posterior: antennae inserted higher than usual, setaceous; the scape about one-fifth the length of the entire organ, very robust, being nearly twice as thick as the base of the flagellum, and curved slightly at its base; the carinae, behind which they are inserted, terminating above abruptly, in front of the anterior ocellus, where they are very prominent, and beneath the insertion of the antennae dilating laterally and enclosing a large circular concavity, and terminating on the edge of the clypeus on each side in a recurved compressed acute tooth: mandibles slender, leaving scarcely any space between them and the clypeus.

Thorax excessively gibbous in front, pendent over the head; metathorax perpendicular: wings rather darkly tinged, their nervures testaceo-fuscous; the stigma testaceous, with a minute brown spot at its base: marginal cell yellowish, lanceolate, slightly acuminated beyond the second submarginal, which is about the same size as the first, from which it is separated by an inwardly curved transverse cubital; it receives the recurrent at about half its length, beyond which to the termination of the cell the cubital nervure is slightly thickened: legs short and rather stout.

Abdomen slightly shining and slightly laterally compressed; its first segment transverse-quadrate, transversely convex at its apex, about as wide as the second, which with the following are transverse and short, and but slightly constricted at their margins, the terminal segment vertically much compressed at its extreme apex, beneath which the sexual organ protrudes as usual.

In my own collection.

This species is amply distinguished from all by the peculiarity of the carinae of the face, the clypeus, the remarkable thickness of the scape of the antennae, and the excessive gibbosity of the mesothorax in front. I have much pleasure in dedicating it to Mons. Guerin, the able illustrator of many genera of Hymenoptera.

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XLIX.—Information respecting Botanical and Zoological Travellers.

Neuchatel, June 12.—Recent accounts have been received from the naturalist Tschudy, who some years ago, assisted by the late King of Prussia and some other gentlemen with four thousand francs, went out with the Edmond to Lima, in order from thence to make excursions into the Cordilleras and adjacent country. A considerable transport of objects of Natural History collected for the Museum of our town (Neuchatel) has already come to hand. He is still in the mountains of Peru; and having consumed the money taken out with him, lives by the chase, and is awaiting fresh assistance which
is on the way for him. He had much to suffer from hunger and want of shelter during the rainy season; this however did not abate his zeal. His collection for our Museum has considerably increased; for he announces 70 Mammalia, more than 500 Birds, Reptiles, Fishes, 1100 Coleoptera, 200 Lepidoptera, and a hundred Conchylia, with several other remarkable objects, plants and fossils. The assistance sent will enable M. Tschudy to embark with his rich booty, and return to his native country.—Augsburg Allgemeine Zeitung, June 19.

Mr. Schomburgh’s recent Expedition in Guiana.

(Continued from p. 348.)

In my former remarks I gave some account of the manners and habits of the Jabiru (Mycteria Americana), and alluded to two young ones which I received while in Georgetown. They were brought to me from the Pomeroon, and when keeping their neck erect they were about five feet high. Their plumage was still grey, and they might have been about a year old. They were so tame that I allowed them to run about the yard, to which, however, they did not restrict their perambulations, and they extended their walks frequently to the street. As they were a great curiosity, they had frequent visitors; or when in the street, a crowd collected generally around them, until annoyed by too great familiarity, they would begin to clack the under chap against the upper, and partly spreading their wings, those unacquainted with the bird fancied these to be the first preparations for a formidable attack; and the little knot of by-standers which had formed round opened their ranks without further contention, and allowed them to return leisurely to the yard.

I shall never forget the effect which the sight of them produced upon a woman of colour, who no doubt had never seen a Jabiru before. The woman with a tray on her head was walking down the street, when one of the Jabirus came with its measured step out of the gate. At the first sight of this gigantic bird she stared with half-open mouth at what she must have considered a monster; at that moment the bird spread its wings to their full extent, and changing its leisurely step into a hop, it approached her rapidly: this was too much for her; and throwing the tray upon the ground, she fled for protection as quick as her legs would carry her to the nearest shop, throwing together her arms during her rapid flight violently over her head. The ridiculousness of the scene cannot be described; it must
Information respecting Zoological Travellers.

have been seen to conceive it. I wished I had possessed the skill of a Cruikshank, in order to sketch it when yet fresh in my memory.

