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G. FOSSATI

1,896,443

ELECTRIC CONNECTER

Filed July 8, 1930

Fig. 1

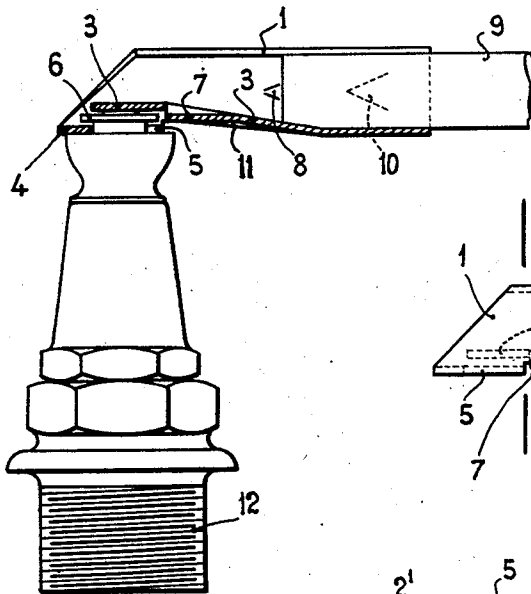


Fig. 2

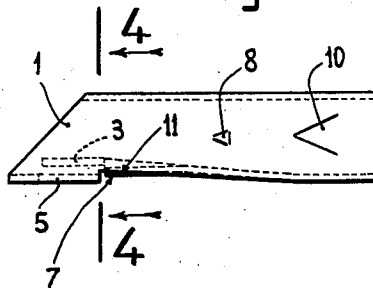


Fig. 3

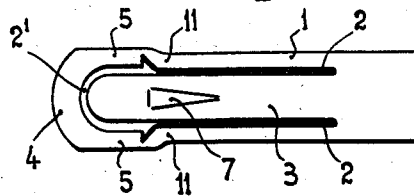


Fig. 5

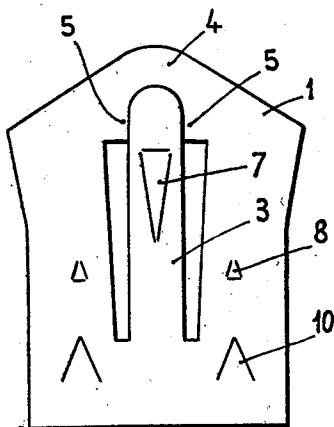
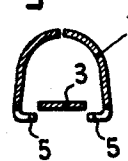


Fig. 4



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ELECTRIC CONNECTER

Application filed July 8, 1930, Serial No. 466,489, and in Italy July 9, 1929.

This invention relates to connectors adapted for connecting an electric lead or cable with a cooperating member, and particularly to connectors used for connecting feeding cables with sparking plugs of internal combustion engines.

This invention has for its object a connector of the above stated class consisting of a sleeve-bent sheet metal piece having at one end an engaging eye extending in longitudinal direction of said sleeve and a resilient tongue ending inside the connector and opposite to said eye.

On the annexed drawing is shown by way of example an embodiment of the connector of this invention and

Figure 1 is a central section on an enlarged scale of a connector in position on a sparking plug;

Figure 2 is a side view of said connector;

Figure 3 is an inverted view of the same;

Figure 4 is a section on line 4-4 of Figure 2;

Figure 5 is a view of a sheet metal flat blank intended to provide said connector in condition preparatory to bending operation.

As shown on the drawing the connector comprises a sleeve 1 which has a flattened or depressed bottom surface in which a split 2-2'-2 is made to provide an intermediate flexible tongue 3 and an engaging frame or stirrup 5-4-5.

The bottom surface of sleeve 1 is depressed with respect to and in front of sides 5-5 of engaging frame as shown by 11 in Fig. 2, and tongue 3 has a downward projection 7 in register with end portion of frame 5-5.

In the body of the connector 1, depressions 8 are provided extending inwardly from the internal surface of the metal sheet providing it, and lugs 10 are cut in said sheet for the hereinafter described purpose.

To arrange connector on the end of cable or lead, a free portion of the conducting wire of the cable is wound on its insulating sheath

and then the end of the cable is forced into sleeve 1 until its end edge abuts on inward projections 8 of sleeve 1; finally the lugs 10 are depressed to enter the insulating sheath of the cable, they preventing its removal from connector sleeve 1.

Assuming the connector is to be used on a sparking plug 12 of the kind shown in Fig. 1 whose central electrode has an enlarged head 6, the connector 1 is engaged thereon by locating it on the plug with its depressed portion 11 over said head 6 and then by shifting said frame 5-4-5 to engage it under flanged head 6, tongue 3 resiliently moving inwardly in this operation. Thereafter, tongue 3 bears on the top surface of said head 6 and its depression 7 engages head 6 opposite the frame portion 4, to lock said connector in position as shown in Figure 1.

To remove the connector from the plug, an inward pressure is produced on tongue 3 to cause it to enter the connector and clear head 6.

The connector is produced by a blank 1 as shown in Fig. 5 which is punched to provide therein a frame portion comprising edges 5 and cross portion 4 and thereafter is bent around its longitudinal axis to provide a sleeve.

The described connector is easily positioned over the head 6 of sparking plug, it being engaged thereon in a releasable manner by resilient means.

Further this connector is stiff owing to its tubular shape and it provides for a safe interconnection with feeding cable or lead.

What I claim as my invention and desire to secure by United States Letters Patent is:—

1. A connector for electric leads consisting of a metal sleeve forming at one end a seat for said lead and having a longitudinal opening with a cross edge at its front end and a resilient tongue projecting within said sleeve into said opening opposite said cross edge and

adapted to bear on a head of the part to be connected.

2. A connector for electric leads consisting of a metal sleeve forming at one end a seat
5 for said lead and having a longitudinal opening with a cross edge at its front end, a resilient tongue projecting within said sleeve into said opening opposite said cross edge and
10 adapted to bear on a head of the part to be connected, and an abrupt projection on said resilient tongue for engaging an edge of said part in a portion opposite its portion abutting
against said cross edge.

3. A connector for electric leads consisting
15 of sheet metal rolled to form a sleeve, said sleeve forming at one end a seat for said lead and having a longitudinal opening cut therein, said opening being defined by two lateral projecting edges and a cross edge of the side
20 walls of said sleeve at the front end, and a resilient tongue projecting within said sleeve into said opening and extending towards said cross edge.

4. A connector for electric leads consisting
25 of sheet metal rolled to form a sleeve, said sleeve forming at one end a seat for said lead and having a longitudinal opening cut therein, said opening being defined by two lateral projecting edges and a cross edge at
30 the front end, a resilient tongue projecting within said sleeve into said opening and extending towards said cross edge, and an abrupt projection extending from said tongue opposite said cross edge.

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

GIUSEPPE FOSSATI.

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