

destroyed, lies sleeping a faith in the existence of a moral universe; in the existence of a natural law which gives to man certain inalienable rights; in a Divine Creator of which we are each a tiny spark. . . . But we are scarcely aware of these foundations far beneath our everyday lives. . . . Only when man-made laws challenge man's inalienable rights do we realise whence comes our belief in these rights".

F. C. THOMPSON

OBITUARIES

Sir Lindsay Scott, K.C.B.

SIR LINDSAY SCOTT, who died on June 17, was an outstanding example of the finest tradition of the amateur in the field of humane studies. A Civil servant fulfilling the exacting duties of a senior official in a war department in peace-time and during hostilities, he nevertheless made a notable place for himself in British archaeological research by his resolute determination to match his work against nothing less than that of the highest professional standards in the field or in the museum and library. With a naturally vigorous and original mind, sharpened and disciplined by academic training, he brought to his studies of British prehistory a freshness and directness of approach which was always well ballasted by precise and detailed documentation, and illuminated by direct personal experience. He was, in the eighteenth-century sense of the word, a 'curious' person: his reading was wide and unconventional, and in particular his knowledge of the byways of English literature from its beginnings to the nineteenth century was as varied and unexpected as it was entertaining to his friends, and to this he added a robust and competent command of the practical skills of the countryman and the sailor.

His work was specifically directed to problems of Scottish prehistory, and his main excavations were carried out in the Outer Isles, where perhaps he felt most at home; but these local studies were invariably made within the framework of European prehistory as a whole, and he carried on an amused, but none the less sincere, campaign against provincialism and isolation in such researches. Always provocative (sometimes deliberately and healthily so), his contributions to the archaeology of Scotland, both in the form of excavations admirably carried out and meticulously recorded, and in subsequent comment upon the wider aspects of the problems involved, will remain as a permanent memorial to his immense energy and to his devotion to exacting standards of scholarship. These, and his work on the Council for British Archaeology and as president of the Prehistoric Society, have ensured him a place among the more powerful forces in the post-war development of prehistoric studies in Great Britain.

STUART PIGGOTT

Mr. F. W. H. Migeod

FREDERICK WILLIAM HUGH MIGEOD was born on August 9, 1872, in Chislehurst, Kent, and went to school in Folkestone. When he was seventeen he joined the pay department of the Royal Navy, and although he had a love for the sea and an interest in those who serve in ships, he was not destined to devote his life to it. After nine years he left the Navy and in 1900 he joined the Colonial Civil Service.

All his subsequent service was in Africa, and most of it in West Africa, though he made several important and hazardous journeys across the continent. His curiosity concerning the languages and customs of the various races was insatiable, and his researches resulted in five volumes on languages and four quite considerable travel books. Wherever he went he observed closely, and he amassed a store of natural history knowledge that he used in later writings.

In 1925, when the British Museum East Africa Expedition was left leaderless through the death of W. E. Cutler, Migeod volunteered from England for the post, and intermittently for the next four years or so he acted as general overseer of the operations. On the whole, he had little success in this, and it is paradoxical that through the nature of the work he came into the public eye much more than he ever did through his able and successful studies in folk-lore and language. It is only fair to say that Migeod in these later years did not claim much for his East African adventure.

Migeod's years of retirement in Worthing were characteristically busy. He wrote a book, "Earliest Man", and another volume, "Aspects of Evolution", which displayed a rather fundamentalist point of view; but also revealed a surprising range of observation and width of knowledge of the literature. He also wrote a survey of Worthing.

Migeod was a Fellow of the Royal Geographical and the Royal Anthropological Societies for many years. He had been president of the Worthing Archaeological Society in 1927 and he was re-elected in 1938. He also entered local government as a town councillor, eventually becoming an alderman both of Worthing and of the County of Sussex. He was for many years chairman of the local sea-cadet force.

His manner of speech and bearing sometimes gave an impression of arrogance; but in fact he was a kindly and friendly man and an admirable host. Fortune seldom shone on him. His married life was happy but brief, and his wife died many years ago. For the last year or two he had been ill and much alone, and the end came on July 8.

W. E. SWINTON

Prof. Tadeusz Estreicher

PROF. TADEUSZ ESTREICHER (Thaddaeus Estreicher-Rozbierski), a member of an ancient and cultured Polish family and one of Poland's most distinguished and versatile men of science, died in Cracow on April 8. Son of Karol Estreicher, bibliographer and director of the University library, he was born in Cracow on December 19, 1871. He enrolled as a student in the famous Jagiellonian University of Cracow, founded in 1364, where he became a favourite pupil of Karol Olszewski, the celebrated chemist. In 1894, at the request of Sir William Ramsay, Olszewski had begun experiments on the liquefaction of argon; Estreicher participated in this work with distinction, and graduated Ph.D. in 1897. After working in the laboratories of van 't Hoff (Berlin), Ostwald (Leipzig) and Ramsay (London), he returned to Cracow as a *Docent* in inorganic and analytical chemistry; at the same time he helped to modernize Olszewski's laboratory. A further year's work with Abegg (Breslau) was followed by his appointment, in 1906, as professor of inorganic and analytical chemistry at the University of Fribourg, in Switzerland, a chair which he

occupied until he was recalled to succeed Olszewski in Cracow in 1919.

