

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.

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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).

So well equipped, he was appointed head of the Herolds Institute, Bermondsey, the first tanning school in London, which was opened in 1897. He remained here until 1909, when the school was transferred to the newly erected Leathersellers' Technical College, Tower Bridge Road, S.E.1, and he was principal of the College from that date until 1928, when he retired. He was elected a fellow of the Royal Institute of Chemistry in 1909. On retirement, he continued in private practice as a consulting chemist to the leather industry, and was internationally known as an authority in this branch of chemical technology.

During the First World War, Dr. Parker was appointed a member of the Leather Supplies Committee at the War Office, and of the Allied Commission of Supplies, where his experience was placed freely at the disposal of the Government. For many years he was examiner in leather manufacture for the City and Guilds of London Institute. During the period 1914-18 he was also honorary secretary of the London Tanners' Federation and the United Tanners Federation. He was an honorary liveryman of the Worshipful Company of Leathersellers, and held the Order of Leopold (second class) and the Order of the Crown of Italy. In 1904 he was awarded the Silver Medal of the Royal Society of Arts for his investigations into the causes of the deterioration of book-binding leathers.

Dr. Parker will be best remembered for his work in the formation and development of the International Association of Leather Trades' Chemists. The Association was formed in 1897, and at the time of his death he was one of the two remaining original members. That Association later developed into the International Society of Leather Trades' Chemists, with sections in many parts of the world (the Society was recently dissolved with the formation of autonomous societies and an international Union). He was the first secretary of the Association, and remained so until 1912, when he was elected president for the years 1912-14. He was awarded the Association's Gold Medal in 1912. After the First World War, he was elected president of the then newly formed International Society for 1920-21, then treasurer for a period, and finally honorary secretary from 1929 until a year or so ago, when ill-health compelled him to forgo many of his activities. He was elected an honorary member of the Society in 1934.

Dr. Vaughan Cornish

DR. VAUGHAN CORNISH was a son of the vicarage, one of the most valuable groups in our national life, and his father's articles on Nature in south-eastern England in the late nineteenth century are still remembered for their intrinsic value and the beautiful form in which they were given. Dr. Cornish therefore had a good heritage of a kind he was to develop by his own efforts to understand, and to spread the understanding of, natural beauty. He was born in 1862 when his father was vicar of Debenham, Suffolk. After attending St. Paul's School, he studied chemistry at the University of Manchester, ultimately taking the D.Sc. degree and becoming director of technical education under the Hampshire County Council. In 1891 he married Ellen Agnes Provis and, with her, planned travel and research. His earlier researches, continued throughout life, were on waves—of water, snow and sand, on sea beaches, sand-

banks, sand-dunes and snowdrifts. The Royal Geographical Society recognized his work by giving him the Gill Memorial Award in 1900. Earthquake waves were also studied in Jamaica in 1907, when both Dr. and Mrs. Cornish were injured; and the results of the inquiries were published in the *Geographical Journal* of 1912. In 1903, Dr. and Mrs. Cornish went around the world, making a special study of Japan, and later on they paid several visits to Panama to study the Canal while it was under construction. In 1911, Mrs. Cornish died and her husband some time afterwards published "The Travels of Ellen Cornish" as a tribute to her memory.

During the First World War, Dr. Cornish did a great deal of lecturing on strategic geographical questions to groups of officers in all branches of the Services, and thereby developed his interest and understanding of many matters of environmental conditioning of social and political life, the political side being more prominent in his mind and work. One of his best known books is "Great Capitals", with its analysis of the situations of capitals in their relations with the country concerned in each case. Dr. Cornish was a well-known and frequent contributor to the work of the British Association for the Advancement of Science, and in 1923 was president of Section E (Geography) of the Association. He was also a faithful friend of the Geographical Association and occupied its presidential chair. One remembers the distinguished figure wandering around at meetings looking for some fine piece of architecture, or some gem of natural scenery to be sketched and studied and discussed from an æsthetic rather than from a historical point of view. He gave much thought to the work of the Council for the Preservation of Rural England and wrote for it "The Scenery of England" (1932); but his most personal interest was in trying to use æsthetics as a channel of approach to truth. "The Poetic Impression of Natural Scenery" (1931) is but the best known of his many efforts in this field. If one cannot point to any very definite doctrine of his concerning æsthetics, we can appreciate, perhaps all the more, the spirit of the searcher after truth who had learned from a scientific training that truth is too great to need propagandist crutches.

Dr. Cornish's second wife was Miss Watson, who was the widow of Mr. E. A. Floyer. In his later years Dr. Cornish derived much pleasure from the inheritance of South Combe farm on which is Salcombe Hill, Devon. He gave this hill-top to the public and supported efforts to protect public amenities in Devon.

WE regret to announce the following deaths:

Prof. W. T. David, professor and head of the Engineering Departments of the University of Leeds, on May 22, aged sixty-two.

Mr. G. L. Overton, formerly a member of the staff of the Science Museum, London, on May 22, aged seventy-two.

Dr. G. H. Pethybridge, O.B.E., formerly mycologist to the Ministry of Agriculture and Fisheries and assistant director of the Ministry's Plant Pathology Laboratory, Harpenden, Herts, on May 23, aged seventy-six.

Mr. J. J. Shaw, C.B.E., who maintained his own seismological observatory at West Bromwich, on May 23, aged seventy-four.