While they were in my possession I fed them on butcher's meat and the offals of the kitchen. They sometimes got fish, but its high price in Demerara did not permit me to feed them exclusively with it, although they appeared to prefer it to any other food. When the food was thrown in the air they caught it with great skill. They were very voracious, and would frequently quarrel with each other for a favourite piece.

When irritated they clacked their beaks violently, and partly spreading their wings, their appearance was certainly calculated to cause some precaution. I have seen them strike with their beak towards the face of those who irritated them; and in one instance a wound was inflicted, fortunately of no great moment. A dog stood no chance, as the clattering noise and their appearance was quite sufficient to frighten him away. In their wild state they are fierce; and I have seen them, although mortally wounded, defend themselves valiantly.

The season was too far advanced to send the two young Jabirus to Europe; and as I was on the eve of my departure to the interior, I gave them away, and am not acquainted with their fate.

All the pictures which I have seen of this bird are poor representations of it. It appears to be scarce in European museums; and the one which is preserved in the British Museum is not only in itself a poor specimen, but is besides so injudiciously stuffed, that it does not convey to the spectator any true resemblance of the bird in its natural state.

The representatives of the swine in South America are the banded or collared, and the white-lipped Peccari; but although their form of body, the length of the snout and the shape of their legs are not materially different from the European swine, there are nevertheless differences, even in the outer appearance, which become evident when we come to examine them nearer. Their body is not so bulky, the legs are shorter, in lieu of the tail there is merely a short protuberance; but the greatest difference consists in a gland upon its back, which although concealed, is easily perceptible from the turn of the hair around it, and which gland secretes a liquor of a strong smell. Both species appear to be common to Paraguay and Guiana. In the latter province, where they have come under my notice, they are seldom met with on the plains or savannahs, and frequent more the thick forests and swamps.
The collared or banded Peccari (*Sus Tajussu, L., Dicoteles torquatus, F. Cuv.*), the lesser of the two species, is generally met with in small families of eight or ten, frequently only in pairs. They are of a gray colour, that is, their hair, which is ringed alternately with black and yellowish white, appears gray at a short distance. The belly is almost bare, and the bristles on the sides are rather short, but they gradually increase in length as they approach the ridge of the back, where they form a kind of bristly mane. From the shoulders round the neck extends a narrow collar or band of whitish hair. Their legs are short and the hoofs long; they run nevertheless with great swiftness, and when hunted by dogs, take refuge in a hollow tree. They feed on seeds, particularly on those of different species of palms, which they crack with their strong jaws, and devour the shell as well as the kernel. They also turn up the soil like the domestic hog to search for worms or insects, and to procure them are often and more generally found in swampy situations: the assertions that they are only found in mountainous parts of a country, and very seldom in lowlands or marshes, may be correct with regard to Paraguay, but not so as to Guiana, where we have found them generally in marshy situations, wallowing like our domestic hogs in quest of worms. They bear one young at a time, rarely two, which follow the dam until it can provide for itself.

They swim across rivers, but seldom take to the water when pursued by dogs, as they do not dive. Indeed they are awkward in the water, and the Indian hunter is sure of success if he can drive a herd into the river. They are then easily killed by striking them a blow on the nose; however, the Indian does not stop to pick them up when thus killed; he is well aware of the peculiarity which they share with few animals, namely, that they float on the water, while almost every other animal sinks: the Indian therefore kills as many as he can, and picks them up when he is no longer able to add to their number.

When taken young they are easily tamed, and will follow any one they take a liking to, like a dog; but are apt to bite and snap at those to whom they take a dislike. They appear very fond of being scratched; and so pleasing must this operation prove to them, that they gradually lie down on the ground and give signs of their great delight by a low grunt. In a tame as well as in a wild state they show the greatest aversion to dogs; in a domesticated state their bristles rise and they begin attacking the enemy with their tusks. When hunted they make a desperate resistance, and severely wound dogs that are not accustomed to hunt them. Those which

