NATURAL HISTORY SOCIETY

OF THE

MAURITIUS.

[We have obtained from this examplary Institution, the valuable privilege of translating and publishing the following Reports and Notices. We have to express our regret, both on account of the unavoidable delay which has occurred in presenting them to our readers, and of the necessity under which we are now placed, of epitomizing and condensing them, from want of room to exhibit all their details.]

ANNUAL REPORT.

READ ON THE 24th OF AUGUST 1830.

This document commences by specifying the steps taken to institute the Association, and the various attempts of the same nature in preceding periods. In 1801, after the arrival at the Mauritius of the ships, le Geographe and le Naturaliste, several of the philosophers attached to that expedition, remained in the island. Among them was Mr. Bory de St. Vincent, so widely known by his zeal in the investigation of science, and by the publications in which he illustrated it. He, aided by Mr. Lislet Geoffroy, laid the foundation of a society, with a very extensive aim. This Association included many noted names, and, with some modifications, continued its labours till 1818; distinguishing itself by the publication of various memoirs, and articles in natural history.

At the foundation of the Lyceum, under the French Government, it was intended to connect with it, a Museum and a Library. For the purpose of carrying this intention into effect subsequently, two of the present members of the Natural History Society, viz. Mr. G. Bouton and Mr. J. Desjardins, made, in 1826, the generous but unsuccessful proposal, to attach gratuitously their collections to this Institution. The existing Association, which confines its views specifically to Natural History, originated in 1829, and commenced its labors under the following office-bearers: His Excellency Sir Charles Colville, Patron; Mr. C. Telfair, President; Mr. J. Delisse, Vice-President; Mr. Wenceslas Bojer, ditto; Mr. Julien Desjardins, Secretary; and Mr. Lienard (Father), Treasurer. Its meetings are held monthly.

Of the discourses read at sittings of the Society, tending to specify and develope its objects, there are particularised the following:—An Introductory Lecture was delivered by the President, Mr. Telfair, at the first meeting of the Society, which was distinguished for ability, philosophic views, and love of the useful sciences. This was, at the same sitting, followed by a discourse from Mr. G. Bouton, taking specially into consideration, the subject of Botany. In a subsequent sitting, Mr. G. Bouton read a report on *The South African Quarterly Journal*, and offered some suggestions for the guidance of the Society, which ordered his paper to be printed.

Mr. Julien Desjardins illustrated, in a rapid analysis, the sciences which the Society seeks to cultivate, and the others related to them. The subject specially selected for his endeavours, is Zoology: and satisfied of the truth of Cuvier's decision, "that the subject is so immense, that each class is, in some sort, the department of individual writers." Mr. Desjardins has limited his attention to whatsoever in each class is required as a preparation for presenting a Fauna of the Mauritius, where the animals of the more perfect classes are few in number, with the exception of the varied species of fishes in its seas.

Mr. Faraguet, a pupil of the Polytechnic School of Paris, whose residence in the Island, since the departure of the Astrolabe, has enabled the Royal College to attain the establishment of a Physical class, under his superintendence, read a memoir explanatory of his just and philosophic ideas, for giving greater solidity to the Association, and greater extension to its undertakings.

The Report proceeds with the following details, regarding the subjects to which the attention of its members had been directed:—

PHYSICAL AND METEOROLOGIC SCIENCE.

Meteorologic observations have been made for many years in the Island. Mr. Lislet Geoffroy possesses the most complete series of observations of this sort. Several other members have alluded to different departments of the subject, and I* think it my duty to propose to the Society, that an intelligent individual should be specially appointed, and remunerated, for conducting Meteorologic observations, and noting at different periods of the day, the variations of Barometric pressure, and of temperature, with the quantity of rain and of evaporation.

Mr. Hoart, Assistant Civil Engineer, has unfolded to the Society, a project dictated by zeal for science and for the interests of humanity. He proposes, that on some elevated station, such as the signal hill of Port Louis, there should be erected a small Observatory, provided with suitable instruments, for observing the Atmospheric changes, and en-

* Julien Desjardins, Secretary.

abling us by the experience of continued observation, to indicate the approach of those appalling hurricanes which often lay waste our Island.

MINERALOGY.

Dr. R. Lyall, known to the world by his publications relating to his voyages, in which he has displayed varied and extensive information in the sciences, has frequently favoured the Association with discussions on Mineralogy. His residence in Madagascar, though distressing to his family, was not a loss to science. The minerals which the inhabitants wished him to convert into gold, and the serpents which the Queen of the Ovas caused to be introduced into his prison,* have been presented to the Society. A Pluviometer, which our colleague had placed upon his house at Tananarivo, made him be regarded as a magician. The Rev. J. J. Freeman having exhibited to us various mineralogic specimens which he had brought from that country, Dr. Lyall made them the subject of a report which we possess.

