

ance only. In the subsequent observations, by regulating the flow of air, the temperature is to be lowered very gradually as it approaches the point noted; and on the first appearance of dullness, the blast is arrested, but the reading of the thermometer is not to be taken till it reaches its lowest point.

There are other points to be attended to, which unpractised observers frequently neglect. One is to keep the eye on the same level as the top of the mercurial column of the thermometer (whether that of the hygrometer or psychrometer) when taking the reading, in order to avoid the errors of parallax. This is a point which it is most difficult to enforce on those who are not thoroughly trained observers, and such persons are few in India.

The capsule must not be more than three parts filled with ether, and at first a very gentle blast must be applied or the ether will spill over the surface of the capsule; and if not perfectly pure, will impair its polish. The ether must be free from water.



VIII.—*List of the Birds collected on the Expedition into the Dafla Hills, Assam, together with those obtained in the adjacent Darrang Terai.—By Major H. H. GODWIN-AUSTEN, F. R. G. S., F. Z. S., &c., Deputy Supt. Topographical Survey of India.*

(Received May 26th;—Read June 7th 1876).

(With Plates III & IV.)

Having been placed in charge of the survey-party attached to the force which, under the command of Brigadier-General W. J. F. Stafford, C. B., penetrated into the Dafla Hills during the winter of 1874—75, an opportunity was presented of forming collections in a portion of the N. E. Frontier which had never before been visited. It was an opportunity not to be lost, as it would extend considerably the undoubted range of many interesting or little-known Himalayan forms towards the east into the Indo-Burman and West China faunas; while there was also the great probability of discovering new forms, not only among the birds, but in other branches of zoology. On arriving in Calcutta in October 1874, I received much assistance and advice from Messrs. Wood-Mason and G. Nevill, of the Indian Museum, and at the recommendation of the former was permitted to entertain and take with me a native taxidermist, with extra coolies for the carriage of specimens, store-boxes, &c.; my cordial thanks are due for this aid and for the interest shewn by the above-named gentlemen. The list shews that I was tolerably successful, notwithstanding that the force did not penetrate beyond the first large valley at the back of the outer range,

which attains an elevation of from 4000—8000 feet. Had I reached the inner ranges of 10—12000 feet lying beyond, and got out of the region of dense sombre forest, there is no doubt but that my success would have been much greater. It may be said that from Darjiling to this part of the Eastern Himálaya, a distance of 280 miles, the ground had scarcely been worked, for the few mammals, birds, reptiles, &c., collected in Bhútan, or recorded as found there, have mostly come from the portion of the country in the neighbourhood of Darjiling. A few birds were collected by the mission under that zealous and talented explorer Captain Pemberton, in 1838, accompanied by Dr. Griffiths, who was more interested in the botany than in the zoology; while the mission under the hon. Ashley Eden started with a taxidermist, who, owing to the difficulty of obtaining coolies, had to be sent back from Sipehú just beyond Dalingkote, after having only obtained a few ordinary Darjiling species; and Mr. L. Mandelli has, I believe, been lately sending his collectors into the Western Bhutan Doars; but from the Sunkos River, eastward, no naturalist has had a chance of exploring the outer hill-tracts.

I was fortunate in having assistants who took a lively interest in collecting, and my thanks are especially due to Messrs. Ogle and Robert, of the Topographical Survey, and to Mr. J. Lister, of the Botanical Gardens, Calcutta, who was attached to my party to collect botanical specimens. Mr. Robert's zeal and energy have been conspicuous, both here and in the Naga Hills, and the list of species has been largely added to by him. General Stafford and other officers of the force took a lively interest in the birds of the country, and I am indebted to them for several interesting things.

The portion of the Eastern Himalaya occupied by the Dafla Tribe, wherein the collection was made, extends from E. long. 93° to long. 94° , on lat. 27° , or a distance of about 60 miles. The district of Darrung lies along the base of the hills extending south to the Brahmaputra River, with a breadth of about 18 miles.

The hill-portion of the Dafla country is covered from base to summit with dense forest, the larger trees being clothed with thick creepers; and the bottoms of the ravines are occupied by a luxuriant growth of bamboo, canes, tree-ferns, screw-pines, plantains, &c. Such luxuriant vegetation renders the scenery on rivers like the Dikrang and Burroi exceedingly beautiful, but it is monotonous. As one ascends, the underwood becomes thinner, and at 7000 feet the forest is composed almost exclusively of a straight-stemmed bamboo, with oak, rhododendron, and other large trees. Clearings for cultivation are the only open ground seen, and these are of no great extent. The Terai portion between the Dikrang and Burroi, where a good many birds in the list were obtained, is covered with a sea of high grass, intersected with sluggish nullas, the banks of which are generally fringed with forest;

this extends towards and meets the forest belt at the foot of the hills, a belt which occasionally attains a breadth of some 8 miles and is most difficult to work through. On the upper plateaux, such as the Bishnath plain, the grass grows in less luxuriance, the country is much more open, and a change in the birds is noticed at once. Compared with other parts in which I have collected, birds are rare, both in point of number and species, and this is no doubt due to the very large extent of sombre dark forest, all possessing the same character; we were there too rather early in the year and before the advent of a number of species that make their appearance later when the large flowering trees begin to blossom.

In this list I have omitted a number of the Grallatores to be found in the nullas of the Terai, and the list of forms occurring in this part of the Assam valley is by no means complete. Some of the commoner birds, such as *Ploceus baya*, *Copsychus saularis*, &c., are not in the collection, either from not having been shot or considered worth preserving. A flock of stone-plover, probably *Esacus recurvirostris*, Cuv., was seen amongst the boulders in the bed of the Burroi River just within the gorge, but I failed to secure a specimen, and the presence of our camp in the place soon scared them away.

Lord Walden has again most kindly assisted me in the identification and nomenclature, and pointed out many points of interest concerning some of the species.

Duplicates of nearly all the species enumerated have been selected for the India Museum, Calcutta. All species marked with an asterisk have not been recorded in my former lists of birds from the N. E. Frontier.

4. GYPS INDICUS, Scopoli.

5. GYPS BENGALENSIS, Gmelin.

Both this and the preceding species were seen in hundreds feeding on the dead buffaloes lying along the road-side. Large droves of these animals were passing up towards Debrughur, and numbers were dying daily from some disease, affording a rich feast for the vultures and jackals.

17. TINNUNCULUS ALAUDARIUS, Brisson.

20 a. MICROHIERAX MELANOLEUCUS, Blyth.

The only species of this genus seen was the above. I noticed it sitting on the topmost twig of a very high tree, from which it sallied forth now and then to capture an insect. Its breast gleamed white against the dark blue sky, but, as it was far out of shot and there was no possibility of getting near the base of the tree owing to the extreme denseness of the underwood and canes, I had to content myself with watching its movements through my binoculars.

