

legends of the district attributed its formation to the "ancient Pechts," I was able to devote, not without profit, the evenings of several Saturdays. I formed, at this time, my first acquaintance with the Palæozoic shells, as they occur in the rock,—an acquaintance which has since been extended in some measure through the Silurian deposits, Upper and Lower ; and these shells, though marked, in the immensely extended ages of the division to which they belong, by specific, and even generic variety, I have found exhibiting throughout a unique family type or pattern, as entirely different from the family type of the Secondary shells as both are different from the family types of the Tertiary and the existing ones. Each of the three great periods of creation had its own peculiar fashion ; and after having acquainted myself with the fashions of the second and third periods, I was now peculiarly interested in the acquaintance which I was enabled to commence with that of the first and earliest also. I found, too, in a bed of trap beside the Edinburgh road, scarce half a mile to the east of the town, numerous pieces of carbonized lignite, which still retained the woody structure,—probably the broken remains of some forest of the Carboniferous period, enveloped in some ancient lava bed, that had rolled over its shrubs and trees, annihilating all save the fragments of charcoal, which, locked up in its viscid recesses, had resisted the agency that dissipated the more exposed embers into gas. I had found, in like manner, when residing at Conon-side and Inverness, fragments of charcoal locked up in the glassy vesicular stone of the old vitrified forts of Craig Phadrig and Knock Farril, and existing as the sole representatives of the vast masses of fuel which must have been employed in fusing the ponderous walls of these unique fortalices. And I was now interested to find exactly the same phenomena among the *vitrified* rocks of the Coal Measures. Brief as the days were, I had always a twilight hour to myself in Linlithgow ; and as the evenings were fine for the season, the old Royal Park of the place, with its noble church, its massive palace, and its sweet lake, still mottled by the hereditary swans whose progenitors had sailed over its