Nov. 15, 1949 M. A. ADAMS 2,487,917

BATTERY CLAMP

Filed Dec. 26, 1947

Fig. 1.

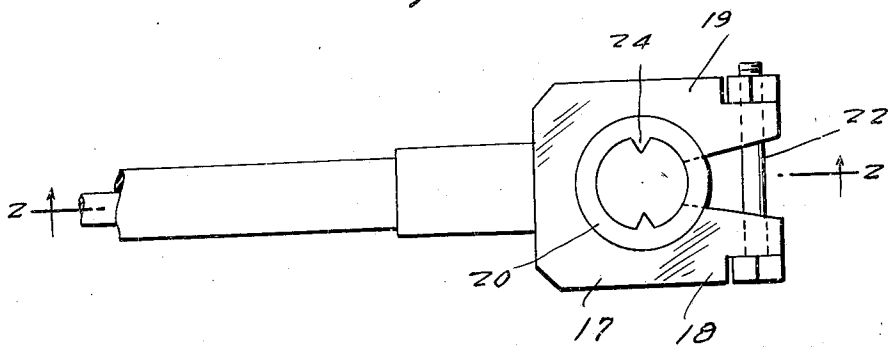


Fig. 2.

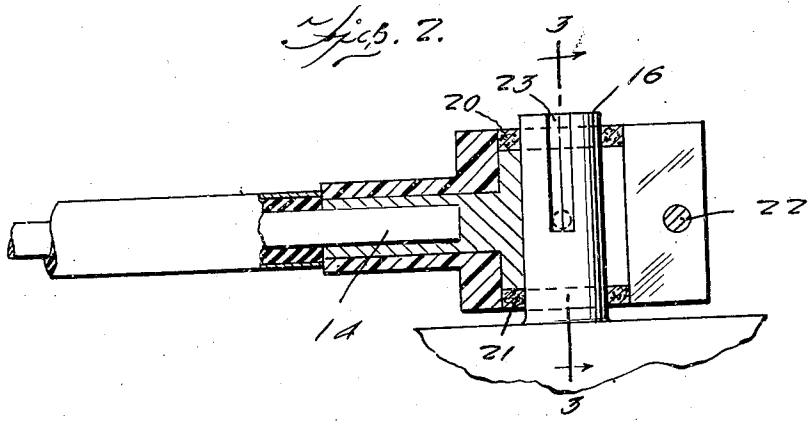


Fig. 3.

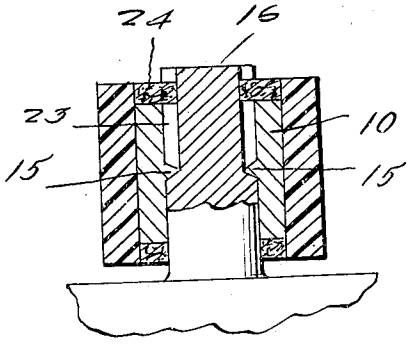
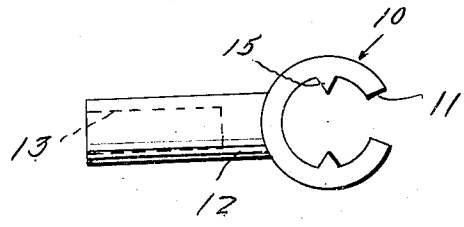


Fig. 4.



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BATTERY CLAMP

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2 Claims. (Cl. 173—259)

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This invention relates to battery terminal clamps.

An object of this invention is to provide a battery terminal or clamp which is so constructed as to eliminate the formation of corrosion around the clamp so that the latter can be readily applied or removed from the terminal post.

Another object of this invention is to provide a clamp of this kind which is sealed at its upper and lower ends against the admission of air or the like, the clamp including an inner metal clamping element adapted to have electrical contact with the terminal post.

Another object of this invention is to provide a clamp of this kind which includes a pair of terminal post piercing pins or points which, when the clamp is in applied position, will provide for positive electrical connection with the post and prevent endwise or circular movement of the clamp relative to the post.

