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THE  
***aeronautical***  
JOURNAL



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**F. W. Armstrong**

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### Cover picture:

Fifty years ago Dr. A. A. Griffith, then working at the RAE, produced a paper on the aerodynamics of turbine design that argued that the hitherto poor performance of axial compressors could be significantly improved to the extent that a gas turbine could become competitive with a reciprocating engine as an aircraft powerplant. In this issue F. W. Armstrong examines the history of Griffith, the gas turbine and its possible future developments, while A. R. Howell looks at his early ideas on turbomachinery aerodynamics in more detail. The first Rolls-Royce axial-flow engine, the Avon, was due to a proposal from Griffith, and it made its first public appearance at the 1948 SBAC Show, installed in the Avro Lancaster as shown on the cover.

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