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FRONT COVER ILLUSTRATION

The engraving on the front cover is reproduced to mark the Bicentenary of the death of James Hutton (1726-1797), Founder of Modern Geology, and the birth of Charles Lyell (1797-1875), author of the seminal work ‘Principles of Geology’, a significant influence on Charles Darwin. It also marks the contribution made by Michael C. Smith (1937-1997), Secretary of the Lothian and Borders RIGS (Regionally Important Geological Sites) Group since its inception in 1992, who worked hard to secure the conservation of this famous locality and its designation as the first RIGS in the Scottish Borders. The engraving, by D. B. Pyet Set. from a drawing by John Clerk of Eldin, is of an unconformity at Jedburgh in the Scottish Borders, and is the only one of many drawings by this artist to have been published during Hutton’s lifetime. It is published by the kind permission of Sir John Clerk of Penicuik. This famous locality occurs half a mile south of the town, at [NT 652198], in the eastern bank of the River Jed and below the surface of the A68 road. Horizontal Upper Old Red Sandstone with a basal conglomerate rest directly on eroded, vertical and folded Silurian greywackes and shales. It is the second of the three localities showing unconformity discovered by James Hutton in the south of Scotland 1787-1788, the first being at the northern end of the Isle of Arran and the third at Siccar Point on the Berwickshire coast. The engraving is from an original drawing in 1787 by the artist John Clerk of Eldin (1728-1812) who accompanied Hutton on several of his field excursions. It forms Plate III in volume I of James Hutton’s Theory of the Earth, with Proofs and Illustrations 1795. In this epoch-making publication, Hutton discusses the Jedburgh locality in Chapter VI, ‘the Theory of interchanging Sea and Land, illustrated by an Investigation of the Primary and Secondary Strata’. This chapter is itself divided into Section I A distinct view of the Primary and Secondary Strata, and Section II The Theory confirmed from Observations made on purpose to elucidate the Subject. Hutton writes ‘... When one day, walking in the beautiful valley above the town of Jedburgh, I was surprised with the appearance of vertical strata in the bed of the river, where I was certain that the banks were composed of horizontal strata. I was soon satisfied with regard to this phenomenon, and rejoiced at my good fortune in stumbling upon an object so interesting to the natural history of the earth, and which I had been long looking for in vain.’

Norman E. Butcher

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