

XXXIX.—Description of a new Species of the genus *Lophotus*, from the collection of Charles Darwin, Esq. By G. R. WATERHOUSE, Esq., Curator to the Museum of the Zoological Society, &c. &c.

THE genus *Lophotus*, founded by Schöenherr* upon an insect from Chile, is placed by that author in his family *Cleasidæ*, and in the apterous section of that family. But one species of *Lophotus* was known to him at the time of the publication of his second volume; he must now however be acquainted with two species, the Rev. F. W. Hope having sent him two from his own collection. One of these is described and figured by Mr. Hope in the 'Transactions of the Entomological Society,' under the name of *Loph. nodipennis*; to the other he applies the name *trifasciatus*—this, however, I believe to be the same as Schöenherr's species. Mr. Hope also refers the *Carcullio Vitulus* of Fabricius to the same genus: there are therefore three species of *Lophotus* known; and as these are now before me, together with the new species I am about to describe, I will endeavour to point out their chief distinguishing characters.

Section RHYNCHOPHORA.

Subsection GONATOCERI.

Family CLEASIDÆ.

Genus *Lophotus*.

Sp. 1. *Lophotus Vitulus*.

Carcullio Vitulus, Fab. Ent. Syst. tom. 1. pars 2. page 479. spec. 326.

"*C. brevirostris niger fronte bidentatâ, elytris unispinosis.*

Habitat in Terrâ del Fuogo. Mus. Dom. Banks.

Caput nigrum rostro canaliculato. Inter oculos dentes duo elevati, acuti. Thorax rugosus, ater anticè punctis duobus elevatis.

Elytra carinata, rugosa, atra, posticè spinâ elevatâ, acutâ.

Pedes nigri."—Fab.

Two specimens of this species form part of Mr. Darwin's collection; one of them is from Hardy Peninsula, Tierra del Fuogo, taken in the month of March; and the other is from

* 'Genera et species Carculicoidum,' tom. 2. pars prima, p. 314.

Tres Montes, "found on a bare granite mountain, at an elevation of 2500 feet." They have been compared with the original specimen in the Banksian collection. The length of this insect varies from 9 to 10 lines (without including the rostrum, which is rather more than 1 line in length), and its greatest width is from $2\frac{1}{2}$ to 3 lines. The general colour is black or pitchy-black. The rostrum is elevated between the antennae, and there are two longitudinal grooves in this elevated portion: on the head between the eyes are two distinct obtusely pointed tubercles. The thorax is nearly cylindrical, but obscurely dilated in the middle; its upper surface is covered with strong irregular rugae, which are for the most part in a transverse direction; besides these irregular ridges, there are two tubercles situated close to the anterior margin. The elytra are of about the same width as the thorax at the base, but towards the hinder part they are dilated; their upper surface is convex, and at the sides they are compressed—the general form of the body however approaches to cylindrical. The anterior angles of the elytra are slightly produced, and the apical portion is rounded: on the upper surface they are deeply and coarsely punctured; these large punctures are near each other and leave strongly elevated rugae, and these rugae are most elevated in the transverse direction, the punctures having a tendency to run into each other in that direction: on the hinder part of each elytra, about 2 lines from the apex, is a large angular tubercle. Each segment of the abdomen beneath is convex and somewhat coarsely punctured; and on the last segment two large foveae are observable. The legs are moderately long.

A specimen of this, as well as of each of the other species here described, is deposited by Mr. Darwin in the Museum of the Entomological Society.

Sp. 2. *Lophotus loapipes*, nov. spec.

Loph. niger, rostro longiusculo, calmine elevato, capite rugosè punctato; thorace suprè lineis irregularibus elevatis transversim, lineisque elevatâ longitudinali, notato; margine antico elevato; elytris punctis grandiusculis longitudinaliter in lineis crebrè depositis; tuberculis parvis, apud partem posticam, apice producto et acuto; abdominis segmentis subtis in medio lev-

bus, ad latera punctis necnon squamis flavidis vel albis obsitis; apud metathoracem squamis pallidis lineam lateralem effluentibus; scutello albo; pedibus longis.