53. *CIRCUS MELANOLEUCUS*, Gmelin.

A male and a female were shot in March on the Bishnath plain, where the species was pretty common. Mr. J. H. Gurney has ('Ibis,' January, 1876, p. 130) described the interesting phase of plumage presented by the female bird as follows:—

"Whilst on the subject of harriers I may remark that in 'The Ibis' for 1875, pp. 226—228, I published some notes on the various plumages of *C. melanoleucus*; as an addition to these, I now give some particulars of a harrier of that species, obtained in the month of March in the Darrany (Darrang) district of Assam by Major H. H. Godwin-Austen, and ascertained by that gentleman to be a female; premising that an ordinary adult male was obtained by the same ornithologist in the same month and in the same locality, and that I have been indebted to the good offices of Lord Walden for the opportunity of examining both these specimens. In this female the feathers on the entire upper surface of the head are blackish brown, with narrow rufous edgings; those of the nape are still darker, and without rufous edgings, the entire mantle is of a similar tint, increasing in intensity as it approaches the tips of the lower scapulars, which are almost black. The general hue of the mantle is apparently unbroken, except by narrow buff edgings to the upper interscapular feathers; but on lifting up the lower scapulars, the feathers which they conceal are found to be grey, barred with blackish brown, which is darkest towards the tip, and in places mottled with white on the inner web; the feathers on the rump are blackish brown, more or less tipped with white; the upper tail-coverts white, with one, or at most two, irregular brown spots in each feather; the tail grey, with six irregular transverse bars and a whitish tip, but no tinge of rufous. The under surface is marked very much as is represented in 'The Ibis' for 1874, Plate X, but with considerably more white on the abdomen, owing to the brown streaks being fewer and narrower; the thighs and under tail-coverts are also white, with a few streaks of brown, varying in both length and breadth. The wings in this specimen show a remarkable approach to the plumage of the adult male; the whole of the lesser wing-coverts are white, but with a broad sagittate mark of dark brown in the centre of each feather, the same coloration being extended over the bend of the carpal joint, and along the anterior edge of the wing to the commencement of the greater coverts; the black band which in the adult male extends from the neighbourhood of the carpal joint to the tips of the tertials, is in this specimen represented by a corresponding band of dark chocolate brown, varied by some of the brown feathers passing, in part, into a decided black, and by a few white spots in that part of the band which is near to the carpal joint; that portion of the wing which is grey in the full-plumaged male is also grey in this female, but with transverse bars of dark brown as in the ordinary plumage of male specimens of intermediate age."

"The principal measurements of this female are as follow: wing from carpal joint 15·8, tarsus 3·3, middle toe s. u. 1·45 inches."

*71. *HUHUA NIPALENSIS*, Hodgson.

Ex. 52, L. 27, W. 19, T. 10·5, t. 3·5, Bf. 2·75, girth round thigh 5·75 inches, diameter of eyes, which are dark glass-blue with narrow brown irides, one inch, mid-toe and -claw 4·5, inner talon 2·4, ear-tufts 3·25 inches. 1st quill rather short, 4th and 5th equal and longest.

Feet dull yellow; bill pale dingy yellow.

This fine horned-owl was shot in the day-time out of one of the large forest trees now growing on the rampart of the old fort of Purtabghur, in the Darrang district; its presence having been made known by the great excitement it was causing among the other birds, who were paying it a noisy levée. The crows of course were taking the lead and two hornbills (*Hydrocissa albirostris*) were among its visitors; it had probably been sacrificing a neighbour. It is a grand and most powerfully built bird.

80. *GLAUCIDIUM BRODIEI*, Burton.

Torúpútú Peak, 7300 ft.

81 a. *NINOX NIPALENSIS*, Hodgson.

The *N. scutulata* of Raffles is the Sumatran bird (*vide* note by Lord Walden in the 'Catalogue of the Mammals and Birds of Burmah' by Ed. Blyth, J. A. S. B. 1875). The Ceylon and Malabar birds cannot be separated and must stand as *N. hirsuta*, Tem., but the Himalayan race seems to differ and we ought perhaps to adopt the title *Nipalensis*, Hodgson, for it.

85. *HIRUNDO ERYTHROPYGIA*, Sykes,

This is the *H. Daurica* of former lists.

*94. *CHELIDON NIPALENSIS*, Hodgson.

In a clearing above Doripu, a large number were observed, and I shot a couple, much to the delight of the Daflas with me, who had never before seen a bird knocked over on the wing. A swift was also seen at the same time, but I could not get a fair shot, and they soon cleared off.

108 a. *CAPRIMULGUS JOTOKA*, Schlegel.

This bird was particularly numerous at No. 6 camp on the Dikrang. The specimens agree exactly with those I have from the Khási Hills.

109. *CAPRIMULGUS ALBONOTATUS*, Tickell.

This species has a loud hard chucking note, which it emits at decided intervals "chuck—chuck," a pause, then "chuck—chuck—chuck," another pause, "chuck—chuck," occasionally sounding it four times. *C. jotoka* may be known at once (as I noticed last summer at Shillong, where it is common) by its shorter more softened "chuck," which it repeats continuously and rapidly for long periods at a time, but only when sitting.

117. *MEROPS VIRIDIS*, Lin.*135 a. *ALCEDO GRANDIS*, Blyth.

A specimen of this very rare and beautiful kingfisher was shot on the Dikrang River, below Pakfi's village, where I saw one or two others. The original specimen was obtained by Mr. Blyth (J. A. S. B. XIV, p. 190) from the base of the Darjeeling Hills, probably in the Teesta valley, well within the hills. Dr. Anderson got another from the same locality; this specimen is to be found figured in Sharpe's 'Monograph of the Kingfishers,' and is now in the Indian Museum, Calcutta. I have compared the Dafla bird with it; but it is young, with the bill not fully developed, and it is to be regretted that no better example for figuring was then procurable. We failed to find Blyth's original type, but Mr. Mandelli of Darjeeling has kindly sent me a drawing to scale of the bill of one of his own specimens and it agrees exactly in size with that of my bird.

136. *CERYLE RUDIS*, Lin.

On all the large streams of the Terai.

*137. *CERYLE GUTTATA*, Vigors.

I saw this large kingfisher several times on the Dikrang river, above camp No. 6; on one occasion four were together, but they are generally solitary. I never perceived it hovering like *C. rudis*. Its flight is very rapid.

An officer of the 42nd Assam Light Infantry shot one, and kindly made me a present of the skin.

138. *PSARISOMUS DALHOUSIÆ*, Jameson.

