

was unimpaired, he felt keenly the sense of isolation which this engendered. The extent to which he prized personal contacts can be gauged from a passage in one of his letters, written in 1937: "the tragedy of age, and the only one that hurts is the loss of friends whom one has survived". We too have suffered the loss of a much-valued friend, and science one who served her well.

E. J. SALISBURY.

### Flight-Lieut. J. A. Moy-Thomas

By the death, in a motor accident while on duty, on February 29, of Flight-Lieut. J. A. Moy-Thomas at the age of thirty-five, we have lost one of the most distinguished of the younger generation of zoologists. The study of fossil fishes attracted him most, and he made many valuable contributions to our knowledge of their structure and classification. Particularly did he devote himself to unravelling the difficult problem of the true affinities of certain well-known forms of very obscure relationship.

A pupil of Archer Vassal at Harrow School, he obtained a scholarship at Christ Church, and read honours in both zoology and geology at Oxford. His first published research was on the development and attachment of teeth in fishes (*Quart. J. Roy. Micro. Soc.*, 76; 1934). There followed a series of memoirs on Chondrenchelys, Pristychius, Petrodus and other early shark-like forms, many of which he had collected himself during his expeditions to Scotland and elsewhere. These researches threw much light on the evolution of the Selachii and Brachyodonti including Holocephali. Already, in 1934 (*Proc. Zool. Soc.*), he had pointed out the affinity that very aberrant Palæoniscid, called Tarrasius by Traquair, may have with the living Polypterus (of which he had published a description of the chondrocranium), and thence passed to the detailed study of Palæoniscids in another series of memoirs not yet completely published. In the course of this work he brought out several papers in collaboration with E. I. White, of the British Museum, and Miss Bradley Dyne. With the same admirable powers of observation and happy interpretation he next dealt with the Coelacanth, and described those of Madagascar. In 1939 he joined an expedition to Greenland to collect material with his intimate friend Prof. E. A. Stensiö of Stockholm.

Particularly important and characteristic of his careful method of dealing with difficult material is Moy-Thomas's work on Palæospondylus, recently published (*Phil. Trans. Roy. Soc.*; 1940). This little fish from the Mid-Devonian of Scotland has been a puzzle to all observers since Traquair first described it in 1890 and assigned it to the Cyclostomes. This interpretation was generally accepted, though some believed it to be a larval form of some higher fish or even amphibian. Moy-Thomas, after examining a vast number of specimens, rejected the larval theory as inconsistent with the presence of well-formed vertebral centra and the condition of the elements of the skull, and also was unable to confirm the presence of many alleged Cyclostome characters. More important still, he discovered that the tail had hitherto been misinterpreted, had been described upside down, and was really heterocercal with a larger ventral lobe supported by jointed radials; he also provided good evidence of the presence of paired fins, and of jaws. Thus he seems to have established that Palæospondylus belongs to the Gnathostomes. Fortunately, the most important results of these various researches

were embodied in his excellent little book on "Palæozoic Fishes" (1939), published just before the War.

Deeply interested in the comparison of the dermal bones of the skull in the various groups of Osteichthyes and Tetrapoda and the tracing of their homologies, Moy-Thomas was not content with mere observation and description, but tried by experimental methods practised on living forms to discover the causes which may influence their shape, size and number. Already in 1941 he had reached important results on the rainbow trout, and concluded that, contrary to earlier theories, the origin of such bones is not due to the presence of the sense organs of the lateral line system or of the central nervous system (*NATURE*, May 31, 1941, p. 681).

Moy-Thomas began his teaching career under Prof. W. Garstang at Leeds, where he went soon after taking his degree. Returning to Oxford, he was made University demonstrator and lecturer in the Department of Zoology and Comparative Anatomy in 1933, and also became the first holder of the fellowship founded by the late E. T. Browne at the Queen's College.

Moy-Thomas's love of accuracy and his excellent memory made him a most successful teacher and tutor. But his influence on his pupils was not only academic. Possessed of great gaiety, sense of humour and zest of life, he was a continual source of stimulation and pleasure to everyone who knew him. With these attractive gifts he could make criticism, not only of their work but also of their life and manners, acceptable to his pupils.

Thus by this tragic accident has been cut short the life of one who will be much regretted by colleagues and many friends in Oxford and elsewhere. He leaves behind his wife and two children.

E. S. GOODRICH.

### Prof. H. Buisson

HENRI BUISSON, professeur de physique générale à l'Université de Marseille, est mort le 6 Janvier 1944 à l'âge de 70 ans, après une courte maladie. Il s'était fait connaître par de nombreux travaux sur l'optique, souvent avec Charles Fabry (métrologie interférentielle, repères spectroscopiques formant le 'système international des longueurs d'onde', photométrie, 'équivalent mécanique de la lumière', etc.). Depuis 1912, il s'était consacré, avec Fabry, à l'étude de l'ozone atmosphérique, travail qui avait été l'origine de nombreuses recherches, principalement en France (Cabannes, Dufay, Gauzit, Chalonge, Vassy, etc.) et en Angleterre (Dobson et ses collaborateurs).

CH. FABRY.

THE work of MM. Fabry and Buisson on atmospheric ozone was the foundation of all later work on the subject. It had been suggested that the remarkably sudden 'cut off' of the solar spectrum at about 3000 Å. was due to absorption in the earth's atmosphere. To test this hypothesis, they made careful measurements of the absorption by ozone of light of different wave-lengths in the laboratory and compared this with the extinction of sunlight passing through the atmosphere. From these measurements they were able to confirm the hypothesis, and also showed that the total amount of ozone in the atmosphere was equivalent to a layer of pure gas about 3 mm. thick.