

pletest sets of Liassic belemnites yet collected. What have been deemed corresponding deposits, which, however, I am disposed to refer to a higher horizon, occur in the neighborhood of the northern Sutor; and near the base of one of these, at Caanrie, there is a seam of coal or lignite very much resembling that of Brora, and flanked by a bed of fresh water shells and *Perna*, the last identical in species, so far as I have been able to determine the point, with that of the *Perna* bed described by the late Mr. Robertson of Woodside as flanking the Brora seam. Above the coal there occurs a rubbly stratum, also like one at Brora, charged with vast numbers of the *Belemnite sulcatus*; and in an upper stratum I found a well-marked specimen of *Ammonites perarmatus*; likewise a species of the Brora coal-field. In short, I am disposed to hold, — both from the identity of many of its fossils, and its general appearance, — that this supposed Liassic deposit is in reality an Oolitic one, and that its coal occupies a horizon not much removed from that of the coal at Brora. I may here mention, that the Lias of Eathie was the scene, only two years ago, of a disastrous coal-boring speculation, on which much good money was expended. The unlucky speculator, — an industrious and respectable man, whom I would fain have dissuaded from an undertaking so hopeless, but who, as he had no faith in geology, simply thanked me for my advice, and wrought on, — dug a wide pit in the Liassic shales, to the depth of more than a hundred feet, and found in abundance ammonites and belemnites, with a few well-preserved vertebral joints of *Ichthyosaurus*, and unfortunately here and there fragments of cone-bearing trees, with their trunks converted into jet, but, of course, no coal. The hole was made large and deep enough to prove the sepulchre of several hundred pounds; but I console myself by reflecting that the inevitable expense of the excavating operations was incurred in defiance of all that I could say; and I would now urge on my