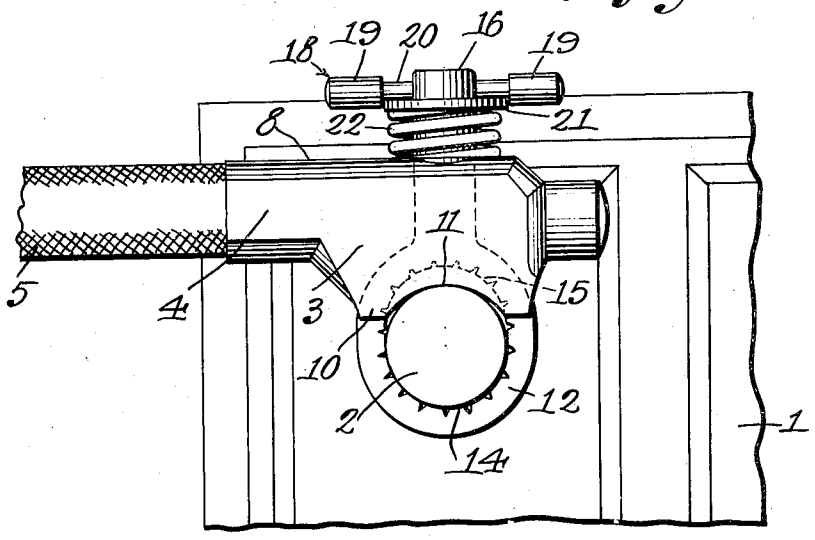
Oct. 9, 1934. W. L. GRIFFITH ET AL 1,975,896

CONNECTER FOR BATTERY TERMINALS

Filed May 10, 1933

Fig. 1.



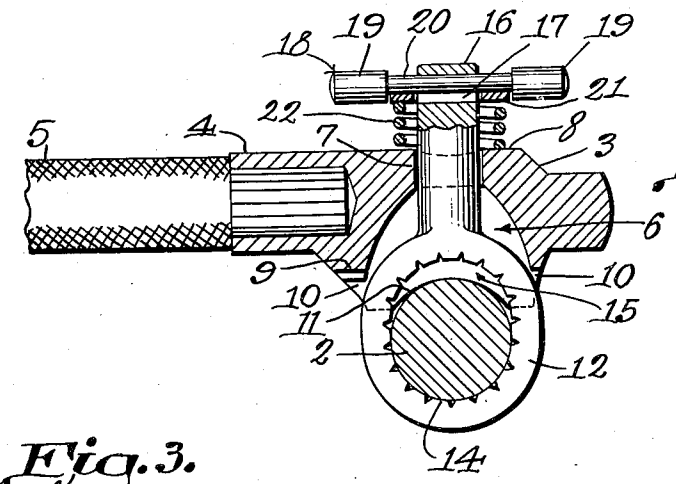
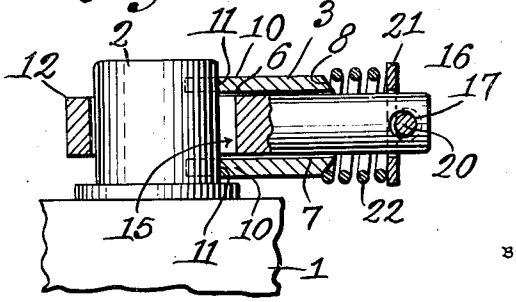


Fig. 2.

Fig. 3.



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CONNECTER FOR BATTERY TERMINALS

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4 Claims. (Cl. 173—259)

The object of this invention is to provide a simple but effective means for holding a conductor on a battery terminal.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the invention appertains.

With the above and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawing:

Fig. 1 shows in top plan, a portion of a storage battery wherewith the device forming the subject matter of this application has been assembled;

Fig. 2 is a horizontal section, taken longitudinally;

Fig. 3 is a vertical section with parts in elevation.

The numeral 1 designates a battery. The battery has a terminal 2.

The device forming the subject matter of this application is made of non-corrosive metal. It comprises a body 3. The body 3 has a reduced end 4. The conductor 5 is assembled with the reduced end 4 of the body 3. The body 3 has a recess 6. A bore or aperture 7 leads from the recess 6 through one edge 8 of the body 3. The recess 6 opens through the opposite edge 9 of the body 3. On the edge 9 of the body 3 there are outwardly projecting flanges 10. The flanges 10 form a continuation of the recess 6. The flanges 10 have concaved seats 11 in their outer edges.

The numeral 12 designates a jaw. The jaw 12 is in the form of an elongated ring. The jaw 12 is received partially in the recess 6 and between the flanges 10. The width of the jaw 12 is about the same as the width of the recess 6 and about the same as the distance between the flanges 10. The jaw 12, therefore, cannot turn in the recess 6. The jaw 12 is provided with internal gripping teeth 14 disposed around the opening 15 of the jaw. The jaw 12 is supplied with a rigid shank 16. The shank 16 is slidably mounted in the bore 7 of the body 3. The shank 16 extends outwardly beyond the edge 8 of the body 3. Near to its outer end, the shank 16 of the jaw 12 has a transverse hole 17.