Large scattered flocks moving rapidly through the forest were seen in the Dikrang Dhún between Harmutti and the Borpani stockade, keeping to the boughs about halfway up the trees. It is curious how exceedingly well defined in these forests are the haunts of many birds. Some, such as species of *Minla*, *Actinura*, *Liothrix*, *Ixulus*, &c., never appear to descend out of the light beneath the thick canopy of leaves in the crown of the trees, but feed about on them and on the orchidaceous growth that thickly clothes the topmost boughs. Others, like the above-named *Psarisomus*, *Irena puella*, *Criniger flaveolus*, &c., keep well in the shade halfway down, while others, and particularly the fly-catchers *Chelidorhynx hypoxantha* and *Culicipeta cinereocapilla*, remain exclusively in or about the underwood, scarcely ever mounting above it into the larger trees.

The culmen in these specimens was not black (as described by Jerdon), but the bill was green above, pale orange below.

139. *SERILOPHUS RUBROPYGUS*, Hodgson.142. *HYDROCISSA ALBIROSTRIS*, Shaw.

The commonest hornbill here; another large one with a red head, probably *Rhyticeros plicatus*, was seen in the Dikrang valley but not shot.

149. *PALÆORNIS CYANOCEPHALUS*, Lin.

Narainpur. The same as the *P. rosa* of former lists.

*152 *a.* *PALÆORNIS MELANORHYNCHUS*, Wagler.

Common in the tea-garden at Harmutti.

157. *PICUS MACEI*, Vieill.

*171. *GECINUS STRIOLATUS*, Blyth.

From the Terai and near Dikráng múkh.

172. *GECINUS OCCIPITALIS*, Vigors.

173. *CHRYSOPTERIS CHLOROLOPHUS*, Vieill.

176. *VENILIA PYRRHOTIS*, Hodgson.

Shengorh Peak.

Bill pale yellow ; legs dull dusky green ; irides dark dull red.

177. *GECINULUS GRANTIA*, McClelland.

This is called "*Koria*" by the Daflas.

178. *MICROPTERNUS RUFINOTUS*, Malherbe.

This is the *M. phaiiceps* of former lists.

187. *SASIA OCHRACEA*, Hodgson.

192. *MEGALEMA HODGSONI*, Bonap.

195. *CYANOPS ASIATICA*, Latham.

196. *MEGALEMA FRANKLINII*, Blyth.

207. *HIEROCOCCYX SPARVERIOIDES*, Vigors.

Young female,—Dikrang valley.

218. *CENTROPUS BENGALENSIS*, Gmelin.

Young male.

223. *ARACHNOTHERA MAGNA*, Hodgson.

229. *ÆTHOPYGA NIPALENSIS*, Hodgson.

Shengorh Peak, at 6000 ft. I have always found this honey-sucker ranging higher than any other of the genus.

231. *ÆTHOPYGA SATURATA*, Hodgson.

Common in the Harjúli,* and along the outer sandstone range.

*245. *CERTHIA DISCOLOR*, Blyth.

The specimens from the Dafla hills agree perfectly with examples in the Indian Museum, Calcutta, with which I compared them. I give the description.

Head black with a medial pale ochreous streak and another over the eye ; back streaked with pale ochre and dark brown ; upper tail-coverts ferruginous ; tail rufous. Chin and throat dull pale brown ; belly paler ; under tail-coverts pale rusty ; primaries black with a pale ochreous band, with subterminal spots and terminal spots on all except the first three ; coverts black and spotted. Bill black above, ruddy beneath ; legs horny.

L. 6·0, W. 2·75, T. 3·0, t. 0·68, Bf. 0·55 inches.

* Júli, a ravine in the local dialect.

261. *SITTA CINNAMOMEOVENTRIS*, Blyth.

I obtained several of this species in the large trees that have been left standing in the tea-garden at Harmutti. They were haunting the holes in the stems and preparing to commence breeding. The tail is very square in this species.

252. *SITTA FORMOSA*, Blyth.

Was occasionally seen and two specimens were secured under Torúpútú Peak at about 5000 ft.

253. *DENDROPHILA FRONTALIS*, Horsf.

According to Mr. R. B. Sharpe ('Stray Feathers', Vol. III, p. 436), this bird will stand under Hodgson's name *corallina*, *frontalis* being the Malayan form, which is distinguished by the pure white colour of the throat.

254. *UPUPA EPOPS*, Lin.258. *LANIUS TEPHRONOTUS*, Vigors.263. *TEPHRODORNIS PELVICA*, Hodgson.

Darpang nulla at the base of the outer hills.

269. *VOLVOCIVORA MELANOSCHISTUS*, Hodgson.270. *GRAUCALUS MACEI*, Lesson.271. *PERICROCOTUS SPECIOSUS*, Lath.273. *PERICROCOTUS BREVIROSTRIS*, Vigors.278 b. *DICRURUS CATHÆCUS*, Swinhoe.

Assam birds agree very well with those from China, save that the tail is rather longer. This is included in my former list as *D. longus*, which is the title of the Javan form.

280. *DICRURUS PYRRHOPS*, Hodgson.282. *CHAPTIA ÆNEA*, Vieillot.

Harmutti and Dikrang valley.

283. *BRINGA REMIFER*, Temm.

In non-breeding plumage (Dec.) on the Niosi ridge near Tanir Peak, a good many seen.

284. *DISSEMURUS GRANDIS*, Gould.286. *CHIBIA HOTTENTOTA*, Lin.

Irides dark reddish brown; legs and feet black.

289. *TCHITREA AFFINIS*, A. Hay.291. *LEUCOCERCA ALBICOLLIS*, Vieillot.294. *CHELIDORYNX HYPOXANTHA*, Blyth.

Very common.

295. *CULICIPETA CINEREOCAPILLA*, Vieillot.301. *EUMYIAS MELANOPS*, Vigors.*303. *CYORNIS UNICOLOR*, Blyth.

A single specimen of this rare fly-catcher was obtained in the Dikrang valley.

315. *NILTAVA MACGRIGORIÆ*, Burton.

316. *NILTAVA GRANDIS*, Blyth.

Shengorh Peak, at 6000 ft.

319. *SIPHIA STROPHIATA*, Hodgson.

A male from Torúpútú Peak, and a female from the Dikrang valley. I observe that this female differs a good deal from the description of the male, which alone is given by Jerdon. Above she is similar throughout, except that the frontal band is absent, there being a very slight pale grey indication of it. The throat is grey in lieu of black; breast and abdomen dull white, the flanks olivaceous. The rufous gorget is very pale; indeed, there is only just an indication of it.

323. *ERYTHROSTERNA LEUCURA*, Gmelin.

Irides dark brown.

Harmutti tea-garden.

343. *MYIOPHONUS TEMMINCKII*, Vigors.

344. *HYDRORNIS NIPALENSIS*, Hodgson.

350. *ZOOTHERA MONTICOLA*, Vigors.

