My invention relates to improvements in battery terminal clamps, particularly to a quick release battery terminal clamp, an object of which is to provide a device of the character herewithin described, which is capable of quick release, so that it may be detached for ease in removal.

Another object of my invention is to provide a device of the character herewithin described, which is adjustable to variations in sizes of battery binding posts, and to variation in sizes due to corrosion.

A further object of my invention is to provide a device of the character herewithin described which is readily attachable to a battery cable by virtue of an associated terminal fitting for said cable.

A still further object of my invention is to provide a device of the character herewithin described which ensures a high degree of electrical conductivity between the battery post and the clamp.

Still another object of my invention is to provide a device of the character herewithin described which can be fitted and removed without the use of wrenches or tools.

Yet another object of my invention is to provide a device of the character herewithin described which is simple and economical to manufacture and use, and which is otherwise well suited to the purpose for which it is intended.

With the foregoing objects in view, and such other objects and advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, my invention consists essentially in the arrangement and construction of parts all as hereinafter more particularly described, reference being had to the accompanying drawings in which:

Figure 1 is a perspective view of my device with the associated battery cable equipped with my terminal fitting.

Figure 2 is a perspective view of my device in situ, clamped upon a battery terminal.

Figure 3 is an alternative embodiment utilizing a simplified jaw.

Figure 4 is another alternative embodiment in which the battery cable is swaged or swaged into the clamp.

In the drawings like characters of reference indicate corresponding parts in the different figures.

In the servicing of motor vehicles, replacement or removal for repair, of batteries involves detachment of more or less badly corroded clamps from the terminals of automotive batteries.
joint end 10. Said “T” end, however, is circular in action, but diminishes in sectional area towards the centre from both ends thereof. This has the effect of providing a rounded jaw of concave conformation, the arc of concavity corresponding with the jaw 5, in the other jaw which remains unaltered in this embodiment, as does the balance of the clamp. The only alteration for the embodiment under discussion, is that concerning the second clamp jaw on the end of the turnbuckle screw.

A third embodiment of my clamp involves two departures from the clamp elements hereinbefore described. This embodiment is intended for use with cylindrical or stranded battery conductor cable 13. To accommodate said cable anvil jaw block 5a is expanded in length to provide a transverse aperture 19, in which the said battery conductor cable is sweated or swaged. This eliminates the necessity for screw-threading on the turnbuckle end. A cylindrical shank 20 is, therefore, substituted for the former screw-threaded end 6, and likewise no cable terminal fitting 14 is required.

In use, the cable which is to be electrically connected to a battery terminal 21 of a storage battery 22, of conventional type is fitted into either a cable end fitting 14 and secured therein, or into clamp jaw 6, and secured within the aperture 19 provided.

The turnbuckle screw is then threaded into the aperture 16 provided. The clamp is then held in the fully open position as in Figures 1 and 3 and whilst in this said open position is placed over and upon the battery terminal 21 to which connection is to be made. The anvil jaw 5 or 5a as the case may be, is then held against the terminal 21 and in a substantially horizontal position. The concavity of the other jaw block is then brought to bear upon the opposite side of the said battery terminal post 21. In this position, the said post is loosely embraced by the two semi-circular arcs, but the balance of the clamp is also loosely cut of alignment. In order to complete the clamping action, pressure is applied to the clamp sides to bring them into alignment with the jaws already in position. This brings a toggle action into play and a slight resistance is encountered. However, once this is overcome the clamp snaps into closure and full pressure is applied to the battery terminal post.

As mentioned previously adjustment is afforded by advancing or retarding the turnbuckle screw in its barrel 9. It will be apparent that the presence of transverse bar 3 prevents over-riding of the clamping action, and assures positive clamping.

The same procedure is followed in both alternative embodiments, and there is no less effectiveness due to the variations in detail.

To remove the clamp from the terminal post, it will be apparent that all that is necessary is to reverse the action, in other words, rotate the jaw 13 by an upward turnbuckle screw pivotally member 8 so that the aforementioned cam action is broken.

Since various modifications can be made in my invention as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

What I claim as my invention is:

A quickly attachable and detachable cable clamp for electrical storage batteries of the upstanding post type, comprising in combination an open, substantially rectangular supporting framework, said framework including a pair of spaced and parallel longitudinal plates, transverse bar spanning said plates across the edges thereof a pair of opposed, battery post embracing jaws pivotally mounted between said plates and at opposite ends thereof, means for pre-setting the spatial relationship between said jaws, said means including a pair of opposed, battery post embracing jaws pivotally mounted between said plates and at one end thereof said screw being engageable within said barrel, and further means to secure said clamp to an associated battery cable, said transverse bar adapted to maintain said jaws in planar relationship one with the other when said clamp is positioned upon said post.

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