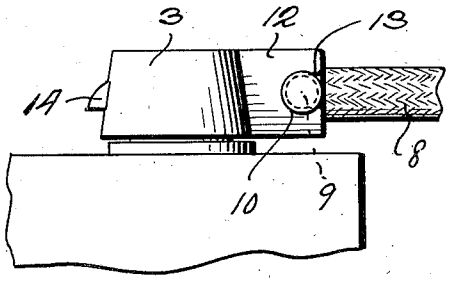


Fig. 4

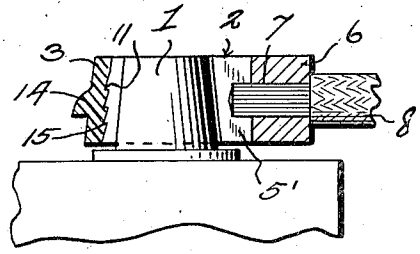


Fig. 3

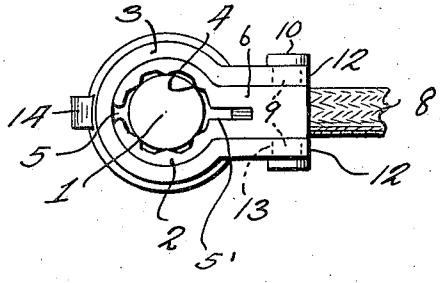
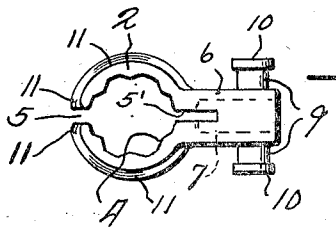


Fig. 5



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BOLTLESS BATTERY TERMINAL CLAMP

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Application August 6, 1935, Serial No. 34,974

1 Claim. (Cl. 173—259)

This invention relates to improvements in means for coupling battery terminals with an electric cable.

The primary object of the present invention is to provide a battery terminal coupling by means of which a secure and positive connection may be established between a cable and a battery post without the use of bolts or screws and easily and quickly dis-established with any tool or implement suitable for prying two members apart.

The invention broadly contemplates the provision of two split rings, one of which is permanently attached to a cable and adapted to frictionally receive a terminal post while the other is designed to be oscillatably mounted upon the first ring and forced into frictional engagement therewith to compress the same into gripping relation with the battery post.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing of the drawing but may be changed or modified so long as such changes or modifications mark no material departure from the salient features of the invention as expressed in the appended claim.

In the drawing:

Figure 1 is a view partly in side elevation and partly in section of the clamping device embodying the present invention, showing the elements in separated relation;

Figure 2 is a view in side elevation showing the clamp in use;

Figure 3 is a top plan of the clamp as illustrated in Figure 1;

Figure 4 is a view in vertical section through the coupled members of the clamp;

Figure 5 is a view in top plan of the inner ring of the clamp body.

Referring now more particularly to the drawing, the numeral 1 indicates a battery terminal post with which the terminal embodying the present invention is shown connected. This terminal comprises two ring members which are indicated generally by the numerals 2 and 3, the ring member 2 being an inner ring while the ring 3 forms the outer part of the terminal coupling.

Both of the ring members are split and as shown, the inner ring 2 has its inner face corrugated, as indicated at 4, and divided as indicated at 5 to provide arcuate post receiving jaws, and opposite the division 5 an extension lug or shank 6 is formed which has an aperture 7 formed in the outer end thereof for the reception of the end of the battery cable 8. The cable end is secured in the aperture 7 in any suitable manner as by soldering or the like.

The lug 6 is slotted longitudinally, as indicated at 5', so as to facilitate the easy contraction of the ring 2 by the means hereinafter described.

Integral with the lug 6 and extending from opposite sides of the same are the studs 9, each of which terminates in a head 10.

The outer faces of the inner ring or jaws are roughened or formed to provide teeth 11 by which the engagement of the outer ring 3 thereover is facilitated.

The outer ring 3 is divided, as illustrated, and has each of the ends extended to form an ear 12 and in the end of each ear a notch or slot 13 is formed for the reception of a stud 9. Upon the outer side of the ring 3 opposite the division therein, a projecting lug 14 is formed which facilitates the separation of the rings, as will be hereinafter described, and adjacent this lug on the inner surface of the ring, and at the sides of the ring on the inner face, are corrugations or roughened areas 15 which are designed to engage the teeth or corrugations 11 on the outer side of the inner ring 2.

In the use of the present terminal coupling, the inner ring 2 which is attached to the cable 8, is forced down over the battery terminal post so as to effect the positive engagement of the corrugations 4 with the surface of the post. The outer ring 3 is then disposed with the extensions 12 thereof on opposite sides of the lug 6 of the inner ring and with each stud 9 engaging in a notch 13, and is then oscillated downwardly into surrounding relation with the inner ring 2. This forces the corrugations 15 on the inner side of the outer ring across the corrugations or teeth 11 on the outer side of the inner ring 2, thus locking the rings together and firmly binding the inner ring into constricted engagement with the terminal post.

From the foregoing, it will be readily apparent that the coupling herein described may be easily and quickly put into use without the usual bother of manipulating screws or bolts and when it is to be disconnected, it is merely necessary to engage some suitable instrument beneath the outside lug 14 and pull up on the same so as to pull the outer ring from around the inner one.

What is claimed is:—

A battery terminal clamp comprising a post receiving member including a tapered split ring

portion providing arcuate jaws having corrugated post receiving faces, a shank formed on the split ring portion and being centrally slotted at its inner end with the slot extending into the ring portion and aligned with the space between the jaws at the outer ends thereof, headed studs formed on and projecting from the opposite sides of the shank, a clamping member including a tapered ring portion fitting the jaws for clamping association therewith, and ears extending from the tapered ring portion of the clamping member for disposal upon opposite sides of the shank and having slots therein received by the headed studs for loosely and pivotally securing the clamping member to the post receiving member.

ALVIN W. HANSEN.