Moscow, which he left in 1888 in order to study Biology under Haeckel at Jena. In 1892 Mr. Bernard published an important monograph on "The Apodida", his study of these forms leading to papers in the GEOLOGICAL MAGAZINE in 1894 and 1895 on the systematic position of the Trilobites, and on 'the Sandblast' as a method of developing these organisms from the rocks in which they are embedded. In 1894 he began the study of the Recent and Fossil Corals at the British Museum (Natural History), continuing the quarto illustrated Catalogue of the Madreporaria (published by order of the Trustees) originally commenced by the late Mr. George Brook. In this work Mr. Bernard paid much attention to the fossil forms. He continued to work at the corals in the British Museum until 1907. During these thirteen years he prepared five volumes, namely:—

Vol. II of the Catalogue (begun by Mr. Brook) on the Turbinaria and Astraopora.

,, III, on the Montiporina. ", IV, V,

Goniopora. ,, Porites (Indo-Pacific). ,,

VI, Porites (West Indies) and Goniopora.

OTHER GEOLOGICAL PAPERS BY H. M. BERNARD.

1893. Trilobites with Antennæ at last. (Nature.)

Systematic Position of the Trilobites. (GEOL. MAG., 1894, p. 230; 1895, p. 280.)

Systematic Position of the Trilobites. (Quart. Journ. Geol. Soc., vol. 1, p. 411.)
Trilobites developed by the Sandblast. (Geol. Mag., 1894, p. 553.)

The Zoological Position of the Trilobites. (Science Progress.) 1895. 1897.

Fossil Apodidæ. (Natural Science.) On the Affinities of the Madreporarian genus Alveopora with the Palæozoic Favositidæ. (Journ. Linnean Soc., Zool.)

He died at 109, West End Lane, London, N.W., on January 4.

## PROFESSOR H. G. SEELEY, F.R.S., F.L.S., F.G.S., F.Z.S., F.R.G.S., Fellow of King's College, London.

BORN FEBRUARY 18, 1839.

DIED JANUARY 8, 1909.

WE regret to announce the death of Harry Govier Seeley, Professor of Geology, Geography, and Mineralogy in King's College, London, and member of the Athenæum Club, which occurred early on January 8 at his residence, 3, Holland Park Court, Holland Park Gardens, W. In June, 1907, we published a life of this able and distinguished worker in the Geological Magazine, in our series of "Eminent Living Geologists" (pp. 241-53), accompanied by a portrait and a list of his numerous publications.

In addition to his arduous labours as a professor in King's College, Queen's College, and the Royal Indian Engineering College at Cooper's Hill, he will be best remembered, perhaps, for the wonderful collections he made in the Karroo Beds of South Africa and the resulting exhibition in the Natural History branch of the British Museum of the remarkable skeleton of Pariasaurus and numerous other Anomodont reptiles, which occupied years of patient work in their development (under Professor Seeley's almost daily superintendence) by Mr. Richard Hall's and the Barlows' unwearied These are a monument alone to his memory which can never be forgotten.

## MISCELLANEOUS.

## THE MESSINA EARTHQUAKE.

The earthquake which at the close of last year devastated Messina in Sicily and Reggio in Calabria, on the opposite shores of the Straits in Southern Italy, is one of the most terrible and disastrous on record. We gather the following particulars from the Times (Weekly Edition. January 1, 1909):-

"The actual time of the earthquake seems to have been 5.20 on Monday morning, The first intimation, according to reports from Catanzaro and by fugitives from other places, was a prolonged, thunderous noise followed by a vivid flash of lightning and at the same time by a series of violent shocks which seemed interminable. Heavy torrential rain then fell.

"The second shock was at 9.30 in the evening of the same day, but it was less

"There was a violent shock at San Marco Argentino on Tuesday night, accompanied by prolonged subterranean thunder. Many houses were damaged. "A slight shock was felt at Palermo on Wednesday morning.

"Messina has been almost totally destroyed by the earthquake and the following upheaval of the sea. The worst damage was done by a vast wave, which has left the whole front of the town facing the sea in ruins. Fires broke out in many parts of the city and added to the difficulty of saving the innumerable persons who had been buried alive.

"Reggio, on the Italian side of the Strait, has also practically perished, and the whole shape of the coastline at that point has been altered. The sea front has been completely swept away, while the water in shore was blocked with sunken débris. foundered vessels, and every imaginable sort of obstruction. For a radius of 11 miles the country had a torn and twisted appearance, roads, bridges, footpaths, and railway lines being uprooted.

"The whole area of the ground below Reggio seemed to have turned over, and a great part of the city was in ruins, covered by the sea. In many places deep chasms appeared in the streets. Of all the villages looking towards Reggio on the

coast, not one has been left standing.

"Most of the coast towns on both sides of the Strait of Messina have been wholly or partially destroyed.

A rough estimate of the number of lives lost places it as more than 100,000 in Messina alone, while the destruction of property has been enormous."

Lyell, in his graphic account of the Calabrian Earthquake of 1783, stated that "The shocks began in February [of that year], and lasted for nearly four years, to the end of 1786". These remarks and the subsequent history of the affected area do not lend encouragement to future enterprise.

Suess has observed in reference to the area of disturbance that "the crust of the earth has sunk down in the form of a dish, and thus radial fractures have been produced, which converge to the Lipari Isles. These converging lines are beset with volcanos near their

<sup>1</sup> Principles of Geology, 11th ed., vol. ii, pp. 113-44.