GEOLOGY.

This science, which, in the age of Buffon rested on so uncertain a basis, has become in our days a science of facts founded on observation. It is now generally known by the title of Geognosie; especially where, as in our case, its investigations are limited to a small portion of the globe.

Mr. J. Desjardins has described a cavern situate in the district of La Riviere du Rempart. It is with no great propriety that this crevice or deficiency in an inferior stratum, has been named *a cavern*. It however possesses all the characters which distinguish the caverns of volcanic regions. It has two outlets, and its bottom is occupied by a pool of clear running Water. Its whole length is 210 feet, which is but little in comparison of that of La Rosieve or Daudin, in the district of Les Plaines Wilhems, which was measured by Messrs. Desjardins and G. Bouton, who penetrated to the extent of 2,040 French feet.

The Isle of Ambre has been the subject of a memoir by Mr. J. Desjardins, explanatory of its Geognostic structure, and of its chief productions, both animal and vegetable. The assertion of Le Gentil, that it is of Madrepore, is disproved. It has, like the Island of Mauritius, a volcanic basis; in various places, however, as is also the case in Mauritius, there is met the detritus of molusca and polypes forming a conglomerate containing sometimes also fragments of basalt.

Mr. G. Bouton, struck with the singular structure of the Grand Basin, and its situation in the midst of forests, at the altitude of 250 fathoms above the level of the sea, read to us a memoir, in which he concludes, that this mass of water rests in the crater of an extinct volcano. It is well known that craters have been extinguished in various quarters of the globe, and that a lake has taken the place of a fiery aperture.

Mr. Hoart, who resided for some time in the Isle Rodrigue, and who, in his occupation of Geographic Engineer, has visited every part of it, communicated to the Society a memoir on its Geognostic structure; and has presented us with a topographic plan of it, and a sketch of a grotto found there, which abounds with stalagmites and stalactites of singular forms and dazzling whiteness.

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* It was explained at the Meeting of the Institution, when this report was read, that the employment of these serpents was not a measure of cruelty on the part of the Ovas, but an artifice of the priests, who thereby wished to represent their divinities as incensed at his abode in their country. Dr. Lyall then inhabited a native hut in a village, under some slight restriction.—*Ed. Quarterly Journal.*

BOTANY.

The empire of Flora, which was wont to be so extensive in our Island, but which is daily curtailed by the operations of its inhabitants, still offers occupation to those who give themselves to that pursuit. Botanists have already made known to the world, a great proportion of our plants, but many species still remain to be described.

Mr. W. Bojer, professor of that science in the Royal College, and who now reckons among the members of our Society many of his former pupils, has imparted to us portions of his discoveries.

A Hybiscus which he has discovered growing wild in the forests of our Island, and which has long been cultivated in gardens, has been, by our associate, remarked as occurring particularly in the district of La Riviere Noire, on the property of Mr. Génève, one of our members. He has given it, on this account, the name of Hybiscus Genevii. He has figured it, and accompanied it with a Latin description.

The Siphomeris Lingua, (Boj.) belonging to a genus which has been for some time established; the Grewia Ulmifolia, (Boj.) a new species which we owe to him; and the Tanghinia venenifiua aub. de Pt. Th. have been described and figured by our colleague, with great care and exactness.

Of the Unona hamata Dec. Prod. and the Norchea Chartacea, figured by Mrs. C. Telfair & Miss Baigrie, Mr. Bojer has ascertained the habitats.

He has also employed himself in figuring and describing the varieties of the Mango, the fruit of Mangifera Indica, so common in our Island; and has already collected more than 70 varieties. He has in this been aided by Mrs. C. Telfair, Miss Baigrie, and Mr. Duvivier. Mr. Nolin of our Society, has furnished him with several fine specimens of fruit, from his estate at La Petite Riviere; where he has succeeded by care, perseverance, and ingenious methods of procedure, in obtaining mangos and other fruits of very superior quality. Mr. Bojer has made known to us, in different instances, figures and specimens of plants transmitted to the Society, and has especially done service to the science, in naming and pointing out the localities of 12 plants, sent from professor Hooker of Glasgow, which had been figured with extreme accuracy by Dr. Shuter, whose premature decease hindered the determination of those plants. The Ipomea Peltata alone belonged to our Island.

