Ashore Jany 19th 1828.

Sept 10/23

Whelden Dell (Aug. 20)

Blacker

Appendix

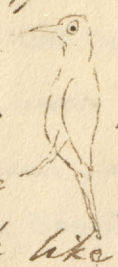
to

Lathams Birds.

Vol III.

Of the figures of Length. The first means from the point of the beak to setting on of the tail: placing the bird in its natural sitting position, and measuring by the curvature of the head (pressing down the crest if the bird have one) neck back &c: the second, from the last point to the end of the longest feather.

NB I find that if the bird be placed in this position holding it by the bill and allowing the body to hang down, the measurement is the same if the string be taken from the bill over the crown of the head straight down, without pressing it into the curvature of the neck. this saves trouble.



NB. To find the setting on of the tail, it is cocked up like this and the inner ~~point~~ corner of the angle it makes with the body, is the point of measurement. This sometimes gives a greater difference than the appearance of the bird would indicate: as some have the feathers of the rump, vent and tail-coverts very long in proportion to their size; which makes the body appear longer, and the tail shorter than it is. e.g. O. Vol 1. Pl 53. Fig 2. also Pl. 48. & others.

The Perpendicular height means when the bird is standing as he is drawn.

The Length of Bill, or for short "Bill" signifies from the point to the corner of the mouth when open.

The "Breadth" means from the extreme points of the longest quill from wing to wing, when full-stretches whether the outer quill or not.

The above are invariable, unless other measurements are expressly specified.

The Native names given allude to the place where the bird was killed, unless otherwise specified. For the names of the same bird, differ often in different parts of India. as indeed is the case with plants insects and even animals. In the Hills (of the Himaleyäh) villages a few miles apart, have sometimes different names for the same bird.

The information about their nests, eggs, time of breeding, migration, and other local points, is collected chiefly from the village boys; who (in the Hills particularly) from being continually bird-nesting, and playing about in the Jungles, are generally well acquainted with these matters.

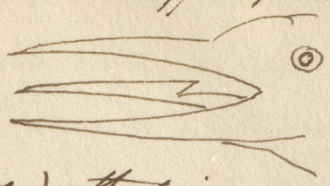
NB. The men comparatively know little: they often say "When I was a boy I could have told you all about it, but I have forgotten it now.

The native names are given with great exactness: spelling according to Gilchrist's plan. This generally is not sufficiently attended to, which creates confusion. Many names of birds, have some meaning characteristic of their color, song, shape, manners &c -

The under parts, and those which cannot appear in the drawing are minutely described. Where I have not exactly hit the color, it is mentioned. From want of this having been done in the drawings from which Latham's descriptions are taken, he has described the color of some incorrectly.

Almost every picture is taken from a real specimen, immediately after it has been shot: chiefly by myself, which gives me an opportunity of observing their natural position and motions. Some few are taken from live birds in cages. but where this is the case it is mentioned: also if taken from another picture or stuffed specimen.

In some the tongue is mentioned to have the "hooked joint". That is when the tongue has a joint near the root, with a sort of barb above, pointing backwards like this.



+ In some the eye is said to have a "film from forwards" (or backwards, upwards, downwards) that is when it has a film under the eye lid, with which it can cover the eye; and which projects from the front or back, or upper, or lower side of the eye.

When a bird is stated to be drawn 1/2, 3/4 &c the natural size; it is done by scale, with proportional compasses.

δ The toes are sometimes said to have 1, 2, 3, 4 joints, or 1, 2, 3, 2 &c &c The first number relates to the back toe; the second to the inner; the third to the middle; the fourth to the outer toe.

NB I find that if the bird be drawn out straight like this  pulling the neck very slightly, the measurement is the same as either of those methods mentioned overleaf.

For brevity's sake, when the toes are directly joined to each other, they will be said to "joined". when joined to each other by a membrane, to be "membraned".

δ NB. Should the bird have two toes before, & two behind, the numbers will refer respectively to the inner back, inner front, outer front, & outer back toe. Should all four toes be forwards, the numbers will commence at the innermost.

+ Some of the birds being only wounded, enables me to ascertain this.

P.S. Augt. 1829. On looking over the book, I find some not very correct. All those that are marked with a cross in the corner where the date is, may be depended on, as properly drawn by scale from living specimens; and what descriptions are annexed are accurate.

The others were drawn before I understood the plan of properly taking them off by scale, and are chiefly drawn by the eye. consequently cannot be compleatly relied on as fit to describe from. [T. J. Shore]

+ Fig 1. Jany 24. 1828.