Only one specimen was obtained. This has a very dark coloured plumage throughout, much darker than any other I have examined.

355. *GEOCICHLA CITRINA*, Latham.

366. *TURDUS (PLANESTICUS) FUSCATUS*, Pall.

Shot at Harmutti.

373. *PARADOXORNIS FLAVIROSTRIS*, Gould.

Only in the high grass of the low plain country skirting the hills.

*378 *b.* *SUTHORA DAFLAENSIS*, Godwin-Austen. Plate III.

I described this very interesting little bird in the *Annals and Mag. Nat. History* for December 1875. I give below a copy of the original description, together with some account of the habits of the genus, which are quite parine. It is closely allied to *S. Munipurensis*, Wald. and G.-Aus., described in 'The Ibis', 1875, p. 250. The difference between them is most marked on the under side, the chin being grey in the Dafla bird, paling on the upper breast and belly to dull yellowish white, while in the Munipur and Nágá species the chin and throat are deep black, fading to grey on the breast and thence into the white of the lower tail-coverts. There is besides a marked difference in size, especially in the bill and legs; this new form being the smallest of the genus now known.

Desc.—"Above; crown of head chrome-brown, back and rump rusty olivaceous brown; tail very rich rusty brown, particularly near the base; frontal band, passing over the eye to the nape, black; a white circle round eye, with a moustachial streak passing down the side of the neck of the same colour; ear-coverts grey, surmounted by a small streak of golden yellow. Chin grey; breast and belly dull sordid white; under tail-coverts

white; flanks grey. Shoulder of wing olivaceous; primaries black, rufous at the base, forming a band, the outermost edged white; their coverts black: secondaries grey, edged rich rufous on the outer web, with a narrow white edging to the inner. Irides dark brown; legs and feet pale grey; bill neutral grey.

"L. 3.25, W. 1.75, T. 2.10, t. 0.62, Bf. 0.25 inches.

"*Hab.* The bamboo underwood of the forests at 5000—7000 feet, first obtained on the slopes of Torúpútú Peak in January.

"These curious little birds associate together in large flocks, making an incessant sharp twitter. They are most active, flitting rapidly about the foliage of the bamboos, of which the underwood is principally composed. They were the most fearless birds I ever met with, perching on twigs within a couple of yards of one's head, so close that it was some time before I could fire at one without the certainty of blowing it all to pieces, and two specimens obtained I had to throw away. The bright-coloured top of the head, set off with its black coronal edging, is conspicuous as they fly and hop about the branches."

*382. *GRAMMATOPTILA STRIATA*, Vigors.

This was a bird seen and heard more than any other at about 6000 feet in January. It was particularly abundant under Torúpútú Peak, associating in large flocks, their note a chatter mingled with another call somewhat simulating the low quack of a duck. On examination of several birds they proved to be fruit- and seed-eaters solely, but insect life was at the time very scarce. Irides red brown; legs and feet pale grey.

L. 10.5, W. 5.5, T. 5.75, t. 1.75, Bf. 0.95 inches.

I have noticed in these forests that many species of gregarious babbling-thrushes associate together, and I have seen as many as three in the same large and numerous flock. The large and noisy white-crested babblers (*Garrulax leucolophus*) often have other species in their train, among others I once shot *Pomatorhinus ferruginosus*. The same habit is to be observed with many of the *Liotrichinæ*: for long distances not a bird is to be seen or heard, all is as silent as if no life whatever existed; when suddenly one comes upon a whole assemblage of birds, all actively feeding and an incessant chirping and twittering are going on on all sides; they pass on through the forest and all is still again.

384. *GAMPSORHYNCHUS RUFULUS*, Blyth.

One specimen possesses an incipient collar, but differs in no other respect. Mr. Hume has separated this phase or variety of colouration under the specific title of *G. torquatus*, but I doubt whether so small a variation however interesting and worthy of record is enough to entitle the bird to a distinctive title. Lord Walden has remarked to me that the collar probably denotes a full stage of plumage.

385. PYCTORHIS SINENSIS, Gmelin.

*386 a. PYCTORHIS ALTIROSTRIS, Jerdon.

In this bird I at first considered I had got a new species, but it agrees so well with *Chrysomma altirostre*, Jerdon, described in the 'Ibis' 1862, p. 22, that I do not hesitate to identify it, although Dr. Jerdon's bird is described as from Thayet Myo on the Irrawady, Burmah, where it has not again turned up, notwithstanding that this place has since been well worked by Mr. Oates, Captain Fielden, and others. Although the paper in which Dr. Jerdon describes *C. altirostre* purports to be exclusively one on birds then lately obtained by him in Burmah, yet I am inclined to think that he may have had before him one or two species from Assam. Twice in the paper (pp. 19 and 23) he writes "Brahmaputra River" when he should have written "Irrawady", so that there is just the possibility that *P. altirostris* was from the same country where I found it so abundant, yet Dr. Jerdon in 1862 had not visited Assam and did not do so until ? 1868.* What has become of Dr. Jerdon's type specimen I cannot ascertain, but the hoary frontal band and peculiar short bill are conspicuous characters; it will be very interesting hereafter to compare *altirostre* from Burmah, should it ever turn up there. As slight differences may exist, I give a description of the Assam bird, which I found to be by no means uncommon in the grass of the Bishnath plain. I first shot it from off an elephant near the embouchement of the Burroi River, and altogether secured four specimens, one of which, with many others in this list, I have sent to the Indian Museum, Calcutta. It is in every respect a true *Pyctorhis*. Jerdon says very rightly, it may be on only a cursory glance mistaken for *Pyc. Sinensis*, but on a more attentive examination, or on comparison with the latter, its distinctness is at once apparent.† It is a difficult bird to shoot, its habits being so very skulking, and when once frightened it will not rise again. It is also a much more solitary bird than *P. sinensis*, which associates in considerable flocks, and I never found more than two or three together.

Desc.—Above dark ruddy brown, brightest on the head, primaries, and outer edging of the tail-feathers; frontal band, over the eye, and ear-coverts hoary; in some specimens less white is mixed with the dark grey than in others. Chin pale grey, merging gradually on the breast into pale rusty ochre and on the flanks, belly, and under tail-coverts into ferruginous. Irides (very narrow) pale sienna; orbits yellow; bill ruddy brown, pale ruddy below.

L. 6.25, W. 2.45, T. 3.8, t. 1.08, Bf. 6.42 inches.

* Since writing this Mr. W. T. Blanford says (*in epist.*), "I remember seeing the specimen at Thayet Myo. I was there with Jerdon, you know."

† Mr. Hume (in 'Stray Feathers', Vol. III, p. 115) refers to *altirostre*, but the birds he had under review were evidently, as he says, nothing but *P. Sinensis*.

