

Professor W. F. R. Weldon, F.R.S.

By the death of Professor W. F. R. Weldon, F.R.S., Linacre Professor of Comparative Anatomy in the University of Oxford, which occurred on Good Friday, 13 April, 1906, with painful suddenness in the midst of his activities, the Marine Biological Association has lost one of its oldest workers and one of its most earnest and enthusiastic supporters. It was in the autumn of 1887, before the building of the Laboratory was completed, that Professor Weldon first commenced work in connection with the Association, and from that time until his appointment to the Chair of Zoology, at University College, London, in 1891, he resided chiefly at Plymouth, and was engaged in investigations at the Laboratory. Since 1891, although the periods spent at Plymouth have not been so prolonged, visits during his vacations have taken place at frequent intervals, and many of his most important papers have been based upon researches carried out at the Laboratory and material collected there.

Professor Weldon's earlier investigations were directed to the study of the classification, morphology, and development of the Decapod Crustacea, and, although much of what he did remains unpublished, the thoroughness with which his researches upon the whole group were carried out was shown in the special courses of lectures upon it, which he subsequently delivered at University College. At the same time several important papers resulted from the work. In two memoirs, one published in the *Journal of the Association* on "The Coelom and Nephridia of *Palæmon serratus*" (N.S., i. p. 162), and the other in the *Quarterly Journal of Microscopical Science*, on "The Renal Organs of Certain Decapod Crustacea" (vol. xxxii. p. 279), the structure of the green glands of various Decapods was described, and the remarkable development of the bladder of these glands in *Palæmon*, with its considerable extension backwards into the body cavity, was for the first time pointed out. In a later paper, on "The Formation of the Germ Layers in *Crangon vulgaris*" (*Quart. Journ. Micr. Sc.*, vol. xxxiii. p. 343), a careful and detailed account of the early development of a typical decapod ovum was given, and this paper well illustrates Professor Weldon's skill, both as a master of histological technique and as a powerful and accurate draughtsman.

Of Professor Weldon's later work, based upon the application of statistical methods to the study of variation, by which he will be chiefly remembered as a biological thinker of originality and force, it is not necessary to dwell at any length here, but it is of interest to record that one of his earliest, if not his first published statement on this

subject, is the note on "*Palæmonetes varians* in Plymouth," published in the Journal of the Association (N.S., I., 1890, p. 459), in which the variations of the teeth on the rostrum of this species are recorded from an examination of 915 individuals. Later papers based upon work done at Plymouth or upon material obtained there are:—

- "The Variations occurring in Certain Decapod Crustacea. 1. *Crangon vulgaris*" (*Proceed. Roy. Soc.*, vol. xlvii. p. 445).
- "Certain Correlated Variations in *Crangon vulgaris*" (*Proceed. Roy. Soc.*, vol. li., 1892, p. 1).
- "Certain Correlated Variations in *Carcinus mænas*" (*Proceed. Roy. Soc.*, vol. liv., 1893, p. 318).
- "An Attempt to Measure the Death-rate due to Selective Destruction of *Carcinus mænas*, with respect to a Particular Dimension" (*Proceed. Roy. Soc.*, vol. lvii., 1895, p. 360).
- "Remarks on Variation in Animals and Plants" (*Proceed. Roy. Soc.*, vol. lvii., 1895, p. 379).
- "Presidential Address to the Zoological Section (on Natural Selection and Variation)" (*Report. Brit. Assoc.*, 1898).

Professor Weldon became a member of the Marine Biological Association in 1884, the year of the inauguration of the Association, and his name first appears in the list of Founders in 1887. In 1888 he was elected a Member of Council, and from that time he continued to serve the Association in this capacity, having been in recent years the representative of the British Association for the Advancement of Science. His time and energy have been freely devoted to the work of the Council, and his personal experience of the various departments of the Association's activity have given special value to his views and recommendations upon many important questions of policy, which the Council has been called upon to determine.

When the Association undertook to carry out for His Majesty's Government the programme of International Fishery Investigations in the English area, Professor Weldon gave particular attention and devoted much time to the vast amount of statistical work, which is entailed by those investigations, and the fact that both the general methods and the results so far published were subjected to his careful and critical examination has added greatly to their value and to the confidence with which the Council was enabled to regard them.

By his enthusiasm, his energy, and the keenness of his intellectual insight, Professor Weldon helped largely in the attainment of the success which has attended the efforts of the Marine Biological Association, and by his ever-ready co-operation with his colleagues on the Council, and with the members of the scientific staff, he so endeared himself to all those with whom he was associated in the work that his death has left a gap which it will hardly be possible to fill.—E. J. A.