

and rewrite a portion of these chapters. New proofs are cited in favor of attributing cleavage to mechanical force, p. 603, and for inferring in many cases a connection between foliation and cleavage, p. 608. At the same time, the question—how far the planes of foliation usually agree with those of sedimentary deposition, is entered into, p. 607.

CHAP. XXXVIII.—To the account formerly published of mineral veins, some facts and opinions are added respecting the age of the rocks and alluvial deposits containing gold in South America, the United States, California, and Australia.

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I have already alluded to the assistance afforded me by the late Professor Edward Forbes towards the improvement of some parts of this work. His letters suggesting corrections and additions were continued to within a few weeks of his sudden and unexpected death, and I felt most grateful to him for the warm interest, which, in the midst of so many and pressing avocations, he took in the success of my labors. His friendship, and the power of referring to his sound judgment in cases of difficulty on paleontological and other questions, were among the highest privileges I have ever enjoyed in the course of my scientific pursuits. Never perhaps has it been the lot of any Englishman, who had not attained to political or literary eminence, more especially one who had not reached his fortieth year, to engage the sympathies of so wide a circle of admirers, and to be so generally mourned. The untimely death of such a teacher was justly felt to be a national loss; for there was a deep conviction in the minds of all who knew him, that genius of so high an order, combined with vast acquirements, true independence of character, and so many social and moral excellences, would have inspired a large portion of the rising generation with kindred enthusiasm for branches of knowledge hitherto neglected in the education of British youth.

As on former occasions, I shall take this opportunity of stating that the "Manual" is not an epitome of the "Principles of Geology," nor intended as introductory to that work. So much confusion has arisen on this subject, that it is desirable to explain fully the different ground occupied by the two publications. The first five editions of the "Principles" comprised a 4th book, in which some account was given of systematic