

the east end of the Tygerberg, in order to study the evidence for Dr. Sandberg's views. It seemed to him that the anticlinal structure of the range was clear, for at many places in it the Witteberg beds were seen to dip under the Dwyka on either side. The masses of quartzite in the Dwyka described by Dr. Sandberg appeared to be parts of that formation, *i.e.* originally sandy sediments with few or no pebbles, formed at the same time as part of the tillite. Similar quartzites in the Dwyka had been described from several localities in the south of the colony. An examination of Sand River valley showed not only that it was extremely unlikely that a mass of Witteberg beds underlay the surface, for those beds were not known to form valleys like that of Sand River, but that where outcrops of rock *in situ* occurred they belonged to the Ecce series. He had come to the conclusion that it was unnecessary to assume the presence of a great overturned fold to account for the appearances at Tygerberg, and that the earlier observers were quite justified in ascribing an anticlinal structure to the range.

DIARY OF SOCIETIES.

THURSDAY, DECEMBER 3.

LINNEAN SOCIETY, at 8.—Biscayan Plankton, the Ostracoda: Dr. G. Herbert Fowler.—Note on *Juwiperus taxifolia*, Hook. and Arn.: Bunzō Hayata.—Mimicry in Spiders: R. I. Pocock.

RÖNTGEN SOCIETY, at 8.15.—Phenomena observed in Electrical Currents of Continuous Oscillation: Dr. H. Manders.

CIVIL AND MECHANICAL ENGINEERS' SOCIETY, at 8.—The Influence of Track upon Railway and Tramway Carriages: J. S. Warner.

FRIDAY, DECEMBER 4.

GEOLOGISTS' ASSOCIATION, at 8.—Personal Experiences of the Jamaica Earthquake of 1907: Dr. Vaughan Cornish.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Design and Erection of a Plate-girder Bridge over the River Lee, at Broxbourne: L. W. Atcherley.

MONDAY, DECEMBER 7.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—Cellulose and Chemical Industry: C. F. Cross and E. J. Bevan.

ROYAL SOCIETY OF ARTS, at 8.—Twenty Years' Progress in Explosives: Oscar Guttmann.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—The Danish North-east Greenland Expedition: Lieut. A. Trollé.

VICTORIA INSTITUTE, at 4.30.—Geneva and Chamounix of To-day as compared with half-a-century ago: Prof. Edward Hull, F.R.S.

TUESDAY, DECEMBER 8.

ROYAL ANTHROPOLOGICAL INSTITUTE, at 8.15.—Notes on Early Ornament: Dr. C. H. Read.—The Lushai-Kuki Clans: Lt.-Col. J. Shakespear.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Rotherhithe Tunnel: E. H. Tabor.

WEDNESDAY, DECEMBER 9.

ROYAL SOCIETY OF ARTS, at 8.—Kinematography in Natural Colours: G. Albert Smith and Charles Urban.

THURSDAY, DECEMBER 10.

ROYAL SOCIETY, at 4.30.—*Probable Papers*: On Reciprocal Innervation of Antagonistic Muscles. XIIth Note: Proprioceptive Reflexes. XIIIth Note: On the Antagonism between Reflex Inhibition and Reflex Excitation: Prof. C. S. Sherrington, F.R.S.—Electrolytes and Colloids. The Physical State of Gluten: Prof. T. B. Wood and W. B. Hardy, F.R.S.—On the Specific Heats of Air and CO₂ at Atmospheric Pressure by the Continuous Electric Method at 20° and 100° C.: W. F. G. Swann.—Potential Gradient in Glow Discharges from a Point to a Plane: J. W. Bispham.—The Extension of Cracks in an Isotropic Material: A. Mallock, F.R.S.—Results of Magnetic Observations at Stations on the Coasts of the British Isles, 1907: Commander L. Chetwynd, R.N.—The Rotation of the Electric Arc in a Radial Magnetic Field: J. Nicol.—On Anomalies in the Intensity in Diffracted Spectra: H. C. Pocklington, F.R.S.—The Isothermal Layer of the Atmosphere and Atmospheric Radiation: E. Gold.—Contribution to the Osmotic Theory of Solution: The Earl of Berkeley, F.R.S., and C. V. Burton.—A Comparison of the Radium Emanation Spectra obtained by Different Observers: T. Royds.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8 (*Ordinary General Meeting*).—Output and Economy Limits of Dynamo Electric Machinery: J. C. Macfarlane and H. Burge.—*Probable Paper*: Commercial Electric Heating: J. Roberts.

ROYAL SOCIETY OF ARTS, at 4.30.—The Birds of India: Douglas Dewar.

MATHEMATICAL SOCIETY, at 5.30.—On the Propagation of Sound Waves Vertically in the Atmosphere: Prof. H. Lamb.—(1) On Sir William Rowan Hamilton's Fluctuating Functions; (2) On the Representation of

a Function by Series of Bessel's Functions: Dr. E. W. Hobson.—Theory of Cauchy's Principal Values (Fourth Paper): G. H. Hardy.—Solution of a Problem of Mersenne's: Dr. T. Stuart.—Note on a Continued Fraction Equivalent to the Remainder after n Terms of Taylor's Series: Prof. L. J. Rogers.—Solid Angles and Potentials of Plane Discs: Balak Ram.

FRIDAY, DECEMBER 11.

PHYSICAL SOCIETY, at 8.

MALACOLOGICAL SOCIETY, at 8.—On *Carelia pilsbryi*, n.sp.: E. R. Sykes.—The Radulae of British Helicids, Pt. II.: Rev. E. W. Bowell.—New Species of Plectopylis: G. K. Gude.—A Preliminary List of Recent Middlesex Mollusca: J. E. Cowper and A. Loydell.—The Application of the Names Gomphina, Marcia, Hemitapes and Katelaysia: A. J. Jukes-Browne.

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