

them at the British Museum. His first major work on the group was in 1932, on the siphonophores of the Great Barrier Reef Expedition. Amongst many subsequent papers, the outstanding landmarks are the *Siphonophores of the Indian Ocean* (1954), the monograph on *Physalia* (1960) and the crowning achievement, the great *Synopsis* of 1965. Totton was without peer as a siphonophore specialist. His descriptions were based on the most exact study of great masses of material from sundry sources. He took endless pains to present a faithful account of the findings of his predecessors and to set them in just relation to his own. He wrote simple, vivid English, and his works are as readable as taxonomy could conceivably be. In several of his major works he attempted to present a simplified account for non-specialists along with the more technical parts.

His paedophore hypothesis (1960) has been influential among younger workers and his opinions are convincing because he distinguished carefully between "stimulating speculation on phylogeny" and "descriptive matter", although even he thought that it was no easy task to reconstruct the zigzag course of evolution in this group. First and foremost, however, he was a taxonomist, to whom a library of specimens was as essential as access to books. The examination of plankton samples (many from Discovery collections) and the analysis of fragmented specimens involved no little labour, and he was fortunate in the help given over many years by his assistant Mr Ernest White, for whom he expressed his esteem by conferring his name on a new species. Similar tributes were paid to other colleagues, and Totton's nomenclature has a zest of its own, of which anyone who knows of his lifelong

interest in the Scout movement will find *Lensia lelouveteau* a good example.

His essential and very exact taxonomic groundwork has made it possible to follow the movements of water masses in the sea by studying the distribution of siphonophore species, as, for example, in Dr J. H. Fraser's work in the Northeast Atlantic. Such water movements have very profound effects on fisheries.

Opportunities to work with living siphonophores afforded him joyful delight, and in the tradition of great naturalists he conveyed his enthusiasm to all who worked with him. His writings continually bring out the need to observe, or to revise facts, and are never for a moment dull. All beginners, he maintained, should see living material, and today all zoologists would agree with him. He himself had few such opportunities in earlier days, although in 1930 he visited the Caribbean on HMS Rodney. In 1955, following Haeckel's geographical intuition, he went to Arrecife with G. O. Mackie to work on *Physalia*, and from 1949 he made visits to Villefranche year by year so that the Station Zoologique became a second home.

Totton was the least stuffy of men. He could utter outrageously reactionary views but this was often done mischievously to provoke a response, and arguments often ended in his yielding his position in an apparent state of apopleptic self-restraint, somehow gratifying to his antagonist. He had remarkable ability to enlist the efforts of others on behalf of his projects, combining the qualities of Ancient Mariner, Svengali, and Portuguese Man-of-War. His friends will remember his sardonic humour, his innate romanticism, his warmth and his *esprit*.

## Erratum

IN the article "Subcutaneous Growth of Human Tumours in Mice" by C. R. Franks, F. T. Perkins and J. Thornton Holmes (*Nature*, 243, 91; 1973) paragraph 3, line 3, should read "and 100  $\mu\text{g ml}^{-1}$  streptomycin", instead of "100 mg streptomycin".

## Reports and Publications

not included in the Monthly Books Supplement

### Great Britain and Ireland

Institution of Gas Engineers. Communications. No. 867: Presidential Address, 109th Annual General Meeting, London, 16/18 May 1972. By J. A. Buckley. Pp. 17. 75p. No. 868: Natural Gas as a Factor in Air Pollution Control. By Dr. Alice Garnett and P. Read. Pp. 23. 75p. No. 869: The International Consultancy Service: An Economic and Social Force in Global Gas Industry. By C. E. Mills. Pp. 17. 75p. No. 870: The Glenmavis Natural Gas Liquefaction and Storage Facility—Experiences in its Design, Construction and Commissioning. By A. B. Garbutt and L. Thompson. Pp. 36. 75p. No. 871: Experience Gained in the Commissioning of the Ling Storage Installation in Stuttgart. By Dr. Heinz Berge and Jürgen Poll. Pp. 17. 75p. No. 872: Long Distance Liquid Natural Gas Pipelines. By Prof. G. Walker, Prof. D. M. Coulter and Prof. D. H. Norrie. Pp. 19. 75p. No. 873: Some Design Considerations and Operational Experience with UK Gas Compressor Stations. By A. Cleveland and D. A. Young. Pp. 31. 75p. No. 774: Converting Customer Service. By B. C. Smith and H. B. Healy. Pp. 22. 75p. No. 875: Marketing—Southern Style. By J. F. Doran. Pp. 29. No. 876: Gas Control with an On-Line Computer. By K. R. Brookes and A. W. Coles. Pp. 26. No. 766: Change and Exchange in International Energy Supply. By Carol V. Kroeger. Pp. 24. 109th Annual General Meeting, London, 1972—Discussions. Pp. 163. £1. (London: The Institution of Gas Engineers, 1973.) [262]

### Other Countries

Bureau International des Poids et Mesures. Le Système International d'Unités (SI). 2e Edition. Pp. 40. (Sevres, France: Bureau International des Poids et Mesures, 1973.) [262]

European Organization for Nuclear Research, CERN. CERN 73-2: A Split Field Magnet Geometry Fir Program: NICOLE. By M. Metcalf, M. Regler and C. Broll. Pp. 33. (Geneva: CERN, 1973.) [262]

En la Marcha Universitaria de Avance, Extension y Ascenso. Por Dr. Jose Joaquin Izquierdo. Pp. 48. (Mexico, DF: Dr. Jose Joaquin Izquierdo, Calle de Colima numero 367, 1972.) [262]

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