Of the species of *Lophotus* known, the present could only be confounded with the *Loph. Vitulus*, but from that it may be distinguished by the following characters:—the rostrum is longer, and instead of having a bisulcated elevation between the *gastreae*, it is furnished with a central longitudinal ridge, which is considerably dilated in front of the *antennae*, where it exhibits a shallow longitudinal depression in the middle; the *antennae* are longer: the tubercles over the eyes are here wanting: the anterior margin of the *thorax* is raised into a fold, but it does not present the two tubercles observable in *Loph. Vitulus*; the irregular *rugae* on the *thorax* are more or less distinct; the *elytra* differ in having the posterior portion produced into a point, the posterior two tubercles much larger, and the sculpturing less deep. In addition to these characters, the comparative smoothness of the segments of the *abdomen* beneath, and their being furnished with pale scales on the sides, together with the proportionately great length of the legs, will serve to distinguish *Loph. longipes* from *Loph. Vitulus*. The *scutellum* is white. The length of this species is 9^l, and its greatest width is 3^l; the length of the *femora* and *tibiae*, taken together, is 5½^l, whereas in *Loph. Vitulus* the same parts measure only 4½^l. Mr. Darwin found this species in Hardy Peninsula, Tierra del Fuego, and at Cape Tres Montes.

Sp. 3. *Lophotus sodipennis*, Hope, Transactions of the Entomological Society of London, vol. 1. p. 13. pl. 1. fig. 5.

L. "ster, rostro canaliculato posticè nivo, elytris antituberculatis, maculæque albiâ inter tubercula et apicem positâ. Long. corp. 10^l. Lat. 3½.

Habitat apud Conception America Meridionalis." Hope.

This species is at once distinguished from either of the others here noticed by its less deep sculpturing, but more particularly by the white spots by which its legs, abdomen, and apical portion of the *elytra* are adorned. These patches of pale scales are observable in the following situations:—1st, there is a patch on the basal portion of the rostrum, another on

each side of the thorax, one on the trochanter of each of the 4 anterior legs; a longitudinal row of spots adorns the under side of the abdomen, one to each segment, and the two basal segments have moreover a spot on either side; a large patch is situated on the apical portion of each elytron, and all the femora have a pale ring near the apex: the colour of these spots is sometimes white, sometimes yellow, and occasionally some brilliant pale blue scales margin the white ones, especially on the legs, and a patch of blue scales is generally apparent beneath the spots on the apical portion of the elytra. Several specimens of this species were brought home by Mr. Darwin; some of them are from Chiloe, and others from Yuche Island, Chonos Archipelago.

Sp. 4. *Lophotus Eschscholtzi*, Scho. Tom. 2, pars prima, p. 316.

Lophotus trifasciatus. Hope, MS.

L. niger, squamis albis dispersis; elytris fasciis tres latas et albas exhibentibus, necnon ad apicem notam albam: tuberculis duobus parvis et angularibus super oculos; thorace punctis confluentibus; elytris insigniter punctato-striato.

This species is readily distinguished from either of the preceding by the black and white *fasciæ* which adorn the *elytra*. It agrees with the description of *Lophotus Eschscholtzi*, if we may suppose Schöenherr's specimen a little rubbed. In perfect specimens the *elytra* (which are shorter and broader than in other species) are densely clothed with white scales, excepting in certain parts, and these unclothed portions form *fasciæ*: a small black spot is observable on each shoulder, a triangular black patch (sometimes confluent with the shoulder-spot) on the *scutellus*; behind these are two black *fasciæ*, the first of which is interrupted in the middle; and on the apical portion of the *elytra* is an irregular black mark. On the head, *thorax*, legs, and the whole of the under parts of the body, are scattered white scales.

One specimen of this insect was brought from Valparaiso by Mr. Darwin, who says "it first appears in November, is very abundant, and injurious to the young shoots of plums and peaches."