Here he was faced with the difficult task of rehabilitating a department which had been devastated during the First World War. In 1923-24 he was dean of the faculty of arts, and in 1926 he was made director of the Pharmaceutical Department in the University of Cracow; his work in the latter capacity resulted, in 1947, in the elevation of this Department to the dignity of a faculty. Meanwhile, at the outbreak of the Second World War, he was doomed to undergo the terrible experience of imprisonment in the concentration camp at Sachsenhausen, following the arrest of himself and many others on November 6, 1939. In this camp a score or so of his colleagues perished, among them his brother Stanislaw, who held a chair in the faculty of law. Although Estreicher survived, he never regained his normal health. When he returned to Cracow upon his liberation the University had ceased to function, and for a time he was obliged to eke out a meagre living as a proof-reader. With the re-opening of the University he resumed his chair; but his health deteriorated so gravely that he soon felt called upon to resign.

Estreicher was vice-president of the Committee of the Polish Pharmacopœia and an active member of the Committee of Pharmaceutical Science of the Polish Academy of Arts and Sciences. He was also a leading organizer of the garden of medicinal plants in Cracow. His researches dealt particularly with

the behaviour of gases at very low temperatures. On this theme he published many original papers in German, Polish and British scientific journals. In 1905 he translated into German Travers's well-known work on the experimental study of gases, and in 1915 he published his own book entitled "Kalorimetrie der niedrigen Temperaturen". For the "Polish Biographical Dictionary" he wrote authoritative notices of Kostanecki, Wróblewski and Olszewski, three Polish men of science of the first rank.

First and foremost a chemist, Estreicher was a man of great erudition and varied interests. He was an accomplished classical scholar, a fluent linguist, and a lover of music and the fine arts. Himself an artist of merit, he assembled a fine collection of modern Polish paintings. His writings included essays on the Polish language and literature, and he published also an interesting monograph on the 'Jagiellonian Globe', a valued relic dating from 1510 and preserved in the Jagiellonian Library at Cracow. He cherished a life-long ambition to write a history of Polish chemistry; but although he collected much material and had the ideal equipment for this task he was never able to find time for it. Towards the end of his life he lost both sight and hearing; but as his letters (often dictated in German) testified, he kept to the end his marvellous memory and his clear and alert mind. This remarkable man of science might well have taken for his motto: *Homo sum: humani nihil a me alienum puto.* JOHN READ

NEWS and VIEWS

Electrical Engineering in the Manchester College of Technology : Prof. J. Hollingworth

PROF. JOHN HOLLINGWORTH, who retires from the chair of electrical engineering in the Faculty of Technology in the University of Manchester at the end of August, was educated at Bradfield College, Peterhouse (University of Cambridge), and the Central Technical College (University of London). During the next nine years he was in turn demonstrator at the Central Technical College, lecturer at the College of Technology, Manchester, and held a commission in the Royal Air Force. He was appointed scientific assistant at the National Physical Laboratory, a position which he held for eleven years. During this period he published a number of papers on the propagation of radio waves and allied subjects. In 1932 he was appointed professor of electrical engineering in the College of Technology, Manchester, and under his direction the department has developed in many directions, notably in the teaching of electronics, servo-mechanisms and high-voltage engineering.

Dr. Eric Bradshaw, M.B.E.

DR. ERIC BRADSHAW, who succeeds Prof. Hollingworth on September 1, was born in 1909 and was educated at the King's School, Grantham, and at the Faculty of Technology, University of Manchester, where he graduated in 1930, taking his master's degree a year later. After a course at the works of the British Thomson-Houston Co., Ltd., Rugby, he joined the staff of the Royal Technical College, Glasgow, where he remained until 1944, during which period he took his Ph.D. degree. He was then appointed special

lecturer in high-voltage engineering at the College of Technology, Manchester. He is joint author of a number of papers in the fields of high-voltage measurement and electric power-supply. Dr. Bradshaw has served on several committees of the Institution of Electrical Engineers and is now vice-chairman elect of the North-West Centre of the Institution. He has for some years been tutor and lecturer at the Ministry of Education Engineering Summer Schools. He founded and is now editor of the *Bulletin of Electrical Engineering Education*.

Radio-Frequency Allocations in Europe: Conference in Stockholm

THREE of the study groups of the International Radio Consultative Committee met in Stockholm during May 15-27; and these were followed by a European Broadcasting Conference during May 28-June 30. This Conference had been called to consider the assignment of very high frequencies (ultra-short wave-lengths) for sound and television broadcasting in Europe. The work of the Committee was of a technical nature, designed to establish the basis upon which a scheme of frequency-sharing could be devised. For this purpose, one of the study groups presented wave-propagation curves showing the field-strength likely to be obtained from transmitting stations at distances well beyond their normal service area. Another group had studied the discrimination which it is desirable to attain in order to avoid interference between television stations operating in the same frequency-channel. By a combination of these results, the geographical separation desirable between stations sharing the same frequency-band could be established. The Stockholm broadcasting conference