

## Obituary Notices

Sir James Currie, K.C.M.G., K.B.E.

IT is with deep regret that we have to record the death of Sir James Currie. Sir James had gone to Cambridge to attend a conference on animal pathology, and was staying with Mr. Will Spens, the master of Corpus Christi College. He retired at 11 p.m. on March 16, and on the following morning was found dead in his room.

Sir James had a distinguished career of public service, and, as he would have wished, died in harness. Son of the Rev. James Currie, principal of the Church of Scotland Training College, he was educated at Fettes (where he played in the first Rugby XV and the first cricket XI), and he obtained an exhibition at the University of Edinburgh and a scholarship at Lincoln College, Oxford, in 1888. After going down, he gained teaching experience at one of the schools of the Scottish Education Board in Edinburgh, his native town. His great opportunity came in 1899 when he joined the Egyptian Education Service. He embraced it magnificently. In the following year he was appointed principal of the newly founded Gordon College in Khartoum and director of education in the Sudan.

As a start, Currie formed a school for the training of the Sudanese as teachers. Inspired by Lord Cromer, many of whose attributes he possessed, he soon won his way into the hearts of the Sudanese. He was appointed a member of the Governor-General's council, and his work in the Sudan was perhaps his greatest achievement.

Relinquishing his posts in 1914, Currie returned to England, where he went in for farming; but during the Great War, in 1916, he undertook, as director of the new Labour Supply Department, the training of munition workers, and in 1918 he joined the Ministry of Labour, again in a voluntary capacity, as controller of the training department. He originated the idea of Government instructional factories, and when he retired, early in 1921, more than 25,000 disabled ex-service men had passed through his hands.

In the same year Currie was appointed director of the Empire Cotton Corporation, and a year later a governor of the Imperial College of Tropical Agriculture, to the chairmanship of which he succeeded in 1927, after the death of Sir Arthur Shipley.

Scientific men were needed for the development of cotton-growing within the Empire, and Sir James initiated the system of scholarships for post-graduates tenable at the College in Trinidad, an example which was followed later by the Colonial Office under the Milner-Lovat Committee's scheme. Much work had to be done. As E. H. C. wrote in *The Times*: "Cotton was to be grown in a dozen different countries, each with a different climate and different conditions. There would be no uniform cotton seed which would suit each and all. First must come research in each country, experimental farms,

trials of various seeds, knowledge of constituents of soils. So, just as he had first to train teachers in the Sudan before he could have schools, he must now concentrate on soil-chemists and plant-breeders before he could have seed which would not bankrupt Colonial farmers. No other man in the Empire would have seen this so clearly or have understood so well how to give practical effect to what he saw."

Sir James was also a governor of the Imperial College of Science and Technology, a member of the council of Marlborough College and chairman of the directors of Dauntsey School. To the Cotton Corporation and the Imperial College of Tropical Agriculture especially, his experience of education and research and his great powers of administration proved of inestimable value.

Sir James possessed exceptional strength of character. He had also a rich fund of humour, and this often found expression in original though apposite comments which relieved the monotony of many meetings which he attended. All who worked with him and for him, loved him and will treasure his memory.

Sir James was made C.M.G. in 1912 and a K.B.E. in 1920, and was promoted to K.C.M.G. in 1933. He was married in 1913 and is survived by his wife, Hilda Beatrice, daughter of the late Sir Thomas Hanbury of La Mortola, Italy.

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### Dr. Elihu Thomson

BY the death of Elihu Thomson on March 13, the world has lost one of the greatest of the pioneers of the practical applications of electricity. He was born in Manchester, England, on March 29, 1853, but his father, who was a skilled mechanic, emigrated to Philadelphia, Pa., in 1858. He was educated there and attended the Central High School, a well-known technical college. His love for experimenting and invention was probably inherited from his father. At first his chief interest lay in chemistry; after he had served his time as an analyst at a factory he returned to the High School to teach chemistry and retained this post for ten years until 1880.

Prof. M. B. Snyder tells how one day in 1875 Thomson transmitted ether disturbances from the first floor of the building to the sixth floor, where his detector was a brass door knob and an ordinary lead pencil. When the apparatus on the first floor was working a stream of delicate sparks passed between the point of the pencil and the knob. This happened twelve years prior to Hertz's celebrated verification of Maxwell's theory.

In 1880, Thomson went to New Britain, Conn., as electrician for the American Electric Co., and two years later in conjunction with Edward J. Houston founded the Thomson-Houston Electric Co. at Lynn, Mass. In 1892, this company was merged with the



Edison General Electric Co. to form the General Electric Co. (America), the largest manufacturing company of electrical equipment in the world. Thomson retained his post as director of the large laboratory at Lynn, which was renamed after him, the Thomson Laboratory.

