

Feb. 16, 1932.

J. B. JURAD

1,845,501

CONDUCTOR CONNECTER

Filed March 19, 1929

Fig. 1.

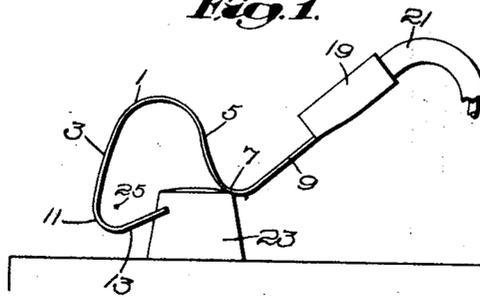


Fig. 2.

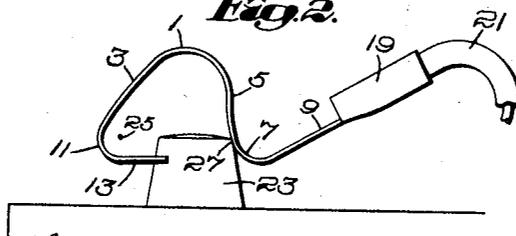


Fig. 3.

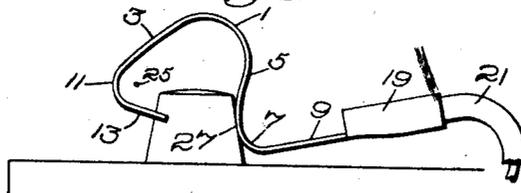


Fig. 4.

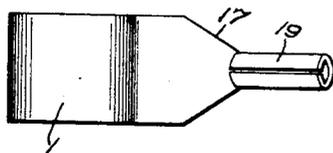
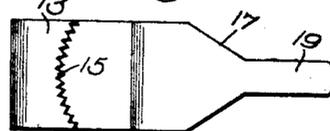


Fig. 5.



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CONDUCTOR CONNECTER

Application filed March 19, 1929. Serial No. 348,176.

The invention relates to clips for connecting conductors to terminals, as, for example, for connecting a "jumper" wire to the terminal of a storage battery.

The invention will be best understood from the following description when read in the light of the accompanying drawings showing one example of the invention, while the scope of the invention will be more particularly pointed out in the appended claims.

In the drawings:—

Figs. 1 to 3 show a clip constructed according to the invention in different operative positions relative to the terminal of the storage battery; and

Figs. 4 and 5 respectively are plan and bottom views of the terminal according to Fig. 1.

In the embodiment of the invention illustrated by the drawings, the clip is formed of a spring plate, preferably by stamping it from a sheet of spring steel and bending it to shape by means of suitable dies, after which it is coated with lead in the usual manner for preventing corrosion.

As shown, the clip comprises a U-shaped portion 1 having the legs 3 and 5, the leg 5 being connected by a curved portion 7 to an arm 9, while the leg 3 is connected by a curved portion 11 to a terminal contacting portion 13, the latter directed toward the curved portion 7. As shown, the portion 7 forms a shoulder for contacting with one side of the terminal, while the end of the portion 7 forms an edge for contacting with the opposite side of the terminal. Preferably, but not necessarily, the end of the portion 13 is of arcuate shape and provided with teeth 15, as indicated in Fig. 5, while the end of the arm 9 is reduced in width at 17 and formed at its end to present a tubular part 19 (or formed so that it may be readily bent to a tubular shape) for connecting it to a conductor 21.

In practice, assuming the clip is to be attached to the terminal 23 of the storage battery, the clip will be first presented to the terminal as shown by Fig. 1. Then, by forcing the arm 9 downwardly, the parts will successively move into the positions shown

by Figs. 2 and 3. Preferably, the top of the U-shaped member and right leg thereof, as viewed in Fig. 1, are formed on such curves, relative to the curves presented by the left leg, curved portion 11, and portion 13, that all the flexure substantially occurs in the former, with the result that when the parts are in the position shown by Fig. 2, the distance between the center of curvature 25 of the curved portion 11, and the point of contact 27 at the opposite side of the clip with the terminal, is greater than when the parts are in the position shown by Fig. 3, with the result that the terminal "snaps" from the position shown by Fig. 2 to the position shown by Fig. 3, and is rigidly secured against removal when in the latter position, unless removed by forcing the arm 9 upwardly.

It will be observed that, as above described, no sliding action occurs between the portion 13 and the terminal, and that as the parts move successively through the positions shown by Figs. 1, 2 and 3, in attaching the clip, the portion 13 rocks about its point of contact with the terminal, with the result that the teeth 15 bite into the material of the terminal, commonly lead, and secure good electrical contact.

It will be understood that wide deviations may be made from the embodiment of the invention herein described without departing from the spirit of the invention.

Claims:

1. A clip for connecting a conductor to a storage battery terminal or the like comprising an elongated spring member having a terminal contacting edge at one end portion thereof and a terminal contacting shoulder at an intermediate portion of its length opposed to said edge, said end portion and shoulder being connected by a resilient portion holding them normally in spaced relation, said resilient portion acting to permit said edge and shoulder to grip opposite sides of said terminal in planes transverse to said terminal, and an operating arm at the same side of said clip as said shoulder.

2. A clip for connecting a conductor to a storage battery terminal or the like com-

prising a spring plate member having a generally U-shaped resilient portion, the latter having at the end portion of one leg thereof a terminal contacting portion directed toward the other leg thereof, an operating arm carried at the end portion of said other leg, and a terminal contacting shoulder portion between said arm and the end of said leg in which carries said arm.

10 3. A clip for connecting a conductor to a storage battery terminal or the like comprising a spring plate member having a terminal contacting edge and a terminal contacting shoulder, said edge and shoulder being
15 connected by a resilient portion holding them normally in spaced opposed relation, said shoulder having a relatively smooth surface of material length whereby said shoulder is readily slidable along one side of said terminal while said edge is in pivotal contact
20 with the opposite side of said terminal.

4. A clip for connecting a conductor to a storage battery terminal or the like comprising a spring plate member having a terminal contacting edge and a terminal contacting
25 shoulder connected by a generally U-shaped resilient portion holding them normally in spaced relation, said edge being carried closer to the apex of said U than said
30 shoulder, the latter having a relatively smooth surface of material length whereby said shoulder is readily slidable along one side of said terminal, while said edge is in pivotal contact with the opposite side of said terminal.
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5. A clip for connecting a conductor to a storage battery terminal or the like comprising an elongated spring member having a terminal contacting edge at one end portion thereof, and a terminal contacting shoulder
40 at an intermediate portion of its length opposed to said edge, said end portion and shoulder being connected by a generally U-shaped resilient portion normally holding them in spaced relation, said edge normally being nearer the apex of said U than said
45 shoulder.

In testimony whereof, I have signed my name to this specification.

50 JOSEPH B. JURAD.

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