The bill is more curved, higher, and shorter than in *Sinensis*, in which moreover it is deep black.

388. *ALCIPPE NIPALENSIS*, Hodgson.

390. *TURDINUS GAROENSIS*, G.-Austen.

I was very fortunate in obtaining a second example of this new bird and can now add the colouration of the soft parts and dimensions from the flesh, those already given (*J. A. S. B.*, Vol. XLIII, page 160) having been taken from a carbolized specimen.

L. 5.5, W. 2.5, T. 2.3, t. 1.15, Bf. 0.53 inches.

Irides red brown; legs very pale fleshy.

Proceeding through the dense underwood in the Dikrang valley, I caught sight of this bird on the narrow path about two yards from my feet, and at the first glance took it to be a small rodent. It was most fearless, and made no attempt to fly off, but caught an insect while I stood and watched it. I had to step back several yards before I could shoot it without blowing it to atoms.

391. *STRACHYRHIS NIGRICEPS*, Hodgson.

From the jungles near Harmutti, near the base of the hills,—common.

394. *STRACHYRHIS CHRYSÆA*, Hodgson.

Shengorh Peak.

395. *MIXORNIS RUBRICAPILLA*, Tickell.

396 *a.* *TIMALIA BENGALENSIS*, G.-Austen.

400. *POMATORHINUS RUFICOLLIS*, Hodgson, var.

Dafla birds are similar to those from Darjeeling, but do not agree with those from Nipal and the Naga Hills, the former being very much more ruddy throughout and darker olive above. The most striking difference lies in the size of the legs and in strength of the toes and claws.

Dimensions—Dafla and Darjeeling, t. 1.25, hind toe 1.0, claw 0.60 in.

Do. Nipal, t. 1.05, „ 0.75, „ 0.45 „

*401. *POMATORHINUS FERRUGINOSUS*, Blyth.

“*Pot gongor*” of the Daflas.

This handsome scimitar-babbler appeared very numerous under Torúpútú Peak, about 5000 feet. It is gregarious, but not a noisy bird, uttering only a faint chirp.

Irides pale greenish yellow; bill crimson; legs dull green.

L. 8.75, W. 3.5, T. 4.2, t. 1.3, Bf. 1.0 inches.

402. *POMATORHINUS SCHISTICEPS*, Hodgson.

405 *b.* *POMATORHINUS HYPOLEUCOS*, Blyth.

The specimen obtained is larger than any I have from the hill-ranges south of the Brahmaputra, but agrees in all other respects.

407. *GARRULAX LEUCOLOPHUS*, Hard.

This was found to be as numerous here as in other parts of the adjacent hill-states.

409 *a.* *GARRULAX GULARIS*, McClelland.

From Borpani in the Dikrang Dhún. Appears never to range higher than 2000 feet or so. It is a rare bird, and I only shot two specimens.

412. *GARRULAX PECTORALIS*, Gould.

413. *GARRULAX MONILIGER*, Hodgson.

"*Poréri*" or "*Purirhi*" of the Daflas.

416. *TROCHALOPTERUM CHRYSOPTERUM*, Gould.

Solitary, in pairs. Its call low.

Shengorh Peak, 7000 ft., in February.

L. 9·0, W. 3·5, T. 3·85, t. 1·5, Bf. 0·77 inches.

420. *TROCHALOPTERUM SQUAMATUM*, Gould.

421. *TROCHALOPTERUM RUFIGULARE*, Gould.

Dafla examples agree with those from Darjeeling. Individuals differ in the colouration of the wing-bar: in all Khási and Gáro birds and in one from Darjeeling this is concolorous with the coverts, *viz.*, olive-brown, the lores sometimes rufous. The normal colouration (? full) is pearly grey on the breast and white in front of the eyes. Khási examples have the rufous of the chin extending well down on to the breast.

L. 9·0, W. 3·6, T. 4·0, t. 1·48, Bf. 0·76 inches.

Bill grey above, very pale yellow below; legs and feet very pale horny; irides very dark purple-red.

Found associating in pairs, shy and not easy to find in the underwood. Their call is a sharp, monotonous kind of chirp, as they answer each other.

427. *ACTINURA EGERTONI*, Gould.

The specimen shot on Shengorh Peak is much more rufous than the Khási bird; this has led me to look at the series at my disposal with more attention. In my first list of birds (J. A. S. B., 1870, p. 105), the latter is recorded as a variety. I noted at the time I shot the first specimen at Asalu that it did not accurately agree with the description of *A. Egertoni* in Jerdon's 'Birds of India', and Dr. Jerdon himself, on my subsequently shewing him the bird, agreed that there were differences, but we had then no Darjeeling specimens to compare it with. I mentioned the points in which the Khási bird differed and I now see that not the least important of these is the distinct difference in the colour of the shoulder of the wing, the back, and the rump; which is an ochrey olivaceous, but in the Dafla specimen it is red-brown as given by Jerdon for the same parts of true *Egertoni*. All the birds (and I have a large series from the hill-ranges south of the Brahmaputra) are identical, and so distinct from the *Egertoni* of the Eastern Himálaya that they must receive a specific title, which I propose should be *A. Khasiana*, or, as I would rather designate races differing like this so slightly from an older well-known form, *A. Egertoni*, Gould, var. *Khasiana*; and in like manner we might indicate the relations of

such forms as *Trichastoma minor*, Hume and *Microperdix Blewitti*, Hume by calling them *T. Abbotti*, Blyth, var. *minor*; *M. erythrorhyncha*, var. *Blewitti*; and the same might be done with several other closely allied species.

427 b. ACTINURA DAFLAENSIS, G.-Austen. Plate IV.

Among the birds collected one of the most interesting forms is the *Actinura* described in 'Annals & Mag. Nat. Hist.' for November 1875, and of which the original description is repeated below.

"As might be expected, its nearest ally is *A. Nipalensis*, Hodgs., the colouration above being very similar on the back and tail, but with less rufous barring. The crest, however, is quite different; and in this respect the species approaches *A. Waldeni* from the Naga hills, on the south of the Brahmaputra valley, only that the crest is far fuller. The general blotchy streakiness of the throat and breast is also a mark of connexion with *A. Waldeni*. On comparison, it is seen that *Actinura Daflaensis* bears the same relation to *A. Nipalensis* that *A. Waldeni* does to *A. Egertoni*.

"The genus is a very well-marked one; and we can now record from the Indian region five species (including *A. Ramsayi* from Tonghoo, in Burmah, described by Viscount Walden in 'Ann. & Mag. Nat. Hist.' for June 1875), viz. :—1. *A. Egertoni*, Gould; 2. *A. Nipalensis*, Hodgson; 3. *A. Waldeni*, Godwin-Austen; 4. *A. Daflaensis*, Godwin-Austen; 5. *A. Ramsayi*, Walden. The last is a very distinct and interesting bird, a departure from the East-Himalayan type, but yet in every point a true *Actinura*.