have been trained by the Indians separate one from the herd and keep it at bay until the huntsman arrives to shoot it with his arrow; the dog then sets off after the herd again and acts in like manner. I have known a hunter with a well-trained dog to bring three and four hogs as the fruit of his hunting excursion. The Indian who is not provided with a dog, on coming up with a herd climbs the first tree, and begins to imitate the barking of a dog; if young ones should be among the herd, at which period they are particularly fierce, this sound is quite sufficient to urge them to attack, and they soon gather in numbers round the tree, threatening with their tusks. This is the time for the Indian to discharge among them the contents of his gun, if provided with one, and with what success may be imagined: off sets the herd in full flight; the Indian is equally quick to follow them, and should he be nimble-footed enough to outstrip them and to get before the herd, he climbs another tree, and again imitating the barking of a dog, he is sure to assemble them in full rage around the tree, and has opportunity of firing a second shot at them. This method is now frequently practised, where guns, and even double-barreled ones, are no rarity among the Indians of the coast regions. An Arawak Indian from the Lower Essequibo nearly paid this ruse with his life; the branch on which he sat when he was about to fire among the incensed herd which had gathered round the tree, broke, and he would have fallen among them if he had not caught one of the lower branches, not high enough however from the ground to be entirely out of their reach. His legs were almost literally torn to pieces by their triangular tusks; still he did not let go his hold, and kept presence of mind enough to try to swing himself upon the branch, in which he at last succeeded. Their victim having escaped, they exhausted their ire on the gun, and at length left the Indian, who in spite of the loss of blood crawled homewards and escaped narrowly with his life.

Their flesh is savoury, though drier and leaner than that of the hog; but precaution must be taken soon after the animal has been killed to cut off that part on the back which contains the glands, otherwise it communicates a musky taste to the meat. They form one of the chief articles of sustenance of the Indians; and as their being hunted with a well-trained dog insures more certain success, a dog of that description commands a good price. The Peccari is called Apuya by the Arawak Indians, Paraka by the Macusis, Parikira by the Paravilhanas, Pakitye by the Warraus.

The white-lipped Peccari or Kairuni (Dicoteles labiatus, Cuv.) is considerably larger than the preceding, of a darker colour, and white
upon the cheeks and lips; and the hair about the head is so long that it almost covers the ears. The young are of a chestnut colour, and their cry resembles the bleating of a goat. Their manner of feeding and habits in general are not different from the Peccari, but they travel together in herds of several hundreds. They are more fierce when hunted, and often kill the dogs that attack them by ripping them up with their tusks; and they are also known to have attacked the huntsman. When they once take to flight they can be followed without much danger, as they seldom retain their courage or turn round upon their pursuers. The Jaguars commit great carnage among them; they remain generally in the rear and seize upon the last and all stragglers; but it is asserted by the Indians, and corroborated by wood-cutters and others who live in the interior, that the white-lipped Peccaris frequently surround the Jaguar and tear their enemy to pieces.

Of all the rivers in British Guiana, the Berbice offered the greatest difficulties to our ascent, either in the shape of cataracts or from large trees, which we frequently found lying across where the river narrowed, which either the wind or age had prostrated. Our advance amounted on the 2nd of January (1837) scarcely to two miles, the trees which barricaded our passage were so numerous. While we were thus engaged in cutting through a large mora-tree, one of the Indians who had been straying about, one of the Indians who had been straying about, brought us information that a herd of the larger Peccari were feeding at a short distance from a river. Our guns were put immediately in requisition, and off we started.

Akuritsh, the Caribi, armed with bow and several iron-headed arrows, accompanied us. I came first up with the herd and found them in a pool of water, where they wallowed in the mire like the common hog. One stood apart apparently as watch; and scarcely had it perceived me, when the bristles on its back rose erect, and turning round towards me, it began chattering with its teeth, and the whole herd rose: not a moment elapsed, and it lay prostrated in the mud pierced by my rifle-ball. How can I describe the bustle and the rush of several hundred, which at the report of the gun were seen flying in the opposite direction! an Indian who had come up by this time shot another, and the retreat was now complete. I had loaded again, but hesitated to wade through the swamp, when the Arawak chieftain Mathias, who had observed my hesitation, requested me to lend him my rifle; I gave it him, and he started off, while I remained at the spot where I first fell in with them. I heard four or five shots fall, apparently at some distance, and while
I was yet considering how many of them might have told, I heard a rushing noise like a whirlwind approaching through the bushes towards the place where I stood: the peculiar growl and that awful chattering of the teeth, did not leave me long in doubt as to its cause; it was evident that the herd had divided and were coming directly towards me. I stood alone, unarmed; these were my last thoughts; the next image which stands fixed in my memory is, that I stood on the lower part of a mora-tree and looked down upon a herd of about fifty Kairunis rushing by in full speed, their rough bristles standing erect, their muzzles almost sweeping the ground, and their white triangular tusks clapping in concert. They came and passed like a whirlwind, and before I had recovered from my astonishment, I heard them plunge into the river to swim across. How I came on that tree I know not; to the rapid execution of what I must have considered my only means of escape I owed my life. The other hunters had not been so fortunate as I expected; excitement or fear made them miss, where it would have appeared almost impossible. Including the one which I had shot, three more had been killed with guns, and one by Akuritsh with bow and arrow: they were a most welcome addition to our reduced Commissariat.

