weighing 30 cwt., is in the Melbourne Museum; No. 3 has disappeared. Unlike the larger mass, No. 2 appears to have exuded very little chloride of iron, and no scaling has been observed. The Bendoc and Yarroweyah irons are both in the Melbourne Museum; they weighed 60 lb. and 21 lb., and were discovered in 1898 and 1903 respectively. The Kulnine iron, which weighed 122 lb., and was found in 1886, is in the Adelaide Museum. A table of chemical analyses and a full bibliography are given. The author concludes that the obsidianites (australites), though glassy in character, are undoubtedly meteoric in origin.

2. Meteoric Irons from the Klondike Mining District, Yukon.—In the Museum Bulletin No. 15 of the Geological Survey of Canada (pp. 8, with 11 plates, June 30, 1915), Mr. R. A. A. Johnston describes the meteoric irons found in the course of gold-mining operations in Gay Gulch and Skookum Gulch, both tributary to the Bonanza Creek system in the Klondike mining district, Yukon. The former weighed 483 grams and was found in 1901. The latter, which was discovered on January 21, 1905, was much larger; it measured 29 cm. in length, 23 cm. in width, and 3 to 8 cm. in thickness, and weighed 15·88 kilograms. Both specimens were acquired by the Ottawa Museum. From the similarity in the characters of the two irons, both being exceptionally rich in nickel and exhibiting a peculiar chatoyancy in sections, and in their positions, both lying on the bedrock under the 'white channel' gravels, as the miners term the ancient creek deposits, the author considers that they are relics of a single meteoric shower, which occurred in Tertiary time.

CORRESPONDENCE.

COAST EROSION IN NORFOLK.

Sir,—On September 1 of this year I found the well-known tower of Sidestrand old Church, near Cromer, now on the very edge of the cliff: a rabbit could not pass between. It had begun to crack, and its fall may come at any time. On April 27, 1905, I made a rough map of churchyard, tower, and cliff-edge; and noted the distance between tower and cliff-edge as then 7 feet. I record this as a contribution towards estimates of cliff-waste on this coast.

In the Geological Magazine, 1895, pp. 229, 230, are calculations of rate of inland retreat for the sand-dunes at Eccles, 12 miles south-east. The calculations give a retreat of somewhere about 130 feet in seventy-seven years.

E. Hill.

The Rectory, Cockfield, Bury St. Edmunds.
September 15, 1915.

HUMAN PALÆONTOLOGY IN ENGLAND.

Sir,—The current number of *L'Anthropologie* (January–April, 1915), I notice, contains a paper by M. Boule entitled "La paléontologie humaine en Angleterre", which is the most extraordinarily biassed statement it has ever been my ill-fortune to read.

M. Boule in this paper refers especially to the flaked flints found beneath the Red Crag of Suffolk, and also to the human skeleton found by me in Messrs. Bolton & Laughlin's sand-pit at Ipswich in 1911, and in criticizing these discoveries has certainly lived up to the view expressed on p. 38 of his paper that it is better to be too severe in criticisms of such matters than not to be severe enough. In this note I propose to emulate M. Boule's 'severity', and to speak out plainly as he has done. But I do not intend to make any reply to the threadbare and foolish arguments he uses in support of his case, arguments which I have replied to a great number of times, and which I do not intend to discuss any further. I want, however, to say something about M. Boule's and his colleague M. Breuil's attitude towards the discoveries I have mentioned, and their capabilities of judging whether a flint has been flaked by nature or by man. Regarding the first, I am of the opinion that both M. Boule and M. Breuil are hopelessly biassed in favour of the view that the human race is not more ancient than the early Chellean period, and I hold this view for the following reasons. It has come to my knowledge from an unimpeachable source that many weeks before either of these gentlemen visited Suffolk or had seen a single one of my specimens, they had expressed their disbelief in the value of my discoveries. I also know, from personal observation, that when they were here they showed very plainly and unmistakably that they did not intend to examine carefully and scientifically the sub-Crag flints or the beds from which they were derived, nor did they spend more than a few minutes in examining the section in the pit where the Ipswich skeleton was found. Their attitude to all the things they saw was careless and almost petulant, and in my opinion quite unscientific. Regarding the capabilities of MM. Boule and Breuil of judging whether a flint has been flaked by nature or by man, I am of the opinion that neither of them is capable of such judgment, and I hold this opinion for the following reasons. After the sub-Crag flints had been seen and rejected as humanly fashioned I showed M. Boule a series of the Middle Glacial specimens, and without telling him from what stratum they were derived asked whether he regarded them as 'human' or 'natural'. He at once said he thought they were definite implements of man. I then told him where they were found, and immediately he disputed the correctness of the geological interpretation. When, however, I showed him that this interpretation was undoubtedly correct, he said that the flints could not be humanly fashioned. I notice at p. 13 of M. Boule's paper he describes these Middle Glacial specimens as "formes troublantes", and I can quite understand why he so regards them. On the morning of the second day of the visit of MM. Boule and Breuil I showed the latter a flint scraper found beneath the shelly Red Crag, which in form was identical with the scrapers which are found in nearly every period of the Stone Age, and asked him whether he considered it to be humanly fashioned or flaked by natural forces. He replied that it was his opinion that nature was responsible for the flaking. I then asked him to tell me what force he considered had flaked the flint, and he simply shrugged his shoulders and said he did not

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.

J. Reid Moir.

12 St. Edmund's Road, Ipswich.

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.