

first to have a large and accurate conception of the causes underlying the physical configuration of the earth. His studies of aqueous erosion, the formation of alluvial plains, the process of fossilisation, and the nature of stratification, led him to a logical conviction of the immensity of geological time, far in advance of the dogmatic thought of his age, and exposed himself to the charge of atheism. Caution compelled him to work in isolation, and to keep his results concealed. He had no scientific instruments, no correspondents to furnish him with observations on geological conditions elsewhere; yet his grasp of the physical history of the portions of Italy which he had visited was sound, and entirely in accord with modern knowledge. Leonardo left a record of his discoveries in his paintings, generally in the backgrounds. There are found pictures of the primeval world as he imagined it, when seas and lakes ran up to the foot of the mountains, to be slowly displaced and silted up by the detritus which the rain carried down from the summits.

BRUSSELS.

Royal Academy of Belgium, March 4.—M. A. Lamere in the chair.—C. Servais: The geometry of the tetrahedron, Pt. 4. The cubic surface of Cayley.—P. Martens: The cycle of the somatic chromosome in *Paris quadrifolia*.

Diary of Societies.

FRIDAY, APRIL 14.

MALACOLOGICAL SOCIETY (at Linnean Society).

WEDNESDAY, APRIL 19.

ROYAL METEOROLOGICAL SOCIETY, at 5.—W. T. Russell: The Relationship between Rainfall and Temperature as shown by the Correlation Coefficient.—R. A. Fisher: The Correlation of Weekly Rainfall.—Prof. S. Chapman and Miss E. Falshaw: The Lunar Atmospheric Tide at Aberdeen, 1869-1919.

ROYAL MICROSCOPICAL SOCIETY, at 8.—C. Beek: The Photometry of a Bull's-Eye Lens for Illuminating Microscopic Objects.—Dr. S. C. Harland and J. H. Denham: The Use of the Microscope in Cotton Research.—Dr. R. S. Ludford: The Morphology and Physiology of the Nucleolus.—H. Sutcliffe: The Use of the Microscope in the Rubber Industry.

THURSDAY, APRIL 20.

LONDON MATHEMATICAL SOCIETY (at Royal Astronomical Society), at 5.

INSTITUTE OF MINING AND METALLURGY (at Geological Society), at 5.30.

CHILD-STUDY SOCIETY (at Royal Sanitary Institute), at 6.

INSTITUTE OF METALS (London Section) (Annual General Meeting at Shaftesbury Hotel, Great St. Andrew Street, W.C.1), at 8.—H. Moore: The Ball Hardness Test.

FRIDAY, APRIL 21.

INSTITUTE OF TRANSPORT (at Royal Society of Arts), at 5.—J. K. Bruce: The Operation of a Large Tramway Undertaking, with reference to Capacity and Cost under given Conditions.

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