I had never a better opportunity of watching their proceedings when on march than offered itself while traversing from the river Berbice to the Essequibo. We had fallen in with the herd and shot two, of which we took as much as we could carry, and continued our journey. A preconcerted signal called us shortly after back to our camp at the banks of the Berbice, where only a case of urgency could have induced those who were left in command to fire that signal. Anxious to learn the cause, I had distanced my party, and unaware and unperceived I fell in with the herd of the Kairunis; they were in regular line of march, and walked with slow step, though single, nevertheless so that the preceding covered partly the following; the young were walking under the belly of the mother. We shot two more, which as time did not permit to carry with us, we hung up on a tree, to send for them if circumstances permitted. A large party of Caribi Indians had arrived at the camp, which had been the reason of firing the signals for our return; they came, however, as friends; and we returned next day for our hogs, and were not a little astonished to see no vestiges of them. They had been carried away by a Jaguar. After some search we found them, however, dragged to a thicket, where they were yet untouched, and of course we put an end to any further question as to who should possess them. Their meat is justly esteemed, and many prefer
it to the lesser Peccari. The liquor which flows out of the gland is equally offensive as in the latter, and is peculiar to both male and female. They bear only two young ones, frequently only one; but they are more difficult to tame than the collared Peccari. I do not think that any attempts have been made to domesticate either one or the other species. The Indians tame sometimes the young ones, but never with the avowed purpose of breeding; although I have little doubt that their meat would vastly improve by regular attention; and after two or three generations they would be familiarized. There is no instance known of their having bred with the European hog and produced an intermediate race.

The white-lipped Peccari is equally indigenous at Paraguay as in Guiana. It is called Kairuni by the Arawaks, Poingo by the Macusis, Ifure by the Warraus.


[Continued from p. 211.]

April 10th. We descended to a small nullah just below the castle, and then commenced an ascent which lasted for three or four hours, and which was generally moderately steep. On surmounting the ridge, which was of an elevation of about 10,000 feet, we commenced a long and uninterrupted descent along the course of a small torrent (the path being well diversified with wood and glade) until we reached Woollookha, distant fourteen and half miles from Telagong. About 1200 feet above this we came on rather fine wheat cultivation, among which two or three villages were situated. Above this elevation we came on fine woods of oaks and yews, diversified with swardy spots; and on reaching the summit of the ridge an open sward with beautiful rhododendron, birch, and juniper woods. Herbaceous monocotyledons abounded here; in fact the vegetation altogether was very rich, and the first spring vegetation we had yet met with. Gooseberries and currants were common from 9000 feet upwards: euphorbias, primroses, saxifrages, clematises, anemones, ranunculuses, &c., were some among the many European forms that I met with on this march. Near the summit, on the descent, a genuine larch was observed, and lower down two species of poplar were very common. The scenery was generally very beautiful. We passed a delightfully situated Gylong village not much below the summit, and near Woollookha saw Symtoka, a rather large square building.
belonging to the Deb Rajah, situated two or three hundred feet above our road. Woollookha is a good-sized village, and the houses are very good: it is close to the river Teemboo, which drains Tassisudon valley, a few miles distant to the north. There are several villages around it, and a good deal of cultivation of alternating crops of barley, wheat, and rice. The valley, if indeed it can be so called, for it is very narrow, is picturesque enough, although the surrounding hills are not well wooded. The banks of the river, which here flows gently enough, are well ornamented with weeping willows.

