

expedition into Devonshire. The two associates, in the course of the year 1836, completely succeeded in proving that the Culm-measures, or Carboniferous series, lay not below but above the rest of the Greywacke of the south-west of England. But what was that Greywacke, and what relation did it bear to the rocks which had been reduced to system in Wales?

The structure of the ground in the south-west of England is by no means simple, and, indeed, is not completely understood even now. The rocks have been much folded, cleaved, crushed, and thrust over each other. But besides these subsequent changes, they present a great contrast in their lithological characters to the Old Red Sandstone on the opposite side of the Bristol Channel. Neither Sedgwick nor Murchison could find any analogy between the Devonshire Greywacke and the red sandstones, conglomerates and marls which expand into the Old Red Sandstone of South Wales, and lie so clearly between the Carboniferous Limestone above and the Upper Silurian formations below. Nor could Murchison see a resemblance between that Greywacke, or its fossils, and any of his Silurian rocks. With their twisted and indurated aspect, the Devonshire rocks looked so much older than the gently inclined Silurian groups by the banks of the Wye, that both he and Sedgwick thought they more resembled the crumpled and broken rocks of North Wales, and they accordingly first placed them in the upper and middle parts of the Cambrian system.<sup>1</sup>

This correlation, however, was made mainly on

<sup>1</sup> *Proc. Geol. Soc.* ii. (1837), p. 560.