years resident in India in the prosecution of his profession, and has employed his leisure time in studying the zoology of that country, particularly its ornithology. Our parcel contains a partial result of researches in the latter department in the first part of a "Catalogue of the Birds of the Peninsula of India, with brief Notes on their Habits and Geographical Distribution*," and notwithstanding the information contained in the illustrated works of Hardwicke and Gould, and in the valuable Catalogues and Papers of Franklin, Sykes, Hodgson, and Eyton, several species among the Raptores are given as new. Mr. Jerdon divides the peninsula into four great districts or divisions. 1st, *The Northern Circars*, comprising a narrow tract of land (between 16° and 20° N. lat.) from the sea-coast on the eastern side of the peninsula to the Eastern Ghauts, by which it is separated from the Great Table-land; 2nd, *The Carnatic*, including the whole of the country lying south of the Northern Circars along the coast as far as Cape Comorin, and bounded on the west by the Eastern Ghauts, except the Coimbatore district, where the eastern as well as western range is broken; 3rd, *Western coast*, including Travancore, Cochin, and Malabar, and comprising a strip of land of various width lying between the sea on the western side of India, and the range of Western Ghauts, which it includes; 4th, *The great central table land*, including Mysore, the Baromahl, the ceded districts (Bellary and Cud-dapah), the kingdoms of Berar and Hyderabad, the Southern Mahratta country and the Decan.

The species already noticed in this range are 390, and the list will probably be extended before the completion of the catalogue, which now reaches only to a part of the Strigidae. Of the Falconidae 32 species are noted; and among those belonging to the British list we have *Pandion Haliaeetus*, *Aquila Chrysaetos*, *Circus cineraceus* and *rufus*, *Falco peregrinus* and *Tinnunculus*, *Accipiter fringillarius*, and *Actus polembarius*. It is possible however that some of these may require a more rigorous comparison with the birds of Europe. This part of the catalogue is illustrated by a lithographic figure of an owl (*Huho pectoralis*), very neatly engraved; and if figures can be produced in India equal to that now attempted, they will be of much importance in illustrating the views of the gentlemen who may in future attend to the zoology of this very interesting region. Our correspondent states, "I have 50 or 60 drawings in the same style †, drawn by myself and finished by the native artists I kept at Trinco-

* Published in the Madras Journal of Literature and Science for September 1833. The Raptores.

† Specimens accompany the packet well drawn and beautifully finished.

napoli, most of them of birds hitherto unfigured. I shall commence sending my specimens next month, and hope by the end of the year to have forwarded to you a series of all I have procured, for the identification of species, &c. As you requested, I now add a few remarks on the Indian Fox and Wolf. *Canis Bengalensis*, Shaw, *C. Kaskree*, Sykes, lives chiefly on the open plains, burrows in the ground, generally four or five openings to the burrow, some of which communicate with each other; others are blind; it feeds chiefly on lizards, locusts, grasshoppers, beetles, small snakes, and occasionally crabs and rats; runs with remarkable speed; the chase with greyhounds is a favourite pursuit in India.—*Canis Lupus*, *C. pullipes*, Sykes, Wolf; hunts in small packs and runs down antelopes and hares, seizes also sheep in a very daring manner in daylight, and carries off young calves, goats, sheep, &c. during nights, and not unfrequently children. It possesses great speed and most extraordinary powers of endurance. Though often chased by the best horsemen, unless it is gorged, it always outlasts the fleetest horse, keeping generally 20 or 30 yards ahead at whatever pace the rider may go."

Dr. Krauss's Return from Southern Africa.

It will be remembered, that about two years and a half since, Dr. Ferdinand Krauss of Stuttgart, left England for the Cape, on his way to explore the interior of Southern Africa, with a view to collect objects of Natural History from those regions. He has within the last month returned to London with his extensive collections of both animals and plants, collected principally in Natal and Amazoola land, where he resided about twelve months; during which period he assiduously devoted the whole of his time and attention to preserving objects in every department of natural history. The zoological collection comprises Mammalia, Birds, Fishes, Amphibia, Crustacea, Insects, Shells (land, freshwater, and marine), Zoophytes, &c. The Botanical collection comprises about 3000 species of native plants, carefully preserved, and in most instances 20 specimens of each species; those of Natal, amounting to about 1000 species, are offered to botanists at forty shillings the hundred; and those collected in the Cape Colony at twenty-five shillings per hundred species. A series of the zoological and botanical collections we understand are about to be purchased by the British Museum; the remaining sets will be disposed of to those desirous of possessing them.

In addition to the above collections Dr. Krauss attentively ex-

amined the geological features of the country through which he travelled, with a view especially to record the exact position and situation of the *oolite*, very imperfectly known to the farmers in the interior of Africa. He has brought with him specimens illustrative of the different formations, including the coal and fossils from the beds: we anticipate giving a more detailed account of this traveller's expedition in a future Number.