11th. We continued our route following the river, the path generally lying down its bed, or close to it, occasionally ascending two or three hundred feet above it. Halted at Lomnoo, an easy march. The features of the country remained the same until we neared our halting-place, when woods of Pinus excelsa became very common; roses occurred in profusion, and the vegetation generally consisted of shrubs; villages were tolerably frequent, and the cuckoo* was again heard.

12th. To Chupcha. Continued for some time through a precisely similar country, still following the river, but generally at some height above its bed. After passing Panga, a small village at which our conductors wished us to halt, although it was only six miles from Somnoo, we descended gradually to the river Teemboo, and continued along it for some time, during which we passed the remains of a suspension-bridge. After leaving Panga no villages were passed, and one small one only was seen on the opposite bank of the Teemboo; but up to the above-mentioned place the country continued tolerably populous. The vegetation, until the ascent was commenced, was a good deal like that about Somnoo, Pinus excelsa forming the predominant feature. From the base of the ascent it became completely changed—oaks forming the woods, and from 7500 feet upwards, various rhododendrons occurring in profusion, mixed with wild currants, &c. We were detained at Chupcha for two days, at the end of which the last coolies had scarcely arrived: it is ten miles from Somnoo, and sixteen miles from Panga, and about 8100 feet in elevation. The greatest ascent, and this too after a march of twelve miles, must have been between 2500 and 3000 feet. We were lodged comfortably in the castle, although it was not white-washed, nor had it the insignia of a belt of red ochre. It is a short distance from the village, which again is two or three hundred yards to the

* The first time I heard this bird was about Punukka. Although in plumage it differs a good deal from the bird so well known in Europe, yet its voice is precisely similar.
west of the direct road. We thought Chupcha a delightful place: the scenery is varied, the temperature delightful, varying in-doors from 46° to 52°. The face of the mountain, although very steep, is about the castle well cultivated: the crops, which were of six-ranked barley, were very luxuriant, and certainly the finest we ever saw in the country. The red-legged crow recurred here. During our stay, I ascended the ridge immediately above the castle, passing through a very large village of Gylongs, elevated at least 9000 feet. This village was the largest I saw in Bootan, and was ornamented with a pretty religious building, surrounded by junipers, and more decorated than such edifices usually are. Up to the village the path passed through beautiful woods of Pinus excelsa: above it I came on open sward, which continued on the south face up to the very summit of the ridge, which was nearly 11,000 feet. The north face of the mountain was well wooded; on it rhododendrons, a few black pines, beautiful clumps of Pinus Smithiana, bogh pat, mountain pears, aconites, columbines, saxifrages, primroses, &c. were found in abundance. The southern face was decorated with a pretty yellow anemone, and the pink spikes of a bistort. From the ridge still loftier ones were visible in every direction, all of which were covered with snow, which lightly sprinkled the one on which I stood. At this season snow scarcely remains for a day under 11,000 feet, except in very sheltered situations.

15th. I left Chupcha with much regret. We descended by a precipitous path to a torrent about 1800 feet below the castle. Crossing this, we descended gradually until we came on the ravine of the Teemboo; at which point there is a small pagoda, visible from Chupcha. We then turned southwards, and continued for a long time at nearly the same level, passing a small village, Punugga, three or four hundred feet below us. The march was seventeen miles. The road in many places was very bad, and scarcely passable for loaded ponies. The scenery was frequently delightful, and vegetation was in the height of spring luxuriance. The hills bounding the ravine of Teemboo continued very high until we reached Chuka; they were well diversified, particularly at some height above us, with sward and glade, and richly ornamented with fine oaks, rhododendrons, cedar-like pines, and Pinus excelsa. Water was most abundant throughout the march, and in such places the vegetation was indescribably rich and luxuriant. No village besides that of Punugga was passed or seen, nor did I observe any cultivation. I was much impeded by droves of cattle passing into the interior, for the road was frequently so narrow, and the mountains on which it was formed
so steep, that I was obliged to wait quietly until all had passed. These cattle were of a different breed from those hitherto seen in Bootan, approaching in appearance the common cattle of the plains, than which however they were much finer and larger. We were sufficiently well accommodated in the castle of Chuka. There is a miserable village near it, and several trees of the *Ficus elastica*.

