

know. Now regarding M. Boule's statement about the Middle Glacial flints it is evident that he does not know the difference between a humanly fashioned flint and one that has been flaked by nature, because he first of all stated these Middle Glacial specimens were 'human', and then when he was told the deposit from which they were derived he immediately said they were non-human. M. Breuil was equally illogical and childish in his remarks about the sub-Crag scraper, because after having stated dogmatically that the specimen was 'natural' he was quite unable to state what natural force had produced the flaking to be seen upon it. These are the facts of the case, and no references to the curious remarks of Professor Boyd Dawkins, or the worthless flints collected by Professor Sollas on the beach at Selsey Bill, will alter them. I have been loath, especially at the present time, to write what I have done, but in view of M. Boule's provocative paper, which many people, not knowing the facts, will regard as reliable, I feel I am justified in speaking out, and in so doing to aid the cause of science.

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STUDIES IN EDRIOASTEROIDEA. A CORRECTION.

SIR,—I deeply regret to find that a bothering error has crept into the lettering of Text-figure 1, on p. 260,¹ illustrating Studies in Edrioasteroidea, VII. In each of the drawings the rays have been numbered in the wrong order, so that what are now V, IV, III, II, I should read I, II, III, IV, V. The numbers in the text itself, as well as in the figures on p. 398 are correct. Possessors of the GEOLOGICAL MAGAZINE can perhaps make the necessary alteration without much difficulty. It will be put right in the complete set of reprints. With more than the usual apologies.

F. A. BATHER.

September 17, 1915.

OBITUARY.

WILLIAM ANDERSON, F.R.S.E., F.G.S., F.R.S.G.S.

BORN FEBRUARY, 1860.

DIED MAY 30, 1915.

MR. W. ANDERSON was the eldest son of Dr. Joseph Anderson, late Keeper of the National Museum of Antiquities and Assistant Secretary of the Society of Antiquities of Scotland, Edinburgh.

A vacancy having occurred on the staff of the Geological Survey of New South Wales, Mr. William Anderson was recommended by Sir Archibald Geikie to Mr. C. S. Wilkinson, the Government Geologist, to fill the gap as Field Geologist. At the time of his selection he was a student at the University of Edinburgh, but proceeded forthwith to Sydney and commenced his official duties in September, 1886. Mr. Anderson's life on the Geological Survey was a very busy one; he contributed many valuable reports on the geological and mineral resources of the Colony, which may be found in the "Annual Reports of the Department of Mines of New South

¹ GEOL. MAG., June, 1915.

Wales, 1886–91". Before leaving Scotland Anderson had already commenced to publish the result of local observations, at least two papers being read before the Geological Society of Edinburgh in 1885–6.

In 1888 he explored the Yarrangobilly Caves, which have since become a well-known tourists' resort; he also examined the neighbouring Kiandra Goldfield. During 1887 he accompanied Mr. Wilkinson to the Bingara Diamond-field and Cope's Creek, and reported on the possibility of existing auriferous deposits in the Byrock, Nyngan, and Girilambone Districts, and the well-established metalliferous zone around Cobar.

Pleistocene deposits, rich in marsupial remains, were known to exist at Myall Creek, near Bingara, and in 1888 Mr. Anderson was sent to investigate these and superintend the excavation of the fossils; these are now in the Mining and Geological Museum, Sydney. He also, during the year, reported on the important discovery of fish in the Hawksbury Formation at Talbragar, Mudgee District; these have since been described by Dr. A. Smith Woodward. In 1889 a most important investigation was commenced by the Geological Survey in the delineation of the great Cretaceous-Tertiary artesian water-bearing area of Western New South Wales, from the South Australian border to well beyond this side of the River Darling. This was entrusted to Mr. Anderson and carried on till 1891 (it was during this year we had the misfortune to lose our chief and friend Mr. C. S. Wilkinson). In 1890 he examined and reported on the Pambula and Cargo Goldfields; 1892 and 1893 were spent by Mr. Anderson in the survey of the Shoalhaven Valley, accompanied by Mr. P. T. Hammond as Field Assistant, but in June of the latter year he retired from the service and returned to Scotland.

