

## THE NATURALIST.

## THE NEW RHINOCEROS AT THE ZOOLOGICAL GARDENS.

IT HAS BEEN SOME TIME in the knowledge of the enterprising dealers in wild animals that a young rhinoceros and an adult orang-outang were amongst the attractions of a well-known tea-garden in Batavia. The latter animal was too attractive to be dismissed of, but ultimately the former was purchased by one of the family of the Jamraens, so well known as importers of living animals. When it arrived in London it was seen by Mr Bartlett, of the Zoological Gardens, who at once pronounced it to be a specimen of the Rhinoceros sondaicus—a species which had never been in the possession of the society. The vendors asked a very high price, but ultimately the animal was purchased for the sum of £250, and is now safely deposited in one of the compartments of the large elephant house on the north side of the gardens. The animal, which is a male, was captured in Java, where, however, they are said to be not common. The great one-horned Indian rhinoceros, specimens of which have long been living in the Zoological Gardens, is the best known of the whole group; the late Mr Blyth stated that it is peculiar to the Tarai region at the foot of the Eastern Himalaya. Writing of the species *R. sondaicus*, which he had never seen alive, he stated:

The lesser one-horned rhinoceros (*R. sondaicus* see javanicus) has a much more extensive geographical distribution, but, though inhabiting within a few leagues of Calcutta (and, numerous some parts of the Sundarbans), the young seem to be very rarely captured; and it is remarkable that the Zoological Society has not yet succeeded in procuring a specimen for the museum. Many years ago, however, a fine male lived for several years in England, being that of which two unmistakable figures from life are given in the volume on Pachydermata in the "Naturalist's Library," in the supposition that they represented the great one-horned species; and the skeleton of *R. sondaicus* in the anatomical museum of Guy's Hospital in Southwark is probably that of the same individual.

The lesser one-horned rhinoceros would appear to be widely diffused over the Indo-Chinese countries, and it is numerous in the Malayan peninsula, and in the eastern portion of Java known as Sunda or Souda. There is also considerable reason to suspect that it likewise inhabits Sumatra and Formosa. A sub-fossil tooth found in the Sarawak district of

Park Gardens will add considerably to the accuracy of our knowledge respecting this group, which at present is in a very unsatisfactory condition.

Dr. Sayer states that there are six species, of which four exist in a living state in the unrivalled collection in the Regent's-park. On the other hand, the late Mr Blyth mentioned the existence of a considerably larger number, one of which, of a small size, is said to be extant in Burma.

The specimen in the Gardens is tame for a rhinoceros, and will permit bread to be put into its mouth, displaying the second set of teeth, which are just protruding through the gum.

W. B. THORNTON.

## A NATURALIST'S EXCURSION IN BRITISH SIKKIM.

By G. E. BULGER, F.L.S., F.R.G.S., C.M.Z.S., &c.

ON THE 14TH of MAY we started early for the cane bridge over the great Rungtee River, which is 6282ft. below the station of Darjeeling, at a distance of not quite twelve miles. Having sent our servants on in advance, with the coolies and luggage, we left the brow of the hill about seven o'clock, and descended rapidly through the Sikkim-Bhotia village of Leebong to the noble spur of the same name, nearly 1000ft. lower, and very much warmer. Thence the road led us down the eastern side of the Leebong mountain through tea plantations and patches of glorious forest, the latter changing in character very remarkably with the descent. On first reaching the summit of the spur, we found oaks and chestnuts in abundance, with *Cedrela toona*, a species of birch, a holly, at least one kind of maple, and many other genera that I did not recognise. Presently we came upon acacia, a Dalbergia, beautiful ferns and wild plants; and, shortly after we passed the village of Ging I, three miles from Darjeeling, and 5156ft. above the sea (all the heights recorded in this paper have been obtained from Dr. Hooker's "Himalayan Journals"); there were screw pines, sal, a *Gordonia*, two or three kinds of pistachio figs, and *Pinus longifolia*, while tree ferns and wild plants continued plentiful. As we neared the river palms began to show themselves, as well as quantities of bamboo and other tropical productions, assuring us, in combination with the rapidly increasing heat, that we

