

on and around the coral or bryozoan masses was deposited a coccolith-ooze of the same constitution as that lying under them. The formation of corallian or bryozoan limestone was not connected with any particular period, so that these rocks may occur at any horizon in the coccolith-limestone, the corals in island-like reefs but the bryozoa in extended sheets.

The Uppermost Chalk of the Baltic contains neither *Belemnitella mucronata*, as stated by Prestwich (Geology, 1888, ii, pp. 7 and 302), nor any other belemnite. It was formed in the period between the Upper Maestrichtian and the Eocene, and has no marine equivalents in Western Europe.¹

ANDERS HENNIG.

LUND, May 8, 1902.

OBITUARY.

JOSEPH NOLAN.

BORN 1841.

DIED APRIL 20, 1902.

THE late Mr. Joseph Nolan, who died at Clontarf, Dublin, on the 20th April, was born in Queen's County, Ireland, in 1841. In early life he attained a sound knowledge of geology from attendance at Jukes's lectures in the Museum of Irish Industry (now Royal College of Science), Dublin.

In 1867 he was nominated by Professor Jukes (then Director of the Irish Geological Survey) for appointment as one of the Assistant Geologists, and in this capacity surveyed with great keenness many important districts in Ireland. Prominent amongst these were the complicated areas of South Mayo and the volcanic region of Carlingford and Slieve Gullion, of which latter the late Sir Andrew Ramsay wrote (in his preface to Mr. Nolan's memoir on Sheet 70 of the one-inch geological map of Ireland): "There is as much interesting matter for discovery and description crowded into a small area as there is to be found in any part of the British Isles." The geological features of the wild mountainous tract which extends through North Tyrone into the Dungiven region in Co. Derry, of the country surrounding Derry City, and portions of Donegal, were ably dealt with by Mr. Nolan; his work in the field being explained in numerous descriptive memoirs which he wrote to accompany the maps.

Mr. Nolan, who was for some thirty years a member of the Royal Irish Academy, took deep interest in the literature, lore, and antiquities of his native country, and his work on the "History and Antiquities of Glendalough" is well-known in antiquarian circles.

Upon the reorganization of the Irish Geological Survey in 1890, Mr. Nolan was appointed "Senior Geologist" to take charge of the office, a post from which he retired only within the past year. His kind and gentle presence will long be greatly missed by his colleagues on the Survey, and by all others who enjoyed the pleasure of his friendship.

R. C.

¹ See Hennig, "Studier öfver den Baltiska Yngre Kritans bildningshistoria": Geol. Fören. Stockholm Förhandl., 1899, xxi, pp. 19 and 133.