

In 1914 the superintendent of the Division, Dr. W. Rosenhain, went on a world lecture tour, and while he was away the First World War broke out. The two senior members of the staff were called to the colours, and Hanson and one other were left to carry on the metallurgical side of the work.

Hanson rose to be senior scientific officer in the Department, and published some twenty-five to thirty papers, mainly on aluminium alloys, impurities in copper, and fatigue in metals. His early interest was in constitutional diagram work, as exemplified by the excellent series of papers which he published with Marie L. V. Gayler on various binary and ternary aluminium alloys, work which set a new standard of accuracy at that time and which has rarely, if ever, been surpassed since. While it is obvious that his interests covered a much wider field as time went on, the accurate determination of an equilibrium diagram was always a subject that attracted his attention.

In 1926 Hanson left the Laboratory to take up the post of professor of metallurgy in the University of Birmingham—a position which he held until his death on June 12. The department, which was quite small when he took it over, grew until in the last few years he was director of a department that had three professors besides himself in addition to a number of lecturers and research students. The buildings also were considerably enlarged, a special

block being erected for the Industrial Metallurgy Section, and an extra floor being added to the main building.

The subjects which he had studied at the National Physical Laboratory still claimed Prof. Hanson's attention, but he added to them cast iron and tin alloys. In all he published about seventy papers in the *Journal of the Institute of Metals*, the *Journal of the Iron and Steel Institute*, and various other places.

Hanson established a reputation for himself, not only in Great Britain but also in many other parts of the world. He lectured in Australia, Canada, New Zealand, the United States and elsewhere. In particular, he gave the Institute of Metals Autumn Lecture in 1930, a British Exchange Paper at the International Foundry Convention meeting in Paris in 1932, and the eighteenth annual lecture to the American Institution of Mining and Metallurgy at its New York meeting in 1949. He also was a member of the delegation of British scientists that discussed, in 1950, the release of information on atomic research with American and Canadian scientists. He served for many years on the Council of the Institute of Metals, and was a vice-president from 1928 until 1939.

In spite of all his success in his professional life, Hanson had a complete absence of 'side'. He had very great charm and will be much missed by a large circle of friends.

J. L. HAUGHTON

NEWS and VIEWS

H. A. Lorentz (1853–1928)

A GREAT architect of the new era in physics and one of the most cosmopolitan men of science of all times, Hendrick Antoon Lorentz was born at Arnhem in Holland a century ago on July 18, 1853. He studied at the University of Leyden, where he graduated in philosophy in 1875, and became professor of theoretical physics at the early age of twenty-four. He was a voluminous writer, and his publications appeared in rapid succession over a period of more than fifty years in Dutch, French, English and German periodicals. His paper, "La théorie électromagnétique de Maxwell et son application aux corps mouvants" (1892), introduced and vindicated the conception of the electron in physics and supplemented Maxwell's theory on electromagnetic phenomena. His electronic theory of matter harmonized completely with the view which followed from J. J. Thomson's researches. Lorentz's expectation that a magnetic field would affect the appearance of spectra was realized in 1896 by his pupil, Pieter Zeeman, with whom he shared the Nobel Prize for Physics in 1902. The introduction of Lorentz's transformation revolutionized theoretical physics and became the foundation stone for the theory of relativity of another pupil of his, Albert Einstein. As early as 1880 he demonstrated the respective relations existing between the refraction of light and the density or aggregate condition, gaseous or fluid, of a translucent body. These relations were recognized independently and on different grounds by the Danish physicist, L. V. Lorenz, and are known to-day as the Lorentz-Lorenz relations. In Britain, Lord Rayleigh and Sir Oliver Lodge were chiefly responsible for making known Lorentz's work. Lorentz retired from the University

chair in 1912, when he was appointed director of the Teyler Laboratory at Haarlem, and he died suddenly on February 4, 1928, at the age of seventy-four. Innumerable honours were showered on this simple, modest and likeable man, and, among British honours, he was elected a Foreign Member of the Royal Society in 1905 and received its Rumford Medal in 1908 and the Copley Medal in 1918. Besides his purely scientific work, Lorentz excelled at international gatherings, where his idiomatic command of languages and great personal charm won the respect and affection of men from all countries.

Royal Society of Edinburgh: Honorary Members

THE following have been elected Honorary Fellows of the Royal Society of Edinburgh: *British*: Prof. Sydney Chapman, Department of Natural Philosophy, University of Oxford; Prof. A. C. Chibnall, lately Sir William Dunn professor of biochemistry, University of Cambridge; Dr. A. T. Doodson, director of the Liverpool Observatory and Tidal Institute, Birkenhead; Sir Harold Jeffreys, Plumian professor of astronomy, University of Cambridge. *Foreign*: Prof. C. P. H. Dam, Department of Biochemistry, Polytechnic Institute, Copenhagen; Dr. G. Egloff, director of research, Universal Oil Products Co., Chicago; Prof. K. M. G. Siegbahn, of Stockholm; Prof. O. Struve, Department of Astronomy, University of California.

Funds for Colonial Welfare and Development

IN reply to a question in the House of Commons on June 24, the Secretary of State for the Colonies said that he hoped it would be possible to introduce legislation to provide further funds for Colonial development early in the 1954–55 session. Mean-