Aug. 13, 1935. R. E. ELLIS ET AL 2,011,537

BATTERY CLAMP

Filed Dec. 6, 1934

Fig. 1.

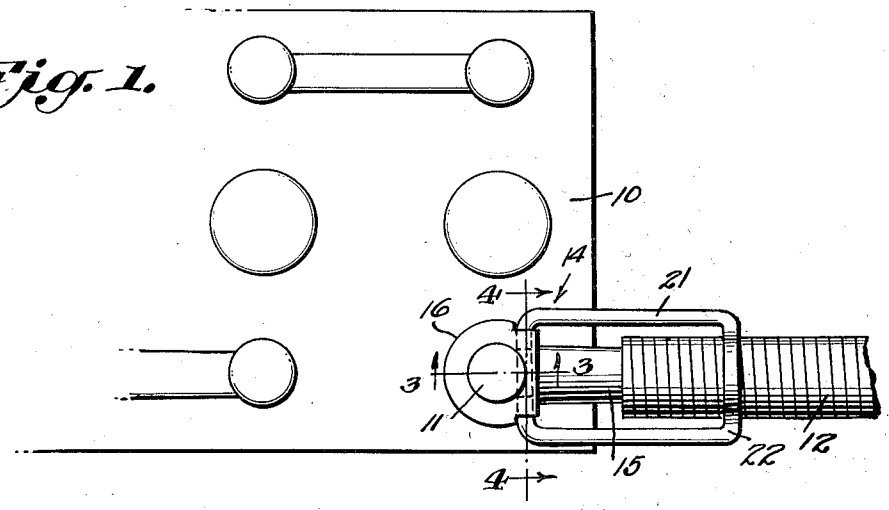


Fig. 2.

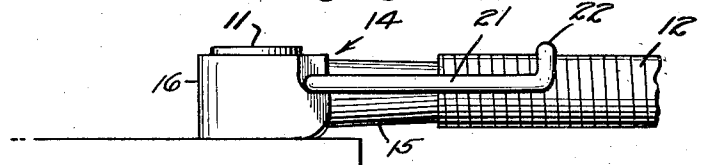


Fig. 3.

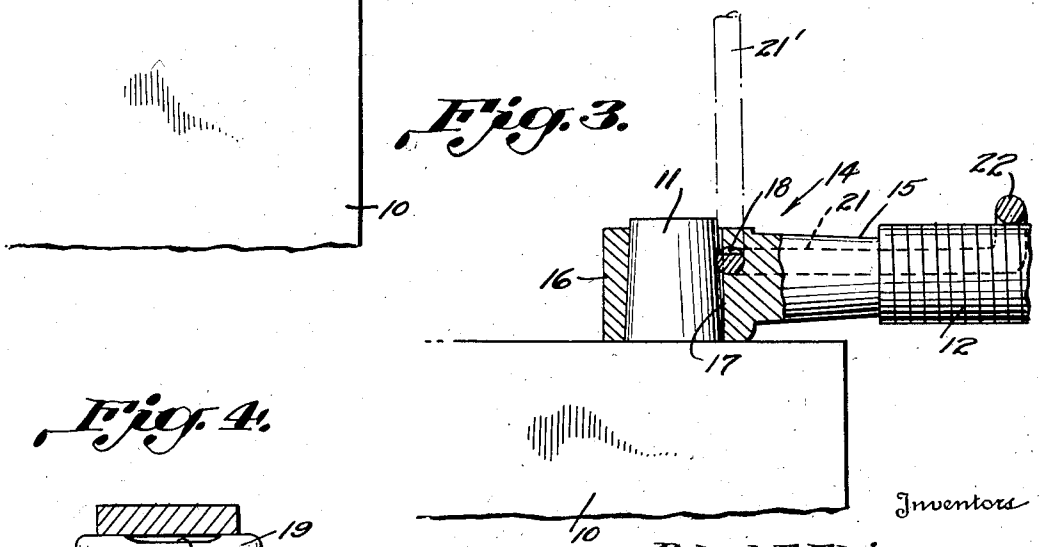
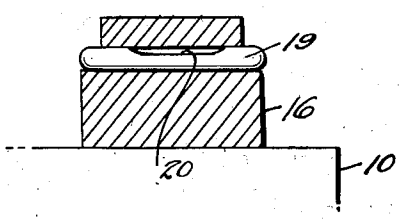


Fig. 4.



