

between 1867 and 1878. These relate almost exclusively to descriptions, with figures, of new species of birds from various parts of the world, and are looked upon as the most important contributions to ornithological science that have been published during the same period in this or any other country. No one, indeed, can look upon the masterly work of Lord Tweeddale without feeling that by his sudden and premature death an irreparable loss has fallen upon the science to which he was devoted, and that many years must pass before ornithologists cease to deplore his untimely removal.

In 1877 Lord Tweeddale published fifteen separate papers on ornithological subjects, and in the following year about the same number—the fourteenth and last having, as already mentioned, been finished only a few days before his death. His loss, therefore, came upon the scientific world at a time when his writings were being regarded with a peculiar interest, and when he himself was everywhere being recognised as the most able ornithologist of his day.

Lord Tweeddale died at Walden Cottage, Chislehurst, on the 29th December 1878. His collections of birds, which are of great value, being the repository of a large number of type species described in the papers referred to, together with his valuable library of scientific works, are bequeathed to his nephew, Mr R. Wardlaw Ramsay, himself an ornithologist of considerable note.

DR JAMES M'BAIN. By Robert Gray, Esq.

DR JAMES M'BAIN was born at Logie, in Forfarshire, in November 1807. After having spent some years at the parish school of Kirriemuir, and about three years as an apprentice to a local surgeon, he entered upon the study of medicine at the University of Edinburgh in 1823. Three years later, namely, in March 1826, he passed his examination at Surgeons' Hall, and received his diploma when little more than nineteen years of age. About this time he removed to St Andrews, where he spent upwards of twelve months; and in the autumn of 1827 he was appointed assistant-surgeon to H.M.S. "Undaunted," just then commissioned to proceed to India with the newly-appointed governor, Lord William Bentinck. During this and a subsequent voyage in the same ship in 1829, to the Azores and Cape de Verde Islands, Dr M'Bain had but

limited opportunities of cultivating his taste for natural history pursuits, but such leisure as he enjoyed enabled him to collect various notes which, although not published at the time, became useful to him in after life.

In 1832, Dr M'Bain, in the capacity of assistant-surgeon, joined the "Investigator," a surveying ship, under the command of Captain Thomas, who was at that time employed in a survey of the Shetland Islands. This survey was completed in 1834, and was followed by a survey of the Orkney Islands, during which Dr M'Bain and Captain Thomas prosecuted a series of successful dredgings in deep water between the two groups of islands, as well as along their shores. Much interesting information and material resulted from their joint labours, extending over a period of sixteen years, and was freely communicated to Messrs Forbes and Hanley and Dr Harvey, who were then engaged in bringing out their important works on Molluscous Animals and British Seaweeds.

After settling for some years at Elie, in Fifeshire, and subsequently at Leith and Trinity, Dr M'Bain continued to devote his time and attention to the investigation of the marine fauna of the Firth of Forth; and while engaged in this he was the friend and frequent companion of Dr Fleming, Prof. Goodsir, Dr Strethill Wright, and other naturalists, who often accompanied him in his dredging excursions. During these years he took an active interest in the proceedings of the Royal Physical Society, of which society he was twice president, and contributed many papers of interest, which appeared at intervals from 1859 to the time of his death. He also contributed to a Topographical work by the Rev. W. Wood, Elie, entitled the "East Neuk of Fife," an important catalogue of the *Mollusca* of the Firth of Forth, embracing 344 species—244 of which were collected by himself; and while he was in the midst of such labours his friends had reason to regret that the state of his health and retiring modesty prevented him undertaking some independent work in which he might have done justice to his powers. He had an extensive knowledge of comparative anatomy, having at one period of his life enjoyed the advantage of studying under Professor Owen of London—a training to which much of the thoroughness of his knowledge as a naturalist may perhaps be attributed.

In private life Dr M'Bain was much esteemed by a large circle of friends. A man of extensive reading, amiable and unobtrusive in manner, he quietly prosecuted his practical work as a naturalist uninfluenced by any of the various theories which are not fully supported by facts. One scientific fact, indeed, to use his own words, was to him worth all the poetry in the world. He took a great interest in the scientific studies of young naturalists, and was at all times ready to give them the benefit of his counsel and wide experience. Many such students now mourn his loss in distant lands.

Dr M'Bain died, after a painful illness of some months' duration, at Trinity, near Edinburgh, on 21st March 1879.

Professor JAMES NICOL. By Professor Archibald Geikie.

In the death of Professor JAMES NICOL the Society has to regret the loss of one who served to link the present generation of geologists with the early leaders of the science in this country. Trained in this university under Jameson, he imbibed that love for the mineralogical side of geology which distinguished his career. His earliest scientific publication—an essay on the geology of his native county of Peebles—was awarded a prize by the Highland Society, and was issued in their “Transactions.” At the time of its appearance very little had been added to the original observations of Sir James Hall, communicated to Hutton, and published in the “Theory of the Earth,” regarding the structure and constitution of the so-called *schistus* or *killas*, forming the uplands of the south of Scotland. Mr Nicol, however, continued to devote himself to the investigation of this subject. He was the first to suggest that these rocks should be paralleled with some of the “Silurian” formations made known by the researches of Murchison; and in subsequent communications to the Geological Society of London he brought forward contributions to the unravelling of the complicated geology of these Silurian uplands of Scotland. At an early period of his life he published a small volume under the title of “Guide to the Geology of Scotland.” Though chiefly compiled from the published memoirs of previous observers, it was a meritorious and useful work, giving within a small compass a trustworthy digest of