Sept. 1, 1959 A. R. DE OLIVEIRA 2,902,552

ELECTRIC CURRENT DISTRIBUTOR

Filed March 21, 1956

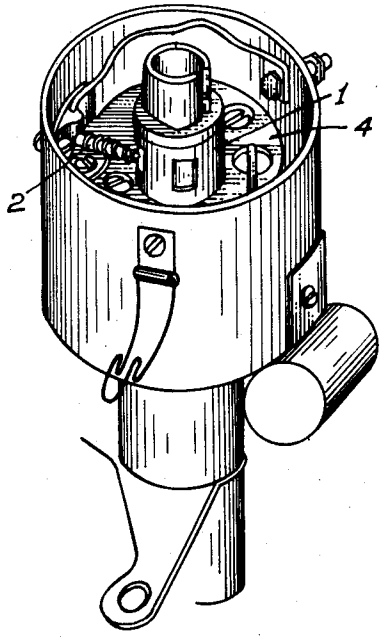


Fig. 1

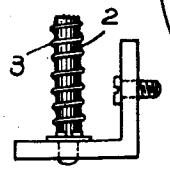


Fig. 2

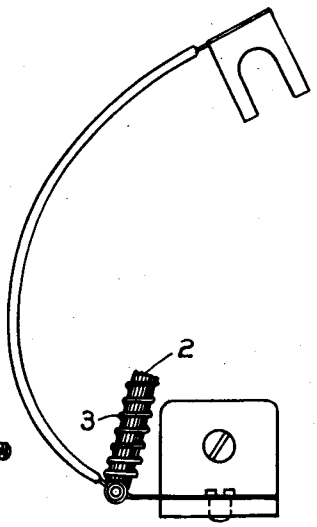


Fig. 3

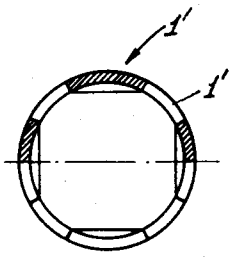


Fig. 4

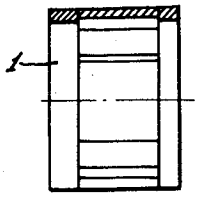


Fig. 5

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ELECTRIC CURRENT DISTRIBUTOR

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Claims priority, application Brazil July 14, 1955

1 Claim. (Cl. 200—28)

The present invention relates to improvements of electric current distributors, which enable said distributors to produce better sparks at the spark plugs of combustion engines, substantially without wearing of the arrangement which substitutes the contacts of the distributors.

In the accompanying drawings, Fig. 1 is a perspective view of an improved distributor suitable for use in combustion engines; Fig. 2 is a lateral view of the flexible brush and of its relative support or terminal; Fig. 3 is a front view of the brush and its support and showing also a connecting cable; Fig. 4 is a partially sectioned top view of a ring provided with lateral equidistant openings; and Fig. 5 is a partially sectional side view of this ring.

As represented in the drawings the normal contacts used in this type of distributor are substituted by an arrangement in which a ring 1 which has several openings or slots 1', one opening for each cylinder of the engine, is provided, which ring is connected to the central shaft of the distributor.

A flexible brush 2 preferably formed by electrolytic copper wires, or equivalent material, very thin in section is mounted on the distributor table 4 and touches lightly the above mentioned ring 1. Those wires are embraced by a suitable steel coiled spring 3.

The primary circuit is alternately established and interrupted as the brush 2 passes along the ring 1 with the slots feeding the current to the spark plugs.

The flexible brush 2 is permanently in contact with the ring 1 but it is not burned and hardly worn. Therefore better sparks will result, improper timing does not occur and the durability of the arrangement is in practice unlimited.

The invention also comprises, if desired more than one brush and contacts provided through the openings or slots provided in the central ring 1.

What I claim is:

An electric current distributor for a combustion engine, comprising, in combination, a distributor table; a ring formed from conductive material mounted for rotation about the axis thereof relative to said distributor table and being formed with a plurality of slots distributed equally spaced from each other about the periphery of said ring, said slots extending in axial direction of said ring and having each opposite closed ends spaced respectively from the opposite end faces of said rings, the number of said slots corresponding to the number of the pistons in the engine; and at least one flexible brush formed from a plurality of flexible metal wires, said brush being mounted on said distributor table and having a free end engaging said ring at the region of said slots, said free end extending in circumferential direction of said ring a distance shorter than the width of said slots, said plurality of metal wires being flexibly connected to each other by a wire spirally wound about said plurality of metal wires.

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