Mr. Anderson's Official Reports are too numerous to mention in detail, but supplementary to these he contributed interesting articles to the Records of the Geological Survey of New South Wales. Prominent amongst these are: "Petrographical Notes on the Eruptive Rocks connected with the Silver-bearing Lodes at Sunny Corner," etc., "The Shell-heaps or Kitchen Middens" of our south-east coast; and in particular "The Occurrence of Opal in New South Wales".

No great lapse of time intervened between the termination of Anderson's Australian work and his appointment to the Geological Survey of India as Mining Specialist, but of this portion of his life I regret I am in possession of very few facts. He resigned his position in October, 1896.

We next hear of Mr. Anderson as Government Geologist of Natal, where he entered on his duties in January, 1899. It was not until the middle of 1901 that his first report on Natal and Zululand appeared. Between these dates the Lower Tugela District mapping was carried out, and a geological reconnaissance of the eastern half of Zululand. Two other very useful items are contained in this report, "Historical Sketch of Natal Geology" and "Bibliography of Natal and Zululand Geology, Part I". There is also a short paper by the writer: on "Fossil Plants from the St. Lucia Coalfield".

In June, 1900, Mr. Anderson acted as one of the examiners in Mineralogy and Geology at the Cape Town University.

His second report appeared in 1904 with a continuation of the Geology of Zululand and a "Report on the Stormberg Coal-measures to the West of Molteno" with Palæontological Reports by Messrs. Seward and Etheridge.

The third and final report appeared in 1907, embracing work accomplished 1903-5. Of this period upwards of seven months (1903-4) were spent in Europe on literary work. In the early part of 1903 he was a member of the Building Stones Commission, instituted by Lord Milner to investigate the distribution and quality of building stones of South Africa. This last report contains an important article on the "Cretaceous Rocks of Natal and Zululand"; another, the discovery in the latter territory of "Marine Fossiliferous Rocks of Tertiary Age containing Mammalian Remains"; and lastly the "Geology of the Drakensberg Mountains". A large portion of the volume is taken up with palæontological articles by Drs. R. Broom and A. S. Woodward, Professor W. B. Scott, Mr. G. E. Crick, and the writer. It is important to note the date of publication of this final report, as Mr. Anderson had already left the Natal Service, resigning his appointment in September, 1905.

After a brief interval he joined the well-known and wealthy firm of Eckstein & Co., mine-owners and financiers of Johannesburg, as mining adviser. In this capacity Anderson continued until some time in 1913, when from failing health he was advised to leave South Africa, and accordingly returned to his home in Edinburgh. During the period of his connexion with this firm there appeared his "Notes on the General Geology of the Waterberg District", etc., read before the Geological Society of South Africa in 1910, and previous to this a joint communication by Professor G. H. Stanley and himself on "The Intimate Relations between Archæology and Geology in South Africa", etc., was read before the same Society in 1909. The Edinburgh climate proved too severe after his long residence abroad, and acting on further advice he visited New South Wales, his first love, and took up his residence in Sydney, June, 1913. Mr. Anderson occupied his time in making occasional short geological excursions to the other States, one in particular to King Island, Bass' Strait. Here he investigated the sand-rock containing extinct marsupial remains. The result of his observations appeared in the Records of the Australian Museum, 1914.

At the beginning of the present year it became evident to his friends here that his health was rapidly declining, and after a very brief final illness he passed away on May 30 from cerebral hæmorrhage in his 56th year.

Mr. Anderson was a minute and accurate observer, a pertinacious man, of reserved demeanour except to a few of his most intimate acquaintances. To them he was of a genial disposition, possessed of a fund of quiet dry humour, and was a staunch and generous friend.

R. ETHERIDGE, JUN.

SYDNEY, NEW SOUTH WALES.

August, 1915.