

XLIX.—*Remarks on the Animals lately described by Dr. Gray as Testudo chilensis and Ateles Bartlettii.* By P. L. SCLATER, M.A., Ph.D., F.R.S., Secretary to the Zoological Society of London.

I AM no lover of controversy; but taking, as I am bound to do, special interest in the correct determination of the animals that have lived in the gardens of the Zoological Society of London, I must ask the Editors of the 'Annals' to allow space for a few remarks upon the tortoise and spider monkey recently described by Dr. Gray in this journal, under the names *Testudo chilensis* and *Ateles Bartlettii*, female.

Testudo chilensis is described by Dr. Gray in the 'Annals' for August last (*ante*, p. 190) as a "new Chilian" tortoise; but, in the first place, it is not new, and, in the second place, it is, as I believe, not Chilian.

That it is not new, but merely hitherto incorrectly determined, has been already admitted by Dr. Gray himself, in his second note on this subject (*ante*, p. 428). This Tortoise was first discovered by D'Orbigny on the Rio Negro, in the south of the Argentine Republic, but referred by him and by Messrs. Duméril and Bibron (*Erp. Gén.* ii. p. 79) to *Testudo sulcata*, though the latter authors expressly notice the principal characters in which the single specimen examined differs from that African species*.

Burmeister, in the second volume of his 'La Plata-Reise,' also follows the determination of Duméril and Bibron, but gives us the additional information that this tortoise "is found near Mendoza, and all over the Pampas" (*l. c.* p. 521)†.

In his excellent essay on the geographical distribution of the Testudinata (*Mém. Ac. St. Pét.* 7th ser. vol. viii.), Dr. Strauch discusses at full length the alleged occurrence of *Testudo sulcata* in Africa and South America as an extraordinary exception to the general law of distribution of these animals, and comes to the conclusion that either the African tortoise has been introduced, by the agency of man, into South America, or, more probably, the American so-called *Testudo sulcata* belongs to a different species (*l. c.* pp. 23, 24).

So far, therefore, from the so-called "Chilian" tortoise being "new," it appears to have been known to four or five

* "Dans l'horizontalité un peu moins marquée des plaques dorsales, et dans la présence d'un petit bord tranchant le long des flancs qui sont au contraire arrondis chez les autres."

† Dr. Peters has most kindly obtained from the Museum of Halle and examined for me Burmeister's specimens, and has no doubt of their being not *Testudo sulcata*, but the so-called *T. chilensis*.

previous writers, including the authors of the 'Erpétologie Générale,' the most ordinary book of reference on the Reptilia.

Secondly, as to the locality of the two specimens of this tortoise received by the Zoological Society, upon one of which Dr. Gray has established his *Testudo chilensis*. It is true that they formed part of a large collection of living animals brought to England for sale from Santiago. But these were certainly not all natives of Chili; for instance, the Burmeister's *Cariama* (*Chunga Burmeisteri*), of which three specimens were in the collection, is confined to the provinces of Tucuman and Catamarca in the north of the Argentine Republic. Again, there were, besides the so-called *Testudo chilensis*, examples of two other tortoises in the collection, neither of which is Chilian—one (*Testudo elephantopus*) being probably from the Galapagos, and the other (*Geoclemmys annulata*) from the coast of Peru, or Ecuador*. Moreover it is expressly stated by all authorities on the subject that no species of tortoises at all are found in Chili †. Had any tortoise been more recently discovered in that country, I cannot doubt that the excellent naturalist Dr. R. A. Philippi, the director of the Museum of Santiago, who has contributed so largely to our knowledge of the Chilian fauna ‡, would have made the fact known. I have very little doubt, therefore, that the specimens received from Santiago, upon which the so-called *Testudo chilensis* has been established, were either obtained from the Argentine provinces on the opposite side of the Andes, along with the Burmeister's *Cariamias*, or, still more probably, from near Buenos Ayres, where the vessel which brought them touched on her way from Valparaiso. To make this point certain, I have written to Dr. Philippi, and shall, in the event of the answer confirming my belief that the tortoise is not found in Chili, propose to change its name to *Testudo argentina*.

* In his 'Supplement to the Catalogue of Shield Reptiles,' recently published (p. 29), Dr. Gray gives the "Gulf of Darien (*Salvia*)" as a second locality for this *Terrapin*. There must be some mistake here, as Mr. Salvia was never in his life in the Gulf of Darien. The specimen of *Geoclemmys annulata* brought home living by Mr. Salvia, in May 1863, and presented to the Zoological Society (which is probably what Dr. Gray refers to), was picked up by that gentleman himself at Huamuchal, in the Pacific-coast region of Guatemala. See this place as marked in Mr. Salvia's map accompanying Dr. Günther's paper, *Trans. Zool. Soc.* vi. pl. 53.

† Cf. *Güichenot*, in Gay's 'Historia Física y Política de Chile,' ii. p. 8; *Bibra*, *Denkschr. Akad. Wien*, v. Abth. 2, p. 127; and *Strawch*, *l. s. c.* p. 27.