"*Male*. Above; head ash-brown; feathers in front spatulate, behind elongated into a full crest, narrowly pale-edged; the ash tint pales on the back of the neck, and merges into the strong rusty brown of the back and upper tail-coverts; base of tail-feathers of the same colour, followed by four or five black bars, and the terminal half all black; the three outer rectrices tipped white, with a slight tendency to barring on the extreme outer web; side of head ash-grey, the ear-coverts with light silky reflections; shoulder of wing rusty brown; first primary coverts tipped with grey, forming a distinct narrow band, the last (covering the first seven primaries) black, forming a patch; the primaries are sienna-brown, the outermost edged with hoary grey, black on the inner webs and extremities, and narrowly barred with black on the terminal outer web; secondaries evenly and narrowly barred black and pale olivaceous umber. Beneath; the chin and throat pale dingy white, becoming a dirty ochrey ash on the breast, with a blurry striation, particularly on the throat; flanks and under tail-coverts rusty brown; tail beneath ashy black, the outermost feathers distinctly barred. Bill dark horny; legs the same; irides—?

"L. 7·5, W. 3·5, T. 3·2, t. 1·3, Bf. 0·68 inches.

"*Hab*. In high forest at 7000 feet, and first shot on Shengorh Peak in February."

*430. *SIBIA PICAOIDES*, Hodgson.

Its range appears to extend up to about 3000 ft.

430 *a.* *SIBIA PULCHELLA*, G.-Austen.

I obtained several specimens of this bird on the slopes of Torúpútú Peak at about 5000 ft. It was first obtained by me in the Nágá Hills, and it was interesting to find it extending to this side of the Assam valley.

*432. *MALACOCIRCUS TERRICOLOR*, Hodgson.

I have never got this bird on the south side of the Brahmaputra or in Cachar, and I did not see many even here in the Darrang district.

437 *a.* *MALACOCIRCUS (LAYARDIA) RUBIGINOSUS*, G.-Austen.

It was a great pleasure to find this bird again and in Assam, so far from the locality in which it was first discovered by me in Munipur. Beating through some grass for florikan, near Helem, in the Darrang district, some ruddy birds were flushed which quickly hid themselves low down in the stuff and could not be driven out, although the elephants were put through and through it in every direction. I suspected they belonged to the above species, but they were far more wary and concealed themselves more than those I had seen in Munipur. Several times afterwards similar birds were put up and a snap shot was obtained off the pad of the elephant as they scudded along for a few yards and dropped completely out of sight into the thick grass. The chase at last became quite exciting, as I was determined to find out what they really were. At last coming on a numerous party in an outlying patch of grass, I dismounted and, sending the elephants to be put in at the opposite end, had the piece beaten up towards me; as the birds flew across an open space where the grass had been burnt, I managed to secure a couple and so clear up the doubt that hung over their identity. I afterwards obtained, with the assistance of Mr. M. J. Ogle of the survey, two or three others. From the back of an elephant, they afford a most difficult shot: the flight is jerky, and unlike other grass haunting species, these birds very seldom when driven perch on the higher stalks before settling into the cover, but shuffle right down into the latter at once, and then continue moving through it very rapidly and out of sight, so that in a few minutes they are yards distant from the spot at which they originally alighted. When hunted in this way, they separate also and straggle in all directions; which adds to the difficulty of finding them again. I found it a far better plan not to waste time over them, but to beat on again for another flock.

439. *CHATORHEA EARLEI*, Blyth.440. *MEGALURUS PALUSTRIS*, Horsfield.444. *HYPsipETES PSAROIDES*, Vigors.

The species in my former list, (p. 106) is this, not *H. concolor*.

448. *HEMIXUS FLAVALA*, Hodgson.449. *ALCURUS STRIATUS*. Blyth.

Torúpútú Peak. January.

451. *CRINIGER FLAVEOLUS*, Gould.

A very abundant bird in the lower ground about Harmutti and Harjuli.

460 *a.* *OTOCOMPSA MONTICOLA*, McClelland.

This bulbul was a very abundant bird in the low country.

466. *PHYLLORNIS HARDWICKII*, Jard. and Selby.

468. *IORA TYPHIA*, Lin.

469. *PYCNONOTUS PYGÆUS*, Hodgson.

474. *ORIOLOUS TRAILLII*, Vigors.

477. *MYIOMELA LEUCURA*, Hodgson.

On Torúpútú Peak. This genus should certainly be placed near *Nil-tava*.

*498. *RUTICILLA HODGSONI*, Moore.

500. *RUTICILLA AUROREA*, Pallas.

505. *RUTICILLA FULIGINOSA*, Vigors.

Dikrang valley.

506. *CHIMARRHORNIS LEUCOCEPHALA*, Vigors.

Dikrang valley.

573. *CALLIOPE PECTORALIS*, Gould.

Dikrang valley.

530. *ORTHOTOMUS LONGICAUDA*, Gmelin.

Narainpur and Harmutti—in plains.

532. *PRINIA FLAVIVENTRIS*, Deles.

Very numerous in the shorter grass of the Terai and on the Bishnath plain.

*534. *PRINIA SOCIALIS*, Sykes, small var.

This little bird was the most numerous wren-warbler in the Darang District, and I shot a large series of it.

I generally found them in the patches of shorter grass near the foot of the Dafla Hills from the Burroi River to the Bishnath Plain, associated with *P. flaviventris*, *Graminicola Bengalensis*, and *Pyctorhis altirostris*. Their pale rufous breasts and grey backs distinguish them at once from other species directly they rise out of the grass; they then fly with a short jerking flight a short distance, settle on a stalk for a few seconds, and then drop into the cover beneath. The specimens obtained are certainly smaller than those of *P. socialis* from Southern India, but I see little or no other distinction.

L. 5.25, W. 1.7 to 1.8, T. 2.75 to 2.8, t. 0.72, Bf. 0.4 to 0.48 inches.

Irides bright reddish brown; legs pale flesh-coloured.

Dr. Jerdon's measurements of the wing and tarsus greatly exceed the above, being 2.1 and 0.9 in. respectively.

*535. *PRINIA STEWARTI*, Blyth.

One example of this species was obtained on the Bishnath plain.

539 *a.* *CISTICOLA MELANOCEPHALA*, And.

539 *b.* *CISTICOLA MUNIPURENSIS*, G.-Austen.

542. *GRAMINICOLA BENGALENSIS*, Jerdon.

Very abundant on the Bishnath plain.

Bill nearly white below, dark horny above; irides red-brown; legs and feet pale fleshy.

