March 3, 1931. F. L. CREAGER 1,794,673

SPARK PLUG COVER

Filed July 26, 1923

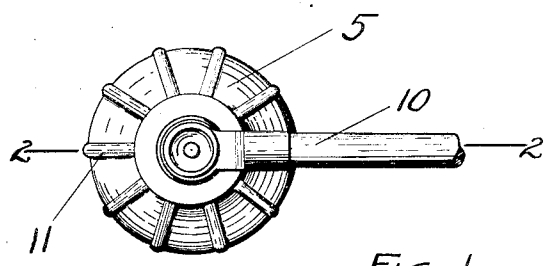


FIG. 1

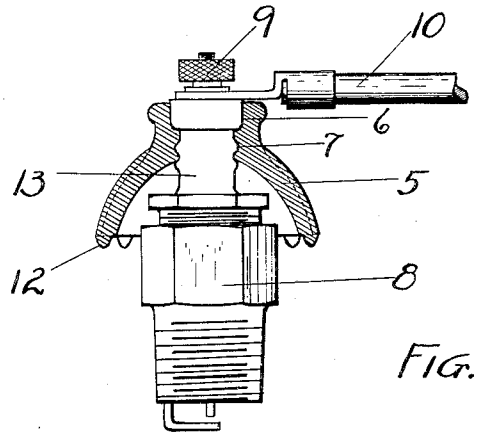


FIG. 2

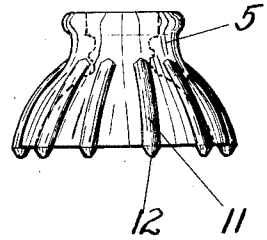


FIG. 3

INVENTOR
FREDERICK L. CREAGER
BY
ATTORNEY

Patented Mar. 3, 1931 1,794,673

UNITED STATES PATENT OFFICE

FREDERICK L. CREAGER, OF BELOIT, WISCONSIN, ASSIGNOR TO FAIRBANKS, MORSE & CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS

SPARK-PLUG COVER

Application filed July 26, 1923. Serial No. 653,963.

My invention relates to improvements in spark plug covers.

It has for its object the prevention of short circuits in a spark plug exposed to rain and moisture, and is advantageous in that it leaves the terminal of the plug and the conductor to the plug free and unobstructed, thus making for greater accessibility, is flexible and therefore adaptable to all types of plugs, provides for the controlling of the moisture drip, and is simple and economical to manufacture being of one piece and of one material.

Referring to the drawings, Fig. 1 is a plan view of my invention showing it attached to a spark plug. Fig. 2 is a sectional view on line 2—2 shown in Fig. 1. Fig. 3 is a side view of my invention alone, showing it removed from the spark plug.

Referring by numerals to the drawings, the cover, 5, is preferably cylindrical or bell shaped, as shown, and is constructed of a suitable, flexible insulating material, such, for example, as rubber or a compound or composition thereof and extends below the insulating column, 13, of the plug, 8.

In use the cap or cover is flexible enough to be forced over the projections, 6 and 7 of the plug, 8, forming a waterproof joint between said cover and said plug and leaving the terminal, 9, and conductor, 10, free and exposed. The vertical ribs or projections, 11, conduct the rain or moisture to the points, 12, from which the drops of water can collect and fall. By the use of these ribs or reinforces I am able to secure a cover using less material and at the same time afford greater flexibility. As shown in the drawings the ribs 11 at the neck portion of the shield are spaced apart substantially the width of a single rib. I do not, however, limit myself to ribs in particular, for indentations or channels would produce the same effect, the portions of the cover situated between the channels serving as reinforces and the channels acting as guides for the moisture flow.

I prefer to have my cover to extend downward far enough to fully protect the plug against water falling on the insulation and, at the same time, keep it from interfering with the operator in screwing the plug in place or removing it.

Having fully described my invention, what I claim as new and desire to obtain by Letters Patent is:

1. A spark plug protecting shield comprising a cup-shaped member provided with a neck portion having an opening for reception of a spark plug porcelain and having an enlarged end terminating in a free edge, said member provided on its outer surface with upstanding ribs extending from said neck portion to the free edge of said member and terminating in projections below said edge to control and direct moisture collecting on said member.

2. A spark plug shield comprising a cup-shaped member of flexible elastic insulating material provided with a neck portion for surrounding the porcelain of a plug and a skirt portion said member provided on its outer surface with a plurality of upstanding moisture controlling ribs, the spacing of said ribs at the neck portion being substantially the width of a rib, said ribs extending to the free edge of said skirt and terminating in drip control projections extending below said free edge.

FREDERICK L. CREAGER.