

OBITUARIES

Sir Hubert Murray, K.C.M.G.

BY the death, on February 27, of Sir John Hubert Plunkett Murray, lieutenant-governor and chief judicial officer of Papua, the British Empire is the poorer for an outstanding figure, and there can be few of those who came into contact with "H.E." who have not felt also a sense of personal loss.

Sir Hubert was born in Sydney in 1861, and after a brilliant university career in England, was called to the Bar. He served with distinction in the South African War; but his real life-work began when he went to British New Guinea in 1904 as chief judicial officer. When this country was placed under Australian administration as the Territory of Papua in 1906, he was appointed acting administrator and shortly afterwards lieutenant-governor. He found himself responsible for a little-known country nearly twice the size of England, populated by a thin sprinkling of white settlers and an unknown quantity of Stone Age savages.

During Sir Hubert's administration a large part of Papua has been opened up. Although as time went on his administrative duties made it necessary to delegate the work of exploration to others, he kept in personal touch with as much of the Territory as he could, and it was on a tour of inspection that he died, after two days' illness, at the age of seventy-eight. But he always regarded as his main task the guidance of the country through the difficult initial stages of adjustment. From the first, he had to contend with the clash of interests between the two types of population, "for if an administrator succeeds in holding the balance even between the white settler and the native, he is open to attack from the partisans of both, and the applause of either will often be a sign that he is acting unfairly to the other". He made it clear, however, that he considered it the duty of the Papuan Government not only to foster the interests of the whites, but also "to show how the civilization of the twentieth century can be introduced among people of the Stone Age, not only without injury to them but to their lasting benefit and permanent advancement".

Taking the long view, Sir Hubert steadily opposed the alienation of any land which appeared necessary to the welfare of the natives, and the introduction of Asiatic labour, although he faced severe criticism on the grounds that he was hampering the development of the country. To meet the reasonable demands of the white settlers for labour, he introduced the indenture system, hoping that free labour might eventually be substituted. He thought that the future of the Papuans, if they were to be more than mere labourers, lay in the cultivation of land for themselves, so he instituted a system of native plantations. He also appointed village councillors, who might gradually be given more authority. At the same time, he realized the harm that can be

done to a primitive people by too swift destruction of their old life. His appointment of a Government anthropologist "to help us in reconciling an intelligent, though very backward, race to the inevitable march of civilization, and in finding the easiest way for its advance", has been amply justified.

His books, "Papua or British New Guinea" (1912) and "Papua of To-day" (1925), and his annual reports—very different from the usual lifeless documents—record, though modestly, the course of Sir Hubert's long tenure of office. Some measure of his achievement may be indicated by extracts from two addresses presented to him on the completion of the thirtieth year of his administration. This from the white residents: "Your Excellency's reputation in Native Administration is world-wide and firmly established. What is not so well known outside Papua is the patient, wise and sympathetic manner in which you have worked always for the protection and support of European industries, for the advancement of Papua as a colony, and for the welfare of every member of the community." This from the natives: "When we have come to speak to you, you have not closed your ears, nor have you frowned on us, but have received us and listened to us, and taken action for us. We have seen all the good things you have done and our happiness is great because of you. Therefore we all beg of you not to leave us, but stay here as our Governor for years to come. For we know you and how you have led us into the ways of your laws, treating white people and ourselves just the same. We know that you love us well, and we are full of love for you, our Governor."

B. BLACKWOOD.

Mr. A. L. Tonnoir

By the sudden death, on January 27, of Mr. A. L. Tonnoir, the Australian Council for Scientific and Industrial Research has suffered an irreparable loss. This loss is shared by the many entomologists throughout the Commonwealth and overseas who have from time to time benefited by his unusually wide knowledge and experience.

André Leon Tonnoir was born in Brussels in 1885. After his formal education at school and at the University of Liège, he spent several years travelling in England, France, Germany, Italy and Spain. During this period he was able to give much of his time to his outstanding interest, entomology, and incidentally to acquire a sound knowledge of six languages. However, it was not until after the War of 1914-18, when he was appointed to the staff of the Brussels Natural History Museum, that he was able to devote his whole time to his former hobby. Like many naturalists, he was especially interested in Australia and New Zealand, and in 1921 he

accepted a commission to study the dipterous insects of the temperate zone of the southern hemisphere, a study which still occupied his leisure hours up to the day of his death.