vicinity of Darjeeling during our stay there, and its soft and familiar note had to us a pleasant and grateful sound, associated as it was in our minds with home scenes and days long gone by. We first heard it in Sikkim on the 23rd April, and by the 4th of May the birds were calling everywhere in the daytime, and sometimes even at night. *Cuculus poliocephalus*—the small cuckoo—was also exceedingly plentiful, and its harsh cry was one of the commonest sounds of the forests. It first occurred on the 2nd of May, and thenceforward I heard it almost perpetually, at night as well as in the daytime. It cries both when flying and at rest, and the Lepchas say it is never silent throughout the whole twenty-four hours in the rains. Our Sikkim-Bhotia servants always spoke of it as the "pavnee-wallah" (water-fellow), from the fact, I suppose, of its being so clamorous during the wet weather. Probably the next most abundant species was the Indian cuckoo (*Cuculus micropterus*), whose soft and beautiful call sounds like that of the European bird doubled thus, "koo-ko, koo-ko"; and the large hawk cuckoo (*Hierocyclops sparveroides*) was constantly giving utterance to its loud, clear note, resembling the words "Oh fu."

Near the village of Ging I had the pleasure of not only seeing the beautiful yellow-billed whistling thrush (*Myiophonus temminckii*), but of hearing his soft and, to my mind, delightful song. I stopped and listened to him for some minutes while he repeated again and again his melodious notes; and, if it had not been that my shikaree was beyond call with the guns, I fear the sweet voice of the beautiful musician would scarcely have saved him from my collection. I never saw another of these birds, and, though they are said to be common near Darjeeling (c. f. Jerdon, "Birds of India," vol. I., p. 509), my shikari failed altogether in his efforts to procure one.

Along the road I met with the large yellow-naped woodpecker (*Chrysophlegma flavinucha*), the large spider-hunter (*Arachnoterps magna*), the maroon-backed honey-sucker (*Anthypus nipalensis*), the large and short-billed minivae (*Paricoocotus speciosus*), the brevitrostris, the verditer flycatcher (*Empidon melanops*), and the orange-headed ground thrush (*Geocichla citrina*). The nomenclature, both scientific and English, is that of Jerdon's "Birds of India." I also saw some other plainly-dressed small birds, but I



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Borneo is referred to this species by Professor Bask, as also two teeth brought from Sumatra by Mr Wallace; and Dr. Gray notices the skeleton of a half-grown individual in the British Museum, which is alleged to be from Sumatra, and was sent by an Amsterdam dealer as *R. sumatranus*. Dr. Gray, however, makes out as many as three additional species from the skulls only, which he has figured and described as *R. masius*, *R. Floweri*, and *R. sinocapitalis*; but all of these are regarded as identical with *R. sondaicus* by Professor Bask. From the variation which I have observed in skulls of this rhinoceros obtained chiefly in Lower Bengal and the Fomasserin provinces, I apprehend that there can be little doubt that Professor Bask is right in attaching higher importance to absolute similarity in the dentition than to the extent of variation in the contour of the skull as estimated and relied upon by Dr. Gray.

The lesser one-horned rhinoceros would undoubtedly appear to be the prevalent species of the Garo (or Garo) and Khasis (or Coastal) hills, and also that still lingering in the Rajmahal hills, and on the banks of the Mahandi river; and I think there can be little doubt that it is the particular species formerly hunted by the Mogul Emperor Baber on the banks of the Indus and in Central India. He describes it as single-horned, and states that he had seen many of the horns, some of which exceeded a span (say nine inches) in length, which accords with the ordinary length in wild *R. sondaicus*, whereas in wild *R. indicus* the horn is commonly double that length. Moreover, it does not seem probable that the side of *R. indicus* could be pierced with arrows in the way that he describes of the animal which he had many times successfully hunted. Sooner or later it is probable that sufficient remains will be discovered, which will go far to enhance the probability of Baber's rhinoceros being the smaller of the two one-horned species, which not very long ago was reported to be altogether peculiar to the island of Java.

The animal now in the Gardens is very accurately represented in the engraving. It is distinguished from the larger Indian species by several remarkable peculiarities; the head is very long and narrow, the back hairy and convex. The folds of skin are very peculiarly arranged; at the back of the head a fold resembling a saddle covers the neck, passing completely from side to side. The body and limbs are closely studded with small circular plates, whereas in the commoner species they are large bosses, which are present on the flanks and back only. The tail, again, is far longer in *R. sondaicus* than the better-known species, although the animal is smaller, even when full grown, and at present it is apparently about two-thirds of its full growth. The horns are exceedingly movable, and serve as an admirable prehensile organ.

