

tinuation of the range of the Scotch highlands, over against which they lie, and with which they closely agree in character. And if this be allowed, the coal which occurs on the south of the primitive tract near Helsingborg at the entrance to the Baltic, will be found on the same geological line\* with that of the central Scotch district. There exists coal also, as it appears, on the prolongation of this line in the island of Bornholm; its farther extension might perhaps be found in Russia; but we know too little of that country to speak with precision concerning it, and it will be found more convenient to postpone

sequence. Bituminous coal has been found in the neighbourhood of Belurbet, in the county of Cavan, and at the collieries of Ballycastle, in the county of Antrim; but the Antrim coal district is not very extensive. These collieries have been wrought for a number of years. The coal is of a slaty nature, and greatly resembles both the coal, and the accompanying rocks, which occur in Ayrshire, and probably they belong to the same formation. A very extraordinary discovery was made at these collieries about the year 1770. It is thus described by the Rev. Dr. Hamilton, in his Letters on the north coast of the county of Antrim. "The miners in pushing forward an adit or level toward the bed of coal, at an unexplored part of the Ballycastle cliff, unexpectedly discovered a passage, cut through the rock. This passage was very narrow, owing to incrustations formed on its sides. On being sufficiently widened, some workmen went through it. In minutely examining this subterranean wonder, it was found to be a complete gallery, which had been driven forward, many hundred yards, into the bed of coal; it branched out into 36 chambers, where coal miners had carried forward their works; these chambers were dressed quite square, and in a workman-like manner; pillars were left at proper intervals to support the roof; and in short it was found to be an extensive mine, wrought by a set of people, at least as expert as those of the present generation. Some remains of the tools, and even of the baskets used in the works, were discovered, but in such a decayed state, that on being touched they fell into pieces. Some of the tools appear to have been wood thinly shod with iron.

The great antiquity of this work is evident, from the fact, that there does not exist the most remote tradition of it in the country; but it is more strongly demonstrable from the sides and pillars being found covered with sparry incrustations, which the present workmen do not observe to be deposited in any definite portion of time.

The whole of the coal districts, which, as far as I know, occur in Ireland, have now been mentioned. Trials have, however, been made at Slane on the river Boyne, and also in the neighbourhood of Balbriggan and Rush. These trials were however on the edge of the district, near the junction of the limestone. If the country contain coal, it will more probably be found in the interior than on the edge of the district. From this brief account of the coal districts it appears, that very extensive tracts of coal country exist in Ireland; but none, if we except the Leinster district, have been examined; yet the Munster coal district is in extent greater than any in England, and may probably contain inexhaustible beds of coal.

\* We must not be understood to convey the idea that the coal forms continuous strata having a regular basset along these extensive lines; but rather that it constitutes a series of insulated deposits, still preserving a general direction regulated by the great primitive chains.