

Its greatest potential value would, therefore, appear to lie in the field of chemical genetics opened up by the work of Lawrence and Scott-Moncrieff which inspired the present investigation.

The help afforded by Prof. A. R. Todd in supplying anthocyanin chlorides and chalkones and by Dr. R. Hill in supplying natural anthocyanins and flavones made this investigation possible. Mr. D. F. Elsdon carried out the experimental work, and Dr. S. M. Partridge's advice in its interpretation is gratefully acknowledged.

¹ Lawrence, W. J. C., and Scott-Moncrieff, R., *J. Genet.*, **30**, 155 (1935).

² Robinson, G. M., and Robinson, R., *Biochem. J.*, **25**, 1687 (1931); **26**, 1647 (1932).

³ Conden, R., Gordon, A. H., and Martin, A. J. P., *Biochem. J.*, **38**, 224 (1944).

⁴ Partridge, S. M., *Nature*, **158**, 270 (1946); *Biochem. J.*, **42**, 238 (1948).

⁵ Lawrence, W. J. C., Price, J. R., Robinson, G. M., and Robinson, R., *Phil. Trans. Roy. Soc.*, **230**, 149 (1939).

⁶ Price, J. R., *J. Chem. Soc.*, 1017 (1939).

⁷ Schmid, C., and Waschkau, A., *Monatsh. Chem.*, **49**, 83 (1928).

OBITUARIES

Prof. A. S. Eve, C.B.E., F.R.S.

ARTHUR STEWART EVE, who died on March 24 at his home at Puttenham in Surrey, was one of Rutherford's collaborators in early days at McGill. Throughout his life he had a fervent admiration for Rutherford, and his authoritative biography of Rutherford was a work of love.

The main facts of Eve's life are simple. Born in 1862 at Silsoe in Bedfordshire, he was educated at Berkhamsted School, whence he passed with a scholarship in 1881 to Pembroke College, Cambridge. He was fifteenth Wrangler and took a first-class in Part 2 of the Natural Science Tripos. He then went as a master to Marlborough, where he stayed for sixteen years, during the last five of which he was bursar. In 1903 he went to McGill, first in the mathematics and later in the physics department, and in the next year a series of papers began dealing with ionization by β - and γ -rays, with the ionization in the atmosphere and, somewhat later, with the amounts of radioactive substances present in rocks and in sea water. In 1909 he succeeded Rutherford as Macdonald professor of physics. Work was interrupted by the First World War, when Eve was responsible for raising the third and fourth University Companies as reinforcements for the Princess Patricia's Canadian Light Infantry. He went overseas as second in command of the 148th Battalion with the rank of major, and afterwards became a colonel in the Canadian Expeditionary Force. Though admirably suited to the command of men, the need for men with scientific training to deal with the submarine menace led to his becoming director of research at the Admiralty Experimental Station at Harwich. For his work there he was awarded the C.B.E. in 1918; in 1917 he had become a fellow of the Royal Society.

After the War he returned to McGill as director of physics, became dean of the Graduate Faculty in 1930 and retired with the title emeritus in 1935. In 1929 he was president of the Royal Society of Canada.

After his retirement to England came his 'life' of Rutherford, and he then undertook the heavy and long-delayed task of writing the life of John Tyndall from the large mass of material collected and partly

arranged by Mrs. Tyndall. Eve produced a first draft, but a stroke prevented him from completing the book, which was eventually published in collaboration with C. H. Creasey and under their joint names.

Eve's true greatness lay in his personality, and this was at no time better shown than in his last years when by cheerful pluck and determination he recovered to a large extent from the stroke which had at first deprived him of speech and movement. He regained the power of speech and to some extent that of walking; he even managed to make his occasional lapses add piquancy to his always racy speech. It is a measure of his great-heartedness that he was able to turn these errors of speech into a joke embarrassing neither to his friends nor to himself. He had a rare sympathy and the widest of interests. It is primarily these that made him the successful teacher that he was, though his excellent text-books show the clearness of mind that is also essential. Few men have made so many friends and so few enemies.

In his researches on ionization Eve showed ability in handling the primitive apparatus of the day and in making clear and logical deductions. Reading them in the light of after-events, it is tantalizing to see how near he came to the discovery of cosmic rays. Though the ionization over land agreed reasonably well with what must be caused by traces of emanation and other known radioactive effects, all of which he carefully measured, it was difficult to account for the ionization over sea. This difficulty he clearly states, and perhaps if he had had more opportunities for measurements at sea he would have proved the existence of another source of ionization.

His text-book "College Physics", written in collaboration with Mendenhall and Keys and recently revised, is still widely used.

Eve was one of the first physicists of distinction to concern himself with the use of physical methods in prospecting in the nineteen-twenties. He published a series of papers, with D. A. Keys and others, dealing especially with the electrical and magnetic methods, and his influence was important in promoting the use of geophysics in Canada. His book on the subject, with D. A. Keys, is an admirable exposition well adapted for men with only a moderate knowledge of physics.

In 1905 he married Miss Elizabeth Brooks of Montreal. She survives him, as do one son and two married daughters.

G. P. THOMSON

Dr. J. G. Parker

DR. JAMES GORDON PARKER died on April 30 at his home in London in his seventy-ninth year. He was born on August 30, 1869, at Newport, Fife, and received his early education at the Madras College, Scotland, and then proceeded to Owens College, Manchester. With this foundation, he went for periods to the Universities of Heidelberg and Göttingen, and thence to the University of Strassburg. It was from here that he received his degree of Ph.D. in 1891, the subject of his thesis being "Ueber Neue Synthesen mit Brenztraubensäure".

Family associations gave him an interest in the leather industry, and for a short time he went to the University of Leeds with the late Prof. H. R. Procter and worked in the Leather Industries Department. Then, to obtain some experience in Continental leather manufacture, he went to Germany for a few years (he spoke German fluently).