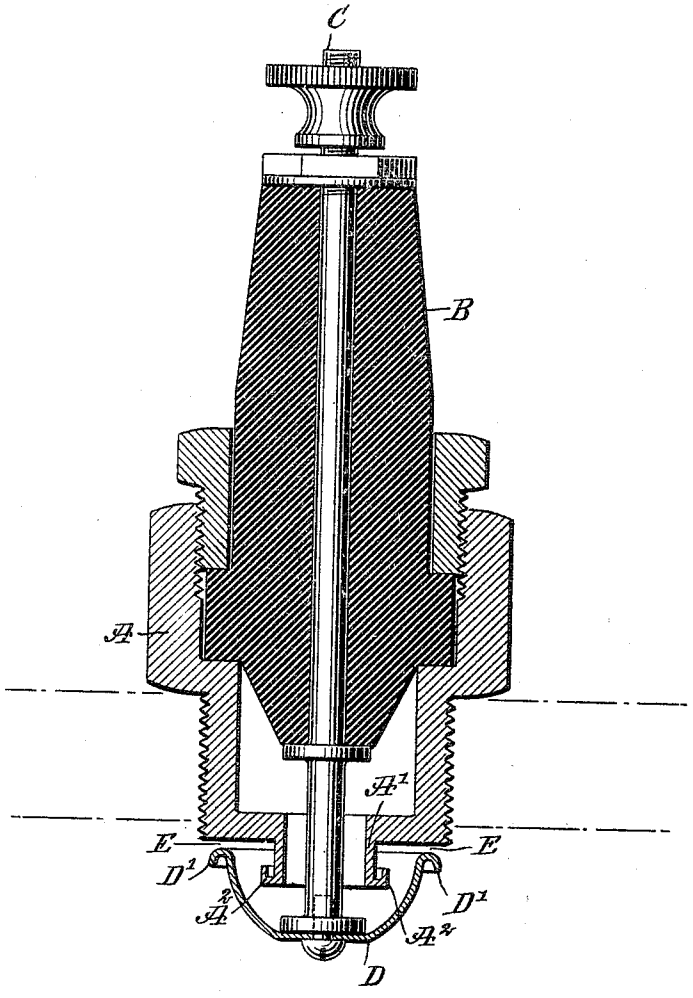
E. J. BUSHEY.

OIL PROOF SPARK PLUG.

APPLICATION FILED MAR. 10, 1909.

957,653.

Patented May 10, 1910.



WITNESSES

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ELI JOHN BUSHEY, OF NEW YORK, N. Y.

OIL-PROOF SPARK-PLUG.

957,653. Specification of Letters Patent. Patented May 10, 1910.

Application filed March 10, 1909. Serial No. 482,471.

To all whom it may concern:

Be it known that I, ELI J. BUSHEY, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Oil-Proof Spark-Plug, of which the following is a full, clear, and exact description.

The invention relates to internal combustion engines, and its object is to provide a new and improved spark plug, arranged to prevent oil or the like splashed up against the plug, from passing into the spark gap or into the interior of the plug, thus protecting the cap against deleterious influences of the oil and keeping the plug at all times in effective condition.

In the practical embodiment of my invention, as shown in the drawing, the firing cap is provided with an angular deflecting flange to prevent oil from passing over the edge of the cap through the spark gap and to the interior of the plug.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which the figure is a sectional side elevation of a spark plug provided with the improvement.

The shell A carries the core B of lava or other suitable insulating material, and on the core B is mounted the binding post C carrying the firing cap D, forming with the shell A the usual spark gap E, in which the explosive charge is ignited by the electric spark passing from the cap D to the shell A. The cap D is provided with a deflecting flange D′, so that any oil or other matter splashed up against the cap D is prevented from passing over the edge of the cap into the spark gap E, the deflecting flange D′ being preferably bent outwardly and downwardly, as plainly indicated in the drawing.

The neck A′ of the shell A, and through which passes the binding post C, is provided at its outer terminal with an exterior retaining flange A^2, so that any oil or other matter that may pass through the spark gap E into the interior of the cap D is caught and retained by this flange A^2, and is thus prevented from passing into the interior of the spark plug. The annular flange A^2 is preferably bent outward and upward, as indicated in the drawing.

From the foregoing it will be seen that by the arrangement described any oil splashed up against the firing cap D is prevented from passing to the spark gap, and any deleterious material which may pass through the spark gap E is retained by the flange A^2, so that the spark plug is maintained at all times in an effective condition.

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

1. A spark plug provided with a shell having an exterior retaining flange at its terminal, and a firing cap forming with the said shell a spark gap, the said cap having a deflecting flange at the said gap.

2. A spark plug provided with a shell having an exterior retaining flange at its terminal and a firing cap forming with the said shell a spark gap, the said cap having an exterior annular deflecting flange at its base adjacent to the said gap.

3. A spark plug provided with a shell having a neck at its terminal, said neck having a lateral marginal flange, and a closed cap forming with the shell a spark gap, said cap having an external marginal flange.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELI JOHN BUSHEY.

Witnesses:

CHARLES MCPARLAN,

M. B. MEEHAN.