

Atmospheric situation at the time of ascent of experimental balloons, by M. H. Tarry.—The registration of atmospheric electric discharges, by M. Ducretet. The registration was effected by the Hertzian waves set up; and the recording instrument was a Branly radio-conductor.—International balloon ascent of June 8, by M. W. de Fonvielle. The ascents were made on the same day at Paris, Brussels, Strassburg, Vienna, Berlin, St. Petersburg, and Munich.—Short account of the results of the ascents of three captive balloons at Trappes, by M. L. Teisserenc de Bort.

NEW SOUTH WALES.

Linnean Society, April 27.—Mr. P. N. Trebeck in the chair.—Some new genera and species of fishes, by J. Douglas Ogilby.—On the affinities and habits of *Thylacoleo*, by Dr. R. Broom. The author reopens a much-debated question in the light afforded by the interesting little fossil marsupial recently described by him under the name *Burrmys parvus* [P.L.S.N.S.W., 1895, p. 563]. This little form, which is evidently the representative of a sub-family of the *Phalangeridae*, in most of its characters agrees with the phalangers, but it possesses the greatly enlarged and grooved premolars of the rat-kangaroos; and not only does it show evidence of a group which fills the only remaining gap between the kangaroos and the phalangers, but as a phalanger with the posterior premolars enormously enlarged, it comes nearer to *Thylacoleo* than does any extinct or living form hitherto discovered. The conclusions arrived at are—That *Thylacoleo* is descended from a phalangeroid form not very dissimilar from *Burrmys*, and that it was almost certainly a purely carnivorous animal.—Descriptions of new Australian lepidoptera: with a note on the occurrence of *Deilephila livornica*, Esp., at Broken Hill, N.S.W., by Oswald Lower. The beautiful sphingid, *Deilephila livornica*, Esp., was noticed by the author to be common during the early part of March last, at the electric lights at Broken Hill. On one occasion individuals were literally swarming. The species occurs in Europe, Africa, and S. Asia. It was first recorded from Australia by Mr. Miskin from a Queensland specimen. It is also known from Adelaide, but has not yet been reported from Victoria, Tasmania, or West Australia; nor has it been recorded previously from New South Wales.—Descriptions of a new Australian grass, by Fred. Turner. The species of *Panicum* described is a capital forage plant from the Liverpool Plains, N.S.W., its nearest allies being *P. semitamsum*, F.v.M., and *P. antidotale*, Retz, from North Australia.—Mr. Hedley exhibited a specimen of fully developed *Gundlachia* recently taken by Mr. H. Leighton Kesteven from a pool in the Botanical Gardens, Sydney. This is the second instance of its occurrence in Australia, and the first in New South Wales. The genus has been treated of at some length in vol. viii. (2nd series) of the Society's *Proceedings*. Possibly no real *Ancyclus* exists in Australia, and all those hitherto reported will ultimately be shown to assume occasionally and at rare intervals the *Gundlachia* form.—Mr. Ogilby exhibited the type of the new bathyphil fish from Lord Howe Island, described in his paper as *Æthopora perspicillata*, and remarked that it may be distinguished from the three Atlantic species by the presence of a pair of supernumerary photophores between the upper angle of the eye and the ante-orbital.

DIARY OF SOCIETIES.

FRIDAY, JUNE 24.

PHYSICAL SOCIETY, at 5.—Exhibition of an Apparatus illustrating the Action of Two Coupled Electric Motors: Prof. Carus-Wilson.—Exhibition of Weedon's Expansion of Solids Apparatus: J. Quick.—On the Theory of the Hall Effect in a Binary Electrolyte: Dr. F. G. Donnan.

SATURDAY, JUNE 25.

GEOLOGISTS' ASSOCIATION (Liverpool Street Station, G.E.R.), at 9.30 a.m.—Excursion to Sudbury. Director: Dr. J. W. Gregory.

MONDAY, JUNE 27.

