

A short treatise on the classification of the Echinidea, written by Albert Gras in 1848, was in so far important as it formed the basis of the *Synopsis* of fossil Echinids drawn up by Desor, which has been a standard authority for many decades. In 1848 also, the first researches of Cotteau and Forbes on fossil Echinids were published, and these were rapidly succeeded by D'Orbigny's account of the irregular Echinids of the French Cretaceous formation and Wright's beautifully illustrated monographs of the Jurassic and Cretaceous Echinidea in Britain. After the deaths of Forbes, D'Orbigny, and Wright, Cotteau¹ was for a whole decade almost the only contributor to this field of research. In his *Paléontologie Française*, and in numerous other works and special memoirs, Cotteau advanced the knowledge of the fossil Echinidea in a degree unrivalled by any other observer before or since. All his writings are distinguished by extreme accuracy and acuteness of observation. As regards the systematic questions, Cotteau adopts in great measure the classificatory groundwork supplied by Desor and Wright. A large number of palæontologists have taken up the study of Echinidea in recent years, and the majority follow the lines of Desor's *Synopsis* and Cotteau's results.

The observations on remains of fossil Holothuridea are comparatively few. They are confined to the description of isolated parts of the dermal skeleton, such as the wheel-like spiculæ of certain species of *Chirodota* described by Moore from the British Jurassic deposits, and several fragments of a similar character, which have been described by Von Siebold, Schwager, Etheridge, and others, occurring in strata of various geological ages.

Worms.—The soft perishable character of the bodies of worms renders them unsuitable for the slow processes of petrefaction, and we find in consequence that palæontological literature contains few references to these organisms, and can bring

¹ Gustave Cotteau, born 17th December 1818 in Auxerre, studied law at Auxerre and Paris, and began his career in 1846 as judge in his native town, in 1857 was transferred to Bar-sur-Aube, in 1858 to Coulommiers, and in 1862 returned to Auxerre as a Member of the Tribunal. Cotteau was regarded as the first authority in the domain of fossil Echinidea; the French Institute in 1887 elected him a Corresponding Member, the Geological Society of France twice elected him President. He died on the 10th August 1894, at Auxerre.