The addition of this specimen to the vivarium in the Regent's

were fast approaching the level of the plains. Crossing the Rangtoo River by a bamboo bridge, close to its junction with the Rungtee, we soon reached the guard house on the banks of the latter stream, where we had decided to remain for the night.

The Rangtoo is a roaring torrent, which comes foaming down from the great mountain called Sinal, and, though we could not see it until we drew near to the bottom of the deep, forest-clothed valley through which it plunges, we heard it dashing over its rocky bed during the whole descent. Near its union with the Rungtee the banks are still inclosed by strips of forest, while great boulders protrude above its dark stream. The natives say that it is dangerous to drink its water, but that that of the "Burra Rangtee" is perfectly good and wholesome.

The road from Darjeeling to the valley is very fair, though steep and somewhat slippery in places. Many parts of it were agreeably shaded by the overhanging trees, and its beauty throughout was very striking. For some distance we enjoyed a fine view of Kunchingia and the other stupendous hills to the northward, whose mighty and unchanging summits, clad in eternal snow, alone like silver beneath the morning sun. Herbaceous ferns were very plentiful, while grand potos plants covered the trunks of many of the trees, and beautiful climbers and pendulous lichens draped and festooned their branches, and disputed possession with the vast numbers of mosses, orchids, and other parasites and epiphytes, which literally seemed to grow wherever they could find root-hold. Vegetation is almost irrespressible in these great, moist forests, and it would be difficult to convey an accurate idea of its profuse and prodigious luxuriance, which exceeded all my preconceived notions of even the lavish redundancy of the tropics. A kind of *Artemisia* was one of the most characteristic plants throughout the desert, and a brilliant *Mussaenda*, with large white bracts and yellow flowers, peeped out conspicuously from the surrounding verdure.

Though especially in search of them, I did not see many birds; but we constantly heard the hooting of the conical (*Catantopus rupinensis*), the cooing of doves, the hammering of barbets, and the varied notes of several species of cuckoo, all of which, combined with the tinkling bell-like cries of apparently innumerable tree-frogs, and the ringing noise produced by hundreds of cicadas, kept the otherwise silent forest absolutely full of sound. The European cuckoo (*Cuculus canorus*) was abundant in the

was not sufficiently close to be able to identify them with any degree of certainty.

The great Rungtee is said to rise amongst the glaciers of the snowy range, and the natives described it as a most rapid and impetuous river throughout its course. Just above the cane bridge, it dashes through a narrow gorge between mountains created with *Pinus longifolia*, and sweeps on with great velocity towards the Teesta, which it joins about five miles below. The bed, like that of the Rangtoo, is strewn with large boulders, and its banks are rocky for three or four feet above the ordinary water-mark.

The temperature of the valley was quite tropical at the time of our visit, and we felt the heat, on first arriving, absolutely oppressive after the cooler climate of the higher altitudes which we had so recently left. (The bed of the river at the cane bridge is, according to Dr. Hooker, 818ft. above sea-level.) Later in the day, however, a pleasant breeze came rushing down through the opening in the hills, and soon effected a marked and grateful change.

The cane bridge is a curious and ingenious, though simple, structure. Two stout rattans are stretched across the river, about two feet apart, and strongly fastened on either bank. From these other rattans of less size, and about eight feet in length, are hung in a series of loops, the ends being attached to the larger ones on either side, which are thus made to perform the office of balusters; while finally, at the bottom of the loops, where they are only six inches or so wide, there is a flooring of loose bamboos, and this constitutes the bridge. The traveller in crossing grasps one or both of the side canes, and walks along the bamboo flooring. The whole structure bends and sways with every step, or even with the breeze; and, as the motion is considerable, it is not calculated to inspire confidence. I stood in the centre for some ten minutes, and, whilst the bridge swung about, creaking and rattling with every gust of wind, I watched the dark angry waters of the Rungtee foaming and dashing over the rocks nearly forty feet below. The canes of which these bridges are constructed is probably *Calamus rotundus* (c. f. Dr. J. Anderson, "Journal Linnæan Society," vol. xi., p. 9).

My search for birds during our stay was not rewarded with any great store of success, notwithstanding all my expectations. I saw but few myself, and my shikari only procured eight species. He brought me a broad-billed roller (*Eurystomus orientalis*), which he said was very rare; several specimens of the common Indian kingfisher