16th. To Murichom. We descended to the Teemboo, which runs some fifty feet below the castle, and crossed it by a suspension-bridge, of which a figure has been given by Capt. Turner; it is very inferior in size and construction to that of Rassgong, although, unlike that, it is flat at the bottom. We continued following the Teemboo winding gradually up its right bank, chiefly through rather heavy jungle, and descending subsequently about 600 feet to its bed, by a dreadfully dangerous path, built up the face of a huge cliff. We continued along it until we crossed a small torrent at its junction with the large river, and then ascended gradually, following the ravine of this through humid jungle. As we approached Murichom we left the Teemboo a little to our left, and continued through a heavily wooded country. Before ascending finally to Murichom, we descended twice to cross torrents. We reached Murichom late in the evening, the distance being eighteen miles. No villages were seen until we came in sight of Murichom. The mountains were much decreased in height, and clothed with dense black jungle. We passed two water-falls, both on the left bank of the Teemboo, the one most to the south being the *Minza peeya* of Turner. Neither of them appeared particularly worthy of notice. The vegetation had almost completely changed, it partook largely of the subtropical characters, scarcely a single European form being met with. Murichom is a small village, rather more than 4000 feet above the sea. Although at so considerable an elevation, most of the plants were similar to those of Assam.

17th. Leaving Murichom we descended rapidly to a small torrent, from which we re-ascended until we had regained the level of Murichom. The path then wound along through heavily wooded country at an elevation of 4000 or 4200 feet; we continued thus throughout the day. At five p.m. finding that the coolies were beginning to stop behind, and failing in getting any information of my companions, I returned about 1½ mile to the small village of Gygoogoo.

18th. I proceeded to Buxa. The path was somewhat improved, and the ascent gradual until an elevation of about 5500 feet was surmounted, from which the descent to Buxa is steep and uninterrupted. This place is seen from a ridge about 1200 feet above it. I reached
it between 9 and 10 a.m., and found that my companions had arrived late on the preceding evening, having accomplished a march of twenty miles in one day. Scarcely any coolies had arrived, however, before me. The features of the country remained the same, the whole face being covered with dense black-looking forest. Even on the ridge, which must have been between 5000 and 5500 feet in elevation, scarcely any change took place. As I descended to Buxa vegetation became more and more tropical, and on reaching it I found myself surrounded with plants common in many parts of the plains of Assam*. Captain Pemberton left Buxa a day before me, as I was detained behind for coolies, none of whom had yet arrived. On the following day I rejoined him at Chicha-cotta. The descent to the plains is steep at first, and commences about a quarter of a mile from Buxa. On reaching the steep portion, a halting-place, called Minagoung, is passed, at which place all bullocks, which are here used as beasts of burden, are relieved if bound to Buxa, or provided with burdens if bound for the plains. The descent from this place is very gradual, and scarcely appreciable; the path was good, and bore appearances of being tolerably well frequented: it passed through a rather open forest, low grasses forming the under-plants. The plains were not reached for several miles; indeed the descent was so gradual, that the boundaries of the hills and those of the plains were but ill-defined. At last, however, the usual Assam features of vast expanses of grassy vegetation, interrupted here and there with strips of jungle, presented themselves. The country is very low, entirely inundated during the rains, and almost uninhabited. Saul occurred toward that which may be considered the Toorai of these parts, but the trees were of no size. To Koolta. We continued through nearly a desolate country, overrun with coarse grasses, until we came on the river, which is of considerable width, but fordable: we now found ourselves in the Cooch-Behar territory, and were much struck with the contrast between its richly cultivated state, and the absolute desolation of that belonging to Bootan. We continued traversing a highly fertile country, teeming with population, until we reached those uncultivated portions of Assam, that are so frequent in the immediate vicinity of the Brahmaputra. At Rangamutty, where we received every civility from the Bhoorawur, we took boat and arrived at Goalpara.

Beyond this it is scarcely necessary to trace our progress. I have only to add, that but one death occurred during the time that the Mission was absent.

* Plantains, jacks, mangoes, figs, oranges, &c. are found about the huts of Buxa.
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