

intendent, Experimental Bridging Establishment, Ministry of Supply; Dr. C. Forster-Cooper, director of the British Museum (Natural History); Prof. C. D. Ellis, Wheatstone professor of physics at King's College, University of London, scientific adviser to the Army Council; Dr. P. G. Fildes, director of chemical bacteriology, Medical Research Council; Dr. C. F. Goodeve, deputy controller, Research and Development, Admiralty; Prof. I. M. Heilbron, professor of organic chemistry in the Imperial College of Science and Technology, London, lately scientific adviser, Ministry of Production; Mr. B. Loeckspeiser, director of scientific research, Ministry of Aircraft Production; Dr. E. J. Salisbury, director of the Royal Botanic Gardens, Kew; Dr. A. M. Carr-Saunders, director of the London School of Economics; Mr. H. R. Stewart, vice-chairman of the Imperial Council of Agricultural Research, India; Dr. H. A. Tompany, agricultural adviser to Secretary of State for the Colonies; Mr. F. Ware, director of animal husbandry, United Provinces, India.

*C.B.*: Prof. S. Zuckerman, professor of anatomy in the University of Birmingham, scientific director, R.A.F. Bombing Analysis Unit, for distinguished service; Mr. R. V. Jones, assistant director of intelligence (science), Air Ministry, for distinguished service.

*C.M.G.*: Prof. H. J. Channon, professor of chemistry, University of Liverpool, a member of the Advisory Committee on Education in the Colonies, for services to education; Prof. A. K. Macbeth, Angus professor of chemistry, University of Adelaide, for public services; Mr. J. Saint, director of agriculture, Barbados; Mr. E. Marsden, secretary of the Department of Scientific and Industrial Research, New Zealand.

*C.I.E.*: Mr. R. H. Hill, director of agriculture, C.P. and Berar; Sardar Gandasing Cheema, principal of the Agricultural College, Poona; Ram Chandra Srivastava, director of the Imperial Institute of Sugar Technology, Cawnpore; Mr. H. P. Smith, senior conservator of forests, Assam; Mr. P. H. Carpenter, director of the Scientific Department, Indian Tea Association, Assam.

*C.B.E.*: Prof. A. W. Ashby, lately professor of agricultural economics, University College, Aberystwyth; Mr. R. Corless, assistant director of the Meteorological Office, Air Ministry; Mr. W. C. M. Couch, deputy director of electrical engineering, Admiralty; Prof. J. Cruickshank, professor of bacteriology, University of Aberdeen, for services to civil defence; Dr. P. Dunsheath, chief engineer and director, W. T. Henley's Telegraph Works Co., Ltd.; Mr. C. W. Goyder, chief engineer, All-India Radio; Prof. J. Gray, professor of zoology, University of Cambridge; Mr. G. R. D. Hogg, assistant secretary, Department of Scientific and Industrial Research; Prof. H. D. Kay, director, National Institute for Research in Dairying, University of Reading; Dr. T. Moran, director of research and deputy scientific adviser, Ministry of Food; Prof. R. E. Peierls, professor of applied mathematics, University of Birmingham, scientific consultant on atomic bomb research, Department of Scientific and Industrial Research; Mr. A. J. Philpot, director of research and secretary, British Scientific Instrument Research Association; Mr. J. D. Pratt, director and secretary, Association of British Chemical Manufacturers; Mr. W. G. Radley, controller of research, Engineer-in-Chief's Office, G.P.O.; Prof. F. E. Simon, professor of thermodynamics, University of Oxford; Mr. J. R. N. Stone, lately chief statistical assistant, Offices of the

Cabinet and Ministry of Defence; Mr. P. C. Vellacott, lately head of the Political and Psychological Warfare Department, Mediterranean Theatre; Dr. J. A. Scott-Watson, chief education officer, Ministry of Agriculture and Fisheries.

#### British Cast Iron Research Association: Dr. Harold Hartley

DR. HAROLD HARTLEY, technical director and managing director of Radiation, Ltd., has been elected president of the British Cast Iron Research Association. Dr. Hartley entered the University of Manchester in 1904, where he studied under Profs. Dixon, Perkin and Bone. Afterwards he travelled in Norway and Canada, collating data on the cost of power production for electro-chemical industries. On returning to Britain in 1909 he was elected to a gas research fellowship at the University of Leeds. In 1912 he was appointed to the staff of the Richmond Gas Stove Co. at Warrington to build up a research section. He was especially concerned in the development of furnaces both for non-ferrous metal melting and for heat-treatment processes generally. With the formation of the Radiation Group in 1919, Dr. Hartley was appointed chief chemist and head of the Research Department. In 1925 the new central research laboratories were inaugurated in London and there followed a period of activity which has led to marked developments in gas- and coke-burning apparatus. In 1937 additional new and enlarged laboratories were opened in Birmingham, and in 1939 the central research organisation was transferred to the Midlands. Shortly afterwards Dr. Hartley was appointed to the board of Radiation, Ltd., as technical director, and he became a joint managing director in 1944. Dr. Hartley has been associated for many years with the British Cast Iron Research Association, becoming chairman of the Research Committee in 1936 and chairman of the Council in 1938.

#### Atomic Energy and the Freedom of Science

At a meeting of the Physical Science Section of the Royal Netherlands Academy of Sciences held on October 27, the following resolution was carried unanimously and has been forwarded to the Netherlands Government:

"The Royal Netherlands Academy of Sciences, Physical Science Section, wishes to state,

"1. that as a result of scientific research, intra-atomic energy has been made available to human society as a new source of energy;

"2. that, consequently, far-reaching possibilities offer themselves for a better world economy;

"3. that, however, these discoveries have first of all been developed into the atomic bomb, the implement of which is an abhorrent destructive power;

"4. that men of science, which have created these possibilities, are well aware of their responsibilities in this respect;

"5. that it is unacceptable with regard to the furthering of science and with regard to the entailing development of social welfare and social hygiene, that results of scientific research be kept secret.

"The Academy therefore appeal to the sense of responsibility of Governments and of scientific institutions, to collaborate in solely making available the fruits of scientific research, to the benefit of civilization, and preventing them from becoming a threat.

"The Academy herewith express their desire that the