Nov. 9, 1926. 1,606,506

J. B. BUSHNELL

ELECTRICAL CONNECTER

Filed June 27, 1922

Fig. 1

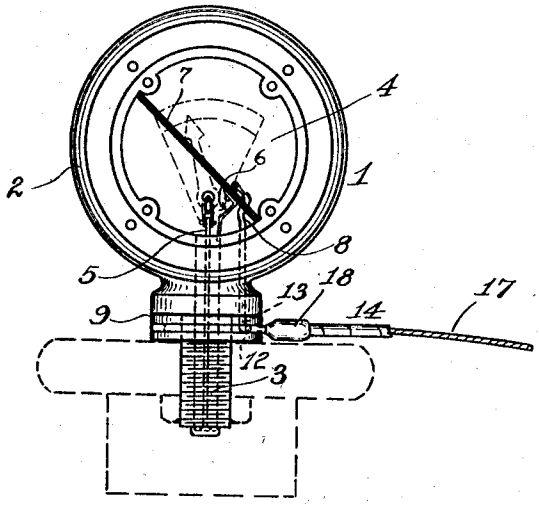


Fig. 2

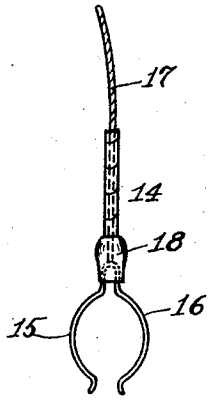


Fig. 3

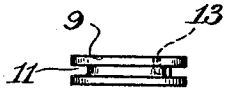


Fig. 4

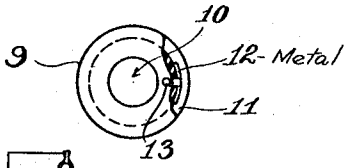
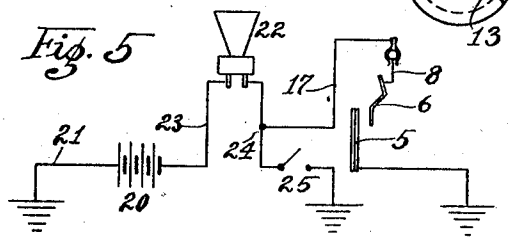


Fig. 5



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UNITED STATES PATENT OFFICE.

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ELECTRICAL CONNECTER.

Application filed June 27, 1922. Serial No. 571,292.

My invention is an improved electrical connecter, particularly applicable to automobile radiator temperature indicating devices. In devices of this character it is very difficult to so place the electrical contact that the plug may be easily inserted.

The object of my invention is to provide a contact which may be inserted in any position of the temperature indicator.

Another object of my invention is to provide a device in which the indicator and radiator cap to which it is secured may be removed from the radiator without disengaging the contact wire, thus insuring that the indicator will always operate properly and the operator can not neglect to connect the contact.

Another object of my invention is to provide a connecter which is simple in construction and inexpensive to manufacture.

Referring to the drawing which forms a part of this specification:

Figure 1 is a front view of an automobile radiator temperature indicator, with the face removed, and with my connecter attached thereto.

Figure 2 is a plan view of my contact clip.

Figure 3 is a side view of the contact holder.

Figure 4 is a top plan view of the same with a portion broken away to illustrate the contact plate.

Figure 5 is the wiring diagram.

Referring more particularly to the drawing, the numeral 1 indicates an automobile radiator temperature indicating device which comprises a casing 2 and a threaded stem 3 depending therefrom. The stem 3 is secured to the radiator cap in the usual manner employed for these devices. Projecting from within the stem 3 into a circular recess 4 in the casing 2 is a bimetallic bar 5. Under the influence of heat the bar 5 is bent towards the right and forms a contact with the arm 6, which is secured to an insulating strip 7 and makes contact with a lead 8. The lead 8 extends through the casing 2 and into a contact holder 9. The contact holder 9 is formed of an insulating material and is positioned around the stem 3 and on the top of the radiator cap. The stem 3 extends through a central bore 10 in the holder 9. An annular groove 11 is formed in the periphery of the holder 9. A metal contact plate 12 is secured within the groove 11 by gluing or otherwise, and a passage 13 leads from said contact plate to the upper face of the holder 9. A lead wire 8 extends through this passage and is secured to plate 12 by soldering or otherwise.

A contact clip 14 comprises a pair of arcuate spring arms 15 and 16 formed of a single piece of wire, and a wire 17 extends from said arms. A handle 18 of an insulating material surrounds the juncture of the arms 15 and 16 and the wire 17.

The wiring diagram is as follows: A battery 20 is grounded through a lead 21 the other pole of the battery being joined to a horn 22 by a lead 23. A lead 24 extends from the horn 22 to a switch 25, the other pole of said switch being secured to the lead 17, which is secured to the clip 14. The clip 14 contacts with the plate 12 which is connected to arm 6 by lead 8. When the interior of the radiator reaches a certain temperature, the bar 5 contacts with the arm 6, closing the circuit which flows to the radiator as a ground. This causes the horn 22 to sound, thus warning the driver that the motor is hot.

Having described my invention, I claim:

1. An electrical connecter comprising a holder of insulating material, said holder having a groove in its periphery, a contact plate in said groove, a passage extending from one face of said holder to said contact plate, an electrical lead extending thru said passage to said contact plate and a contact clip adapted to fit within said groove and contact with said plate.

2. An electrical connecter comprising a holder of insulating material, said holder having a groove in its periphery, a contact plate in said groove, a passage extending from one face of said holder to said contact plate, an electrical lead extending thru said passage to said contact plate, a contact clip

adapted to fit within said groove and contact with said plate and a handle for said contact clip made of insulating material.

3. An electrical connecter comprising a disk formed of insulating material, said disk being provided with a central bore and a circumferential groove, a contact plate secured in said groove, a passage extending from said groove to one face of the disk and adapted to receive an electrical lead, and a resilient contact clip adapted to lie within said groove and contact with said plate.

In testimony whereof I affix my signature.

JOHN B. BUSHNELL.