

mineralogical professors, but, soon, specialisation was felt to be necessary, and professorships began to be founded for geology and palæontology as a distinct scientific study.

The encouragement given by the strict academical system of preparation and research, and the higher standard in the demand for accurate detail, had the effect of diminishing the influence of private individuals. Leopold von Buch, Charles Lyell, De la Beche, and Murchison are among the few leaders of modern geology who worked independently.

With specialisation in geology and palæontology, the spring-time of the science was over. The period was past when a man could mentally survey the whole field of petrographical knowledge, when great discoveries lay, so to speak, by the roadside, and only required to be observed. Instead of hasty, widely extended observations and broad generalisations, there began now the less brilliant, but more lasting, investigation of details. The telescope of a geological traveller surveying the rocks from afar was exchanged more and more for the microscope of a specially trained academician. The rapid advances made by modern geology are due to concentrated endeavour in the solution of problems of a definite and limited character, and the universities and academies have sedulously fostered the accomplishment of such work.

Among German universities, Berlin has always held a distinguished place. Gustav Rose, Ehrenberg, and Beyrich¹ were some of the famous teachers in Berlin University. For nearly sixty years Beyrich exerted a strong influence on the younger generations. Although without any great oratorical gifts, Beyrich fascinated his hearers by the carefully considered subject-matter of his lectures and the breadth of his knowledge, while in his practical teaching in the field he provided a model of accuracy and completeness. Not a few of the greatest

¹ Heinrich Ernst Beyrich, born 1815 in Berlin, entered the Berlin University at the age of sixteen, and presented his thesis in 1837. Soon afterwards he was appointed an assistant in the mineralogical museum, and in 1857 was made director of the palæontological collection. As a teacher he was first a *privat docent* (a university tutor), then an extra-Ordinary professor, and in 1865 became full Professor of Geology and Palæontology in the University and in the Mining Academy. In 1848 the German Geological Society was founded, and Beyrich was one of its promoters. In 1873, when the Prussian Geological Survey was instituted, Beyrich was appointed co-director with Hauchecorne. He died in Berlin on 9th July 1896.