THE LATE PROFESSOR JAMES GEIKIE.1

SIR,—A biography of the late Professor James Geikie is now in course of preparation, and the work would be greatly facilitated if those who have letters or communications of general interest from him would kindly forward these to me at the Royal Scottish Geographical Society's Rooms, Synod Hall, Castle Terrace, Edinburgh. They will be carefully preserved and returned after being copied.

Edinburgh,

MARION I. NEWBIGEN.

September 4, 1916.

OBITUARY.

JAMES DALLAS, F.S.A.Scot.

BORN 1853.

DIED SEPTEMBER 12, 1916.

WE regret to record the death, in his 63rd year, of Mr. James Dallas (formerly curator of the Albert Museum, Exeter), which occurred on September 12, at Bampton, Oxon. James Dallas, F.S.A.Scot., was the son of the late W. S. Dallas, F.L.S., for so many years Assistant Secretary to the Geological Society of London.

CHARLES DAWSON, F.S.A., F.G.S.

BORN JULY 11, 1864. DIED AUGUST 10, 1916.

Geologists and archæologists alike mourn the early death of Mr. Charles Dawson, of the Castle Lodge, Lewes. For thirty years he had been one of the most active students of the geology and antiquities of Sussex. To a capacity for taking pains, with endless patience, he added a sharpness of sight that never overlooked anything of importance; and he was not only in close touch with all workmen in his district who might make accidental discoveries, but was also in constant friendly communication with a wide circle of professional scientific men who helped him to make the best use of his material.

Charles Dawson was born at Fulkeith Hall, Lancashire, fifty-two years ago, the son of Mr. Hugh Dawson, barrister-at-law. Most of his early life was spent at St. Leonards-on-Sea, and he was educated at the Royal Academy, Gosport. He began to study law in 1880, and from 1890 until the time of his death he practised as a solicitor at Uckfield. There he held several public appointments, and won the highest esteem of all who were associated with him. His duties were many and arduous, and science was the recreation of his leisure hours.

From early boyhood Mr. Dawson had been interested in natural history and antiquities, and he began to collect Wealden fossils from the quarries and cliffs round Hastings. He soon attracted the notice of Mr. S. H. Beckles, F.R.S., who was then spending his last years at St. Leonards. He was thus helped and encouraged to collect Dinosaurian remains in a systematic manner; and he met with so much success that by 1884 he had made a valuable collection which

¹ For a brief account of Professor James Geikie and his works, see "Eminent Living Geologists" (GEOL. MAG., N.S., Dec. V, Vol. X, No. VI, June, 1913, pp. 241-8, with a portrait, Pl. IX); for obituary see op. cit., April, 1915, p. 192.

was gladly accepted by the British Museum. From that time until nearly the end of his life he made continual additions to the Dawson Collection, as it was named by the Museum, where it now occupies a conspicuous position. The last noteworthy accession to it was the finest known specimen of the Wealden ganoid fish, Lepidotus mantelli. On the death of Mr. Beckles in 1890, Mr. Dawson also gave much help to the British Museum in labelling the collection of Wealden

fossils which was acquired from that gentleman's executors.

Among the Wealden Dinosaurian remains discovered by Mr. Dawson, Mr. Lydekker recognized three new species of Iguanodon, of which one was named I. dawsoni. Among his later discoveries was the first tooth of a Wealden mammal, Plagiaulax dawsoni. He obtained this specimen from one of the fine pebbly bone-beds which occur in different horizons of the Wealden series. He subsequently encouraged two French students at the Hastings Jesuit College, Fathers Teilhard de Chardin and Pelletier, to examine these bone-beds more thoroughly, and they succeeded in finding a second form of mammalian tooth, Dipriodon valdensis, besides numerous rare teeth of reptiles and fishes. Mr. Dawson was also the stimulating friend of Mr. Philip Rufford, who made the great collection of Wealden plants now in the British Museum.

