My invention relates to improvements in cooling internal combustion engine cylinders and associated parts.

Air cooled aviation engines in particular are subject to local hot spots in the combustion chambers which limit the usable compression ratio and therefore the power output. For example, there is usually a high temperature zone at the spark plugs and adjacent combustion chamber wall, particularly in the case of plugs located on the leeward side of an air-cooled cylinder head.

The present invention provides additional radiating means for such points without change in the present standardized dimensions of the plugs, which should remain interchangeable between various engine designs.

According to the present invention, an extension in intimate thermal union with the cylinder head is disposed about the spark plug to form a base for the application of a substantially increased number and area of cooling fins.

In the preferred form shown in the drawing, the extension is indicated as being conveniently formed integral with the usual spark plug hole bushing and comprises an enlarged cylindrical extension surrounding the plug and provided with a plurality of integral annular radiating fins.

This cooling element is preferably made of material of high thermal conductivity, i.e., a material characterized by a relatively small temperature gradient, whence it will be seen that the bushing into which the spark plug is screwed will be substantially reduced in temperature, with a corresponding reduction in the temperature of the spark plug itself and of the surrounding cylinder wall.

Referring now to the drawing—1 is the cylinder wall with its radiating fins 2—2. 3 is the spark plug boss machined to receive the bushing 5. 4 shows a standard spark plug. 5 is the bushing having the integral radiating fins 6, and threaded internally for the spark plug and externally to fit the cylinder boss. 7 is the cavity to accommodate the spark plug.

It will be obvious that alternative disposi-

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