for when the Dee began to run, that escarpment had no existence, and the strata of these formations stretched further to the west, ending along some line now unknown in a sort of feather edge, and forming part of the great inclined plane over which the Dee ran at a level hundreds of feet above the bottom of its present valley. By-and-by, as the river channel deepened, the escarpment began to be formed, its face sloping in a direction at right angles to the general dip of the strata, after the habit of all such escarpments. The whole was strictly analogous to the manner in which the rivers of the Weald acted at a later date, and also for the same reason that the Thames now cuts across the escarpment of the Chalk. Escaped into the low country of the New Red series, the history of the Dee becomes simple, and requires no special illustration.

But this process of ordinary fluviatile erosion is not the only agent that has been at work in Wales, for in later geological times the Glacial epoch supervened, and the moving ice of thick glaciers exercised a strong abrading power. Then it was that in the mountain-region of the west, ice-smoothing, mammillations, and striations were so strongly impressed on the sides of so many valleys, and so many lake-basins were scooped out, and among others the rock-bound basin of Bala Lake; and though the face of the country is always being slowly changed, the time that has elapsed since the close of the Glacial epoch is comparatively so short, that the large essential rocky features of the regions traversed by the rivers have since that time undergone no important alteration.

In the 'Journal of the Geological Society' for 1876, I published the Physical History of the Dee. It is too long, and the necessary diagrams are too large