ROYAL GEOGRAPHICAL SOCIETY, at 4.30.—Plans for the Construction and Erection of a Terrestrial Globe on the Scale of 1:500,000: Prof. Elisée Reclus.

THURSDAY, JUNE 30.

LINNEAN SOCIETY, at 8.—A Revision of the Genus *Elaeocarpus*, Linn.; Sir D. Brandis, K.C.I.E., F.R.S.—Observations on the *Membraniporidae*, a Family of Marine Bryozoa: A. W. Waters.—On the Fruit of *Chnoospora fastigiata*, J. Agardh: Ethel S. Barton.

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BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Essai Synthétique sur la Formation du Système Solaire: G. Lafouge, Part 1 (Paris, Gauthier-Villars).—Calculations in Hydraulic Engineering: Prof. T. C. Fidler, Part 1 (Longmans).—South American Sketches: R. Crawford (Longmans).—Twenty-first Annual Report of the Connecticut Agricultural Experiment Station, for 1897 (New Haven).—Catalogue of Earthquakes on the Pacific Coast, 1769 to 1897: Dr. E. S. Holden (Washington).—Report of the U.S. National Museum for the Year ending June 30, 1895 (Washington).—Leçons Élémentaires d'Acoustique et d'Optique: Prof. C. Fabry (Paris, Gauthier-Villars).—A Manual of Bacteriology: Dr. R. T. Hewlett (Churchill).—Lectures on the Geometry of Position: Prof. T. Reye, translated and edited by Prof. T. F. Holgate. Part 1 (Macmillan).—The First Philosophers of Greece: A. Fairbanks (K. Paul).—The Study of Man: A. C. Haddon (Bliss).—Year-Book of the U.S. Department of Agriculture, 1897 (Washington).—Cape Photographic Durchmusterung for the Equinox 1875: Drs. Gill and Kapteyn, Part 2 (Darling).—Text-Book of Zoology: H. G. Wells and A. M. Davies (Clive).

PAMPHLETS.—Contribution iii. to the Coastal and Plain Flora of Yucatan: Dr. C. F. Millsbaugh (Chicago).—Medical Missions in their Relation to Oxford: Sir H. W. Acland (Frowde).—Advanced Exam. Papers in Book-Keeping, with Notes by J. Thornton (Macmillan).—Boron Food Preservatives, &c. (Perkins).

SERIALS.—Journal of the Franklin Institute, June (Philadelphia).—Proceedings of the American Philosophical Society, December 1897 (Philadelphia).—Proceedings of the Academy of Natural Sciences of Philadelphia, 1897, October-December (Philadelphia).—Transactions of the Wagner Free Institute of Science of Philadelphia, Vol. v., January (Philadelphia).—Annals of the Astronomical Observatory of Harvard College, Vol. xiii. Part 1 (Cambridge, Mass.).—Académie des Sciences de l'Empereur François Joseph I. Bulletin International (Sciences Mathématiques et Naturelles et Médecine) (Prague).—Memorie della Societa Geografica Italiana, Vol. vii. Parte Seconda (Roma).—An Account of the Crustacea of Norway: G. O. Sars, Vol. 2, Parts 9, 10 (Bergen).—Archives of the Röntgen Ray, May (Rebman).—American Naturalist, April (Ginn).—Morphologisches Jahrbuch, 26 Band, 1 Heft (Leipzig).—Botanische Jahrbücher, Sechsr. Band, 1 Heft (Leipzig).—Journal of the Scottish Meteorological Society, third series, Nos. 13 and 14 (Blackwood).—Zoologist, June (West).—Jahrbuch der K.K. Geologischen Reichsanstalt, Jahrg. 1897, xvii. Band, 2 Heft (Wien).—Die Gastropoden der Trias um Hallstatt: E. Koken (Wien).—Psychological Review Monographs, Vol. ii. No. 4 (Macmillan).

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