

formed by earth-movements, and had produced a great effect upon the river-system. In the discussion which followed this view was severely criticized by Mr. Strahan, and was characterized by him as highly speculative.

A few months ago Mr. Strahan read at the Geological Society a paper on the rivers of South Wales; and in this he makes the suggestion, quite as if it were new, that the north-east to south-west valleys are due to earth-movements, and that the complications of the drainage system have been produced by these movements.

My paper was rejected by the Council¹ as too speculative: Mr. Strahan's has just been published in the Quarterly Journal.

To those Fellows who are not familiar with Burlington House, I commend a comparison of these two papers.

PHILIP LAKE.

MR. STRAHAN AND SOME ENGLISH RIVERS.

SIR,—In his suggestive paper "On the Origin of the River System of South Wales, etc.," in the recently published May number of the Quart. Journ. Geol. Soc., Mr. Strahan states (pp. 219–220) that "The [Chalk-] escarpment, in that part of it which extends from Dorset to the borders of Hertfordshire, diverges from the water-parting three times, namely, in the Vales of Wardour and Pewsey and in the valley of the Upper Thames. In *all* these cases, rivers rising in the low-lying Oolitic region flow eastward against the general run of the country, and make their way through the Chalk-escarpment to the Thames or Frome. The explanation did not escape Ramsay. *Their courses were initiated upon an eastward slope of Chalk, and the distance from their sources to the existing escarpment is a measure of the recession of the escarpment since the initiation.*"

With respect to this passage (in which the italics are mine) I should like to point out (1) that the river running eastward through the Vale of Pewsey does not rise "in the low-lying Oolitic region," but in a tract of Chalk and Upper Greensand to the east of and some 200 feet above it. (2) That inasmuch as the rivers traversing the Vales of Wardour and Pewsey follow the axes of minor east-west anticlinal folds, they are to be regarded rather as longitudinal, autogenetic branches of the north-south Salisbury Avon, than as primary, or consequent, eastward streams of the Upper Thames class. Unlike the Upper Thames, the Kennet-Thames, or the Frome, which follow the slopes of constructional troughs, these streams (i.e. the Nadder and Upper Avon) can only have come into existence after prolonged denudation of the folds on which they are situated. It is, therefore, scarcely probable that their present sources were determined by, or, indeed, are in any

¹ I owe it to the GEOLOGICAL MAGAZINE that the article subsequently saw the light (May and June, 1900).

way connected with, the former position of the main, north-east to south-west escarpment of the Chalk.

It must be admitted that in dealing with the origin of the Southern English rivers Mr. Straban shows generally a fine disregard for the principles of drainage development. H. C. OSBORNE WHITE.

WARGRAVE, BERKS.

May 21, 1902.

OBITUARY.

WILLIAM HENRY PENNING, F.G.S.

BORN MARCH 9, 1838.

DIED APRIL 20, 1902.

MR. PENNING, who joined the Geological Survey in 1867, had in previous years qualified as an engineer under the late C. H. Gregory. During his official service he was engaged in the survey of portions of Essex, Hertfordshire, Suffolk, Cambridgeshire, and Lincolnshire, and he was joint author with Mr. Whitaker and others of "The Geology of the North-Western Part of Essex, etc." (1878), and with Mr. Jukes-Browne of "The Geology of the Neighbourhood of Cambridge" (1881). He also contributed to "The Geology of the Country around Lincoln" (1888), by Mr. Ussher and others, the memoir being published after he had retired from the Geological Survey in 1882 through ill-health. On this account he spent some time in South Africa, and, regaining health, he was enabled to communicate to the Geological Society of London papers on the high-level coalfields of South Africa, on the goldfields of Lydenburg and De Kaap, and on the geology of the Southern Transvaal. A previous communication by him dealt with the physical geology of East Anglia during the Glacial Period. Mr. Penning was author of a "Text-Book of Field Geology" (1876, second edition 1879) and of "Engineering Geology" (1880).

JOHN CLAVELL MANSEL-PLYDELL, F.L.S., F.G.S.

BORN 1817.

DIED MAY 3, 1902.

IN the death of Mr. Mansel-Pleydell, of Whatcombe, Dorset, geological science has lost an energetic and enthusiastic worker, one who in the widest sense was a naturalist, for he was intimately acquainted with the plants, the mollusca, and the birds of his native county, and had published separate volumes on these subjects. The antiquities of Dorset had likewise engaged his attention, while as a Magistrate, as a member of the County Council, and as High Sheriff (in 1875) he had rendered distinguished local services. He was educated at St. John's College, Cambridge, and on the death of his father in 1863 he succeeded to the family estates, which included land in the Isle of Purbeck. Here he had fine opportunities for geological research, and the Kimeridge Clay in particular yielded to him many saurian remains, some of which were described by Owen and J. W. Hulke. In 1873 he contributed to the GEOLOGICAL