NEWS and VIEWS

Dr. J. C. Willis, F.R.S.

DR. J. C. WILLIS, the well-known botanist, celebrated his seventy-fifth birthday on February 20. When Dr. Willis was appointed director of the Royal Botanic Gardens, Ceylon, in 1896, he not only developed the gardens to a high state of efficiency but he also began a very fruitful study of the flora of the island, coming for the first time in contact with a most interesting tropical flora. He began with the investigation of the Podostemaceæ, a group of highly modified type of flowering plants which grow on the waterworn rocks of rapidly flowing tropical streams in various parts of the world. When at Cambridge as personal assistant to Sir Francis Darwin, he had accepted with enthusiasm Darwin's doctrine of natural selection, but faced with the fact of numerous species of the same family living under practically similar conditions of life he began to question the Darwinian theory of evolution. Thus the views which he has put forward in his later stimulating books had their origin in his intensive study of the Podostemaceæ.

Dr. Willis's studies of the endemic plants of Ceylon, and later those of New Zealand, confirmed him in his conclusion, formulated in his earlier publications, that the older a species is the greater is its geographical distribution, and vice versa. This view was put forward at some length with numerous examples verified by himself in "Age and Area", published in 1922. As this book met with some criticism, Dr. Willis published in the following year a reply to criticism. Further studies on endemism and geographical distribution have occupied Dr. Willis's time and energy since then and two accounts of his work and his conclusions were given to the Linnean Society in 1936 and 1938 respectively. Advancing age has not diminished his output of important contributions to botanical science, and 1940 saw the publication of "The Course of Evolution by Differentiation or Divergent Mutation rather than by Selection", a book showing the vigour of his mind and summing up with a wealth of mature and critical judgment the arguments in favour of his conclusion. Marooned in Switzerland during the present War, he is still hard at work and last April (1942) he published an article in the *Proceedings of the Royal Society* indicating the kaleidoscopic manner in which the mutations referred to in his "Evolution of Plants" takes place. This publication may be taken as an instalment toward a projected volume on geographical distribution, the publication of which has been retarded by the difficulties caused by the War.

Post-War Commercial Air Transport

THE recent discussion in Parliament upon the necessity for making provision for the development of civil aviation in the immediate post-war period has aroused much interest in many different circles, political, commercial and technical. Mr. F. C. R. Jaques, of North Eastern Airways, Ltd., 31–32 Haymarket, S.W.1, has prepared a memorandum in which he endeavours to apply his experience in commercial air transport to the post-war problem. He suggests that much technical progress in design has been made, necessarily secret at present, that has improved performance, reduced the labour needed for construction, and simplified maintenance. This should be reflected in a general lowering of costs of air transport, the principal bugbear of the earlier air-line operator. If schemes, both for commercial air transport and private flying, are launched with sufficient vision and energy they will help in the problem of re-establishing the skilled personnel of the R.A.F. in civil life.

The memorandum postulates that international freedom of the air is a necessary preliminary for the fullest development of civil flying, and suggests that sufficient balance can be maintained if each country controls its nationals, guaranteeing their bona fides, technical skill, and the airworthiness of their machines. These standards will obviously need to be aligned, at least approximately, by some international agreement. As such did exist before the War there should be no difficulty in resurrecting them. His suggestions include the removal of civil aviation from the Air Ministry, introducing a sense of competition in the air transport world by allowing other selected companies to operate, the development of internal routes possibly by smaller companies as feeders to the big transcontinental lines, and the immediate appointment of a powerful committee to examine such questions.

René-Just Haüy (1743–1822)

ON February 28 occurs the bicentenary of René-Just Haüy, recognized everywhere as the founder of the science of crystallography. Born in the small town of St. Just, in the Department of Oise, he was the son of a weaver, but in spite of his poor circumstances gained admission to the College of Navarre, in Paris, and at the age of twenty began to teach there. Led to the study of minerals through an accident with a crystal of calcareous spar, he discovered the law of crystallization, and became widely known thereby. In 1783, at the age of forty, he was elected to the Academy of Sciences, and in the following year he published his "Essay in the Structure of Crystals", the first of his various books. He was deprived of his posts at the Revolution, and for a short time imprisoned; but after the fall of Robespierre, he took his place among his scientific peers, being given a chair in the short-lived Normal School, and a seat in the Institute. He was also made keeper of the mineralogical collections at the School of Mines and secretary to the Commission of Weights and Measures. In 1802 he became professor of mineralogy in the Natural History Museum, where his lectures attracted large audiences. His numerous memoirs are to be found in the periodicals of the time. He continued to lecture to an advanced age, and died in Paris on June 3, 1822. His collections and his statue are in the galleries at the Museum, and on November 8, 1903, a monument to him and his brother, Valentin Haüy (1745–1822), a pioneer in work for the blind, was unveiled at St. Just, when a discourse was pronounced by Lacroix. The *American Mineralogist* (No. 6, **3**, 1919) contains a series of articles on aspects of Haüy's life and works and includes a number of portraits.

British Mammals in War-time

THE increase of many species of British birds due to war-time changes in the countryside has already been noted in NATURE. Evidence is now accumulating to show that many British mammals are likewise increasing, and one of the most welcome is the pine-marten, which had reached a dangerously low