

early stage of our journey, through the London Clay, and then see rising from under it the Chalk, — the first representative of an entirely different state of things from that which obtained in the Tertiary, and the latest written record of that Secondary dynasty at whose terminal line, if we except one or two doubtful shells, on which it is scarce safe to decide, all that had previously existed ceased to exist forever. The lower members of the Cretaceous group are formed of materials of too yielding a nature to be indicated in the section; but the Oolite, on which they rest, is well marked; and we see its strata rising from beneath, as we pass on to lower and yet lower depths, till at length we reach the Lias, its base, and then enter on the Upper New Red Sandstone. Deeper and yet deeper strata emerge; and at the commencement of the Lower New Red we reach another great terminal line, where the Secondary dynasty ends, and the Palæozoic begins. We still pass downwards; encounter at Walsall a misplaced patch of Silurian, — a page transferred from the earlier leaves of the volume, and stuck into a middle chapter; and then enter on the Coal Measures, — the extremest depth to which we penetrate, in regular sequence, on this line. Our journey northwards from London to Wolverhampton has been also a journey downwards along the geologic scale; but while we have travelled *northwards* along the surface about a hundred and twenty miles, we have travelled *downwards* into the earth's crust not more than a mile and a quarter. Our descent has been exceedingly slow, for the strata have lain at very low angles. And hence the flat character of the country, so essentially different from that of Scotland. The few hills which we pass, — if hills they may be termed, — mere flat ridges, that stretch, rib-like, athwart the landscape, — are, in most cases, but harder beds of rock, intercalated with the softer ones, and that, relieved by the denuding