LOCAL SCIENTIFIC SOCIETIES

THE title of the presidential address to the Conference of Delegates of Corresponding Societies being delivered by Mr. J. A. S. Stendall is "Problems and Responsibilities". After tracing the history of societies in Northern Ireland and directing attention to men eminent in their own spheres of activity, Mr. Stendall turns to the decline in publications issued by local societies. This, he suggests, is possibly not due to lack of interest on the part of those responsible, but rather to present-day conditions. Fewer reports and proceedings of societies are being published and still fewer records of accomplished work made available, owing to the prohibitive increase in printing costs. This is to be deplored. Mr. Stendall thinks that societies should subsidize regional journals rather than attempt their individual publications and in this way cut their own costs, allow for an increase in size of the journals, bring all regional records together and reduce time-lag in the publication of important papers.

Following a brief account of the natural scene in Northern Ireland, an appeal is made to members of the local societies to give more consideration to the importance of preservation by law of several well-known areas of great interest—scenically, archæologically and naturally. Great Britain has scheduled many such areas, but nothing in this respect has been done in Northern Ireland, notwithstanding favourable recommendations contained in the 1946 Interim Report of an officially sponsored Planning Advisory Board on Amenities.

An appeal is made for the control of ivy growth, especially on trees. Locally many fine trees have been killed by ivy strangulation; to-day there are numbers tending that way, while potential victims are legion, especially those growing along roadsides. Similar conditions appertain farther afield than Northern Ireland.

Turning to local achievements in the preservation of Nature, Mr. Stendall refers to the value of the Wild Birds Protection Act (N.I.) 1931, which swept away outmoded legislation, similar to that which holds in other parts of the United Kingdom to-day, ranging as it does back into the 'eighties. Northern Ireland, fortunate in being a compact area, lends itself to the now admitted justifiable experiment of deeming all species of wild birds to be protected, with the proviso that any undesirable members of the family could be contracted out, while a close season is given to birds of sport. The Act is administered by the Home Office of the Northern Ireland Government, with a special committee to advise the Minister. At the moment, there are seventeen species completely unprotected, two species can only be taken on enclosed land, while sporting birds of winter can have their close season altered and even be given complete protection for a definite period if necessary. All nests and eggs are protected, except those of the blacklisted species. The Minister has the power to transfer species from, and to, complete protection, while police have to be able to recognize but few species. Mr. Stendall suggests that local societies could do much to bring about legislation of a like nature in Great Britain.

OBITUARIES

Sir Jack Drummond, F.R.S.

THE insensate murder, on the night of August 4, of Sir Jack Drummond, together with his wife and their twelve-year-old daughter Elizabeth Anne, will have brought rage and grief to many hearts. Debonair would be the best single word to describe him; he attracted friends as the sparks fly upwards.

He was born in 1891. The history of his scientific work typifies and illustrates the development of biochemistry in Great Britain. Graduating from Queen Mary College and King's College, London, he became a research worker at the Royal Cancer Hospital, London, in 1914, and remained there for five years, when he was appointed reader in physiological chemistry at University College, London. This appointment, in which he succeeded the first reader in the subject to be created in the University, Dr. R. H. Aders Plimmer, was to the staff of the Department of Physiology. The post was made into a professorship in 1922, the Department then being known as the Department of Physiology and Biochemistry, which title it retained until his resignation in 1946 to become director of research to Boots Pure Drug Co., Ltd., after which a separate Department of Biochemistry was created.

The long list of Drummond's published papers emphasizes the unfolding of the subject of biochemistry. He had begun work on nutritional subjects, particularly on the so-called 'accessory substances', while at the Royal Cancer Hospital, and under the influence of Casimir Funk. In 1922 he was publishing the results of a search for the fat-soluble factor, then called vitamin A, and investigating its origin. At that time, although Mellanby had shown the antirachitic properties of the factor, it had not yet been separated into the A and D fractions—this happened about 1924. He passed on to study high protein diets, further properties of the non-saponifiable fraction of cod liver oil, and to the antirachitic properties of irradiated sterols, in 1925. The following year he went back to the question of the chemical nature of vitamin A, discussed its possible relation to carotene, which was rejected because he could not confirm the growth-promoting action of the latter, and he evolved the arsenic trichloride colour reaction. After working for two years on vitamin B in relation to diet and inanition, he returned in 1930–31 to the question of the relation of vitamin A to carotene, and this he now confirmed, explaining the former failures by the fact that the carotene had been given in solution in ethyl oleate, which oxidized easily and led to destruction of the carotene. For the time it appeared that carotene and vitamin A were, in fact, identical; but in 1932 T. Moore, of Cambridge, showed that the vitamin was formed from carotene in the body, and this Drummond confirmed.

Attention was next turned to more practical questions of the nutritive value of bread, the effects of milling, of the seasonal alterations in milk, and of the effects of fat-free diets; he also worked on vitamin E, which had recently been isolated.