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BATTERY CLAMP

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Application December 6, 1934, Serial No. 756,344

1 Claim. (Cl. 173—259)

This invention relates to a battery clamp and has for an object to provide an improved means of quickly attaching or detaching a battery cable to a battery post without the necessity of using any bolts or screws whose operation might be interfered with by the presence of corrosion.

A further object of this invention is to provide a battery cable terminal which may be clamped to the battery post by means of an extension key which is easily moved from either locked or unlocked position while the terminal is in position on the battery post.

With the foregoing and other objects in view, as will hereinafter become apparent, this invention comprises the constructions, combinations and arrangements of parts, hereinafter set forth, disclosed and shown on the accompanying drawing. In this drawing,

Figure 1 is a plan view of the invention,

Figure 2 is a side elevation of the same,

Figure 3 is an enlarged sectional view taken on the line 3—3 of Figure 1, and

Figure 4 is an enlarged sectional view taken on the line 4—4 of Figure 1.

There is shown at 10 a representation of the battery having a post 11 to which it is desired to detachably secure the battery cable 12. Secured to the battery cable 12 is the cable terminal or clamp 14 constituting this invention. This clamp or terminal 14 is preferably made of lead, copper, or other good suitable electrical conducting material.

This battery clamp or terminal 14 includes an arm 15 suitably secured to the battery cable 12 and ending in an eye 16 adapted to be placed down over the battery post 11. The opening through the eye 16 is of such a diameter that it will just snugly fit down about the battery post 11, this opening being shown at 17.

A second opening 18 extends through the side of the eye 16 adjacent the arm 15 transversely of the eye 16 and intersects the opening 17 therethrough. Mounted in this second opening 18 is a key 19 which is cut away as at 20 so as to make it eccentric along the meeting line between the eye opening 17 and the transverse opening 18.

A handle 21 extends from the end of the key 19 and terminates in a curved portion 22 of such a size as to snugly fit over the top of the cable 12. The handle 21 is so secured to the key 19 so that the flat sides of the eccentric 20 coincide with the opening 17 in the eye member 16 when the handle 21 is in the vertical position shown at 21' in Figure 3. As a means of insuring the proper placing of the flat portion of the eccentric 20 on the key 19, this eccentric 20 may be formed therein after the key 19 has been placed through the transverse opening 18 with the handle 21 properly attached. The key 19 may be placed therein so that it partly extends into the opening 17 through the eye member 16. A suitable cutting tool is then used to ream away a portion of the key 19 extending into the opening 17 while the handle 21 is in the position 21'.

With the handle 21 still in this position 21' the battery terminal 14 is then placed over the battery post 11 and tapped downward to the position shown in Figure 3. The handle 21 is then moved from the position 21' to the position 21 causing the eccentric portion 20 to clamp against the side of the battery post 11 securely holding or clamping the cable 12 to the post 11 against accidental removal.

When it is desired to intentionally remove the cable 12 from the post 11, the handle member 21 is turned upward to the position 21' thereby releasing the eccentric 20 of the key 19 from contact with the side of the battery post 11. Then the eye member 16 is lifted off the battery post 11 using the member 21 as a handle or lifting means.

Any corrosion that may form on the post 11 during operation of the battery 10 will obviously not interfere with the operation or effectiveness of the clamp formed by this invention, and no screw driver or monkey wrench is necessary in the operation of this clamp. At most only a weight is necessary to tap the eye member 16 down over the post 11, thereby making it easy to attach or remove the cable 12 from the battery 10 at any time without difficulty.

The novel features and the operation of this device will be apparent from the foregoing description. While the device has been shown and the structure described in detail, it is obvious that this is not to be considered limited to the exact form disclosed and that changes may be made therein within the scope of what is claimed without departing from the spirit of the invention.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

A battery cable terminal clamp comprising an eye member secured to the battery cable, said eye member having a battery post receiving aperture extending therethrough, a second and cylindrical aperture extending through said eye member transverse to said battery post aperture and partly coinciding with said battery post aperture, a cut away eccentric key pivotally extending through said transverse cylindrical ap-

erture, a U-shaped handle member extending from said key, the base of the U of said handle being curved at right angles to the plane of the legs of the U of the handle, and of a diameter to lie snugly about the battery cable when the key is in a locking position, the cut away portion of said key coinciding with the battery post aperture only while the key is in an unlocked position with the handle member in a raised position away from the battery cable.

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