

standard work on "Northumbrian Crosses" (1927), in which a knowledge both wide and profound was combined with keen insight and artistic feeling. Although to the general public "The Life and Work of John Ruskin" among Collingwood's writings will be his strongest claim to remembrance, "Northumberland Crosses" is his most enduring achievement. Under his editorship the *Proceedings of the Cumberland and Westmoreland Antiquarian Society* attained a standard of technical and artistic excellence unusual among the publications of local scientific societies; and he was the inspiration and the organiser of much of the excellent work in archæological research which has been accomplished by the Society in the present century. In 1920 his work was recognised by election to the presidential chair.

MR. H. C. CHADWICK

WE regret to announce the death of Mr. Herbert Clifton Chadwick on Sept. 16 at the age of seventy-three years. He was the last survivor of a group of scientific men who, in the 'eighties of the last century, began the biological investigation of the Irish Sea region. For this purpose the late Sir William Herdman founded the Biological Station at Port Erin, in the Isle of Man, and Mr. H. C. Chadwick, then a business man in Manchester and an amateur naturalist, was made curator of the laboratories. He was a recognised authority on the morphology and systematics of the Echinodermata and was the author of many papers on

these subjects. But his general zoological knowledge was very wide and in his capacity of curator of the Port Erin Station he was able to assist very many investigators and students who worked there during the last forty years.

WE regret to announce the following deaths:

Prof. Karl E. Ritter von Goebel, For. Mem. R.S., professor of botany in the University and Director of the Botanical Gardens, Munich, an authority on cryptogamic botany, especially Bryophyta and ferns, on October 10, aged seventy-seven years.

Dr. T. H. C. Stevenson, formerly superintendent of statistics at the General Register Office, who rendered great service in the field of vital statistics, on September 12, aged sixty-two years.

Prof. William Stirling, formerly Brackenburg professor of physiology in the University of Manchester and in 1906-9 Fullerian professor of physiology at the Royal Institution, on October 1, aged eighty-one years.

Dr. Florence A. Stoney, formerly demonstrator in anatomy at the London School of Medicine for Women, who was a pioneer in X-ray and ultraviolet light treatment, on October 7, aged sixty-two years.

Sir Everard Im Thurn, K.B.E., formerly curator of the British Guiana Museum, and in 1919-20 president of the Royal Anthropological Institute, on October 8, aged eighty years.

News and Views

Antony van Leeuwenhoek, 1632-1723

ON October 24, 1632, four days after the birth of Sir Christopher Wren at East Knoyle, Wiltshire, the centenary of which has just been celebrated, Antony van Leeuwenhoek, the eminent Dutch naturalist who has been called the "Father of Protozoology and Bacteriology" was born at Delft. Both Wren and Leeuwenhoek were long associated with the Royal Society in its early days, and both lived to extreme old age; Leeuwenhoek outliving Wren by six months and dying at Delft on August 26, 1723, being then aged—as his epitaph says—"90 years, 10 months, and 2 days". But the careers of these two distinguished men followed very different lines; for while Wren was first a professor of astronomy and then a great architect, Leeuwenhoek began his life as a draper and haberdasher with few advantages of education, and his fame came through his lifelong devotion to microscopical studies. The son of a basket maker, he was sent to a school at Warmond, near Leyden, and at sixteen was an apprentice in Amsterdam. At the age of twenty-two years he married and set up in business for himself in his native town, and for thirty-nine years was "Chamberlain of the Council-Chamber of the Worshipful Sheriffs of Delft". He was also a surveyor and wine gauger. When he began his work with his simple microscopes

is not known, but at the age of forty-one years he addressed the first of his many letters to the Royal Society, then eager to get into touch with all men working for "the promotion of natural knowledge", and it was through these letters he became famous. He was made a fellow of the Royal Society in 1679 (1680 N.S.), a *correspondant* of the Paris Academy of Sciences in 1699, and in 1716 the University of Louvain presented him with a medal. At his death at Delft in 1723 he was buried in the Old Church, in which his daughter Maria, in 1739, erected a monument to his memory.

Leeuwenhoek and the Royal Society

THE connexion of Leeuwenhoek with the Royal Society was unique, since, although for fifty years he was a constant correspondent and for forty-three years a fellow, he never attended a single meeting. His letters were all written in old-fashioned Dutch and before publication in the *Transactions* were translated into English or Latin. They were none the less highly appreciated and many distinguished men visited Delft in order to see the writer of them. He, indeed, became one of the 'sights' of the pleasant town. In spite of his wonderful discoveries and his communications to the Royal Society, hitherto there has been no good account of his career in English.