While interested chiefly in the fossils of the Wealden formation, Mr. Dawson also paid much attention to its more purely geological features, and he made one important investigation of the natural gas at Heathfield, which he described to the Geological Society in 1898. He also exhibited zincblende from the Wealden and Purbeck beds to

the same Society in 1913.

Mr. Dawson's most important archæological work culminated in his publication of the two handsome volumes on the History of Hastings Castle in 1909. His interest in geology, however, gradually led him to turn to prehistoric archæology, and during his later years he searched most persistently the superficial deposits of Southern Sussex. His ultimate success was his recognition of the great antiquity of the Piltdown gravel, and his discovery in this deposit of the skull and mandible of the oldest known type of man, Eoanthropus dawsoni, which was described to the largest meeting of the Geological Society ever assembled in December, 1912. The story of this discovery, which was not altogether accidental but the outcome of logical reasoning, is now so well known and has been so often repeated that it need not be further detailed here.

Mr. Dawson made few contributions to geological literature—he preferred to hand over his specimens to experts who had made a special study of the groups to which they belonged. He published only one paper in the Geological Magazine, on "Dene Holes, Ancient and Modern" (1898, p. 293), concluding that they were all mines. His only contributions to the Geological Society's Quarterly Journal were those on Natural Gas and the Piltdown Man already mentioned. His last paper, read to the Anthropological Institute in 1915, was an ingenious comparison between the shapes of the so-called 'Eoliths' of tabular flint and the shapes of diminutive splinters obtained from the hexagonal columns of starch. He maintained that tabular flint

had an imperfect hexagonal structure, and that accidental fractures must produce the shapes found in 'Eoliths'.

Mr. Dawson was a most versatile student, and during the beginning of his last illness was investigating a case of the development of incipient horns in a cart-horse. He had a restless mind, ever alert to note anything unusual; and he was never satisfied until he had exhausted all means to solve and understand any problem which presented itself. He was a delightful colleague in scientific research, always cheerful, hopeful, and overflowing with enthusiasm. The premature loss of his inspiring and genial presence is indeed a great sorrow to his large circle of devoted friends.

A. S. W.

ROBERT JOHN LECHMERE GUPPY,

Corresponding Member of the Zoological Society of London and of the New York and Philadelphia Academics of Science.

Born August 15, 1836. Died August 5, 1916.

WE deeply regret to announce the death of Robert John Lechmere Guppy, in the Island of Trinidad, on August 5, 1916, who was within a few days of completing the 80th year of his age. The deceased was born in London in 1836, his father being the Hon. R. Guppy, M.A., Barrister-at-law, and for many years the Mayor of San Fernando, Trinidad. He qualified for a Civil Engineer, and afterwards travelled through Australia, Tasmania, and New Zealand. On returning he joined his family at Trinidad and became engaged in the construction of the Cipero Railway, subsequently entering the Colonial Secretary's office, and in 1868 was appointed to the important position of Chief Inspector of Schools, which he held until retirement in 1891. He was an ardent student of natural history and foremost in supporting the scientific societies of his island home, having been president of the Scientific Association of Trinidad and the first elected presiding officer of the Royal Victoria Institute Board. particularly interested in the Marine Mollusca, and was instrumental in obtaining for the British Museum the second largest example of a living species of Pleurotomaria known to conchologists, having a height of 150 millimetres. The shell was obtained from off the Island of Tobago, and was described by Guppy in a locally published journal.

Mr. Guppy's scientific labours will always be associated with his investigations on the geology and palæontology of Trinidad and other regions of the West Indies. Until his researches began the only information on the geology of Trinidad was obtainable from Wall and Sawkins' "Report" of 1860, published by the Geological Survey of England, the palæontological portion of which was furnished by the late R. Etheridge, F.R.S., who regarded the Tertiary fossils as belonging probably to the Miocene period. Guppy's first papers referred to the Foraminiferal beds of San Fernando, containing numerous Orbitoides and other forms, as well as Brachiopods, Echinoids, and Crustacea, which were described and figured and assigned to the older Miocene. It was found that these fossils bore resemblances to those from the Farallon rock which enabled both sets