Length 3/2 - 2 5/8 - Bill 5/8 Broad 9 5/8 - inches. Drawn of the natural size. Inner wing coverts like the breast but a little lighter. Tail 12 a little rounded. The white on the wing is the coverts nearest the body, & is barely perceptible when the wing is quite closed. Tongue narrow thin, a little gouged, horny at the end, & has the hooked joint. Toes 1. 2. 3. 4 joints. Middle joined to the outer to the first joint, membraned to the inner half way up the 1st joint

Killed near Hurdwar.

The female of Vol 1. Pl. 29. fig 2. It is a little smaller. but very little difference.

+ Fig 2. Jany 29th 1828.

+ Fig 1.

Killed at Hurdwar. Called Gid or Geed. Gurroor by Gukrwallees.

Length 26 5/8 – 10 1/4 – Bill 2 3/4 – inches. Broad 7 ft. – 3 1/2 inch. Perpendicular height 26 3/4 inch. Middle claw 3 3/4 inch.

Lower part of back dirty white, with a very slight reddish brown tinge. inner wing coverts the same, but the edge of the wing dark blackish bluesish brown. At the root of the neck is a sort of ruff as drawn. Sides of the body close to the wing, are dirty white. Feathers of breast like lower part of belly, but the shafts are dirty brownish white. Vent and under tail-coverts dirty brownish white. Upper tail coverts very short color like the tail. Tail 12 a little rounded.

Toes 1, 2, 3, 3 joints. Middle strongly membraned half-way up the 1st joint to the inner wholly up the 1st joint to outer.

The back part of the Head and neck has a good number of short dirty brownish white hairy feathers. The front part has a few short hairs only perceptible by looking near. In some lights the throat has a dirty chocolate tinge.

Inside of quills like the outer, but much lighter. Nostrils almost perpendicularly across the bill. The ruff does not extend to the front part.

Fig 2. Full-size from old book.

White-backed Vulture (Pseudogyps bengalensis)

Wall Creeper (Tichodroma muraria)

Fig 2. Length 4 — 1/2 — 1/4 — 12/8 — inches. Tongue bayonet-shaped at root, the rest horny, narrow, very-thin, and divided at end. Nostrils oval, in a long deep indentation, & covered with a black membrane. The scarlet greater wing coverts have black inner webs. Quills scarlet on outer, black on inner webs for two-thirds the length from the roots, except the outermost & three innermost. The four outer quills have each two patches of white on inner web one 3/4 inch from tip, the other an inch above that. The fifth quill has one even with the latter, & the fourth counting from inside. The 4th, 5th, & 6th quills have a patch of light brown on inner webs, even with the above-mentioned upper patches. Inner wing coverts black dashed with red. Tail 12. The outer black at root-half, white with slate-colored fringe at end half. The seconds black fringed with slate color, & a patch of white on inner web near the tip. Rest like latter without the white patch. Back claw half an inch long. Found in the Doon running about rocks.

Fig 1. Jany 27th 1828.

Neophron (Neophron percnopterus).

+ Feby 23rd. 1828
correct by scale from a
fresh killed bird.

the fourth size.

Length 17 - 10 3/4 - Bill 2/2 - Broad 65 - inches. Tongue soft, fleshy. fits to the inside of the under mandible. ears large, in the cere underneath the eye. Inner wing coverts pure white. Sides of body like breast. Whole body indeed white with dirty light brown dashes. Tail 16 rounded. Toes 1, 1, 3, 2 joints. Middle and outer membranes together at their root. Perpendicular height about 14 or 15 inches. This bird is found all over Bengal and Hindostan eating all sorts of garbage, and may be seen near a cantonment eating human excrement.

NB. The legs are a little too dark. they should be more of a whiteish cream color. on the whole well done as to shape and color.

Full size. Copied from old book.
Probably a Grackle.
Length 6 3/4 — 4 1/8 — 1 1/4 — 14 3/4 — inches. Tongue much fringed. Inside of mouth red. Legs short and scaly. Claws hooked and sharp. Middle and outer toes joined half-way up first joint. Found in Gurhwall. called Bun Bakrā (forest goat) from a fancied resemblance in its cry to the bleat of a goat.

Full size. Copied from old book.
probably a cuckow.

Length 5 – 4 3/8 – Bill 1 – 12 5/8 – inches. Tongue flat, thin, slightly divided at the end. Inner wing-coverts grey with whiteish specks. The middle wing quills have a patch of white on inner webs near the roots. Nostrils in a projecting rim, inside of mouth red. Tail 10. cuneiform. The outer barred with white, the second slightly so, rest only white at tips. Found in Jurkwall.

Full size. from old book. Probably a Cuckow.

