C. M. PEARSALL.

SPARK PLUG.

APPLICATION FILED JULY 1, 1914.

1,182,419. Patented May 9, 1916.

Fig. 1.

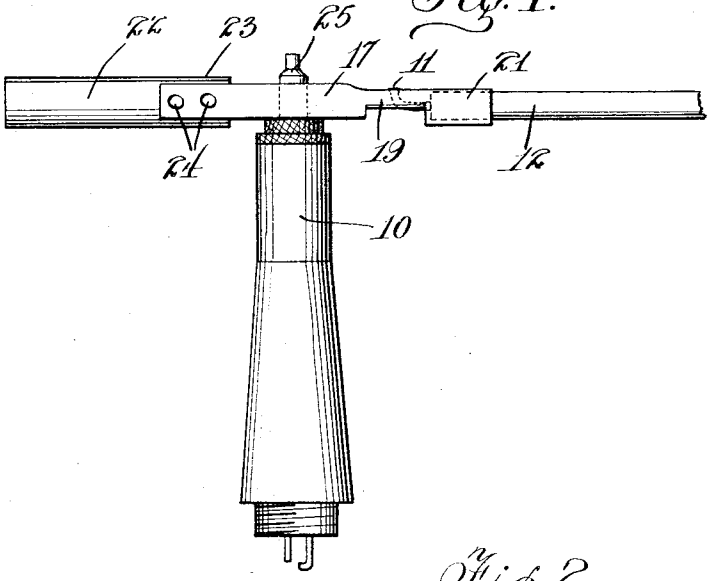


Fig. 2.

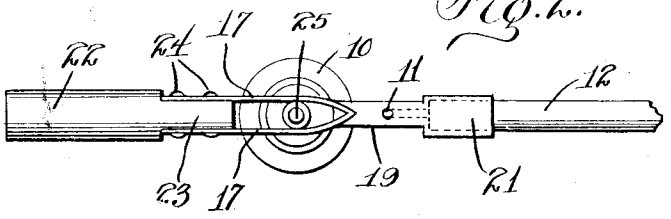
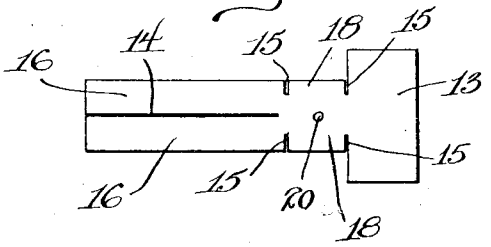


Fig. 3



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SPARK-PLUG.

1,182,419. Specification of Letters Patent. Patented May 9, 1916.

Application filed July 1, 1914. Serial No. 848,471.

To all whom it may concern:

Be it known that I, CHARLES M. PEARSALL, a citizen of the United States, residing at Ridgewood, in the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Spark-Plugs, of which the following is a specification.

This invention relates to an improved means for connecting a wire with a spark plug so that the wire may be easily and quickly connected and disconnected from the plug when it is desired to test a cylinder without danger of the person receiving a shock.

Another object of the invention is to so construct the connection between the wire and plug that the wire will be securely held in place and not liable to slip loose.

Another object of the invention is to so construct the connection that it may be formed of a sheet metal blank of conducting material such as copper with a small amount of loss.

This invention is illustrated in the accompanying drawings wherein—

Figure 1 is a side elevation showing a wire connected with a spark plug by means of the improved device; Fig. 2 is a top plan view showing the wire connected with the plug by the improved device; Fig. 3 is a view of the blank from which the securing device is formed.

The spark plug 10 shown in Fig. 2 may be of any desired type and is simply shown to illustrate the conventional form of spark plug. The wire 11 which is provided with the usual insulating coat 12 has a portion of the coat removed adjacent its end so that one end of the wire will be exposed. The attaching device is formed from the blank shown in Fig. 3. This blank is provided with a head 13 from which there extends an arm provided with a longitudinally-extending slit 14 and transversely-extending slits 15. The slit 14 divides the arm into two sections 16 which form the jaws 17 when the blank is formed into the finished article. The slits 15 form side tongues 18 so that when the head and wire are rolled, the side tongues 18 will meet and form a neck 19 through which the wire 11 passes. An opening 20 is formed in the neck 19 in which the end of the wire 11 is secured, thus permitting electricity to pass through the wire into the connecting device. The head 13 forms a sleeve 21 which engages the insulating jacket 12 and securely connects the securing device with the same. In order to permit the securing device to be handled freely without danger of receiving a shock, a small handle 22 formed of some insulating material is connected with the jaws 17 by having its reduced end 23 inserted between the free ends of the jaws and secured by means of rivets 24. It should be noted that the blank is formed of material which has sufficient resiliency so that when the stem 25 of the spark plug passes between the jaws 17, a frictional binding will be caused which will cause the securing device to be securely but removably connected with the stem. When desired to test a cylinder, the handle 22 may be grasped and the securing device easily and quickly disconnected from the spark plug without any danger of receiving a shock.

What is claimed is:

1. A securing device comprising a sleeve, a neck extending from said sleeve, jaws extending from said neck in spaced relation, and a handle of insulating material secured between the free ends of said jaws.

2. A securing device formed of resilient conducting material comprising a sleeve, a neck extending from said sleeve and provided with an opening for receiving conducting wire, jaws extending from said neck in spaced relation constituting frictional gripping jaws, and a handle formed of insulating material and provided with a reduced end and secured between the free ends of said jaws.

3. In a securing device of the character described an engaging element formed of resilient conducting material and comprising a sleeve, a neck extending from said sleeve, frictional gripping jaws extending

from said neck in spaced relation, and a handle connected with the free end portions of said jaws.

4. A resilient contact of the character described comprising an engaging element formed of conducting material and comprising a jacket-engaging member, a wire-engaging element extending from said jacket-engaging element, gripping jaws extending from said wire-engaging element, and a handle formed of insulating material connected with the free ends of said jaws.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES M. PEARSALL.

Witnesses:

JAS. G. CONKELTON,

RAYMOND PANTA.