

16/ OBITUARIES

Prof. T. H. Laby, F.R.S.

THE death of Prof. T. H. Laby, at the age of sixty-six, brings to an end the career of one devoted to the furtherance of physics and of science generally. His efforts in this direction, often in very difficult circumstances, undoubtedly undermined his health. Despite this, he was untiring in his work, the value of which to his native country, Australia, and to the world of science in general, is still inadequately recognized.

Laby was born in Victoria, Australia, and received his early academic education at the University of Sydney. After graduating, he was awarded an Exhibition of 1851 Overseas Research Studentship, and proceeded to Emmanuel College, Cambridge, and to research work at the Cavendish Laboratory under J. J. Thomson. After a successful period there, during which he held the Joule Studentship of the Royal Society, he took up an appointment as professor of physics at Wellington, New Zealand, in 1909. This he held until 1915, when he was elected to the chair of natural philosophy in the University of Melbourne, a post he retained until his resignation in 1942. His influence on Australian physics during this period was remarkable, and it is largely due to him that Australia holds a high place in the realm of physics.

Among the many reasons why Laby played such a unique part in the development of physics in Australia was his great interest in research and the wide range of his own activities in this direction. During his tenure of the chair, there existed throughout his department an air of enthusiasm and a feeling of complete confidence in the importance of the subject, which lent a distinction apparent to undergraduates as well as research students. This led to a remarkably regular production of very keen research students; so regular, in fact, that it was a matter of great surprise if, in any year, one of the Exhibition of 1851 Overseas Studentships did not fall to a member of Laby's department.

His primary interest was in precision experimental physics, but this did not prevent him from realizing the importance of other branches of the subject. Thus he was keenly aware of the importance of theoretical physics and encouraged any students with a bent in that direction. His unusual breadth of view is exhibited by his abolition of practical examinations in the subject, despite his own special interest in experiment.

It is difficult to say in which field of precise experiment Laby was most interested; thermal conduction, mechanical equivalent of heat, X-rays, geophysics, scientific radio all occupied his attention and were a continual source of research problems for his students and assistants. The precision determination of J by Laby and Hercus is well known, as are also the series of papers by Laby and by his assistant Kannuluik on problems of thermal conduction. Laby was actively interested in the work of the geophysical prospecting party, led by Broughton Edge in Australia in 1929, and collaborated with Edge in editing the final report of the work, which is by way of becoming a standard text-book on the subject. Besides these researches in which he, personally, took an active share, Laby encouraged work on nuclear physics, and a neutron generator was in operation just before the War.

Among his publications the most widely used is undoubtedly the "Tables of Physical and Chemical Constants", compiled in collaboration with Dr. G. W. C. Kaye, and now in its ninth edition.

Apart from his academic activities, Laby played a very important part in official developments in Australian science, such as the organisation of the radium supply for hospitals and the formation and operation of the Radio Research Board. As a result of the latter, Australian workers have made, and are continuing to make, very important contributions to problems of radio transmission through the atmosphere. Despite all his other interests Laby maintained a detailed knowledge of developments in radio-physics. Thus, during his visit to England in 1934, he read to the Royal Society a stimulating paper by Martyn and Pulley, and was instrumental in exciting the interest of atomic physicists in ionospheric problems. He was thoroughly convinced of the importance of physics in the development of Australian industry, and devoted a great deal of time and effort towards the often thankless and wearisome task of convincing others of this now generally accepted fact.

At the outbreak of war in 1939, there existed virtually no optical industry in Australia to meet the requirements of optical munitions supply. Laby took a leading part in the organisation of the Optical Munitions Panel of Australia, of which he was the first chairman. This body was vital to the establishment of a sufficiently productive industry. Laby's real value in the war crisis cannot be measured only by this. The great contribution that Australian physicists were able to make to the defence of their country and of the British Commonwealth could not have been made if in preceding years a firm tradition of high-quality physics had not been established in Australia, largely by the efforts of the Department of Natural Philosophy at Melbourne under Laby's direction. The difficulties of doing this under conditions of isolation imposed by the great distance of Australia from Europe and America cannot easily be over-estimated, and there is no doubt that Laby sacrificed himself unsparingly in achieving this end.

H. S. W. MASSEY

16/ Dr. Arthur W. Rogers, F.R.S.

ON June 23 he passed away at Cape Town, at the age of seventy-four, one to whom South Africa owes much in regard to geological discovery, description and application. A. W. Rogers was born at Bishops Hall, Somerset, and educated at Clifton College and Christ's College, Cambridge—of which he was later elected an honorary fellow; he also studied at the University of Heidelberg.

In 1896 Rogers became assistant geologist to the Geological Commission of the Cape of Good Hope, director thereof in 1903, and director of the Geological Survey of the Union from 1916 until his retirement in 1932. His forty-three years of sterling service with the Government were divided equally between the Cape and Transvaal provinces.

Closely associated in the field at first with his colleague Prof. E. H. L. Schwarz, largely within the picturesque south-western corner of the Cape with its magnificent exposures of folded strata, he was able, by 1905, to publish "An Introduction to the Geology of Cape Colony", the first text-book of its kind for southern Africa, and a work of considerable