L. 6.0, W. 2.25, T. 3.16, t. 0.9, Bf. 0.5 inches.

544. *DRYMÆPUS LONGICAUDATUS*, Tickell.

555. *PHYLLOSCOPUS FUSCATUS*, Blyth.

Only found in the woods of the Terai.

561. *PHYLLOSCOPUS AFFINIS*, Tickell.

Only seen in the plains.

572. *ABRORNIS XANTHOSCHISTOS*, Hodgson.

578. *ABRORNIS CASTANEOCEPS*, Hodgson.

Harmutti.

585. *HENICURUS IMMACULATUS*, Hodgson.

Dikrang valley.

L. 10.0, W. 4.0, T. 5.5, t. 1.3, Bf. 0.8 inches.

*586. *HENICURUS SCHISTACEUS*, Hodgson.

Several specimens were obtained in the Dikrang valley. Leaving the main stream and proceeding up the bed of any of the small tributaries, almost the first bird seen would be a pair of this species, flitting with their peculiar jerking flight and settling a short way up stream on the gravelly bed. When disturbed by a shot they fly into the dense underwood and do not shew themselves again. Another pair would soon be found higher up.

Irides dark umber; legs fleshy white.

L. 10.0, W. 3.9, T. 5.5, t. 1.15, Bf. 0.7 inches.

*587. *HENICURUS SCOULERI*, Vigors.

I first became acquainted with this very diminutive representative of the genus on the Dikrang River, where it was very numerous, flitting about the large rocks and boulders. It is not such a lover of confined overgrown ravines as its much larger allies recorded above.

Irides very dark brown; legs and feet white; the two outer tail-feathers pure white, not tipped black (*conf.* Jerdon).

L. 4.75, W. 2.75, T. 2.0, t. 0.85, Bf. 0.42 inches.

588 *a.* *HENICURUS SINENSIS*, Gould, *Birds of Asia*, Pt. XVIII.

The Daffa specimens have been compared with typical *H. Leschnaulti* from Java and with *H. Sinensis* from China, obtained by Swinhoe. The frontal patch, as noticed by Captain Elwes in his revision of the genus ('The Ibis' 1872), is not a reliable character, and the only distinction appears to be that of size, the China bird being altogether larger. My specimens

again are markedly larger than *H. Sinensis* especially in the bill; which removes them still further from the Javan race.

L. 10, W. 3.9, T. 5.5, t. 1.15, Bf. 0.7 inches.

*590 *a. MOTACILLA HODGSONI*, G. R. Gray.

If really distinct from *M. Luzoniensis*, my specimen is evidently the above; it was obtained at Tezpur on the 27th November.

Desc.—Above; all sooty black, more velvety on the head, this colour extends round the sides of the neck, ear-coverts, throat, and moustachial streak from the gape; shoulder of wing a paler brown-black; quills and secondaries brown, white-edged, the latter strongly so; the primary coverts very broadly edged with white, so as to form a wing-band; a broad frontal band extending over the eye as far as the posterior limit of the ear-coverts, white; white also on the lores, chin for half an inch, and a narrow line under the eye, this colour has a tendency to replace the black on the throat and sides of the neck; abdomen and outer tail-feathers white the latter with a very narrow black edging near the base of the inner web, the next pair also white with a broader edging extending nearly to the tip.

*592. *CALOBATES MELANOPE*, Pallas.

593. *BUDYTES VIRIDIS*, Gmelin.

Got in December at Narainpur.

596. *PIPASTES AGILIS*, Sykes.

Numerous in the Dafla clearings, attracted by the millet-crop which was being cut in December.

609. *PTERYTHRIUS ERYTHROPTERUS*, Vigors.

L. 6.5, W. 3.4, T. 1.8, t. 1.1, Bf. 0.58 inches.

Bill beneath greenish grey; legs pale flesh-coloured; irides umber.

*612. *CUTIA NIPALENSIS*, Hodgson.

(Púting, Dafla.)

It was quite a pleasure obtaining this bird for the first time on account of its peculiar and beautiful colouration, as well as the very great difference between that of the males and females. Mr. Lister, attached to the survey party for the purpose of forming a botanical collection, was the first to bring it in to me, he having shot four one after the other out of a large flock on the same tree, the birds being apparently quite scared by the report of the gun and not flying away. It is well-known on the Darjeeling side, but I have not yet met with it south of the Brahmaputra. The males besides their different colouration are rather larger than the females.

♂ L. 6.75, W. 3.65, T. 2.7, t. 1.15, Bf. 0.68 inches.

♀ L. 6.50, W. 3.25, T. 2.42, t. 1.10, Bf. 0.57 „

Irides umber-brown; legs and feet yellow.

615. *LIOTHRIX ARGENTAUROS*, Hodgson.

616. *SIVA STRIGULA*, Hodgson.

617. *SIVA CYANUROPTERA*, Hodgson.

619 *a.* *ALCIPPE COLLARIS*, Walden.

Is very probably *Minla rufogularis*, Mandelli ('Stray Feathers,' Vol. I, p. 416) and specimens from Darjeeling must be compared. The species were described by the above gentlemen about the same time. Should the two prove identical Mr. Mandelli's title has priority. It is pretty numerous at about 3000 ft. in these hills. Mr. Mandelli's single specimen came from the Bhútán Doars. I consider the species to be a *Minla*.

Dimensions in the flesh :—L. 5·0, W. 2·3, T. 2·2, t. 0·9, Bf. 0·44 in.

*619 *b.* *MINLA MANDELLII*, G.-Austen.

Described as below in the 'A. and M. N. H.' for January 1876.

"Above dark olivaceous, tail brown; forehead rufous, merging into the olivaceous brown of the top of the head; a white supercilium commences from above the eye, and extends to the neck, merging into some streaky buff and black feathers behind the ear-coverts; a black band surmounts the white one, but does not meet the black lores; ear-coverts sooty. Chin, throat, and upper breast buffy white; sullied white on abdomen, flanks olivaceous. Irides dark red-brown; legs and feet pale fleshy; bill grey-brown. Feathers of the head scaly."

L. 5·5, W. 2·2, T. 2·5, t. 0·95, Bf. 0·45 inches.

I named this bird after Mr. L. Mandelli, who has so successfully worked the ornithology of the Sikkim Hills, and who has described a near ally of this species. Since forwarding the communication to the 'Annals', I see that Mr. Hume (in 'Stray Feathers' for 1874, p. 447) has described a *Proparus* under the title of *dubius* which is so like my bird, that I am inclined to think the two will prove identical, in which case the specific title *Mandellii* will not stand, but I should certainly not place it in the group *Proparus*, as it is in every respect similar in form to *Minla ignotincta* and *M. castaniceps*.

