

III.—BRIEF NOTICES.

CHANGES OF LEVEL IN THE NILE VALLEY.—In an article on "Elevation and Depression in the Nile Valley" (*Cairo Scientific Journal*, April, 1909), Dr. W. F. Hume summarizes the conclusions at which he has arrived as follows:—

1. Elevation due to folding that resulted in fracture (not necessarily accompanied by faulting), and gave rise to the Nile Valley cleft.
2. Depression to at least 250 feet in late Pliocene times, admitting the sea up the Nile Valley at least as far as Sidmant, determining a chain of lakes in the valley, and the accumulation in them of thick deposits of rain-eroded materials.
3. Elevation to at least 600 feet, involving the drainage of the lakes, the cutting back of the cataracts, and the deepening of the river valley.

COTTESWOLD NATURALISTS' FIELD CLUB.—The Proceedings, vol. xvi, pt. iii, June, 1909, contains a short article "On the occurrence of *Chara-nucules* in the Forest Marble of Tarlton, near Kemble, Gloucestershire", by Mr. Charles Upton, who names the new species *Chara laevigata*. Mr. T. S. Ellis deals with the origin of "The Lower Severn Valley, River, and Estuary from the Warwickshire Avon to the Bristol Avon", and combats the notion that the Lower Severn was cut backwards so as to behead a stream which was formerly connected with the river-system of the Thames. Mr. L. Richardson contributes a "Note on *Pollicipes aalensis*, Richardson" (described in the *GEOLOGICAL MAGAZINE* for August, 1908), and also a short article on "The Dorset and Hampshire Coasts, with particular reference to the Forest Marble Beds near Langton Herring".

CORRESPONDENCE.

THE OLD AND NEW THEORIES OF IGNEOUS ROCKS.

SIR,—Your review of Mr. Harker's *Natural History of Igneous Rocks* inferentially gives judgment against my two 1903 papers in the *GEOLOGICAL MAGAZINE* on all points. So I crave a word of explanation.

After General McMahon's reply, in November, 1903, to my "Crystallization of Granite" appeared, I learned to my regret how ill he was, and that the controversy had troubled him. I at once wrote to express my regret, and received a most friendly answer. There, so far as the *Magazine* is concerned, the matter dropped, leaving me apparently crushed.

I subsequently submitted my paper to two physicists and to Dr. Sorby, with a view to clearing up outstanding doubts, if possible. Dr. Sorby gave me a general permission to use his letters, and I got all the leave I asked for from the physicists. I subsequently reviewed the whole controversy in the *Transactions of the Devonshire Association*. The dispute thus remains at a loose end, with no attempt by the petrologists to settle it.

To give you an idea how loose the ends are, I may say that in October, 1903, a physicist wrote as follows:—"My best thanks for the copy of your paper and letter accompanying it. I should not wonder if the petrologists are all adrift."

I see that your reviewer considers that the old doctrine of the permeability of rocks by overhead waters has been finally disposed of. Now geologists always rely on the explosive or expansive action

of steam to repel any invasion of water; but they seem to overlook the fact that when once the critical *pressure* of water is attained, there will either be no steam, or the steam will be compressed to the same volume as the liquid water at the critical temperature. If the critical pressure be exceeded, the steam will be still more compressed.

As the critical pressure of water is only 200 atmospheres, the moderate ocean depth of 1100 fathoms will suffice to overcome the free penetration of water or steam may exert; and at the greater oceanic depths, fire and water would be impotent to resist the pressure-control.

One thing I notice is that though petrologists reject the penetration of rocks by water under tremendous pressure, they gaily assume the free penetration of 'country rocks' by gases and liquids! They obviously will not allow the sauce for the goose being used for the more powerful gander.

A. R. HUNT.

SOUTHWOOD, TORQUAY.

September 9, 1909.

OBITUARY.

WILLIAM FORD STANLEY, F.G.S.

BORN 1828.

DIED AUGUST 14, 1909.

MR. STANLEY, who died at his residence, South Norwood, at the age of 81 years, was the head of the firm of W. S. Stanley, manufacturers of surveying and drawing instruments. Well versed in all branches of physical science, he also took considerable interest in geology, and became a Fellow of the Geological Society in 1884. In that year he communicated a note—"A Correction in the assumed Amount of Energy developed by the Secular Cooling of the Earth as stated in two Papers by the late Robert Mallet." In 1887 he brought before the same Society some observations on the "Probable Amount of former Glaciation of Norway". Before the British Association at the Montreal Meeting in 1884, he criticized Dr. Croll's views in a paper "Upon the Improbability of the Theory that Former Glacial Periods in the Northern Hemisphere were due to Eccentricity of the Earth's Orbit, and to its Winter Perihelion in the North" (see *GEOL. MAG.*, 1884, p. 518). He was also author of a work on *The Nebular Theory in relation to Stellar, Solar, Planetary, Cometary, and Geological Phenomena* (1895).

MISCELLANEOUS.

VICTORIA UNIVERSITY, MANCHESTER.

Professor W. Boyd Dawkins, F.R.S., has resigned the Chair of Geology and Palæontology in the Victoria University of Manchester, and he is succeeded by Sir Thomas H. Holland, K.C.I.E., F.R.S., who has for some years been Director of the Geological Survey of India. Professor Dawkins, after serving from 1861 to 1869 on the Geological Survey in England, was in 1870 appointed Curator of the Manchester Museum and lecturer in geology at Owens College; and since the foundation of the University he has been Professor of Geology and Palæontology.