‡ See his numerous articles in *Wiegmann's Archiv*, of most of which a list is given in *P. Z. S.* 1867, p. 319.

I may add that the typical specimen of *Testudo chilensis*, Gray, now in the British Museum, has twenty-five marginal plates, and the same number is shown in a figure of this specimen prepared by Mr. Ford. Our living specimen, however, only possesses the normal number of twenty-three. Dr. Gray gives no dimensions in his description. Our living animal is 9·8 in. long, 7·7 broad, and 4·0 thick.

Next, as regards the spider monkey referred by Dr. Gray (*anteò*, p. 428) to the female of his *Ateles Bartlettii*. In the first place, *Ateles Bartlettii* (described and figured P. Z. S. 1867, p. 992, pl. xlvii.) is by no means a new species, being the same as *Ateles variegatus* of Wagner. Natterer discovered this finest of spider monkeys on the Serra de Cocoi, on the Upper Rio Negro, in 1831; and it was first shortly described by Wagner in 1840, in the supplementary notes to his first volume of Schreber's 'Säugethiere' (p. 313). Further details are given in one of Wagner's articles on South-American Mammals, in the 'Abhandlungen' of the Academy of Munich (v. p. 420); and the species is inserted in its proper place in the fifth or "Supplement-Band" to Wagner's 'Säugethiere,' the most ordinary book of reference on this Order of Mammals (*l. c.* p. 78).

Herr v. Pelzeln, of the Imperial Cabinet of Vienna, who has most kindly examined the typical specimens of this spider monkey for me, and agrees in considering them the same as *Ateles Bartlettii*, Gray, so far as he can tell from the figure and very short description* above referred to, informs me that Natterer obtained five examples of this animal—a male, three females, and a young. But as the females agree with the male in the yellow colour of the under surface, it follows that the spider monkey just described by Dr. Gray as resembling his *A. Bartlettii*, except in being "greyish white" where the *A. Bartlettii* is "bright yellow," cannot be the female of this species. Nor can it, I think, be the young of this spider monkey, as Herr v. Pelzeln informs me that the young individual of *A. variegatus*, in the Imperial Cabinet of Vienna, resembles the adult, except in the absence of the frontal spot and the white stripe on the sides of the face. At the same time the condition of the skeleton of the Society's specimen shows it to have been quite immature; and the length of the fur and other characters of this example agree so well with those of

* Herr v. Pelzeln observes that the under colour is rather too bright in the figure and that no dimensions are given. In two of Natterer's specimens, also, the yellow colour of the under body is continued over the upper surface of the limbs.

A. variegatus that I should be sorry to make a new species out of it without further evidence.

Dr. Gray gives no locality or other particulars concerning this specimen, simply stating that it has been "received" by the British Museum. I may therefore add that it was obtained by the Hon. A. Gordon, lately Governor of Trinidad, from the upper part of the Caura river, a southern confluent of the Orinoco, and presented alive to the Society's collection on the 14th of July last. It died on August 18th, and was sent to the British Museum.

L.—*Notula Lichenologica.* No. XXXIV.

By the Rev. W. A. LEIGHTON, B.A., F.L.S., F.B.S. Ed.

Notes on the Chemical Reaction in the British species of Pertusaria.

In preparing my 'Lichen-Flora of Great Britain' I have had occasion to devote a good deal of attention to the genus *Pertusaria*, and have discovered that in no series of lichens do the chemical reagents give more important or more beneficial results. By their means we are not only enabled to define the limits of the species themselves, but also definitely and satisfactorily to allocate the forms comprised in the old pseudo-genera of *Variolaria* and *Isidium*, which have ever proved a sort of *crux* to lichenists, and have consequently performed a continual migration from one genus to another. My proposed arrangement is as follows:—

A. *Thallus* K yellow, then orange-red.

1. *P. multipunctata* (Turn.), E. Bot. 2061. *Variolaria multipunctata*, T. & B. ! Lich. Br. 73.
2. *P. Westringii* (Ach.). *P. lactescens*, Mudd !, Man. 272. *Isidium Westringii*, T. & B. ! Lich. Brit. 93 ; E. Bot. 2204.
3. *P. glomerata* (Schleich.).
4. *P. ceuthocarpa* (Sm.), E. Bot. 2372. *Isidium microsticticum*, T. & B. ! Lich. Br. 94.
5. *P. dealbata* (Ach.), E. Bot. 1541 & 1511. *Isidium paradocum* ! and *corallinum* ! and *coccodes* ! α & β , T. & B. Lich. Brit. 97, 100, 89. *Variolaria chlorothecia*, Tayl. ! Fl. Hib. 2. *P. syncarpa*, Mudd !, Man. 273.

B. *Thallus* K yellow, C yellow.

6. *P. communis*, DC., E. Bot. 677 ; and forms *rupestris*, DC.