

SCIENTIFIC SERIALS

Morphologisches Jahrbuch, vol. ii. Part 2.—On the structure of the toes of Batrachia, &c., by Dr. F. Leydig (32 pages).—On the valvular apparatus in the conus arteriosus of Selachians and Ganoids, by Dr. Stöhr.—Contribution to the anatomy and histology of Asteroids and Ophiuroids, by Wichard Lange (46 pages, 3 plates).

REICHERT and Du Bois Reymond's *Archiv*, September, 1876.—Studies on animal heat, Part 3 (conclusion), by Dr. A. Adamkiewicz.—Contribution to the theory of the growth of bone, by Dr. I. Lotze.—On the negative variation of the muscular current during contraction, Part 3 (conclusion), by Du Bois Reymond.

Archiv für mikroskopische Anatomie, vol. xiii. Part 1, July, 1876.—Rhizopod studies, No. vi., by F. E. Schulze.—On the anatomy and histology of the Coccidæ, by E. L. Mark.—Studies of the development of Gastropods, by N. Bobretzky (75 pages), with 6 plates illustrating the development of *Nassa mutabilis*, *Natica*, and *Fusus*.—On the hypothesis of discharge and the motor end plates, by W. Krause.

Bulletin de l'Académie Impériale des Sciences de St. Pétersbourg, t. xxii., No. 2.—This part contains the following papers of interest:—Diagnoses plantarum novarum Japoniae et Mandshuriae, decas xx. (continued from last vol.), by C. J. Maximovicz.—On the plants of the bear period found in the deposits of the Ogour river, a tributary to the Jenissei, in Siberia, by J. Schmalhausen.—Preliminary communication by the same, on a microscopical examination of the food-remains of Siberian fossil rhinoceros, viz., *Rhinoceros antiquitatis seu tichorinus*.—On the supposed satellite of Procyon (*a Canis min.*), by O. Struve. The other contents are only of archæological and philological interest.

SOCIETIES AND ACADEMIES

LONDON

Linnean Society, November 16.—Prof. Allman, president, in the chair.—Messrs. J. C. Oman, R. H. Peck, and D. G. Rutherford were duly elected fellows.—Mr. H. N. Moseley, of H.M.S. *Challenger*, read a paper on the flora of Marion Island. This island possesses considerable interest from its isolation and being within the Antarctic drift. It is about 1,000 miles from the African Continent, 450 from the Crozets, 1,200 from the desolate Kerguelen Island, above 2,000 from Tristan D'Acunha, and 4,500 from the Falklands, to which, nevertheless, its flora appears related. It is of volcanic origin and snowclad. The rocks at half-tide are covered with *Davoulea utilis*, above high tide *Tillaea moschata* is found in abundance, and beyond the beach a swampy peaty soil covers the rocks, where there is a thick growth of herbage; this is principally composed of species of *Acacia*, *Asorella*, and *Festuca*, the first of these three being the most abundant plant on the island, though the latter grass is by no means scarce. The cabbage-like plant *Pringlea antiscorbutica* is less profuse than at Kerguelen's Land. Some of the ranunculid group are met with at water pools near the sea; four kinds of ferns were obtained, *Lomaria Alpina* being the most numerous. Lichens are scarce, but mosses in plenty form yellow patches, which stand out conspicuously amidst the green vegetation, which rises to an altitude of probably 2,000 feet. From the occurrence of *Pringlea* on Marion Island, the Crozets, and Kerguelen Island, and the existence of fossil tree-trunks on the two latter, the author surmises an ancient land connection between them.—A memoir on the birds collected by Prof. Steere (U.S. Michigan) in the Philippine Archipelago was read by Mr. R. Bowdler Sharpe, and copious coloured drawings of the new and rare forms exhibited and commented on. Although it is but lately that Lord Tweeddale's (President Zool. Soc.) remarkable monograph on the Philippine birds was published, with immense additions to the avifauna, yet Steere's collection has yielded over sixty hitherto unknown species. Many novelties may therefore still be expected as further exploration proceeds. The recorded species of birds from the Philippines at the present now amount to 285.—A letter containing observations on the American Grasshopper (*Caioptenus femur-rubrum*), with remarks on the same by Mr. Frederick Smith, was noticed.—Mr. Moseley exhibited some insular floral collections in illustration of his paper and of the various parts touched at by the *Challenger*. He also called attention to a series of volumes and pamphlets, &c., on natural history obtained by him in Japan.