From Belgium Tonnoir went to New Zealand, where he worked at the Cawthron Institute, the Canterbury Museum, and the Canterbury University College, until 1929, when he joined the staff of the Division of Economic Entomology of the Australian Council for Scientific and Industrial Research in Canberra. During the past ten years he has been closely associated with research on biological control of insect pests and weeds, and has also played a prominent part in the development of an intensive study of the grasshoppers in Australia. Mr. Tonnoir's numerous papers on lesser-known families of the Diptera do not adequately reflect his remarkable knowledge of insects, although they are a record of the thoroughness of his work and his outstanding ability as a taxonomist.

Tonnoir's death removes a colourful personality and a delightful colleague, but our sadness is tempered by the knowledge that he died as he would have wished, peacefully in his sleep as he rested in the shade of a tree, after a morning's collecting in the bush.

A. J. NICHOLSON.

Mr. H. G. Newth

MR. H. G. NEWTH, whose death at the age of fifty-four occurred on February 17 after a long illness, went to school in Worcester and then entered the Royal College of Science, London. There he studied zoology under Adam Sedgwick and Mr. Clifford Dobell, and then became demonstrator in zoology for Prof. E. W. MacBride, a post which he held until the War of 1914-18. From 1920 onwards, he was lecturer in zoology in the University of Birmingham.

The early death of Mr. Newth will be deeply regretted by his friends in zoological and other circles, for he had a personal charm which endeared him to his colleagues and his students, generations of whom remember his clear lectures and skilled help in the laboratory. Advanced students profited especially from his embryological teaching, embodying practical experimental work on modern lines.

Mr. Newth was a master of microscopical technique and was always more than willing to help other research workers in the laboratory. His own original contributions included work on the embryology of *Cucumaria* and of *Astropecten*, on the development of *Amphioxus*, and on the swarming of *Vorticella*. Perhaps his most important research was on the mode of feeding of the ammocœte, which he showed to be different from that of any other animal (NATURE, 126, 94; 1930). Mucus secreted by the endostylethyroid is moved by cilia forwards and up the peripharyngeal grooves, from which it is freed as a cone of mucous strands, uniting behind to form a mucous cord which lies free in the middle of the pharynx. This cord is continuously sucked back into the gullet by cilia in the latter. Food particles drawn into the

mouth with the respiratory water current, which is maintained by muscular movements of the pharynx and of the velum, are caught in the cone of mucous strands and passed back into the gullet in the mucous cord.

H. M. F.

Prof. C. Tangl

PROF. CHARLES TANGL, of the University of Budapest, died on January 10 in his seventy-first year. He received his early training in physics at the University of Budapest, where he was student, and later assistant and collaborator of Prof. Eötvös. He was appointed in 1901 as *Privat-Dozent* and in 1903 as professor of experimental physics at the University of Kolozsvár. In 1917 he became professor of physics at the Polytechnic in Budapest, and in 1921 he succeeded Eötvös in the chair of experimental physics at the University of Budapest. He was a member and president of Section III of the Hungarian Academy of Science.

Tangl's interests lay in three different branches of physical research. His early work was devoted to the study of the effect of magnetic fields upon the mechanical properties of solid bodies, especially of the effect upon elasticity. Then in several papers he published the results of his investigations upon the variation of the dielectric constant of liquids with pressure and temperature. These experiments, carried out with great care and accuracy, furnished very reliable values of the dielectric constants which are frequently cited. In a third line of work he applied quite new methods to investigate the forces at the contact surface of solid and liquid bodies; the determination of the contact force between platinum and water, in particular, should be mentioned.

Tangl was a man of outstanding personality and wide knowledge. A thoroughly critical judgment was combined with great kindness; he was a helpful friend to all who needed his advice. M. FORRÓ.

WE regret to announce the following deaths:

Prof. F. Emich, emeritus professor of chemistry in the Polytechnic Institute, Graz, an authority on microchemistry, on January 22, aged seventy-nine years.

Sir Thomas Heath, K.C.B., K.C.V.O., F.R.S., an authority on Greek mathematics, on March 16, aged seventy-eight years.

Prof. A. G. Högbom, emeritus professor of geology in the University of Uppsala, on January 19, aged eighty-four years.

Prof. Bernhard Lehmann, emeritus professor of chemistry and director of the Institute of Hygiene in the University of Würzburg, on January 28, aged eighty-two years.

Prof. W. C. Morgan, professor of chemistry in the University of California at Los Angeles, on February 9, aged sixty-five years.

Dr. A. J. R. O'Brien, C.M.G., chief medical adviser to the Colonial Office, on March 9, aged fifty-six years.