

941,808.

Fig. 1.

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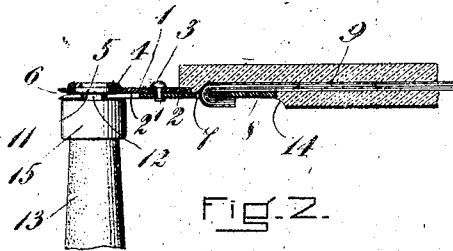


Fig. 2.

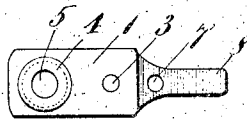


Fig. 3.

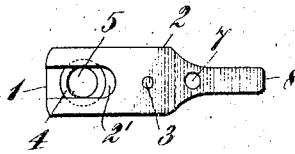


Fig. 4 -

WITNESSES:

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UNITED STATES PATENT OFFICE.

FRANK PARSONS, OF BOSTON, MASSACHUSETTS.

CORD TERMINAL.

941,808.

Specification of Letters Patent.

Patented Nov. 30, 1909.

Application filed April 9, 1909. Serial No. 483,807.

To all whom it may concern:

Be it known that I, FRANK PARSONS, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Cord Terminals, of which the following is a specification.

My invention relates to cord-terminals and its object is to provide a connecting clip that may be cheaply manufactured and by means of which a conductor may be securely retained in connection with a coöperating contact or plug, especially where the apparatus employed is subject to shock and jar as in the case of automobile or motor-boat spark-plugs.

In carrying out my invention I prefer to employ two flat conducting members of spring material appropriately formed to provide a housing for the head of the plug with which the device is to be used, and means so uniting said members that the terminal may be snapped over said plug and elastically secured thereto, thereby dispensing with locking devices or other movable members sometimes employed with cord-terminals.

The drawings which accompany and form a part of this specification show one embodiment of my invention whereby the foregoing object has been realized in practice.

In the drawings Figure 1 is a side view of my improved cord-terminal and its coöperating spark-plug. Fig. 2 is a central section of the cord-terminal shown in Fig. 1, and Figs. 3 and 4 are top and bottom views thereof respectively.

In the drawings selected for more fully disclosing my invention, 1 represents a flat piece formed substantially as shown of any suitable material such as spring-brass and provided near its front extremity with a depression or cupped portion 4 shown in the present instance as circular and adapted to receive the head 11 of the spark-plug 13. This cupped portion may be perforated as shown at 5 for the purpose of adapting the terminal to types of plugs other than that shown herein.

2 represents a member coöperating with the member 1 and also constructed of elastic material such as spring-brass. The member 2 is provided with a slot 2' of substantially the shape of the rear portion 8 of the member 2, so that the latter may be stamped from

strip-brass without undue waste of material. The forward ends of the members 1 and 2 are reversely beveled as shown at 6, so that the terminal may easily be snapped over the plug with which it is intended to be used.

The members 1 and 2 are secured together as by the rivet 3 and are arranged so that the slot and cupped portion coöperate to form a housing for the head of the plug shown in the present instance at 11. The member 2 is provided with a hole 7 through which the conductor 9 may be passed and then bent over upon the member 2 and secured thereto in any suitable manner. In the present instance I have illustrated one way in which the conductor may be secured to the terminal. In this particular instance a portion of the insulation of the conductor 9 is cut away as shown at 14 thereby exposing a short length of the conductor, the latter is then passed through the hole 7 and bent backward and then secured to the member 2 by binding with cord or insulating tape 10. The advantage of this particular mode of connecting the terminal to the conductors is that the end portion only of the terminal is exposed so that the jarring of the motor vehicle on which the device is employed cannot cause any portion of the terminal to come in contact with metallic parts of the engine and thereby cause short-circuiting as in the case of several types of cord-terminals now in common use.

In Fig. 2, 15 represents the cap of a well known form of spark-plug and this cap terminates in a head 11 provided with a neck 12. In attaching the cord-terminal to a plug of this type, the terminal is placed so that the head 11 will enter the recess between the beveled edges 6 and the neck 12 will enter the slot 2'. When so positioned, the cord-terminal may be forced forward over the head, the members 1 and 2 having sufficient elasticity to permit the terminal to be snapped over the head and secured thereto by their elasticity.

It will be obvious that a very firm, although readily removable, connection may be formed by my cord-terminal and that after the latter has been snapped over a plug and the plug-head secured in the depression or cupped portion 4, it will be impossible to remove the terminal from the plug without first pressing downward upon the rear portion of the terminal so as to

slightly separate the member 1 from the lower member and thereby slightly elevate the front part of the cupped portion over the head, whereupon the terminal may be withdrawn from the plug. Whenever by wear or otherwise the members become loosened or the parts altered, the rivet connection of the members may be readily tightened.

10 I claim:

A cord-terminal comprising a flat body of spring material provided with an unslotted cupped-cap, a flat body 2 of spring material provided with a slot 2' underlying said cap, said slot having substantially the shape of the rear portion 8 of said body 2

and the front edges of each of said bodies being reversely beveled to provide an entrance for the plug with which the terminal is to be used, and means near the rearward end of the terminal securing said bodies together so that the cap and slotted body form a housing which may be snapped over the head of a plug and secured thereto by the elasticity of said bodies.

In testimony whereof, I have hereunto subscribed my name this 6th day of April 1909.

FRANK PARSONS.

Witnesses:

GEO. K. WOODWORTH,
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