It must be mentioned that nearly all this large amount of published work was carried out in collaboration with others, and they were many and often

distinguished, or destined to become so; Drummond was, however, the senior partner in most of these publications. I think he exerted much more influence through his inspiration of junior colleagues, and by his example of first-class work than by any actual event of discovery, in which, despite immense efforts, he was, on the whole, not over fortunate. That he played a very large part in the general development of the biochemistry of nutrition nobody can doubt; but it was more by example, by the application of first-class chemistry, by his innate appreciation that mere chemistry is not enough, and by the co-ordination of wide chemical with biological knowledge rather than by resounding discoveries that he did so.

When the War came in 1939, he was clearly indicated as the most suitable person for the responsible post of scientific adviser to the Ministry of Food, which he held until 1946, in the later years of the period being also adviser on nutrition to the Allied Post-War Requirements Bureau and S.H.A.E.F., and adviser on nutrition to the Control Commissions for Germany and Austria (British Element). He was knighted in 1944, and shortly afterwards was elected a Fellow of the Royal Society. Great Britain owes to Jack Drummond and to the Minister, Lord Woolton, who gave him a pretty free hand, an incalculable debt for the fine work they did in connexion with the British rationing system, which was finely conceived, brilliantly executed, and a pattern to all nations.

Drummond was interested in food from every aspect; he was a very good judge of food and knowledgeable as to its preparation, and he brought, as often as he could, to good food, good fellowship. Very many have spent many a happy hour with him, enjoying good fare, good conversation, and good fun at one of his clubs, at some private dining club, which he always enlivened, or in his own home, where he was the perfect host. We shall all think, often and often, of those very well-spent evenings, and shall not forget.

Lady Drummond (*neé* Wilbraham) was his second wife; she was interested in history, and collaborated with him in the production, in 1939, of an entertaining book, "The Englishman's Food" (Jonathan Cape), which abounds in sound scholarship and humour.

'Jack' was full of energy and enterprise, and with a lively sense of humour, which extended to telling stories against himself. He had travelled widely, and with wide-open eyes. Hatred was foreign to his nature, though he freely expressed amused contempt for any kind of pomposity or priggishness; to some, therefore, he might have been unacceptable. Beneath the twinkling eye there was, nevertheless, a steely inflexibility of purpose, and he could be devastating towards incompetence and astringent to fools. Lecturing came easily to Drummond; he was bright, informative and had a gift for popular exposition; accordingly he gave many popular lectures to large audiences, both in Great Britain and in the United States, and these lectures were greatly enjoyed.

His connexions with the industrial aspects of biochemistry, and especially with the food industry, were close, and mutually beneficial. Few realized more clearly than he that our standard of living, together with the sweets of academic life, represent the cream skimmed from industrial endeavour, and he probably supplied more young men for industrial undertakings than any other three biochemists put together; these young men did him great credit, and they not infrequently gained distinction in both pure and applied science.

Very many young people owe to Sir Jack Drummond their start in life; he liked young people, and put on no professorial airs for their benefit. If any memorial to him is to be created, he would have liked nothing better than something which would enable capable young people to receive an encouraging start, such as he gave to so many. It would also keep alive the name, for those whose loss it was not to have known him, of a great and lovable personality.

C. Lovatt Evans

The late Sir Jack Drummond was a man of outstanding ability. He was a scientist with an international reputation as one of the leaders in developing what has been called the newer knowledge of nutrition. By applying the scientific method of approach to the administrative problems in the Ministry of Food he made a great contribution to the success during the Second World War of food policy, the outstanding feature of which was the special provision for the nutritional needs of mothers and children. The resulting big improvement in the health and physique in the rising generation in a time of acute food shortage was a remarkable achievement. As one of those who got this policy adopted, and for his work in helping to get it carried through, he rendered great service to Great Britain.

Boyd-Orr

Mr. J. R. Park

British applied science has suffered a severe loss in the untimely death of Mr. J. R. Park, a managing director of the British Oxygen Co., Ltd. Mr. Park was born in London in 1902 and was educated first at Battersea Grammar School and then at Queen Mary College, where he graduated in chemistry. After a short period on the staff of Westminster Technical College he worked as an analytical chemist in industry for a number of years in Britain, followed by a year in a French firm.

In 1929 Mr. Park joined Imperial Chemical Industries, Ltd., Billingham Division, where he remained until 1945. For a time he worked there as a plant manager, but soon he switched over to the research side. The production of hydrogen, the hydrogenation of coal, the ammonia synthesis and methanol synthesis were some of the fields which occupied him in the years up to the Second World War, when he had advanced to the position of ammonia research manager. He was also connected with the design of oil hydrogenation plant, and in the first year of the War was responsible for the design of various other plants.

I made his acquaintance in 1941, when Park was put in charge of the I.C.I. Billingham research team working on the British Atomic Energy Project. His quick grasp of problems, his strong scientific background and his understanding of large-scale industrial processes formed a combination that contributed greatly to the success of the enterprise.

In 1945 Park was asked to organize a research department in the British Oxygen Co. He did this with outstanding success, creating within a few years a large and flourishing research organization practically from scratch. His worth was quickly appreciated;