112 HISTORY OF GEOLOGY AND PALÆONTOLOGY.

without the encouragement and sympathy of colleagues in the study which he loved, his own unflinching determination, noble enthusiasm, and remarkable insight enabled him to elucidate the structure of his native land with such clearness and accuracy that no important alteration has had to be made in his work. Smith confined himself to the empirical investigation of his country, and was never tempted into general speculations about the history of formation of the earth. His greatness is based upon this wise restraint and the steady adherence to his definite purpose; to these qualities, the modest, self-sacrificing, and open-hearted student of nature owes his well-deserved reputation as the "Father of English Geology."

Soon after their publication, Smith's researches were productive of results which he could never have anticipated. It was found that the strata described by him from the Lias to the Purbeck horizons filled the great gap between the Muschelkalk and the Cretaceous formations in Werner's system. European geology was thus enriched by the accurate knowledge of an important series of fossiliferous geological horizons, and the equivalents of the English Lias, Cornbrash, Portland and Purbeck series were sought for and discovered in various parts of Europe.

George Greenough,¹ the founder of the Geological Society of London, published a geological map of England and Wales in 1819, soon after the appearance of W. Smith's. The topographical groundwork and technical workmanship of

¹ George Bellas Greenough, born 1778, at first studied law at Cambridge and Göttingen, but under Blumenbach's guidance turned to natural science, and afterwards studied mineralogy and geognosy with Werner in Freiberg; travelled in Germany and Italy; became a Member of Parliament in 1807, and in the same year, on November 13th, founded the Geological Society of London; died 1855 in Naples. The Geological Society has exercised a strong and favourable influence upon the development of geology in England. The aim in founding the Society was to unite all the English geologists, and to keep alive and encourage the interest in geology by the regular publication of memoirs, Transactions, and shorter reports of the communications made at the meetings. The first of six volumes of Transactions appeared in 1811. Much later, in 1845, the Transactions, published in quarto form, were replaced by the Quarterly Journal, fifty-two volumes of which have now been published, and have upheld the high quality of the Society's publications. Mr. Greenough, the first President of the Society, helped very considerably to supply the means for endowment of the Geological Society.