

We are of opinion that it is of fundamental importance to the progress of the natural sciences in this country that the administration of the National Natural History Collections should be separated from that of the Library and Art Collections, and placed under one officer, who should be immediately responsible to one of the Queen's Ministers,

We regard the exact locality of the National Museum of Natural History as a question of comparatively minor importance, provided that it be conveniently accessible and within the Metropolitan District.

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### SCIENTIFIC SERIALS

The *Archives des Sciences physiques et naturelles* (May, 1879) contain the following more important papers:—Geological review of Switzerland for the year 1878, by M. Ernest Favre (continuation).—On the lake-dwellings of the Swiss lakes, by Dr. F. A. Forel.—On the rotatory power of isocholesterine, by E. Schulze.—On the existence in a gaseous state of nitrous anhydride and nitrous acid, by G. Lunge.

The *Rivista Scientifico-Industriale* (No. 10, 1879) contains the following articles:—On a new instrument to study microseismic phenomena, by Prof. Giovanni Mugna.—On the regress canals for the filling of ponds, by Francesco Cagnacci (3 plates).—On the present state of Mount Vesuvius, by Prof. Semmola.—On the blue colours in manufacture of porcelain, by V. Joclet.

### SOCIETIES AND ACADEMIES

#### LONDON

Linnean Society, June 5.—Prof. Allman, F.R.S., president, in the chair.—Attention was called to an article on Cinchona in India, by Mr. J. E. Howard. *Calisaya Ledgeriana* is shown to yield excellent results, as much as 10 per cent. of quinine, and of excellent quality, being obtained.—Prof. Parker read a memoir on the structure and development of the skull in the Urodelaous amphibia. Several forms are here worked out, the Spotted Salamander serving as a type. Some of the so-called skin bones appear early, other investing bones appear later, and the investing cartilaginous roof of the nose comes after the ear capsule cartilages. Some Urodela show a stapes absent in *Ceratodus* and *Lepidosiren*. The transformations of the Anoura are carried on in the plastic larva and young to a greater extent than in the Urodela.—A paper on the Lichens collected during the English Polar Expedition of 1875–76, by Prof. Fries, of Upsala, was communicated by Sir J. D. Hooker. In Dr. Hayes's Arctic journey lichens probably were not brought away from a more northerly position than 78° N. lat., but Julius Payer, in the German Expedition, with certainty obtained specimens at Cape Fligely, 82° 5' N. lat. With the exception of these last, but three species of lichens hitherto have been published as found beyond 81° N. lat. Thus considerable interest is attached to those got under Capt. Sir G. Nares by Capt. Feilden, of the

*Alert* and Mr. Hart of the *Discovery*. As these vessels wintered in different quarters, the localities where the lichens were obtained correspondingly are more numerous, thus adding to their value as indicative of vegetable life in the frozen regions. Mr. Hart, got his at thirteen stations, Discovery Harbour, 81° 42' N. lat., being the most northern; Capt. Feilden records twelve stations, Westward Ho Valley, 82° 41' N. lat. being the limit. But Lieut. Aldrich gathered *Gyrophora cylindrica* on the shore of the "Palæocrystic Sea," the northernmost spot trodden by man, viz., Cape Columbia, 83° 6' 30" N. lat. Prof. Fries notes that the so-called "fruticolous" and "foliaceus" lichen species are feebly represented, doubtless accounted for by the severe climate, but seemingly at variance with the presence of musk oxen; added to which the reindeer moss is absent. This anomalous circumstance of the presence of large ruminants and deficiency of their usual lichen food, Capt. Feilden explains by stating that the musk ox in Grinnel Land does not feed on lichens, but on mosses and grasses. The same officer has also pointed out that the lichen growth curiously enough increased in size of species with increase of altitude. Prof. Fries concludes that, without the least credit being given to an open Polar sea (existing, no doubt, only in fancy), lichen vegetation may exist at the very Pole, if only land be there, and occasionally free from snow or ice. Among the series obtained in the Expedition, save a very few, all the forms of lichens of over 100 are already known. The abstract of a fourth contribution to the Mollusca of the *Challenger* Expedition, by the Rev. R. Boog Watson was read. This dealt with the Trochidæ and Turbinidæ.—The Secretary also read a communication on a remarkable new form of *Helvella*, this fungus being described by Mr. W. Phillips.—Mr. C. B. Clarke summarised a lengthened memoir by him, viz., a "A Review of the Ferns of North India." He showed that many of the localities given by Dr. Wallich, and doubtfully received by botanists were doubtless correct.—Mr. A. D. Michael was elected a Fellow of the Society.

Zoological Society, June 17.—Prof. W. H. Flower, F.R.S., president, in the chair.—Mr. Sclater exhibited a skin of *Ara glauca*, from Mr. Boucard's collection, obtained at Corrientes, and stated that having compared it with the *Ara* now in the Gardens, purchased in June, 1860, and hitherto named *A. glauca*, he had come to the conclusion that the living bird belonged to the allied form *Ara lauri*.—Prof. Flower called attention to the skull of the female sea-lion, which had lately died at the Southport Aquarium, and pointed out that it belonged to *Otaria gillespii*, and not, as had been supposed, to *Otaria stelleri*.—Mr. C. G. Danford exhibited and made remarks on some remarkable antlers of deer, which he had obtained during his recent journey in Asia Minor.—Prof. Newton exhibited skins of some rare species of birds obtained by Mr. Edward Newton, C.M.Z.S., in Jamaica.—Mr. F. D. Godman exhibited and made remarks on a drawing of the manatee by Mr. Wolf, taken from the specimen lately living in the Westminster Aquarium.—Hans, Graf von Berlepsch, exhibited and made remarks on the skins of two varieties of the long-tailed titmouse (*Mecistura caudata*), which occurred near Cassel, in Germany, one of which appeared to be the same as the British form of this bird.—Dr. J. Murie read a paper on the manatee, containing the results of his examination of the specimen which was lately living in the Westminster Aquarium. The peculiar attitudes assumed by the animal in life, the great mobility of the upper lip, and the occasional use of the limbs in feeding were noted. As regards the anatomy, the chief points dwelt on were the shape of the brain and its suppressed convolutions. The vexed question of the number of the cervical nerves and their distribution was also discussed.—A communication was read from Mr. A. H. Garrod, on the brain and on other points in the structure of the adult male hippopotamus, which was presented to the Society by the late Viceroy of Egypt, in 1850, and which died in the Society's gardens in March, 1878.—A second communication from Mr. Garrod contained a note on the mechanism of respiration, as well as of the retraction of the head and limbs in certain chelonians.—Dr. Gwyn Jeffreys communicated the second part of his work on the mollusca of the *Lightning* and *Porcupine* Expeditions, embracing the families from *Anomiidae* to *Arcidae*. The number of species noticed was 100, of which 4 were new to science, and 15 were hitherto unfigured. Particulars were given of the geographical and geological distribution of all the species, and their synonymy was discussed. Some species of *Leda* and *Malletia* were Sicilian fossils of the pliocene formation, and had not been previously known as recent or living. These species