

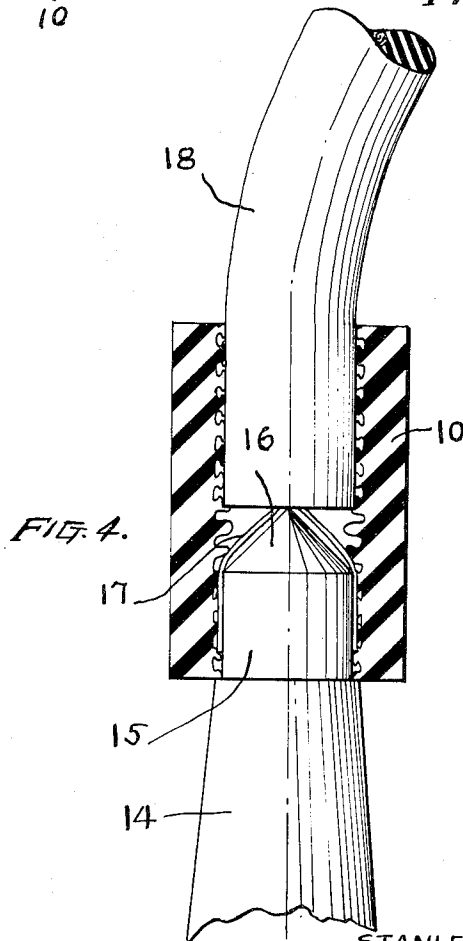
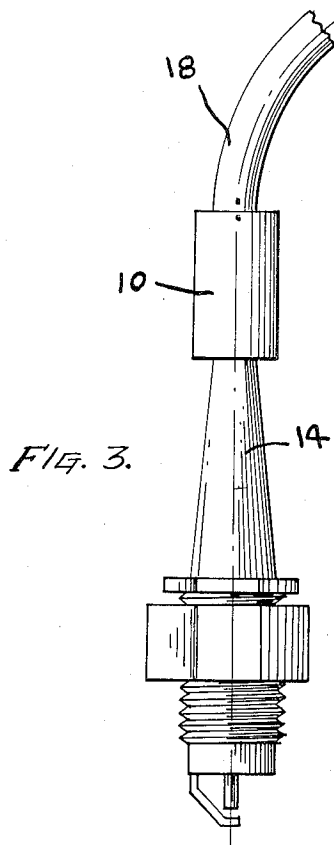
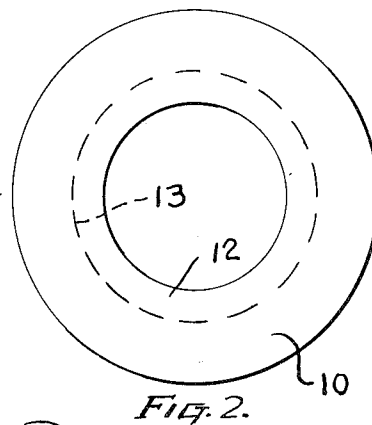
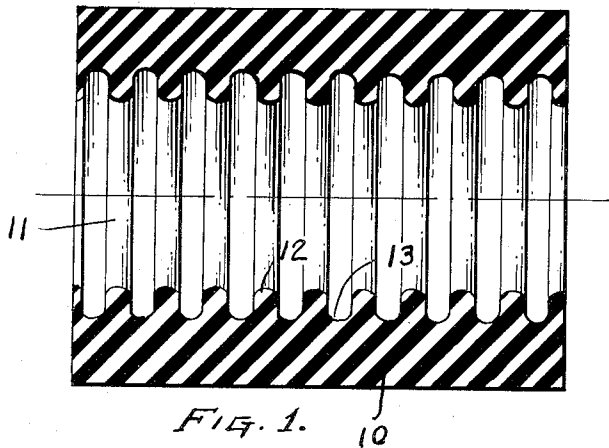
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SURE LOCK CONNECTORS

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SURE LOCK CONNECTORS

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1 Claim. (Cl. 339—250)

This invention relates to a cable connector.

It is an object of the invention to provide a flexible sleeve grip adapted to be tight fitted upon a wire cable and onto an electric terminal whereby to hold the wires of the cable in tight conducting relationship with the terminal.

It is another object of the invention to provide an electrical cable holder which is flexible and such as to provide a tight friction grip on a terminal post and which is serrated or internally grooved to provide adequate space so that the interior wall can be accommodated to different sizes of cable and terminal without being unduly stressed.

Other objects of the invention are to provide a sleeve grip element for electrical conductors to attach the wires thereof to a terminal wherein the operation of applying the connector is simple and which is itself of simple construction, adapted for mass production, inexpensive for manufacture, durable, formed of a single piece, effective and efficient in use.

For other objects and a better understanding of the invention, reference may be had to the following detailed description taken in connection with the accompanying drawing, in which:

Figure 1 is a longitudinal sectional view of the connector embodying the features of the present invention and taken along the line 1—1 of Fig. 2;

Fig. 2 is an end view of the connector;

Fig. 3 is an elevational view of a spark plug and of a cable and of a wire applied to the spark plug;

Fig. 4 is an enlarged vertical sectional view of the connector and looking upon the engagement of the wires of the cable with a tapered terminal post of the spark plug and with the cable being retained by the inner wall of the connector.

Referring now to the figures, 10 represents the connector formed of flexible and pliable material such as rubber, natural or synthetic, or other pliable material. The connector 10 has an inner gripping wall 11 which is grooved or serrated to provide internal projections 12 of annular shape and recesses 13 into which the projections 12 may be folded.

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A spark plug 14 has a terminal 15 upon its upper end with a tapered end 16 over which wires or strands 17 of cable 18 can be supported or fixed by the connector 10 formed of rubber. The cable insulation is tightly gripped by the internal annular projections 12 of the connector.

The same connector is fitted down tightly over the terminal 15 and over the wire strands 17 of the cable. It will be seen that a tight grip is effected and that the wire will be completely sealed within the connector 10 and upon the terminal so that the terminal and the wire will be kept entirely free of dirt or moisture which would tend to corrode the wire and spoil the connection. The individual annular projections 12 each form sealing engagement with the surfaces of the cable and of the terminal.

The connector can be easily slipped on to the cable 18 and will have a tight frictional grip with the terminal 15. It will be seen that this grip is sufficient to seal out moisture, dirt and so forth and at the same time the strands of the cable will be rigidly held against the terminal 15. It will be seen that a wiping engagement is made of both the cable 18 and the terminal 15.

While various changes may be made in the detail construction, it shall be understood that such changes shall be within the spirit and scope of the present invention, as defined by the appended claim.

What is claimed is:

A spark plug comprising in combination a top terminal having a tapered end, a cable wire having wire strands fitted downwardly over the tapered end and along the side of the terminal, said spark plug adjacent said terminal having a substantially cylindrical portion of less diameter than the main body of said spark plug whereby to provide a shoulder, and a retaining connector comprising a substantially cylindrical member of flexible material having a central longitudinal bore therethrough adapted to be squeezed onto the adjacent ends of said cable wire and said spark plug cylindrical portion with one end thereof abutting said shoulder, said connector on the interior thereof having a plurality of axially spaced annular projections providing recesses therebetween, said annular projections extending throughout the full length of said bore and adapted to provide sealing engagement with the cable and spark plug whereby to hold the cable against axial displacement on the terminal.

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