

Educational Topics and Events

CAMBRIDGE.—The Adams Smith prize (£40) offered annually for an essay upon some unsettled question in economic science or in some branch of economic history or statistics subsequent to the year 1800 has been awarded to V. K. R. V. Rao, Gonville and Caius College.

D. J. Bell has been appointed University lecturer and Dr. E. H. F. Baldwin, of St. John's College, University demonstrator in the Department of Biochemistry.

The Faculty Board of Mathematics has appointed Prof. J. W. Alexander, of the Institute of Advanced Study, Princeton, to be Rouse Ball lecturer for the year 1935-36.

Dr. T. S. Hele, Master of Emmanuel College, has been appointed assessor to the regius professor of physic.

Lord Rutherford has been appointed director of the Royal Society Mond Laboratory.

DR. H. LOWERY, head of the Department of Pure and Applied Physics in the College of Technology, University of Manchester, and secretary of the Manchester and District Local Section of the Institute of Physics, has been appointed principal of the North-Western Polytechnic, London.

SIR MARTIN O. FORSTER, formerly director of the Indian Institute of Science, Bangalore, gave the presidential address at the Education Week held recently in Bangalore. He quoted the Principal of the Muhammadan College, Madras, as saying that in nine-tenths of life only elementary knowledge is required, therefore for nine-tenths of the population elementary education is sufficient. That is true in England as in India, and considerable time and money would be saved if secondary and university training was reserved for those only who could benefit by it. Sir Martin is not in favour of making Hindi the common language of India, instead of English. By not learning English, Indians would cut themselves off from communicating with 200 million English-speaking inhabitants of the globe. Only ten per cent of the population of India is literate; until that percentage can be doubled or trebled, natives of the country must remain poor in purse and in intellect.

RHODES scholars in residence at Oxford in 1934-35 numbered 191, namely, 99 from the British Empire, 88 from the United States and 4 from Germany. They were distributed among the various fields of study as follows: natural science and medicine 57, philosophy, politics and economics ('Modern Greats') 46, law 33, English 14, modern history 13, mathematics 7, *Litt. Hum.* 6, modern languages 5, economics 5, geography 3, theology 1, forestry and rural economy 1. A list of degrees, honours and distinctions won includes the names of 65 scholars from the British Empire (Canada and Newfoundland 20, South Africa 21, Australia and New Zealand 21, West Indies 3), 53 from the United States and 3 from Germany (2 B.Litt. degrees in social sciences and one diploma in economics and political science). Of the seventeen who obtained distinctions in law studies, all except two were from America.

Science News a Century Ago

Polarisation of Heat

WRITING to Whewell on February 2, 1836, J. D. Forbes said: "I cannot help writing two lines in a hurry to tell you that I succeeded yesterday in making the most curious discovery respecting heat, it seems to me, that I have yet arrived at, and one quite decisive of the identity of its character with that of light. I found that dark heat is copiously reflected within rock salt at an angle too great for its emergence. This I had foreseen last summer before I was aware that Melloni had actually tried it, and at the same time I conceived the possibility of trying whether two total reflections would produce the same effect in the case of heat as in that of light. I have had a Fresnel's rhomb made of rock salt with angles of 45° —one of the critical ones, nearly, calculated by this formula, giving μ its proper value for light. I placed it between polarizing and analysing plates of mica, as described in my last. When the plane of total reflection coincided with that of primitive polarization, or rather was perpendicular to it, the heat was as much polarized as before the rhomb was interposed; when it was inclined 45° it was wholly unpolarized, apparently, or even the longer axis of the ellipse turned a little the other way corresponding to μ for heat. This I made out even with a very imperfect rhomb, and with heat wholly unaccompanied by light. . . ."

Challis becomes Plumian Professor at Cambridge

ON February 2, 1836, the Rev. James Challis succeeded Airy as Plumian professor of astronomy and experimental philosophy and as director of the observatory at Cambridge. The fourth son of John Challis, he was born at Braintree, Essex, on December 12, 1803, and educated at Mill Hill School. In 1821 he entered Trinity College, Cambridge, as a sizar and in 1825 was senior wrangler and Smith's prizeman. Ordained in 1830, he was made rector of Papworth Everard, Cambridgeshire, the living of which he held until 1852, though from 1836 onward for many years he resided at the Observatory, Cambridge. His earliest astronomical paper was one on the extension of Bode's law to the case of the satellites of the planets, read to the Cambridge Philosophical Society in 1828. He resigned the directorship of the Observatory in 1861, while retaining his professorship, and died at Cambridge on December 6, 1882.

Progress of Colonel Chesney's Expedition

ON February 2, 1836, *The Times* said: "We have intelligence of Colonel Chesney up to the 10th December. The hopes that were entertained of the speedy equipment of the expedition and the sailing has not been realized, and matters are represented as beginning to wear rather a gloomy aspect. One boat has been launched, but the heavy materials of the others, on the passage from Aleppo to Bir, had got grounded, and great difficulty was experienced in procuring other means of transport. One of the officers had been despatched to Ibrahim Pascha's headquarters, to ask his assistance in this difficulty, and had met with a most friendly reception. . . ."