

CHAPTER XV

THE Rise of Petrographical Geology—William Nicol, Henry Clifton Sorby. Conclusion.

I TURN now to the Petrographical department of geological inquiry, as exhibiting the last great forward stride which the science has taken. We have seen how greatly geology and mineralogy were indebted to Werner for his careful and precise definitions. The impulse which he gave to the study of Petrography continued to show its effects long after his time, more particularly in Germany. Methods of examination were improved, chemical analysis was more resorted to, and the rocks of the earth's crust, so far as related to their ultimate chemical constitution, were fairly well known and classified. Their internal structure, however, was very imperfectly understood. Where they were coarsely crystalline, their component minerals might be readily determined; but where they became fine-grained, little more could be said about the nature and association of their constituents than might be painfully deciphered with the help of a hand-lens, or could be inferred from the results of chemical analysis. Hence though not actually at a standstill, petrography continued to make but slow progress. In some countries indeed, notably