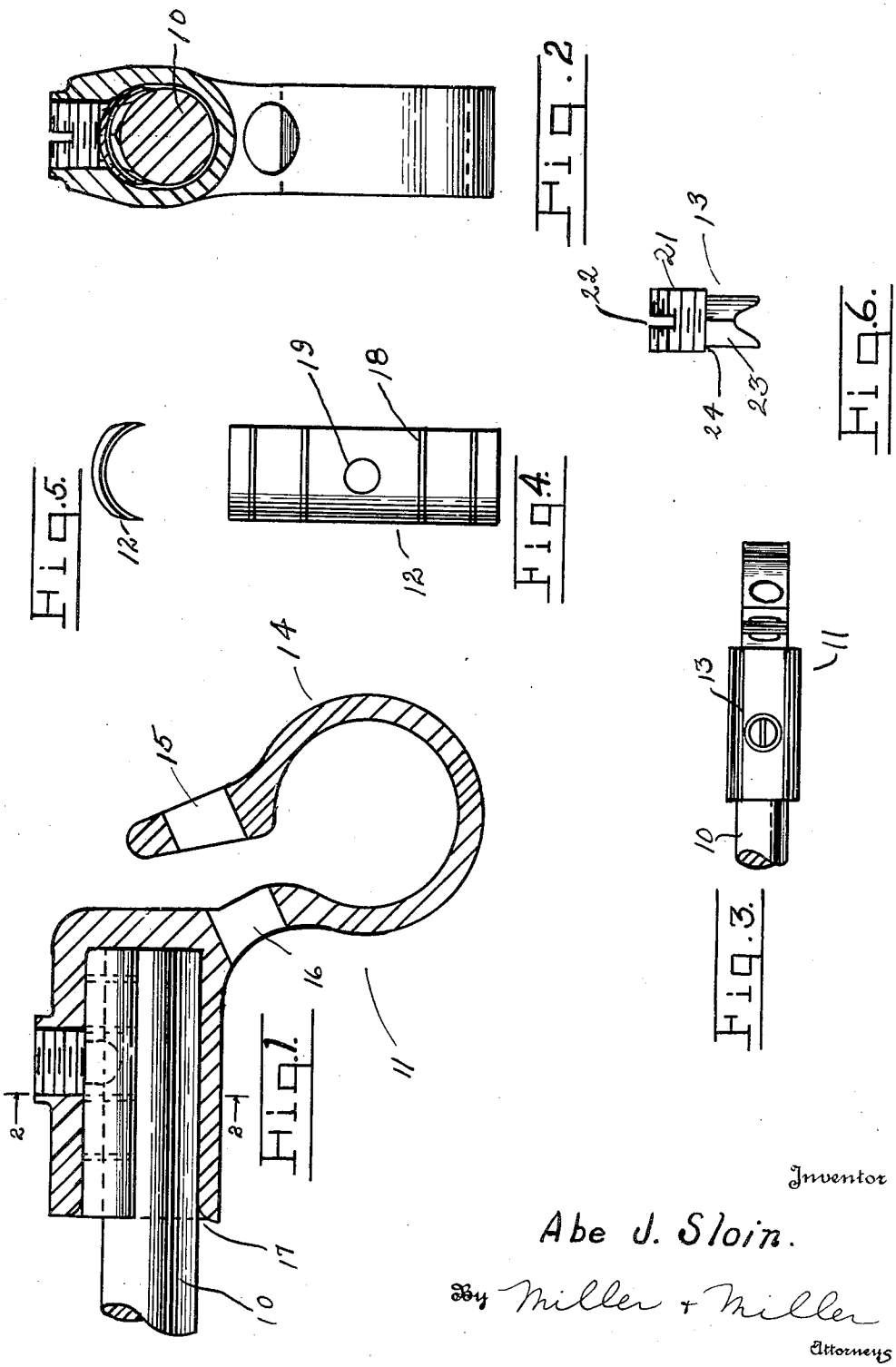
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CABLE CONNECTION

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CABLE CONNECTION

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This invention relates to an improved solderless cable connection and has for an object to provide an improved connection or terminal for a battery cable.

A further object of this invention is to provide an improved connection adapted to be easily and securely attached to the end of a battery cable and providing means for connecting the same to a battery terminal.

A further object of this invention is to provide a connector for a battery cable which may be connected to said cable so as to be electrically and mechanically secured thereto without the use of solder, which may be easily connected and removed with only the use of a screw driver.

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, claimed and shown on the accompanying drawing. In this drawing,

Figure 1 is a sectional plan view of this improved connector, certain parts thereof being in full view.

Figure 2 is a cross sectional view on line 2—2 of Figure 1.

