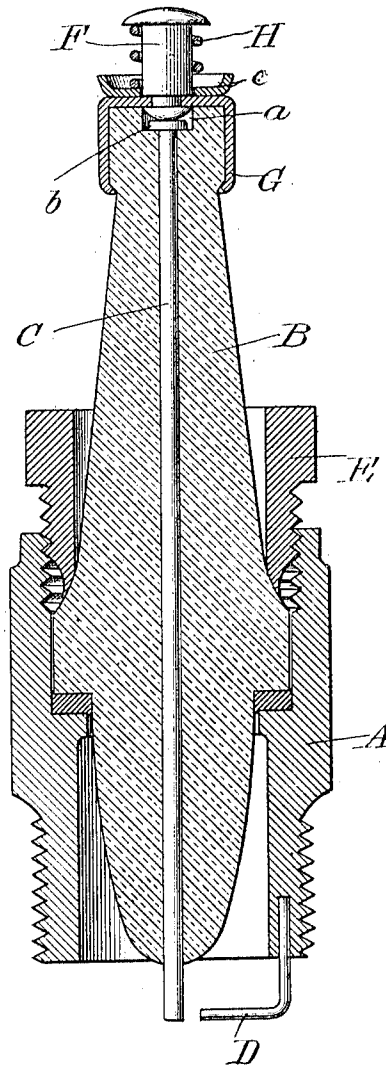


J. M. DAYTON.
SPARK PLUG.
APPLICATION FILED DEC. 30, 1910.

1,001,365.

Patented Aug. 22, 1911.



WITNESSES
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UNITED STATES PATENT OFFICE.

JAMES M. DAYTON, OF TORRINGTON, CONNECTICUT, ASSIGNOR TO PROGRESSIVE MANUFACTURING COMPANY, OF TORRINGTON, CONNECTICUT, A CORPORATION OF CONNECTICUT.

SPARK-PLUG.

1,001,365.

Specification of Letters Patent.

Patented Aug. 22, 1911.

Application filed December 30, 1910. Serial No. 600,048.

To all whom it may concern:

Be it known that I, JAMES M. DAYTON, a citizen of the United States, residing at Torrington, in the county of Litchfield, State of Connecticut, have invented certain new and useful Improvements in Spark-Plugs, of which the following is a description, reference being had to the accompanying drawing and to the letters and figures of reference marked thereon.

My invention relates to an improvement in spark plugs, particularly of the type employed in what is termed the "jump" spark or high tension system of ignition in gas engines.

The object of the invention is to improve the construction of spark plugs, and particularly of those which have a terminal cap fitting over the porcelain insulating tube or sleeve, said cap being in contact with the end of the center electrode.

The present invention consists in providing a spring terminal cap, in which the terminal cap is secured to the porcelain plug, and the upper rivet is headed over on the inside of the cap, and engages a head in the center electrode, a spring surrounding the rivet being interposed between the upper head thereof and a cupped washer, the spring holding the cupped washer against the terminal cap or the terminal clip interposed between the cupped washer and the cap.

The invention is illustrated in the accompanying drawings, in which the figure represents a sectional view of a spark plug, constructed in accordance with my invention.

In this drawing, the body portion of the plug is of any well known design, such as shown in my previous application for patent filed November 14th, 1910, or as herein illustrated, such as that shown in patent to Mills, 825,856, of July 10th, 1906. In general, it comprises a nipple or plug base A, an insulating sleeve tube or plug B, preferably of porcelain, through which passes the metal rod or stem C, forming the center electrode, which is cemented therein.

D is the other electrode, which is preferably of wire and secured to the plug base or nipple, and E is the bushing or stuffing nut screw, threaded into the base or nipple.

The porcelain plug has a recess or seat *a* in its upper end, in which rests the head *b* of the center electrode, this recess or seat being large enough to receive also the head on the lower end of the rivet or stud *F*, which head is inside of the terminal cap or ferrule *G*, which is preferably of brass pressed onto the porcelain, with its lower edge crimped into a recess in the porcelain.

A coiled spring *H* surrounds the rivet or stud *F*, at its upper end resting against the under side of the outer head of said rivet, and at its lower end bearing against a cupped washer *c*, which it keeps normally pressed against the face of the terminal cap *G*. Between the cupped washer and the face of the terminal cap, a terminal clip is adapted to be inserted and held by the pressure of the spring.

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

1. In a spark plug, in combination with the insulating plug, the electrode passing therethrough, the terminal cap upon said plug, a stud having its lower end riveted within the cap and engaging the electrode, whereby the cap is in electrical connection with the electrode, and a spring and washer carried on said stud, said spring bearing at its lower end on said washer to normally keep it in contact with the face of the cap with a terminal clip interposed between the washer and the cap.

2. In a spark plug, in combination with the insulating plug, having a recess or seat in its upper end, the electrode passing therethrough having a head located in said recess, a terminal cap or ferrule on said plug, a stud having its lower end riveted within the cap and located in said recess or seat in contact with the head of the electrode, and a spring and washer carried on said stud, said spring bearing at its lower end on said washer, to normally keep it in contact with the face of the cap.

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

JAMES M. DAYTON.

Witnesses:

F. P. RYAN,
E. J. MILLS.