

accumulation of snow took place in precisely those districts which are now characterised by a very heavy rainfall, and he pointed out how exactly this is in accordance with the views of Prof. Tyndall as to the conditions most favourable to the development of glaciers.

Zoological Society, May 21.—F. D. Godman, F.Z.S., in the chair.—A communication was read from Lieut.-Col. R. H. Beddome, C.M.Z.S., containing the description of a new genus and species of snakes, of the family of Calamariidae, from Southern India, proposed to be called *Xylophis indicus*.—Mr. P. L. Sclater, F.R.S., read the tenth of a series of reports on the collection of birds made during the voyage of H.M.S. *Challenger*, containing an account of the birds of the Atlantic Islands and Kerguelen's Land, and of the miscellaneous collections made by the expedition.—Mr. J. Wood Mason, F.Z.S., described several new or little known Mantidæ from India, Australia, and other localities.—Mr. H. W. Bates, F.Z.S., read a paper containing the description of new genera and species of Geodephagous Coleoptera from Central America, belonging to the families Cicindelidae and Carabidae.—Mr. G. French Angas, C.M.Z.S., read the description of a new species of *Tudicula*, which he proposed to name *T. inermis*.—A communication was read from the Marquis of Tweeddale, F.R.S., being the ninth of his contributions to the ornithology of the Philippines. The present paper gave an account of the collection made by Mr. A. H. Everett in the Island of Palawan, and contained the descriptions of nine new species, namely, *Tiga everetti*, *Dicrurus palawanensis*, *Broderipus palawanensis*, *Trichostoma rufifrons*, *Dryococcyz cinereiceps*, *Brachypus cinereifrons*, *Criniger palawanensis*, *Cyrtostomus aurora*, and *Corvus pusillus*. The collection likewise contained three examples of the remarkable *Polyplectron emphanes*, of which the locality was previously unknown, and specimens were excessively rare.—Prof. A. H. Garrod, F.R.S., read a paper in which he gave a description of the tracheæ of *Tantalus loculator* and of *Vanellus cayennensis*.—A second paper by Mr. Garrod contained some notes on the anatomy of the Great-headed Maleo (*Megacephalon malco*).

Victoria (Philosophical) Institute, May 31.—Annual Meeting; the president, the Right Hon. the Earl of Shaftesbury, K.G., in the chair.—From the annual report it appeared that the number of members is now 756.—The Address was delivered by Principal Rigg, D.D., and contained a review of various systems of philosophy now popular.

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Academy of Sciences, June 3.—M. Fizeau in the chair.—The following among other papers were read:—Direct determination at sea of the azimuth and route of a ship, by M. Paye. This is for iron ships, and involves keeping the ship some time in a fixed direction indicated by the log-line and determined astronomically. The log is slightly modified in form.—New researches on the fossil mammalia of South America, by M. Cervais. The author has examined the recent collections of MM. Ameghino, Brachet, and Larroque, from the province of Mines, in Brazil, and some parts of the Argentine Republic. He is able to add some new details about the *Toxodon*, and describe, *inter alia*, a new species of *Machairodus*, and two new species of *Glyptodon* (the species of which, he estimates, certainly exceed a dozen).—On the chalk of the Central Pyrenees, by M. Leymerie. He finds there a bed immediately under the first eocene layer, containing quite a special marine fauna, among which are numerous urilins.—M. Cornu was elected member in the section of physics in place of the late M. Becquerel.—Direct fixation of carbonic acid, sulphurous acid, and phthalic anhydride, on benzene; synthesis of benzoic acid, hydride of sulphophenyl, and benzoylbenzoic acid, by MM. Friedel and Crafts. The authors suppose in these syntheses an organo-metallic combination of aluminium by the reaction of the chloride of this metal on the hydrocarbons.—On the manufacture of cast manganese and on the volatility of manganese, by M. Jordan. More than 100,000 kil. of this cast manganese (from treating ores of manganese in the blast furnace) have already been supplied to French steel works. Manganese is volatile at the temperature of metallurgical furnace; and this fact explains several anomalies remarked in the manufacture of very manganese-ised products.—On Daltonism; sanitary precautions, and preventives, by M. Favre. There are in France more than 3,000,000 persons affected with Daltonism; the number of women affected is to

that of men as 1 : 10. Nine out of ten cases can easily be cured in youth; the best means being methodic exercise on coloured objects. This should be attended to in all schools, and mothers should seek to develop the chromatic sense in their children. No one should be admitted to the service of railways, the navy, or schools of painting, without being examined in colours. No Daltonians should be charged with service involving the use of coloured signals.—Information was given regarding observation of the transit of Mercury in the United States.—On the densities of vapour, by M. Troost. He describes the behaviour of vapour of acetic acid, hyponitric acid, sulphur, and hydrate of chloral. Sulphur vapour behaves like ozone, whose density is independent of pressure, and whose transformation into oxygen takes place in proportion as the temperature is raised.—On metallic allotropy, by M. Schutzenberger. By electrolysis of metallic solutions, allotropic varieties of other metals besides copper (*e.g.* lead) may be got. It is impossible to decide by direct experiment whether or not allotropic copper contains occluded hydrogen eliminable at 100°. In any case the proportion of hydrogen could not exceed 0.03 per cent.—Method of determination and separation of stearic acid and oleic acid proceeding from saponification of tallow, by M. David. The principle of this process is based on the new fact that when into an alcoholic solution of oleic acid one pours acetic acid drop by drop, a moment comes when, suddenly, the oleic acid separates completely.—On the structure of nerves in invertebrates, by M. Cadiat. In crustacea, insects, and annelida, the nerves have no myelene, which in vertebrates is found between the cylinder axis and the wall proper of the tube (the grey fibres of the great sympathetic excepted). In gasteropodous and acephalous molluscs the sheath of Schwann is almost always wanting.—On the relations between the volume of motor or sensitive cells of nervous centres, and the length of passage of the impressions transmitted, by M. Pierret. The dimensions of the nerve-cells are in direct ratio of the distances which the motor incitations proceeding from them, or the sensitive excitations reaching them, have to traverse.—There were several other papers on chemical subjects, determination of arsenic in volumes, reciprocal combinations of metallic sesquisulphates, some combinations of platinum, nitrogenised acids derived from acetones, cyanide of ethylene, researches on peptones, &c.

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ERRATA.—In Mr. Broun's article on Cosmic Meteorology, vol. xviii. p. 152, 1st column, line 7, for 464, read 8,464; and p. 153, 2nd column, line 16, for "relate to magnetical and meteorological phenomena," read "relate magnetical to meteorological phenomena."