

Werner's "Transitional formations." But his subsequent visit to the Alps and Jura mountains caused him to modify these views.

He accomplished new and important work of investigation in the Carboniferous districts of Belgium and the Rhine Provinces. He showed the extensive development of the highly-tilted slate formation in the Ardennes, the Eifel and Hunsrück, and pointed out that in the Rhine Province and in the Palatinate (Pfalz) this formation had been penetrated by volcanic rocks. The productive horizons were chiefly developed in the northern French provinces, Artois and Boulonnais, while the fossiliferous strata beneath the coal-bearing series were best developed in the Hennegau. Thus Omalius d'Halloy laid the foundation of geological knowledge over wide areas. His more detailed works are those which deal with the Tertiary deposits of the Paris basin. He united horizons 5 and 7 in the classification system of Brongniart and Cuvier, and traced the topographical distribution of each horizon.

The hill of Petersberg, near Maestricht, was made the subject of a local monograph of high excellence by Faujas de Saint-Fond. The chalk series of this district has since been recognised as the uppermost horizon ("Danian Stage") of the Cretaceous formation, a stage absent in the British development, but of very great interest from the intermediate Cretaceous-Eocene character of the fauna.

The monograph of Faujas de Saint-Fond begins with a description of the hill and the deposits, more especially the system of caverns and tunnels that had been excavated in the rock. In the palæontological portion, the first specimen described is the huge reptilian skull, *Mosasaurus Camperi*, that had been found in these deposits in 1770. The specimen originally belonged to a physician of the name of Hoffmann, but, as the result of a lawsuit, it came into the custody of the Canon Godin, and finally, after the siege of Maestricht by the French in 1795, it was demanded as booty of war and transferred to the Paris Museum. The famous anatomist, Peter Camper, had examined the jaw of a similar fossil animal and identified it as the remains of a Cetacean, nearly allied to the genus *Physeter*, whereas Faujas tried to demonstrate that it represented a fossil crocodile. Both indications were proved erroneous by Cuvier, who identified the remains as those of a marine serpent-like reptile, and placed the genus *Mosasaurus* among the lizards, in near relationship to the genus *Varanus*.