A further object of this invention is to provide a clamp of this kind which is substantially enclosed in a non-metallic casing forming a clamping element for the inner metal contact or terminal engaging member, so that the pressure applying bolt which engages through the non-metallic element will be free from corrosion and the clamp may be readily removed after it has been in applied position on a battery for a period of time.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings,

Figure 1 is a plan view of a battery terminal clamp constructed according to an embodiment of this invention,

Figure 2 is a vertical section taken substantially on the line 2—2 of Figure 1, showing the clamp in applied position,

Figure 3 is a sectional view taken on the line 3—3 of Figure 2,

Figure 4 is a plan view of the metal contact clamp embedded within the insulating cover.

Referring to the drawings, the numeral 10 designates generally a substantially cylindrical terminal post clamping member which is split as indicated at 11.

A socket 12 is formed integral with the clamping member 10 being formed with a bore 13 within which the end of a battery cable 14 is adapted to be stored or otherwise firmly secured.

The inner side of the clamping member 10 is

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formed with a pair of opposed points or teeth 15 which, when the clamping member is in applied position about a terminal post 16, are adapted to project into the body of the post as shown in Figure 3, so as to thereby provide for positive electrical contact between the clamping member 10 and the terminal post 16.

In order to provide for elimination of corrosion when the clamping member 10 is in applied position, I have provided a non-metallic clamping cover 17 which is formed with a pair of spaced jaws 18 and 19.

The height of the cover 17 is substantially greater than the height of the clamping member 10, and upper and lower fibrous sealing members 20 and 21 are disposed within the outer body 17 and abut against the upper and lower ends of the clamping member 10.

The annular sealing members 20 and 21 are adapted to be soaked in oil, grease or the like and are of such width that when the jaws 18 and 19 are tightened through the medium of a bolt 22 which engages through the two jaws 18 and 19, the sealing members 20 and 21 will be compressed about the terminal post and will thereby form a seal at the upper and lower ends of the clamping member 10.

The post 16 may be formed with a pair of vertical grooves 23 within which the teeth 15 engage, and the upper ends of the grooves 23 are closed by teeth 24 carried by the upper sealing member 20.

Through the provision of the non-metallic cover 17 including the clamping jaws 18 and 19, there will be no exposed metal which can become corroded and by disposing the bolt 22 through the non-metallic jaws 18 and 19, this bolt will remain free from the accumulation of corrosion.

Having thus described my invention, what I claim is:

1. A corrosion-preventing coupling means for connecting a cable to a storage battery comprising a terminal post cylindrical in cross-section and having a longitudinal groove extending inwardly from its outer end, a split metallic clamping member of tubular contour mounted on said post and having a tooth biting into the post within said groove, a cable connector extending from said clamping member, said clamping member being insertible over and removable from said post through relative movement longitudinally of the post, a split non-metallic cover for said clamping member and said cable connector, said cover extending beyond the ends of said connecting member in spaced relationship with said post, said

groove being of less length than said connecting member, a non-metallic seal of annular contour fitting about the post at the inner end of the connecting member and in the space between the post and said cover, a second non-metallic seal of annular contour fitting about the post at the opposite end of said connecting member and in the space between the cover and the post, said last-mentioned seal having a sealing projection fitting in said groove, and a bolt co-active with said cover for clamping said clamping member tightly on said post.

2. A corrosion-preventing coupling means for connecting a cable to a storage battery comprising a terminal post cylindrical in cross-section and having two longitudinal grooves extending inwardly from its outer end, a split metallic clamping member of tubular contour mounted on said post and having teeth biting into the post within said grooves, a cable connector extending from said clamping member, said clamping member being insertible over and removable from said post through relative movement longitudinally of the post, a split non-metallic cover for said clamping member and said cable connector, said cover extending beyond the ends of said connecting member in spaced relationship with

said post, said groove being of less length than said connecting member, a non-metallic sealing washer fitting about the post at the inner end of the connecting member and in the space between the post and said cover, a second non-metallic sealing washer fitting about the post at the opposite end of the connecting member and in the space between the post and the cover, said last-mentioned washer having sealing projections fitting in said grooves, and a bolt co-active with said cover for clamping the clamping member tightly on said post.

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