Wherever I have found this and *Minla collaris*, the whole country has been covered with forest, and I should certainly not call them reed- or grass-haunters. The *Liotrichine* group is already too much sub-divided and I would not recommend the adoption of another genus for these two species as proposed by Mr. A. O. Hume under the title *Schæniparus*.

*621. *PROPARUS CHRYSÆUS*, Hodgson.

This very lovely tit was got on Shengorh, out of a numerous flock that passed through the trees near the camp.

L. 3·9, W. 2·0, T. 1·9, t. 0·8, Bf. 0·3 inches.

623. *IXULUS FLAVICOLLIS*, Hodgson.

Shengorh Peak.

624. *IXULUS OCCIPITALIS*, Blyth.

628. *YUHINA NIGRIMENTUM*, Hodgson.

Shengorh Peak.

630. *HERPORNIS XANTHOLEUCA*, Hodgson.

Harjuli 3000 ft. up to Torúpútú Peak.

645. *PARUS NIPALENSIS*, Hodgson.

The *cinereus* of my former lists is shewn to be the Javan race by Lord Walden in the 'List of Birds of Burmah', p. 112.

647. *DENDROCITTA HIMALAYANA*, Blyth.

660. *CORVUS CULMINATUS*, Sykes.

Large numbers were attracted to Narainpur on the formation of the camp there.

663. *CORVUS SPLENDENS*, Vieillot. (*C. IMPUDICUS*, Hodgson).

In the camps of Narainpur and Harmutti only.

673. *SISSA CHINENSIS*, Bodd.

"*Pilitel*" of the Daflas.

678. *DENDROCITTA FRONTALIS*, McClelland.

683. *STURNOPASTOR CONTRA*, Lin.

688. *TEMENUCHUS MALABARICUS*, Gmelin.

702. *MUNIA ACUTICAUDA*, Hodgson.

Seen only in the plains.

706. *PASSER INDICUS*, Jard. and Selby, var.

723. *EUSPIZA AUREOLA*, Pallas.

754. *MIRAFRA ASSAMICA*, McClelland.

766. *ALAUDA GULGULA*, Franklin.

773 *a.* *CROCOPUS VIRIDIFRONS*, Blyth.

776. *OSMOTRERON PHAYREI*, Blyth.

781. *CARPOPHAGA INSIGNIS*, Hodgson.

These birds were pretty common at No. 9 camp in the Dikrang valley.

793. *TURTUR MEENA*, Sykes.

Harmutti.

803 *a.* *POLYPLECTRUM TIBETANUM*, Lin.

Not so plentiful as in the hills south of the Brahmaputra, Mikir, Naga, &c.

811 *a.* *GALLOPHASIS HORSFIELDII*, G. R. Gray.

Occurs at the base of the hills.

812. *GALLUS FERRUGINEUS*, Gmelin.

Found all along the Terai, but did not appear to be very abundant.

818. *FRANCOLINUS VULGARIS*, Stephens.

Plenty were seen on the Bishnath plain.

823. *ORTYGORNIS GULARIS*, Temminck.

Very plentiful, in the high grass plains, near water, but far oftener heard than seen. They are very difficult to flush, and I have more than once, when sitting on the pad of the elephant, seen them crouching in the

grass close to the elephant's feet and not rising until actually kicked up.

825. *ARBORICOLA RUFIGULARIS*, Blyth.

"*Pokhú*" Dafla.

This was the only species obtained, and it was very common at 4000 feet and upwards at our camp in the forest under Torúpútú Peak, and the Dafla guides snared several. The Daflas, like the other hill-tribes, are clever at this art, and the mode of capturing pheasants and partridges is simple and worth describing. As it is the habit of the birds to get down low at night into the warmer ravines and feed upwards along the crests of the spurs, they stop the progress of the covey by a zig-zag barrier about 2 to 3 feet high, made up of twigs and short pieces of bamboo stuck into the ground, which is rapidly formed and extended a short distance down the hill on either side. A narrow opening is left here and there, generally at the re-entering angles, and in this the noose is set just above two cross sticks and in the same plane, at exactly the height of the bird's breast. The noose-string is made of a thin strip peeled off the outside of a bamboo, and tied to the end of a pliant stick, drawn down like a spring, and hitched into a saw-nick in a bamboo peg, into which the flat form of the string forming the noose fits close and accurately. All the materials grow on the spot, and in a few hours hundreds of barriers and snares can be made and set. The birds are often caught alive by the legs, and I had one thus captured for several days, but it refused food and died; it was probably in some way injured, for they are not difficult birds to keep in captivity, and large numbers are brought to Calcutta for transfer to Europe.

831. *EXCALFACTORIA CHINENSIS*, Lin.

*838. *SYPHEOTIDES BENGALENSIS*, Gmelin.

Numbers are to be seen on the Bishnath plain. In the early morning they are constantly on the move, taking long flights from one feeding ground to another, and are then very wary; as the heat increases, they lie very close and are often difficult to flush, and if the sportsman is on foot, they will hide and often elude him altogether. I found the best plan was to walk along about 50 yards in front of the elephants when the grass would admit of it.

870. *GALLINAGO STENURA*, Kuhl.

905. *GALLINULA CHLOROPUS*, Lin.

917. *MYCTERIA ASIATICA*, Lath.

Often seen in the Darrang District, and I shot a fine specimen. I once saw this bird breeding in the extensive marshes near Shushang, Mymensing, in January. It had formed its nest on the top of a thick bushy mass of trees about 30 feet high, which stood in the midst of a dense thicket of a species of rose, so thick that the elephants could not push into it, and it

was practically inaccessible. The nest consisted of a very large accumulation of sticks and reeds.

931. BUTORIDES JAVANICUS, Horsfield.

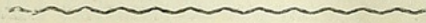
On all the large wooded rivers and streams.

*981. LARUS RIDIBUNDUS, Lin.

This bird, which Mr. Howard Sanders has kindly identified, was shot near the junction of the Dunsiri and Brahmaputra in December. From the colour of its bill and legs it rather puzzled me, for I was well acquainted with *brunneicephala*, which is a common gull on the above river. It is interesting finding the laughing-gull so far up the Brahmaputra, at this point some 500 miles from the sea. Jerdon mentions its being abundant at the mouths of the Ganges.

*987. STERNA MELANOASTRA, Temminck.

A very common tern on the Brahmaputra and its larger tributaries, such as the Dikrang, as far up as sand-banks occur.





SUTHORA DAFLAENSIS.



J Smit del. et lith.

M & N Hanhart imp.

ACTINURA DAFLAENSIS



Austin, Henry Haversham Godwin. 1876. "VIII—List of the Birds collected on the Expedition into the Dafla Hills, Assam, together with those obtained in the adjacent Darrang Tcrai." *The journal of the Asiatic Society of Bengal* 45(II), 64–85.

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