Mr. J. Delisse (Father) has read a most interesting paper on Botany and Vegetable Physiology. The Cassia Alata was long ago introduced here from Java, under the name of Caliping. It was cultivated in our gardens, and used in cutaneous affections; but no one had beheld its qualifications. Mr. Delisse had the pleasure of being able to study this plant; the result is detailed in *The Voyage of L'Uranie round the World.*

Mr. G. Bouton, in a memoir on the distribution of the natural families of plants of this country, has reviewed and considered those which are found on the summits of the mountains, and on the brink of the ocean, and at different altitudes and exposures. This memoir was undertaken with the view of promoting the progress of Botanic Geography. He has also carefully investigated the genus Ziziphus, known here by the name *Masson*, and has given us a detailed description of its species. He has pointed out several varieties which ought to constitute species. Our colleague also gave an account of a work produced in Paris by Mr. Achille Richard, on the Orchideæ of this island, and of a proposal of this naturalist, to publish a Flora of the Isles of France and Bourbon.

Our fellow countryman Cossigny, had long since remarked a male

Papaw-tree, which had borne fruit, and which Commerson had observed at his residence of Palma. Mr. Bouton has recently read to the Society, some interesting details in regard to this anomaly; and has particularly investigated the genus Carica, which different Botanists had arranged in various families, and of which they have lately constituted a family under the appellation of Caricеae. This phenomenon, already remarked by the inhabitants, had never been satisfactorily explained. Several quarters of the Island furnished disicious plants, which produced fruit. Those which Mr. Bouton described, came from La Baie du Tombeau. Mr. J. Newman, director of the Royal Garden at Pamplemousses, exhibited some from Monplaiser, and Mr. J. Desjardins procured at Le Camp de Masque, one fruit, or rather *three* so attached together that they composed but one, which hung at a peduncle more than two feet in length.

Mr. Bouton has read, at our last sitting, the descriptions of three plants, which he has gathered in various localities of our island. They belong to known genera, but the species were nondescript. He has named them, Ammania Cruciata, Cerastium Mauritianum, and Ammania Striata. This last is offered with hesitation, he having seen only its seeds.

The Panicum granulare (Lamarck enc.) has been long known to Botanists, and our island was pointed out as one of its localities. Our colleague Mr. Dupouy, having found its description not sufficiently detailed, has undertaken to complete it.

ZOOLOGY.

It is especially in this great division of Natural History, that our members have, at different periods of the year, furnished a multitude of objects which have originated verbal discussions of great interest. Strangers also have presented us with anatomical preparations, which have been deposited in the Museum of the Society. We are particularly called upon to acknowledge the kindness of Captain Fayrer and Mr. S. Parlby, both from India, who have generously imparted to us, a portion of their collections.

MAMMIFEROUS ANIMALS.

Those of this order which inhabit the Mauritius, have been the subject of a memoir by Mr. J. Desjardins. He has pointed out with some details, the twenty-six species which inhabit the island, of which, twelve only are in a wild state,—these are,

Macaque Aigrette, (Simia aggula. Lin.)
Roussitte of Buffon, (Pteropus vulgaris.)
Roussitte, (Pteropus rubicollis. Geoff.)
Nyctonome of Port Louis, (Nictonomus acetabulosus. Geoff.)
Taphien of the Isle of France, (Taphozoüs Mauritianus. Geoff.)
Tanrec, (Erinaceus setosus. Lin.)
Mursareigne Musquèe, (Sorex Indicus. Geoff.)
Rat, (Mus Rattus. Lin.)
Mouse, (Mus Musculus. Lin.)
Black-necked Hare, (Lepus Nigricollis.)
Wild Pig, (Sus scropha. Lin.)
Stag, (Cervus Elaphus. Lin.)

BIRDS.

Mr. Bojer, with the praiseworthy intention of affording to the youth of our island, facilities for the study of this class of animals, which enlivens so agreeably the different regions of the globe, has adopted the happy idea of constructing tables accompanied by descriptions representing the different parts which characterize the orders and families. He has on various occasions exhibited birds of our island, and explained the characters which distinguish them; and, in conjunction with Dr. Lyall, he gave verbally an account of several birds from Madagascar.

The Rev. J. Freeman having presented to the Society twenty species of birds from the same country, Mr. J. Desjardins made a careful examination of them, and read, at subsequent sittings of the Society, descriptions of those which he considered to be new, and the synonymes of those which are known. As the Natural History of Madagascar is little known, we will cite here the species which he has determined, viz.