Thomson made more than seven hundred inventions, some of which have led to great developments and many theoretical discoveries. He discovered that the resistance of the electric arc varies inversely with the current. He was the first to utilize a magnetic field to move the electric arc, a method which is used in magnetic blow-out switches and electric safety valves. A notable discovery was that a copper ring placed in front of an a.c. magnet was strongly repelled, a fact which he applied to the development of repulsion motors which are much used in industry. He was the pioneer of high-frequency apparatus, making the first dynamo of this type in 1890. In 1886, he invented the art of electric welding by the resistance method. The art of welding has developed very rapidly since this date. Ships, buildings, bridges, etc., are now being welded instead of being riveted and bolted. It has also proved of great value when designing aeroplanes and large motor vehicles. His inventions show great novelty of design. The Thomson-Houston dynamo for arc lighting had a spherical armature, cup-shaped field magnets and a three-part commutator. He made most useful contributions to the field of radiology and was the first to make stereoscopic X-ray pictures.

In 1884, Dr. Thomson married Miss Mary Peck of New Britain, Conn., by whom he had four sons. Mrs. Thomson died in 1916, and seven years afterwards he married Miss Clarissa Hovey of Boston and lived at Swampscott near Lynn, where he continued his inventive work.

Elihu Thomson received many honours for his electrical and scientific work from countries all over the world. He made many friends when he was president of the International Electrical Congress at St. Louis in 1904 and of the International Electro-technical Commission which met in Turin in 1911. The writer remembers how feelingly Elihu Thomson spoke of Prof. Silvanus Thompson when a portrait of the latter was presented in 1923 to the Institution of Electrical Engineers. He said that he felt that the late Prof. Silvanus Thompson was in many respects nearer to himself than any other man. He was successful not only in electrical work, but as an optician, a musician and an artist he had also attained distinction. He felt that in his own way he was humbly following in Thompson's footsteps.

When he was presented with the Kelvin Medal in 1924 by the leading engineering institutions in Great Britain, Elihu Thomson said that Kelvin was his ideal, as an influence and example that was not to be estimated by ordinary standards. Kelvin was lovable as a man, and unequalled as a scientific expert. Thomson regarded him as the earliest and greatest electrical engineer. In 1924, the University of Manchester, his native city, conferred on Thomson the honorary degree of doctor of science. At the festivities which took place at the World Power

Conference in 1924, he and Mrs. Thomson took a leading part and were esteemed by everyone. Since then, many of us have received at Christmas time from them beautiful photographs of their garden taken in natural colours by a new method invented by Thomson. He will be missed by his many friends all over the world.

A. R.

### Baron de Stael Holstein

WE regret to record the death of Baron de Stael Holstein, well known as an Oriental scholar, which is reported to have taken place recently in Peking at the age of fifty-seven years.

Baron de Stael Holstein was formerly one of the largest landowners in the Russian Baltic States; but on being dispossessed by the Revolution, he took up his residence in Peking, where he devoted himself to the study of Sanskrit and Buddhism, of which he had long been an ardent follower, adding to them Tibetan and Chinese. In so doing, he was anxious to bring about a better understanding of the Buddhist canon among the Chinese themselves, and for the furtherance of this object founded, with the co-operation of Harvard University, the Sino-Indian Institute, in which Tibetan lamas were engaged for instructional purposes, but at the same time initiated into Western methods of critical scholarship. With the assistance of American benefactions, he brought together a remarkable collection illustrating Buddhist iconography. His eminence as an Oriental scholar was recognized by the University with which his Institute was connected when he was called to Harvard for a time to occupy the chair of Sanskrit. His literary output was considerable, his work of most enduring value being the publication of a number of Buddhist texts.

### Dr. F. P. F. Ransom

DR. F. P. F. RANSOM, who died on February 23 at the age of eighty-seven years, studied pharmacology as a young man in Halle and Marburg with von Behring and H. H. Meyer. They studied immunity, and the pharmacology of tetanus toxin and diphtheria toxin. They obtained evidence that these toxins passed from the periphery to the central nervous system in the trunks of nerves. Ransom also showed that the toxic effects of saponins were largely due to their affinity for cholesterol, and made an active cell-free cholera toxin.

At the age of sixty years, he was elected to a Beit fellowship, and, with Dixon in Cambridge, demonstrated the action of sympathetic and parasympathetic nerves on the bronchi. From 1912 until 1924 he held first a readership and then a chair at the London School of Medicine for Women, and published papers on the effect of caffeine on seeds, on alcohol, chloroform, pilocarpine and other subjects. His wide knowledge of pharmacology was always at the disposal of his colleagues, and he will be remembered as a kind, modest and courteous friend. He spent his last years in retirement in Somerset, and kept up his interest in pharmacology in spite of failing eyesight.