Figure 3 is a top plan view of Figure 1 on a reduced scale.

Figure 4 is a bottom plan view of Figure 5 showing the bottom of a washer member.

Figure 5 is an end view of Figure 4, and

Figure 6 is a plan view of the screw.

There is shown at 10 a conventional battery cable such as used on automobiles and the like for connecting up to the terminal of a storage battery. This invention relates to an improved connector for this cable 10 and the battery terminal (not shown), and comprises a connector 11, a washer member 12, and a screw 13, each shaped substantially, as shown.

This connector 11 has the usual open eye end 14 adapted to pass over about the terminal and be secured thereto by a bolt and nut passing through holes 15 and 16, in the conventional manner. This connector 11 is cast in one piece from brass or other suitable material and has an opening 17 therein adapted to receive the end of the battery cable 10 as shown. This opening 17 is substantially egg-shaped in cross section, whereby the cable 10 fits snugly against one side of opening 17, leaving a space thereabove. A washer 12 crescent shaped in cross section, having depending ridges 18, is adapted to fit in this space between the cable 10 and the connector 11. A small opening 19 is provided through this washer 12 and a correspondingly placed but larger threaded opening 20 in the connector 11 is adapted to receive a screw 13.

The screw 13 is formed with a threaded portion 21 of a diameter to correspond to the threaded opening 20 and has a screw driver receiving head 22 of the same diameter as the threads and a bifurcated tubular end 23 likewise of lesser diameter than the screw threaded portion 21, there being a shoulder 24 between the screw threaded portion 21 and the bifurcated portion 23.

In assembling, the washer 12 is placed on the end of the cable 10 and slid into the opening 17. The screw 13 is then threaded through the opening 20 until the bifurcated portion 23 passes through the correspondingly sized opening 19 in the washer 12. Then as the screw 13 is tightened down into position, the shoulder 24 presses against the washer 12 thereby pressing the ridges 18 into firm contact with the cable 10.

At the same time, the bifurcated end 17 of the screw tends to separate as it wedges itself into the sides of the cable, while the shoulder 24 exerts its pressure against the washer 12. In this way, it will be seen that merely tightening the screw 13 forms a very secure mechanical as well as electrical connection between the cable 10 and the connector 11. When for any reason it is desired to remove the cable 10, it is only necessary to unthread the screw 13 and the bifurcated tubular end 23 will be bent back into position as it passes through the opening 19 and washer 18, thus making it ready for use again with another cable. The ridges 18 pressing into the cable 10 make it impossible for the cable 10 to pull out of connector 11 even though under the strain of severe vibration as it may be in operative use,

the bifurcated end 23 of screw 13 likewise tending to act in this same way.

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:

1. A battery cable connector comprising means for attaching said connector to a battery terminal and means for securing a battery cable to said connector, said latter means including a female member on said connector adapted to receive an end of the battery cable, a washer member adapted to be received in said female member, said washer member fitting longitudinally on the battery cable end, said washer member having an aperture therethrough, and means passing through said one side of said female member and through said aperture in said washer member into contact with the cable end, said means also pressing said washer member into contact with the cable end.

2. A battery cable connector comprising means for attaching said connector to a battery terminal and means for securing a battery cable to said connector, said latter means including a female member on said connector adapted to receive an end of the battery cable, a washer member adapted to be received in said female member, said washer member fitting longitudinally on the battery cable end, said washer member having an aperture therethrough, and means passing through said one side of said female member and through said aperture in said washer member into contact with the cable end, said means also pressing said washer member into contact with the cable end, a plurality of internal ridges on said washer member, said ridges pressing into the cable end.

3. A battery cable connector comprising means for attaching said connector to a battery terminal and means for securing a battery cable to said connector, said latter means including a female member on said connector adapted to receive an end of the battery cable, a washer member adapted to be received in said female member, said washer member fitting longitudinally on the battery cable end, said washer member having a threaded opening passing through one side thereof, said washer member having a correspondingly aligned opening of lesser diameter, a screw member, a tubular bifurcated projection of lesser diameter, forming a shoulder on said screw member, whereby said shoulder may press said washer against the battery cable end while said projection may pass through said washer and press against the cable end.

4. A battery cable connector comprising means for attaching said connector to a battery terminal and means for securing a battery cable to said connector, said latter means including a female member on said connector adapted to receive an end of the battery cable, a concavo-convex washer member adapted to be received in said female member, said washer member fitting longitudinally on the battery cable end with said end substantially filling said female member, said washer member having an aperture therethrough, and means passing through said one side of said female member and through said aperture in said washer member into contact with the cable end, said means also pressing said washer member into contact with the cable end.

In testimony whereof I affix my signature.

ABE J. SLOIN.