Two species of the subgenus Falco, (Cuv. R. A.)
The Barn Owl, (Strix Flammea. Lin.).
The Madagascar Grosbeak, (Loxia Madagascariensis. Lin.)
The White-backed Crow. (Corvus Dauricus. Lath.)
A species of the subgenus Regulus, (Cuv. R. A.)
The common Cuckoo, (Cuculus Canorus. Lin.)
The common Quail, (Titrao Coturnix. Lin.)
The Umbret of Senegal, (Scopus Umbretta.)
The Madagascar Rail, (Rallus Madagascariensis. J. Desj.)
The common Water Hen. (Fulica chloropus. Lin.)
The Madagascar Coot, (Fulica cristata, L. Gm.)
The Madagascar Snipe, (Scolopax Capensis. Lin.)
The little Gribe, (Colymbus Minor. Lin.)
Four species of the genus Anas.

Mr. Desjardins has also read a description of a waterside bird, known in the Mauritius by the name of Culblanc. It is a Plover properly so called (Scolopax). He has with hesitation given it the name of Scolopax Mauritiana.

REPTILES.

A living Snake having been discovered in the demolition of a house at Port Louis, at Caudan, Mr. J. Desjardins has examined it, and found it to be the red Coluber (Coluber rufus). The appearance of an animal of this order, in our island, is extremely rare, only one other such instance is remembered. This animal is harmless. The specimen, probably, came from the coast of Coromandel: the individual with which it was compared, is in the collection of Mr. Lienard, and came from thence.

Another memoir by Mr. J. Desjardins, has for its subject, three deposits of the bones of fossil Tortoises, which are in the district of Flacq: two of these have been discovered, and announced by himself. These ought scarcely to be named fossils, as the bed of calcareous deposit, and even of vegetable mould which contains them, is of modern formation; we cannot assign an antiquity of more than two or three centuries, to these remains. The first part of the memoir contains an enumeration of the authors and travellers, who, at distant periods, have spoken of these animals, which used to abound in the Mauritius, and which have left only such traces as we have mentioned, of their existence.

The inhabitants are familiar with the large lizard of Le Coin de Mire, and of l'Isle Platte, and also with that commonly called the Rock Lizard; but these animals have remained unknown to Naturalists

Mr. J. Desjardins has given a descriptive and historical account of these two species, which he has named Telfair's Scink (Scincus Telfairii), and Bojer's Scink (Scincus Bojerii). A third species, smaller and more rare has been described by him, and named Bouton's Scink (Scincus Boutonii)

FISHES.

The history of this class of vertebrated animals, has hitherto been very imperfect till now that Cuvier, and his fellow labourer Valenciennes, have given to the world a history of fishes, which their united talent has rendered as perfect as possible. The two first volumes of this work have been analized by Mr. J. Desjardins, in a notice which was read to the Society: he dilated only on the portion of the work relating to the Mauritius.

Mr. Th. Delisse read, at three sittings, descriptions of several species of fishes,—which are,

1. A Chetodon of the subgenus Heniochus. (Cuv.) 2. A Holocanthus. (Cuv.) 3. An Ophidium, of the same author. These inhabitants of our seas have been figured by our young colleague, with the utmost accuracy; of which no better proof need be given, than that the illustrious Secretary of the Royal Academy of Sciences at Paris has expressed great satisfaction with this talent of his.

ANNELIDES.

We have now arrived at the invertebrated animals, of which our island possesses such variety, especially of the marine species.

Mr. Lienard, junr. has read a description of a species of the genus Amphitrite. It has been beautifully figured by Mr. Couran. Though this species be abundant on our coasts it appears to be new. Our young colleague has modestly hesitated to affix a name to it. He described, at another sitting, five other species of the same genus, of which these seem to be new, and have received the names of Amphitrita fuscata, A. albicans, and A. tricolor; the other two are described by Lamarck, in the "Natural History of Invertebrated Animals," they are the A. volutacornis, and A. splendida. They inhabit the coasts of the island.

Mr. J. Desjardins, in a description which he has given of a fresh-water species of Erpobdella (Erpobdella), has preserved the name of Sexlineata, which Messrs. Quoy and Gaimard had, in 1828, given to a doubtful sort of this class.

CRUSTACEA.

Three species of the Crustacea of our island, have been described in detail by our young colleague, Mr. Lienard, (cadet.) They belong to the genera Lupea Pluguria, and cancer of modern authors. The exactness of these descriptions render it easy to determine the authenticity of these discoveries of our colleague, and his consequent right to assign names to them.

