

attention to the identity of one of its cervical vertebræ with the vertebra from the Kraai River, and the label on the exhibited specimen, giving the name, was turned down at my request. My responsibility for reference of the specimen to *Euskelesaurus* ceased. There is no evidence for making the correction other than that in my possession and under description. Hence no publication seemed necessary in anticipation of final account of the animal.

In his postscript Dr. Smith Woodward states that "Dr. R. Broom has described similar vertebræ from the Upper Beaufort Beds of the Karoo Formation under the new generic name of *Erythrosuchus*." This scarcely represents the facts. If my new unpublished skeleton is omitted, there is no evidence to connect the Kraai River vertebra with Dr. Broom's types. Dr. Broom states that in *Erythrosuchus* "there is one well-preserved vertebra, which is either lower cervical or upper dorsal," compared to the dorsal vertebra of a carnivorous Dinosaur, and said to show that the rib was single-headed. On comparison of this vertebra (Ann. S. Afr. Mus., vol. v, pt. 4, figs. 8, 9) with the Kraai River fossil, it is difficult to recognise any near approximation. There is no room for doubt, for the Trustees of the South African Museum have given me, with the assistance of the Geological Department of the British Museum, the opportunity of studying Dr. Broom's *Erythrosuchus* in the description of my own materials.

Finally, the postscript remarks, "According to Dr. Broom's description this reptile is not a Dinosaur, but exhibits many resemblances both to Belodonts and to Anomodonts." Dr. Broom does not use the term Dinosauria, but refers his animal to the Phytosauria, because the ilium is like that of *Belodon*, and the other bones are said to be somewhat like; but he exhibits caution in not speculating on the nature of the skull. In 1892 (Quart. Journ. Geol. Soc., vol. xlviii, p. 189) I published the view that *Belodon* is a primitive Cetiosaurian, to be classed under the Saurischia. Therefore it makes little difference in my estimate of the wider ordinal affinities of the Kraai River fossil whether it is referred to the typical Saurischian *Euskelesaurus* or transferred to the subdivision Phytosauria and named *Erythrosuchus*. It is stated (Phil. Trans. Roy. Soc., 1892, pt. B, p. 346) that "Saurischian Dinosaur reptiles alone among Reptilia approximate towards the Anomodont types in pelvic characters," and I am not aware that these views have been elaborated by any subsequent writer, though I have repeatedly referred to the affinities of the two groups (l.c., p. 366; 1895, pt. B, pp. 41, 112, etc.).

H. G. SEELEY.

CRETACEOUS AND EOCENE DEPOSITS OFF THE SOUTH-WEST OF THE BRITISH ISLES.

SIR,—The publication of the remarkable papers by Mr. L. R. Crawshay and Mr. R. Hansford Worth, on the rocks dredged from the English Channel since 1906 (Journ. Marine Biol. Assoc., vol. viii, No. 2, May, 1908), marks a very distinct step forward in our knowledge of submarine stratigraphy. It seems of interest to state that the Cretaceous specimens therein recorded and illustrated are paralleled by

a considerable series of flints and chalk fragments recently dredged from about 500 fathoms off the Kerry coast by the Fishery Branch of the Department of Agriculture for Ireland. At two points, moreover, *Miliolina*-limestone has been found. This is at once distinguished from the specimens of Cretaceous Chalk by the naked eye, and it affords an unexpected extension of the material described by Mr. R. H. Worth from a dredging off the south of Cornwall. The Irish specimens will be dealt with in a forthcoming memoir of the Geological Survey of Ireland, in which Mr. T. Crook and myself have brought together what we know of the rocks forming the sea-bottom off the coast from Donegal to Kerry. The small part played in this area by ice-borne material agrees with the discoveries of Herr Bøggild off the coast of Greenland. We are now fortunate in having Mr. Worth's work for consultation and guidance, since it not only includes his previously published observations of 1899, but affords a valuable review of all rocks that have been recorded from the English Channel area.

GREVILLE A. J. COLE.

GEOLOGICAL SURVEY OF IRELAND,
14, HUME STREET, DUBLIN.
June 13th, 1908.

OBITUARY.

ALBERT AUGUSTE DE LAPPARENT.

BORN DECEMBER 30, 1839.

DIED MAY 5, 1908.

It is with profound regret that we record the decease of M. de Lapparent, one of the most eminent geologists of France, who since 1875 has been Professor of Geology and Mining in the Catholic Institute at Paris. To geologists in this country he has been, perhaps, most widely known for his excellent "Traité de Géologie," of which the first edition was published in eight parts (1881-83), and the fifth edition in three volumes (1906). It is a work of great labour and research, and gives the best summary we have had of European geology, especially in the portions relating to stratigraphical palæontology.

Of other works, his "Cours de Minéralogie," published in 1884, reached its fourth edition during the present year; and mention should also be made of "Le Globe Terrestre," published in 1899. Interested largely in earth movements and earth sculpture, de Lapparent contributed original articles on these and other subjects to the Bulletin of the Geological Society of France, and he assisted in the preparation of the geological maps of La Manche and other areas.

A suave and fluent speaker, he was in much request at scientific gatherings, and his visits to this country at the time of the International Geological Congress in 1888 and during the recent centenary celebrations will be long remembered by those who had the privilege of listening to his eloquent speeches. He was elected a Foreign Member of the Geological Society of London in 1887.
