

OBITUARY.

JAMES DWIGHT DANA.

BORN FEBRUARY 12TH, 1813.

DIED APRIL 14TH, 1895.

THE announcement of the death of this eminent geologist and zoologist will be received with deep regret by the readers of the *GEOLOGICAL MAGAZINE*. Dana was born at Utica, New York, and entered Yale College, graduating in 1833. On leaving Yale, he entered the service of the United States Navy as teacher of mathematics to midshipmen. In this capacity he visited on board the "Delaware" and the "United States" a number of the seaports of France, Italy, Greece, and Turkey, the cruise lasting fifteen months.

In 1836 he became assistant to Prof. Benjamin Silliman, the mineralogist. In 1837 he published his "System of Mineralogy," a work which obtained a worldwide reputation, and which ran through numerous editions, of which the last was issued in 1892. Dana was next appointed Geologist to the Wilkes Exploring Expedition, which sailed in 1838 and returned in 1842. "The expedition consisted of five ships, the route pursued being briefly as follows:—First to Madeira, then to Rio Janeiro, down the coast and through the Straits of Magellan, after passing which, while on board the 'Relief,' he nearly suffered shipwreck off Noir Island, the ship remaining for three days and nights in extreme peril: in the same storm one of the smaller accompanying vessels was lost. Then to Chili, Peru, and across to the Paumotus, to Tahiti, and the Navigator Islands; then to New South Wales, where the Naturalists remained while Commodore Wilkes went into the Antarctic; then to New Zealand, the Fiji Islands, where two of the officers were murdered by the natives; to the Sandwich Islands, the Kingsmill group, the Caroline Islands, and thence north to the coast of Oregon. Here, near the mouth of the Columbia river, the 'Peacock,' the ship to which Dana had been assigned, was wrecked, entailing the loss of all his personal effects, as well as many of his collections. He was, then, one of the party that crossed the mountains near Mount Shasta, and made their way down the Sacramento River to San Francisco. In his report of the expedition he states that the geological features indicated the probable presence of gold. This was six years before the discovery of gold in California, and rich mines have since been discovered in the region over which the party went. At San Francisco they were taken on board the 'Vincennes,' and the homeward voyage was made by way of the Sandwich Islands, Singapore, the Cape of Good Hope, and St. Helena, arriving in New York in June, 1842." As a result of his connection with the expedition he published the Reports on Geology, Crustacea, and Zoophyta, and spent in all thirteen years editing and superintending the printed reports resulting from these voyages. In 1855 he succeeded to the Chair of Mineralogy at Yale, a position he held till 1894, when he resigned. His "Manual of Geology" appeared in 1863, a fourth edition having been issued only this

year. He was part editor of the *American Journal of Science* from 1846, and continued his interest in it up to the last.

Dana received the Copley Medal from the Royal Society in 1877, and the Wollaston Medal from the Geological Society in 1872; he was a member of the Academy of Sciences, Paris, and of the Academies of Berlin and Munich, and was elected a Foreign Member of the Royal Society in 1884 and of the Geological Society in 1851.

His publications amount to nearly 400 in number, and when one considers that these include such colossal works as his "Mineralogy" and his "Manual" and "Text-Book of Geology," one is astonished at Prof. Dana's wonderful power of work, and are not surprised to learn that his health broke down upon several occasions owing to his excessive mental labours. It is wonderful and touching to read of Prof. Dana working on at the new edition of his "Manual of Geology" at the age of eighty-two, and being actively assisted in all his literary labours by his life-long companion with never-failing and watchful care to the end.

It is impossible to do justice to this distinguished man and personal friend in so short a notice, but we feel that, with our American brethren, we have also lost one of the greatest figures in geology of our time.

THE MARQUIS OF SAPORTA.

BORN 1823.

DIED JANUARY 26TH, 1895.

By the death of the Marquis of Saporta the sciences of Geology and Botany have suffered a severe loss. A wide botanical knowledge, combined with a vigorous enthusiasm and an untiring energy, enabled Saporta to add a rich store of facts to palæontological literature. Born at Saint-Zacharie (Var) in 1823, he spent some time in a Jesuit college at Fribourg, and in 1861, in conjunction with M. Matheron, published his first paper on a palæobotanical subject.¹ From that date up to the time of his death, Saporta devoted himself as a keen student to the problems of his chosen science.

His earlier works dealt especially with the Tertiary vegetation of the South-east of France; the floras of Aix, Manosque, Sézanne, and other localities have formed the subjects of elaborate monographs, in which he has not merely recorded lists of fossil species, but has dealt with the facts from a broad and philosophic standpoint. Between the years 1872-91 there appeared the splendid series of volumes on the Jurassic Flora of France; this comprehensive work, with its numerous illustrations and exhaustive text, forms an indispensable handbook to students of Mesozoic Botany. Saporta's most recent work, on Upper Jurassic and Lower Cretaceous Plants, appeared a few months before his death²; it contains a detailed geological and botanical analysis of an exceedingly interesting flora, and supplies fresh facts of considerable importance towards a more complete knowledge of the early history of dicotyledonous plants.

¹ Examen analytique des flores tertiaires de Provence.

² Flore fossile du Portugal (Direction des travaux géologiques du Portugal), Lisbon, 1894.