come to my knowledge; but I have since obtained such of species of both *Spermophilus* and *Georychus*, the latter nearly allied to, if not identical with, the Siberian Lemming (*Georychus aspalax*), from a deposit of lacustrine brick-earth near Salisbury, associated with *Elephas primigenius*. The Lemmings, I may remark, belong to the family of "Voles" (*Arvicolidæ*), not of "Hares" (*Leporidæ*); but the fossil from "the surface of the cave-earth far in the Reindeer gallery" of the Brixham Cave (Report, p. 558) appears from the figures (plate xlvi. figs. 12, 13) to be rightly referred to *Lagomys*, and to the same species determined and named (p. 213, figs. 82, 83, 84) in the 'British Fossil Mammals' (1846). The specimen submitted to me by Dr. Buckland was found by the Rev. Mr. M'Enery in Kent's Hole, Torquay, and includes a larger portion of the skull than the specimen figured in the "Report" from the Brixham Cave. It is evidently a Pika, or tailless Hare, not a Lemming. And the determination of the original or first evidence of *Lagomys spelæus*, now in the British Museum, led me also to remark:—"None of the circumstances attending its discovery, nor any character deducible from its colour or chemical state, indicate it to be an older fossil than the jaws and teeth of the Hares, Rabbits, Field-voles, or Water-voles already described; yet it unquestionably attests the former existence in England of a species of rodent, whose genus not only is unrepresented at the present day in our British fauna, but has long ceased to exist in any part of the Continent of Europe" ('British Fossil Mammals,' p. 213). The Lemmings still disturb, by their multitudinous migratory swarms, the husbandmen of Scandinavia.

June 18, 1874.—Joseph Dalton Hooker, C.B., President in the Chair.

"Description of the Living and Extinct Races of Gigantic Land-Tortoises.—Parts I. and II. Introduction, and the Tortoises of the Galapagos Islands." By Dr. Albert Günther, F.R.S.

The author having had the opportunity of examining a considerable collection of the remains of Tortoises found in the islands of Mauritius and Rodriguez associated with the bones of the Dodo and Solitaire, has arrived at the following conclusions:—

1. These remains clearly indicate the former existence of several species of gigantic Land-Tortoises, the Rodriguez species differing more markedly from those of the Mauritius than these latter among themselves. All these species appear to have become extinct in modern times.

2. These extinct Tortoises of the Mascarenes are distinguished by a flat cranium, truncated beak, and a broad bridge between the foramina obturatoria.

3. All the other examples of gigantic Tortoises preserved in our museums, and said to have been brought from the Mascarenes, and likewise the single species which is known still to survive, in a

wild state, in the small island of Aldabra, have a convex cranium, truncated beak, and a narrow bridge between the obturator foramina; and therefore are specifically, if not generically, distinct from the extinct ones.

4. On the other hand, there exists the greatest affinity between these contemporaries of the Dodo and Solitaire and the Tortoises still inhabiting the Galapagos archipelago.

These unexpected results induced the author to subject to a detailed examination all the available material of the gigantic Tortoises from the Mascarenes and Galapagos which are still living, or were believed to be living, and are commonly called *Testudo indica* and *Testudo elephantopus*, and to collect all the historical evidence referring to them. Thus, in the *first* (*introductory*) part of the paper a selection from the accounts of travellers is given, by which it is clearly shown that the presence of these Tortoises at two so distant stations as the Galapagos and Mascarenes cannot be accounted for by the agency of man, at least not in historical times, and therefore that these animals must be regarded as indigenous.

The *second* part consists of a description of the Galapagos Tortoises. The author shows that the opinion of some of the older travellers, viz. that the different islands of the group are inhabited by different races, is perfectly correct; and he distinguishes four species, the adults of which are characterized as follows:—

A. *Shell* broad, with more or less corrugated plates. *Skull* with the palatal region concave; outer pterygoid edge sharp in its entire length or for the greater part of its length; a deep recess in front of the occipital condyle; anterior wall of the entrance of the tympanic cavity constricted. One of the two species is from James Island.

1. *Shell* depressed, with the upper anterior profile subhorizontal in the male, and with the striæ of the plates not deeply sculptured; sternum truncated behind. *Skull* with the facial portion very short, and with an immensely developed and raised occipital crest. *Testudo elephantopus* (Harlan).

2. *Shell* much higher, with the upper anterior profile declivous in the male, and with the striæ deeply sculptured; sternum excised behind. *Skull* with the facial portion much longer, and with low occipital crest. *Testudo nigrita* (Dum. & Bibr.).

B. *Shell* oblong, smooth. *Skull* with the palatal region shallow; the outer pterygoid edge expanded in its whole length; no deep recess in front of the occipital condyle; anterior wall of the tympanic cavity not constricted.

3. *Shell* with some traces of former concentric striæ, compressed anteriorly into the form of a "Spanish saddle" in the male; sternum truncated behind. *Skull* with the tympanic cavity much produced backwards. *Testudo ephippium* (Gthr.), from Charles Island. *Extinct.*

4. *Shell* perfectly smooth, with declivous anterior profile in the male, and with truncated posterior extremity of the sternum.

Skull resembling that of the young of the larger species, with the tympanic case not produced backwards. The smallest species. *Testudo microphyes* (Gthr.), from Hood's Island.

Part III. will contain the account of the still existing Tortoises of the Mascarenes, and Part IV. that of the extinct species.

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P.S. The author has just received from Professor Huxley the carapace and skeleton of another adult male, which evidently belongs to a fifth species of Galapagos Tortoises. With regard to the form of the carapace, it resembles much that of *T. elephantopus*, the dorsal shell being depressed, broad, with the upper profile nearly horizontal. Striæ distinct, broad. However, the skull differs widely from that of *T. elephantopus*, and has all the characteristics of that of *T. ephippium*, from which it differs in having a circular tympanic opening. The form of the sternum is quite peculiar, the gular portion being much constricted and produced forwards, whilst the opposite end is expanded into the large anal scutes and deeply excised. This species may be named *Testudo vicina*.

MISCELLANEOUS.

On the Annelids of the Gulf of Marseilles. By M. A. F. Marion.

I have the honour to submit to the Academy the principal results of the researches on the Chætopod annelids of the Gulf of Marseilles, which I made in conjunction with M. Bobretzky, of Kiew, during the winter of 1873–74. We have been able to determine ninety-six species, among which ten appear to us to be entirely new to science; for four of them we shall even have to establish new generic divisions.

Of the eighty-six known species which we have observed, and of which we have completed our study, eighteen exist in the Black Sea, or are represented there by forms which can only be regarded as local varieties or as subspecies of more or less importance. These are :—

Pholoë synophthalmica.
Eunice vittata.
Lysidice ninetta.
Staurocephalus rubrovittatus.
Nereis Dumerilii.
—— cultrifera.
Syllis gracilis.
—— spongicola.
Trypanosyllis Krohnii.
Syllides pulliger.
Eteone picta.
Eulalia virens.
—— pallida.
—— macroceros.
Audouinia filigera.
Polyophthalmus pictus.
Aricia Œrstedii.
Saccocirrus papillocercus.

We find also seventeen of our Marseillese species in the lists of