Mr. Schomburgk's recent Expedition in Guiana.

[Continued from p. 283.]

I HAVE been told of eight varieties of Opossum which inhabit Guiana, five of which have come under my notice. I have identified four species with those described by authors, as *Didelphis emaciora*, L., *D. guica*, Temm., *D. pilander*, Temm. and *D. darwleri*, L. and Temm.; but the fifth appears to me to stand intermediate between *D. virginiana* and *D. Azarae*, Scrb. Temm. It differs from the latter in the absence of the black markings on the head, black neck, and the black and white ears, which in the Guiana species are of a uniform black colour. If we could reconcile the geographical distribution of *D. virginiana* over a space so different in temperature, I should consider the specimen which I am now describing a variety of that species; the circumstance that the ears are of a uniform black would scarcely constitute a specific difference. Its body from the nose to the insertion of the tail measures 15 inches and a half, the tail 15 inches. The latter, which is prehensile, is for the length of 3 inches clothed with thick fur, the remainder scaly for about 4 inches, of a black colour, and afterwards white. The scaly part is covered with a few short hairs, black on the back part, and white for the remainder. The fore leg to the malleolus measured 3 inches, the hind leg 4 inches. The fur is of a brownish yellow, short and silky, but intermixed with longer hair of white colour and somewhat stiff. These white hairs are along the vertebral line from 4 to 5 inches in length, intermixed with shorter silky hair, which being black above and white beneath, give it the appearance of a black band stretching from the head along the back to the insertion of the tail. The fore and hind feet are of a dark mouse colour, intermingled with a few white hairs. The ears somewhat compressed at the base, naked, black, and about 1-2 inch in length. Round the eyes is a dark spot of an oblong figure, but otherwise the head is almost entirely of a brownish yellow. The neck is covered with the same short fur of a brownish yellow as the belly, while in *D. Azarae* it is of a black colour. The specimen which has served

me for description was shot in the neighbourhood of Georgetown, but as it was the only one of its kind which I ever saw, I hesitate to establish it as a separate species, until I have had opportunity of procuring individuals of the same appearance. It is said to be very common at the coast region, and is called the white Yawari by the colonists, Nops by the Warran Indians, Yawari by the Arawaks and Macusá. It does great injury to the feathered stock, and frequents the sugar-cane fields, being apparently partial to sweets.

The black Yawari (*Didelphis quica*, Temm.), called so by the colonists from its appearance when at rest; the hair being long and black at the tip, but yellow towards the root. The tail is longer than the body, clothed with hair for one-fourth of its length, the remainder naked and scaly. Its size is that of a marten, but in its head it resembles a fox, and the muzzle ends with a whitish spot. I do not possess an actual measurement, but I should estimate the length of its body about twelve or thirteen inches, and the tail from fifteen to sixteen inches. The latter, which is prehensile, is of great assistance to them in climbing. They are very destructive to poultry and likewise to fruit; They are often found on those savannahs where the wild pine (*Bromelia, spec.?*) flourishes, to the fruit of which they appear to be partial. Like its congeners, the female possesses a pouch in which she carries and suckles her young until they are as large as half-grown rats. They produce from six to seven young at a time. They sleep during the day and hunt at night. They are sometimes eaten by the Creoles and Indians, but as they have a rank and disagreeable smell I doubt if they would prove palatable to us.

The *Didelphis castoreus* is too well known to deserve more than a passing remark; moreover, I am not able to add anything about its habits, as it is more peculiar to the sea-coasts than to the interior of Guiana.

The Yawari cusinal of the Marusi Indians, or Picnappa of the Warrans (*Didelphis phileader*, Temm.) has an extensive range in Guiana. It is met with in the coast regions as well as in the interior. It resembles in size a full-grown rat; the fur, short and silky, is of a rust-colour, lighter beneath the belly; length of the body nine inches, tail ten inches and a half, clothed with fur for about two inches, the remainder naked and of a uniform brown colour. A deep furrow divides the nostrils, and the eyes are brown and very prominent, and surrounded by a reddish spot. Possessing all the peculiarities of its tribe, it appears to be more lively than the rest, and climbs with the alacrity of a squirrel. Although I have seen many