

*Discovery of Footsteps of Quadrupeds in the New Red Sandstone of Saint-Valbert, near Luxeuil (Haute-Saône).* By M. DAUBRÉE.

In reporting the discovery, in the above French locality, of the footprints described by Kaup as those of the *Cheirotherium*, and which Professor Owen has attributed to the *Labyrinthodon*, a gigantic Batrachian, the author gives the following particulars as to the occurrence and characters of these remarkable impressions. He says, "Above the great red beds which are quarried for building purposes, some thin strata of sandstone, also of a red colour, and spotted with pale green, alternate with clays of the same coloration. It is in these latter strata that I observed the impressions, at the very limit of the clay and sandstone. As at Hildburghausen, the foot first made an impression in the clay, and the relief which the sandstone presents on its lower surface is only the counterproof of the direct impression. In their form, as in their disposition, the prints just discovered in France exactly resemble those of Saxony, and belong to the same species of animal."

"By the side of the large feet there is also an innumerable multitude of small ones, turned in various directions, only presenting four toes, and somewhat resembling those of Batrachia."

"A new circumstance increases the interest of the vestiges of the *Cheirotherium* at Saint-Valbert. The mud upon which the animal walked was sufficiently plastic not only to take and preserve the exact form of the feet with their claws, but also to catch the inequalities of the skin with as much delicacy as if it had been done by a clever moulder; these latter peculiarities are even reproduced in the counterproof. Each foot, whether anterior or posterior, presents in all its parts, both on the sole and the toes, a granulation which is undoubtedly of organic origin. Beyond the footprints the surface of the slab presents nothing of the kind. This granulation is very regular, except upon some oblique ridges, where the sliding of the animal's foot has caused a slight stretching; they are small, rounded asperities, the largest of which do not attain a millimetre in diameter."

"Such an exact knowledge of the inequalities of the integument of the *Cheirotherium*, furnishes useful evidence as to the class of Vertebrata to which the animal should be referred. The lower part of the feet of Reptiles usually presents either more or less irregular scales, gradually decreasing in size to the extremity of the member, or a smooth skin with folds, or a few warts arranged in certain lines. In no existing animal of the groups of Batrachia or Chelonia does the foot appear to present inequalities of such comparatively small size, and so uniformly arranged, as in the footprints of Saint-Valbert. On the other hand, the asperities in question exactly resemble the papillæ of the sole of the foot of certain Mammalia, such as the Dog. For facility of comparison, I have had casts made, with the materials of the New Red Sandstone itself, of the feet of various quadrupeds, such as the Bear, Kangaroo, Opossum, Crocodile, Lizard, &c. It is observable that the hairs leave no traces upon the impressions of the feet of many Mammalia, any more than upon the fossil foot-



prints in question. Thus the papilliform granulation of the skin of the *Cheirotherium* is in favour of the zoologists who have regarded it as a Mammal. Now, this last conclusion is of importance, inasmuch as it leads to the admission that Mammalia existed on the surface of the globe at the time of deposit of the most ancient strata of the Triassic period."—*Comptes Rendus*, Oct. 26, 1857, p. 646.

*On two new species of Birds from Bogota.*

By P. L. SCLATER, Esq.

**ANABATES STRIATICOLLIS.**

*Olivascenti-brunneus, capite virescentiore et hujus plumis tenuissime nigro marginatis: alis nigricantibus, extus brunneo, intus autem cinnamomeo marginatis: subtus clarior et cinnamomeo tinctus; gutture et pectore antico pallidioribus et scapis plumarum cum harum parte mediali clare flavicanti-albidis, strias obsoletas formantibus: cauda unicolore rufa: rostro flavido, culmine brunnescente, pedibus nigricantibus.*

Long. tota 6·0, alæ 3·3, caudæ 2·6.

I have lately obtained a Bogota skin of this *Anabates*. Another specimen, which was previously in my collection and has been submitted to M. de Lafresnaye's examination, is marked in his handwriting "*Anabates striaticollis*, Lafr." I have therefore used that name, though as yet, I believe, unpublished. These two examples merely differ in their slightly inferior size from a third specimen marked "*Anabates olivaceiventer*" by M. de Lafresnaye some years since. I do not know whether he considers the two species indicated by these MS. names as distinct. For myself I doubt the fact. The cervical striæ, whence the name is derived, are not very well marked in my Bogota specimens.

**SCLERURUS BRUNNEUS.**

*S. supra brunneus cinnamomeo tinctus, subtus paulo pallidior; gutture albo mixto: alarum et caudæ pennis intus nigricantibus, illarum marginibus externis dorso concoloribus: rostro nigro, basi flavicante: pedibus nigris.*

Long. tota 6·0, alæ 3·4, caudæ 2·1.

I have lately obtained a single Bogota skin of a bird of this genus, to which (as I cannot associate it with any of the already-described species) I have given a new name. From *S. caudacutus* of Brazil and *S. mexicanus* (P. Z. S. 1856, p. 290) of Mexico and Guatemala, it differs in the want of the bright rufous colouring in the rump and fore neck. In this respect it would seem to resemble Hartlaub's *S. guatemalensis* (Rev. Zool. 1844, p. 370), but that bird is said to be of the size of *S. caudacutus*, to which the present species is considerably inferior in dimensions.—*Proc. Zool. Soc.* Jan. 27, 1857.





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