

once more by examining the junction of the two groups of rock along the coast where the range of the Lammermuir Hills plunges into the sea. Accompanied by his friend Sir James Hall, whose property of Dunglass lay in the immediate neighbourhood, and by his colleague and future biographer, Playfair, and favoured with calm weather, he boated along these picturesque shores until the unconformable junction was reached. The vertical Silurian shales and grits were found to protrude through, and to be wrapped round by, the red sandstone and breccia. "Dr. Hutton," Playfair writes, "was highly pleased with appearances that set in so clear a light the different formations of the parts which compose the exterior crust of the earth, and where all the circumstances were combined that could render the observation satisfactory and precise. On us who saw these phenomena for the first time, the impression made will not easily be forgotten. The palpable evidence presented to us of one of the most extraordinary and important facts in the natural history of the earth, gave a reality and substance to those theoretical speculations which, however probable, had never till now been directly authenticated by the testimony of the senses. We often said to ourselves, what clearer evidence could we have had of the different formation of these rocks, and of the long interval which separated their formation, had we actually seen them emerging from the bosom of the deep? . . . The mind seemed to grow giddy by looking so far into the abyss of time; and while we listened with earnestness and admiration to the philosopher who was now unfolding to us the