Mr. Delisse (Father) having examined all the parts of the Scyllarus Orientalis, (Fabr.) and considering the disposition of its orbits, has proposed to constitute, of the species, a new genus, under the title of Scyllibacus, ranking intermediate between the Scyllarus (Fabr.) and the Ibacus (Per.) Our Homard sans cornes, as it is named by the fishermen, is the Scyllibacus Orientalis of Delisse. Our island is so rich in Crustacea, that even after the abundant harvest which, during several years, the Colonel of Artillery, Mathiew, employed himself in gathering, many species are still undiscovered, and we may perhaps find some which must take their places in this new genus.

Mr. Delisse, jun. has exhibited to us, a figure from nature of the common Grapsus pictus.

INSECTS.

Although this class, compared with others, occupies the attention of a greater number of Naturalists, on account of its really startling extent, yet we have been favoured with only one discourse on Entomology. Mr. J. Desjardins read a description and history of the transformations of the Coccinella Sulphurea (Oliv.), known here by the name of Poule du Bon Dieu.

Different members have brought to the Society, insects of the different orders, which have been the subject of verbal dissertations; and Messrs. Bojer and Desjardins have examined and illustrated verbally, figures of insects sketched by various individuals, and especially by Lieutenant Beaufoy of the 29th Regiment. Dr. Lyall has also given us an account of a collection of insects from Madagascar, which he exhibited to us.

MOLLUSCA.

No country could be more conveniently situated than ours for the study of these animals, of which the solid part or shell forms the delight of so many amateurs, and of which the internal organization is so admirable, that by Physiologists they have been placed in a rank superior to that of the Insects and Crustacea.

The Mollusca properly so called, and also the order of Gasteropodes, of Lamarck, have frequently occupied the attention of the Society. The two Messrs. Lienards (brothers) have read five papers upon these animals. Mr. Lienard (aîné) in one of these memoirs, described five species of Doris, and to one, which he reckoned to be new, he has affixed the new name *Marginata*.

At another sitting, he described a Pleurobranchus, and afterwards another Doris.

Mr. Lienard (cadet) read the description of a Dolabella, and, as his brother had done, he explained its anatomy. The three stomachs of these animals, which contain horny substances for the trituration of their food, as well as the operculum, which covers the organs of respiration, are objects of little value to the generality of shell collectors, who almost always neglect the most philosophic part of natural history.

Another Doris, different from those already alluded to, was also the subject of a description by our colleague.

CIRRHIPIDES.

An Anatiffa, closely allied to the A. Striata, but sufficiently distinct from it, has been named by Mr. J. Desjardins, A. Mauritiana, and was the subject of a paper by him.

RADIATA.

Mr. Sevennes, one of our young associates, read a detailed description of a Fistularia, which is found in the Madreporic Detritus of our shores, and which he discovered in October last, on the shore, in a living state.

One genus of this class of animals has been noticed by Mr. Lienard (cadet), who has described a Cepheus, (Lamarck), which he names C. Lamillosa, on account of the foliaceous plates which cover the underside of its arm. We owe the knowledge of this production to our young associate.

The Report concludes with announcing that the Society is composed of 39 members, and possessed, as the result of their contributions, the sum of 300 piastres, and that, moreover, they had acquired a treasure of more than 50 memoirs and descriptions, notwithstanding the limited period since the Association commenced.

PROCEEDINGS OF THE NATURAL HISTORY SOCIETY OF THE MAURITIUS.

October 5, 1830.—The Society, after having during a year held its sittings in the house of Mr. C. Telfair, President, met this day, for the first time, in an appartment of the Royal College, prepared for it. The Secretary presented a variety of works, as donations from various sources, to commence the basis of a Library.

Mr. C. Telfair presented a case of minerals arranged according to the method of Haiiy; Dr. Lyall presented minerals of different countries, with a catalogue; The Rev. D. Johns, in Madagascar, sent several specimens of the produce of tanneries established in that island; Mr. J. Desjardins presented 150 colcopterous insects, forming 40 species, derived from the collection of C^te. Dijeon, and named by that skilful entomologist; Made. Faraguet and Madlle. Durand, presented figures of the fruits of the colony.

Mr. Faraguet exhibited a map of Tongataboo, where he, in his visit in the Astrolabe, nearly fell a victim to the perfidy of the inhabitants; he being the youth who was carried off by them.

Mr. Desjardins read a notice of a grey Cuckoo (Cuculus Canorus. Lin.) killed in the district of Flacq. This is the second instance in which this species, which certainly comes from Madagascar, has been observed in this island.

A letter was read from Capt. Pole, R. N. proposing a new method of moving steam-ships, which was committed to Mr. Faraguet to report thereon.

Mr. L. Bouton read a notice respecting various errors current in regard to the Botany of Mauritius, alluding particularly to an article in the Voyage of La Coquille, and to certain mistakes in the *Dictionaire des Sciences Naturelle*.