Wright. Mr. Brundrett went to Sidney Sussex College, Cambridge, and obtained first-class honours (Wrangler) in the Mathematical Tripos. During 1916–19 he served in the R.N.V.R., and then was appointed to the scientific staff of H.M. Signal School, where he served in various capacities until 1937, his most outstanding original technical work being on the propagation of short wireless waves and in the organisation of world-wide propagation trials. In 1937 he was transferred to the Scientific Research and Experiment Department, Admiralty, as principal scientific officer, where a sequence of rapid promotions led to his becoming a deputy director of scientific research in 1942. In 1946 Mr. Brundrett was appointed assistant to the chief of the Royal Naval Scientific Service for the reconstruction period.

At the start of the Second World War, as many hundreds of scientific men throughout Great Britain will know from personal experience, Mr. Brundrett accomplished with great success a prodigious task in organising and recruiting a vast expansion of the Navy's scientific staff, and in the radar research branches of the other Services. He was throughout the War particularly prominent in the organisation and administration of radio valve research for the Services. He was honoured with the award of the C.B., in recognition of his war-time work, in the New Year Honours, 1946. Mr. Brundrett has a farm in Hampshire where he has achieved great success in the breeding of pedigree poultry and Red Poll cattle.

Physics at King's College, London: Prof. C. A. Coulson

Dr. C. A. Coulson, recently appointed to the University chair of theoretical physics at King's College, London, is among the foremost workers in Great Britain on the wave-mechanical side of quantum theory. Although Coulson's research papers cover a very wide range of interests (he collaborated with Lea and Haines in early work on the action of radiation on bacteria and has also made contributions to the theory of liquids and solutions), the great bulk of his published work deals with the application of wave-mechanics to the theory of molecular structure. It has been concerned both with the determination of accurate wave-functions for simple molecules and molecular ions and with the necessarily more approximate treatment of large organic molecules. An extensive series of papers in collaboration with W. E. Duncanson deals with the rather neglected field of momentum distribution functions and the related Compton-line profiles.

In the theoretical treatment of large unsaturated molecules, Coulson uses the method of molecular-orbitals originally due to Hückel and first developed in Britain by Prof. (now Sir John) Lennard-Jones at Cambridge. Coulson has used this method for a great variety of problems, from the computation of the bond-lengths of such a molecule as coronene to a calculation of the electrical conductivity of pure graphite. Recently, at Oxford, Coulson and his co-workers have made considerable advances towards an understanding of the effects of substituents in molecules and a general theory of chemical reactivity. In addition to his research papers, Dr. Coulson has also written text-books on the more elementary and classical aspects of mathematical physics. He has a well-deserved reputation for his kindly and helpful encouragement of younger research workers.

Food and Agriculture Organisation: Production and Research

Dr. G. Scott Robertson, Permanent Secretary of the Ministry of Agriculture for Northern Ireland, has been seconded for a period of six months to take up the post of director of agricultural production and research under the Food and Agriculture Organisation of the United Nations. Dr. Scott Robertson went to Northern Ireland in 1922 and held the dual post of professor of agricultural chemistry in the Queen's University of Belfast and senior research officer of the Ministry of Agriculture. It was during this period that he continued the now classic work on phosphatic fertilizers which he had been conducting for several years in Essex while head of the Agricultural Chemistry Department of the East Anglian Institute of Agriculture. At the same time Dr. Scott Robertson started a series of investigations on the mineral requirements of farm livestock, paying particular attention to those of poultry. This work was carried out in close collaboration with Sir John Boyd Orr, who was then director of the Rowett Research Institute. In 1928, Dr. Scott Robertson became chief inspector of the Ministry of Agriculture for Northern Ireland, and later was appointed permanent secretary when Dr. J. S. Gordon retired. For many years Dr. Robertson has acted as assessor on the Agricultural Research Council and United Kingdom delegate to the meetings of the Imperial Agricultural Bureaux. Thus he brings to his new work many years experience in agricultural research, coupled with administrative knowledge gained as head of a department the energies of which have been devoted to the task of production at the highest possible level for more than seven years.

Research in the Region between Subsonic and Supersonic Speeds

There is a large gap in our knowledge which must be bridged before we can take decisive steps from present aircraft subsonic speeds to supersonic speeds. There is first of all the question as to what happens when actually passing through the range of speed about that of sound. It is known that we must expect a steep rise of drag in this region, but we have no quantitative information. There is the further question of change of trim and stability in level flight as one passes from subsonic to supersonic speeds. There are other questions of aerodynamic and structural significance, and the whole problem is rather complex. Normally one would expect to get a large part of this information from wind tunnels, and although the capabilities of existing wind tunnels will be used to the limit, nobody knows how to design or use a practicable wind tunnel at or about the speed of sound. The phenomenon known as 'choking' and the effect of wall interference prohibit the use of tunnels for model tests at Mach numbers between about 0·9 and 1·15. This is the main reason for going into the air, and a series of experiments has been planned to use flying model aircraft launched from a great height from another aircraft and powered by rockets. This form of propulsion should enable the models to be driven through the speed-range of that of sound to various supersonic speeds.

The models will be fitted with instruments, and a six-channel telemetering system will transmit readings continuously to the ground, giving information on speed, height, Mach number, drag, lift coefficient and