

## OBITUARIES

## Prof. F. J. Cole, F.R.S.

FRANCIS JOSEPH COLE was born at Clapham in 1872, and by his death on January 27, a week before his eighty-seventh birthday, British zoology lost an outstanding scholar. He was educated at Sir Walter St. Johns School, Battersea, where the only science subject he studied was physics. Reading Darwin's "Vegetable Moulds and Earthworms" in his teens inspired him to keep and study these creatures, and his first three publications were notes on his observations. He also started buying books, and E. B. Wilson's classical memoir on the development of the earthworm made a deep impression on him by the accuracy of description, careful illustration and extensive bibliography.

In 1892 he was assistant to Prof. J. Cossar Ewart in Edinburgh, and his experience while there played a significant part in shaping his subsequent career. He collaborated with Ewart in a paper on the cranial nerves of elasmobranchs, the forerunner of a series of publications on the cranial nerves of fishes which firmly established his reputation as an able comparative anatomist and were recognized by the award of the Rolleston Prize by Oxford in 1902. These researches contributed to the establishment of the now generally accepted 'component theory of the nervous system' and they brought to his notice the works of the old masters of anatomy.

In 1895 Cole went to Liverpool as lecturer under Prof. W. Herdman, continued his line of research, and with James Johnstone produced "*Pleuronectes*", which still remains the longest of the well-known Liverpool Marine Biological Committee (L.M.B.C.) memoirs and shows clearly his noteworthy dexterity in dissecting and illustrating. A proposed memoir on the sea lamprey, *Myxine*, became expanded into a detailed monograph and brought him into contact with Prof. G. B. Howes, whom he regarded as the most learned zoologist he had ever met and the main person to substantiate his interest in bibliography. The first part appeared in the *Transactions of the Royal Society of Edinburgh* in 1905 and was followed by five further parts which set a standard of meticulous accuracy that has not often been reached. As the result of the earlier parts of this and his other work, he received the Neill Gold Medal of the Society. While at Liverpool, arrangements were made for him to keep terms at Jesus College, Oxford, where he obtained his B.Sc., and later the University conferred on him the D.Sc.

Cole went to what was then University College, Reading, in 1905 to found a Department of Zoology, and the following year was appointed to the chair, which he held until his retirement in 1939. He threw himself whole-heartedly into the task of building up the Department and, indeed, by his example and wise counsel played an appreciable part in the development of the young University. One of his first objects was to set up a museum, which from the beginning contained deliberately chosen specimens most carefully prepared and mounted and catalogued and written up in several volumes. It formed an outstanding and widely admired feature of the Department and represented an enormous amount of hard work and thoughtful planning. He retained

a connexion with Liverpool, for he continued to take his senior students to Port Erin Biological Station, and several of his students contributed important memoirs to the Liverpool Marine Biological Committee series. In 1926 he was elected a Fellow of the Royal Society.

His inquiring mind and interest in things historical turned Cole's attention to the medieval architecture of the churches in the countryside around Reading and to the writing of an interesting analysis of the church of St. Mary, Cholsey. He now devoted more attention to the bibliography and history of comparative anatomy and published a number of contributions on these subjects, including, in 1944, an important book on the "History of Comparative Anatomy: from Aristotle to the Eighteenth Century". Always interested in books, he gathered a most remarkable and valuable library in his own field, which contains a number of very rare early works and is exceptionally complete. Indeed, the museum of his Department and his library were his much-loved and cared-for 'scientific children'. His first contribution to *Nature* was in 1895, and then there was a long gap; but readers will recall the series of articles and reviews since his retirement that gave some indication of his wide knowledge and sound judgment. His particular period was the Dutch microscopists of the seventeenth century, especially Leeuwenhoek. Just before and during this time he played a much appreciated part in the development of the newly instituted subject of history and philosophy of science in the University of London. For twenty-five years he served as external examiner and for a year less as member of the Board of Studies.

He was a tall, impressive man who would have appeared somewhat forbidding if this were not contradicted by the twinkle in his eyes. Gifted with a most retentive memory and, in addition to his zoological and bibliographical lore, a good knowledge of classical music and of the old masters of the Dutch and Flemish Schools, his conversation was well worth while, particularly as it was spiced with a quiet, dry humour. His teaching was always thorough and inspiring, and his students retained a great respect and affection for him. He will retain a warm place in their memories and in those of his colleagues. He is survived by a wife and a son, to whom we offer our sincere sympathy. CHAS. H. O'DONOGHUE

## Dr. Karl Jordan, F.R.S.

It is not given to many men to cover a span of seventy years with worth-while contributions to any science. Karl Jordan's first published work was an account of the lepidopterous fauna of Göttingen, a university dissertation submitted on his doctorate. In the next three years he gave rein to his childhood passion for beetles by publishing numerous supplements to the list of beetles of Hildesheim, his home town, near which he was born on December 7, 1861. The seventh son of a small farmer, Heinrich Ernst Karl Jordan had many duties to perform, besides going to school; but it was while going about these tasks that he had become interested in insects. He