Zoological Society, November 21.—Prof. Flowers, F.R.S., vice-president, in the chair. The Secretary read a report on the additions that had been made to the Society's Menagerie during the month of October.—Mr. Sclater exhibited and made remarks on the skin of a young rhinoceros (*R. sondaicus*), belonging to Mr. W. Jarnach, which had been captured in the Sunderbunds, near Calcutta, in May last.—The Secretary exhibited on behalf of Mr. Andrew Anderson, a coloured drawing of a specimen of *Emys hamiltoni*, lately captured at Futteghurh (Ganges). The occurrence of this *Emys*, chiefly confined to Lower Bengal, so far west as Futteghurh, was considered as of much interest.—A letter was read from Count T. Salvadori, containing remarks on some of the birds mentioned by Signor D'Albertis, as seen by him during his first excursion up the Fly River.—A communication was read from Mr. G. B. Sowerby, jun., containing descriptions of six new species of shells, from the collections of the Marchioness Paulucci and Dr. Prevost.—Mr. Edward R. Alston read a paper containing the descriptions of two new species of *Hesperomys* from Central America, which he proposed to call respectively *Hesperomys tequima* and *H. couesi*.—A paper was read by Prof. Garrod, F.R.S., on the Chinese Deer, named *Lophotragus michianus*, by Mr. Swinhoe, in which he showed that the species so called was identical with *Elaphodus cephalophus* (A. Milne Edwards), obtained by Père David in Moupin. The close affinity between the genera *Elaphodus* and *Cervulus* was demonstrated, the latter differing little more than in the possession of frontal cutaneous glands not found in the former.—Mr. Arthur G. Butler read a paper containing descriptions of new species of Lepidoptera, from New Guinea, with a notice of a new genus.—A communication was read from Dr. J. S. Bowerbank, being the eighth of his series of "Contributions to a General History of the Spongiadæ."

Meteorological Society, November 15.—Mr. H. S. Eaton, M.A., president, in the chair.—Messrs. R. A. Allison, John Evans, F.R.S., Dr. W. Marcott, F.R.S., Rev. T. G. P. Pope, and Mr. G. Washington were elected fellows.—The following papers were read:—Results of meteorological observations made at Rossinière, Canton Vaud, Switzerland, during 1874 and 1875, by Mr. William Marriott. Rossinière is situated in a valley running north-east and south-west, about three quarters of a mile broad, the mountains on the north being 3,000 to 4,000 feet above the valley of the Sarine, and those on the south, 1,000 to 3,000 feet. The valley is shut in at either end by a gorge, that on the east being about one mile, and that on the west about two miles distant. The observations were all taken by Col. M. F. Ward, F.R.A.S. The mean temperature, as deduced from the mean of the maximum and minimum readings, was 43°·4 for 1874, and 43°·5 for 1875. The monthly means ranged from 20°·0 for December, 1874, and 20°·5 for December, 1875, to 64°·9 for July, 1874. The highest temperature in 1874 was 89° on July 3, and 1875, 85° on August 18; the lowest in 1874 was -4° on December 24, and in 1875 -7° on January 1. Owing to the situation of Rossinière, the prevailing winds are those from north-east and south-west. In the winter months the air is for the most part calm, and it is owing to this absence of wind that the intense cold is not so severely felt as it would otherwise be. The total rainfall for 1874 was 54·282 inches, and for 1875, 55·870 inches. The months of greatest rainfall are July and November, and those of the least February and March. Thunderstorms occur frequently from May to August, as many as five being sometimes recorded in one day. The number of thunderstorms observed in 1874 was forty-five, and in 1875, forty-three. No thunder was heard or lightning seen in the months of December to March.—The climate of Fiji, by Mr. R. C. Holmes. This paper contains the results of meteorological observations taken at Delanasa, Bay of Islands, north coast of the province of Bua, Fiji, during the five years ending 1875. The average annual mean temperature is 79°·1. The highest temperature recorded was 97°·7 on January 12, 1871, and the lowest 58°·5 on August 20, 1875, the extreme range in the five years being 39°·2. The average annual rainfall is 124·15 inches, and the number of rainy days 170. The greatest fall in 24 hours was 14·95 inches, which occurred on March 19, 1871. After describing somewhat fully the chief characteristics of the months and seasons, hurricanes and storms, earthquakes, waterspouts, &c., the author concludes with the question, "Is the climate of Fiji a healthy one?" In reply he says that, considered as a tropical country, an affirmative answer may be given without hesitation. Those fatal diseases so common in tropical countries, fevers of various kinds, cholera, and liver complaints, are almost unknown. This is owing partly to the geographical