The numeral 18 designates a cross pin. The cross pin 18 has heads 19 at its ends. The heads 19 are connected by a reduced neck 20. The neck 20 is located in the hole 17 of the shank 16. The heads 19 of the cross piece 18 are disposed on opposite sides of the shank 16. A washer 20 surrounds the shank 16, between the neck 20 of the cross pin 18 and the edge 8 of the body 3. The external diameter of the washer 21 is practically the same as the distance between the heads 19 of the cross piece 18. The washer 21 abuts against the neck 20 of the cross pin 18. A compression spring 22 surrounds a portion of the shank 16 of the jaw 12. One end of the spring 22 abuts against the edge 8 of the body 3. The opposite end of the spring 22 abuts against the washer 21, and holds the washer in engagement with the neck 20 of the cross pin 18, between the heads 19 of the cross pin.

Suppose that the spring 22, the washer 21, and the cross pin 18 are removed. Then the battery terminal 2 is inserted through the opening 15 of the jaw 12. The compression spring 22 is placed on the shank 16 of the jaw 12 in engagement with the edge 8 of the body 3. The washer 21 is mounted on the shank 16. The spring 22 is compressed until the washer 21 is clear of the hole 17 in the shank 16. The cross pin 18 is inserted through the hole 17 of the shank 16. The spring 22 is released, and the parts assume the position of Fig. 2, the battery terminal 2 being gripped between the seats 11 and the outer part of the jaw 12. The spring 22 forces the washer 21 outwardly until it engages the shank 20 of the cross pin 18, and the washer then lies between the heads 19 of the cross pin. The spring 22 also forces the cross pin 18 transversely and outwardly until the neck 20 of the cross pin is engaged with the shank 16 at the outer part of the hole 17 in the shank 16. The heads 19 of the cross pin 18 then prevent the cross pin from working out of the hole 17. The washer 21 affords additional security. This is true because, when the washer 21 is located between the inner ends of the heads 19 of the cross pin 18, as shown in Fig. 2, the cross pin cannot work endwise and permit the heads 19 to approach the hole 17 in the shank 16.

Having thus described the invention, what is claimed is:

1. A device for connecting a conductor to a battery terminal, comprising a body having an aperture, a jaw extended through the aperture

and slidable in the body and including an element movable toward one edge of the body to grip a battery terminal therebetween, a part of the jaw having a transverse hole external to the opposite edge of the body, a cross pin having end heads connected by a reduced neck, the neck being extended through the hole, the diameter of the hole being as great as the diameter of one head, and a compression spring exerting a pressure against the cross pin and against the said opposite edge of the body.

2. A device for connecting a conductor to a battery terminal, comprising a body having an aperture, a jaw extended through the aperture and slidable in the body and including an element movable toward one edge of the body to grip a battery terminal therebetween, a part of the jaw having a transverse hole external to the opposite edge of the body, a cross pin having end heads connected by a reduced neck, the neck being extended through the hole, the diameter of the hole being as great as the diameter of one head, a washer surrounding said part of the jaw and abutting against the neck of the cross pin, the washer being interposed between the inner ends of the heads of the cross pin, and a compression spring surrounding said part of the jaw, the cross pin exerting a pressure against the washer and against said opposite edge of the body.

3. A device for connecting a conductor to a battery terminal, comprising a body having a recess in one edge and having a bore leading from the recess through the opposite edge of the body, a ring-shaped jaw slidable in the recess and having a reduced shank slidable in the bore, the thickness of the jaw being approximately equal to the width of the recess, so that the jaw cannot rotate in the recess, a cross pin extended removably through the shank, externally of said opposite edge of the body, and a compression spring surrounding the shank and interposed between the cross pin and said opposite edge of the body.

4. A device for connecting a conductor to a battery terminal, comprising a body having a recess in one edge and having a bore leading from the recess through the opposite edge of the body, there being projecting flanges on the first-specified edge of the body, at each side of the recess, and the flanges being provided with inwardly extended seats, a ring-shaped jaw slidable in the recess and having a reduced shank slidable in the bore, the shank having a transverse hole, the thickness of the jaw being approximately equal to the width of the recess, so that the jaw cannot rotate in the recess, a cross pin having end heads connected by a reduced neck, the neck being extended through the hole, the diameter of the hole being as great as the diameter of one head, a washer surrounding the shank and abutting against the neck of the cross pin, the washer being interposed between the heads of the cross pin, the cross pin being located outwardly of said opposite edge of the body, and a compression spring about a portion of the shank and interposed between the washer and said opposite edge of the body.

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