

the coal-field of Brora is, in at least one respect, one of the most remarkable of these with which geologists are yet acquainted. The seams of the well-known Bovey coal of South Devon,—a lignite of the Tertiary,—are described as of greater depth ; but it burns so imperfectly, and emits so offensive an odour, that, though used by some of the poorer cottagers in the neighbourhood, and some of the local potteries, it never became, nor can become, an article of commerce. It is curious merely as an immense accumulation of vegetable matter passing into the mineral state,—as, shall I venture to say, a sort of half-mineralized *peat* of the Tertiary,—a *peat moss* that, instead of overlying, underlies the diluvium. In the Brora coal, as might be inferred from its much greater age, the process of mineralization is more complete ; and it furnishes, if I mistake not, the only instance in which a coal newer than that of the carboniferous era has been wrought for centuries, and made an article of trade. There were pits opened at Brora as early as the year 1598 : they were re-opened at various intermediate periods in the seventeenth and eighteenth centuries ; on one occasion, in the middle part of the latter, by Williams, the author of a *Natural History of the Mineral Kingdom*, which has been characterized by Lyell as ‘a work of great merit for its day ;’ and during twelve years of the present century, from 1814 to 1826, there were extracted from but a single pit in this field no fewer than seventy thousand tons of coal. The Oolitic coal-field of Sutherland stands out in prominent relief amid the ligneous deposits that derive their origin from the later geological floras. And yet its commercial history does not serve to show that the speculations of the miner may be safely pursued in connexion with any other than that one wonderful flora which has done so much more for man, with its coal and its iron, than all the gold mines of the world. The Brora workings were at no time more than barely remunerative ; and the fact that they