Length 5 1/4 — 5 3/4 — — 14 1/2 - inches. Plumage of upper parts & from chin to breast, black with a greenish, bluish, purple glos. Belly & below it. black. Quills have a spot of white about the middle of their lengths, on the inner web. Tail 10. the outer ones two-thirds as long as the other eight which are even, four turning one way, four the other, forking the tail. Outer tail feather, & under tail coverts beautifully barred with ash-color. Found in Surhwall.

Koel (Eudynamis scolopaceus).

The Eastern Black Cuckow of Latham. O. Vol 3. P. 282.

+ April 30. killed at Lall Dhang. half-size.
Length 8 3/4 - 7 3/4 - Bill 1 1/2 - Broad 23 3/4 - inches. Tongue small, fleshy, rounded, & has the hooked joint. Toes 1, 2, 3, 4 joints. Tail 10 feathers. much rounded. Is seen in Hindostan in the spring & until the rains. called Koeel. from the similarity of its cry to that word. said to eat fruits, and the white ants as soon as these fly. it is called Kalee koeel (black koeel) to distinguish it from a smaller sort. lays its eggs in crows nests.

+ June 6. 1828. killed at Pokree
3/4 size. correctly drawn.
Length 6 1/2 – 8 1/2 Bill 1 1/4 – Broad 25 – inches. Tongue lancet shaped flat & extremely thin. Inner wing-coverts like belly. Sides of body do. Inner web of quills marked with wedge shaped white bars like this; a tinge of rufous at the inner point. The outer webs of the 4 or 5 outer quills have bars of brownish rufous opposite. Tail 10. set on very high up the body. Under side greyish white with black bars. rounded. Back like the wing, which hides it when closed.
Found all over Guhrwall in the spring. Called Kafal pukkee. (from its cry. See Vol 1. Pl 4) From the number of natives who said so, this must be the real one. it is a shy bird, difficult even to see, although heard in every direction; chiefly early, & late. often at night.

Length 6 – 6 3/4 – 1 1/4 – 22 3/4 – inches.
This is the female of the foregoing. Those parts where it differs appear in the drawing. The underparts from the breast downwards, are the same; except that the under tail coverts, have the curved bars a little larger and darker.

+ June 7th 1828.
killed at Pokree – correctly drawn.

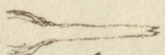
killed in the Doon. called Bugulā. usually if not entirely found in deep cool ravines, which have water running thro' them.

+ Feby 16. 1828. half size.

Length 15 3/4 - 2/2 - Bill 3/4 - Broad 26 1/4. 12 1/2 perpendicular. - inches. Tongue fleshy at root, with the hooked joint. thin, flat, horny towards the end. 2/3rds as long as the bill. Nostrils pervious. Lower part of belly, vent, & under tail coverts, like upper belly. Rump & whole of underside of wing light bluish slate-color. On each side of the rump, hid under the feathers, are a tuft of yellow silky hairs, in substance like those of a fresh ear of Indian corn. Tail 12. roundest, blackish, bluish green. Toes 1, 2, 3, 4 joints. middle membranes to the outer to the 1st joint.

Pied Crested Cuckoo (Clamator jacobinus).

Paoree. Septr 1st 1828
Full size. well done.

Length 5 3/4 – 6 3/4 – 1 – 17/4 – inches. Tongue about an inch long  this shape. fleshy at the root. Thin flat, & horny for the rest, & divided at the end. Inner wing coverts like breast. i.e the smaller; the larger, light blackish slate color. Nostrils surrounded on the upper side by a prominent rim. Tail 10. Toes 1. 2. 3. 4 joints. The white wing patch is made, by the inner web of outer quill: both webs & quill of 2nd to 7th quill, & outer web of 8th quill. The color of the upper parts is a mixture of black, brown, green, & blue. each of which appears stronger in particular lights. The 2 middle tail feathers have more brown than the others. This an elegant bird, except the legs which are long, particularly the thigh joint. like most Cuckoos. Only seen for the 6 summer months. Called Koil. called at night. The more common name of this is Miolrä. its cry is a long shrill whistle. chiefly heard in evenings. often in mornings. sometimes at night.

+ Drawn. Novr. 8. 1828.
Full size. correct.

Length 7 – 5/12 – 1/8 – 15 3/4 – inches. Nostrils partly hid under reflected hairs. Bill compressed like a grackles. Back & rump like the belly & vent. Tail 12 – Toes 1. 2. 3. 4 joints. Middle & outer joined to 1st joint. This is found in the warmer parts of Purkwall. usually 10 or 12 or more together. hopping quickly from branch to branch in small trees & underwood. making a cackling & hissing & whistling noise. The white is a fine silky white.

+ Pioree Aug 29th. 1828.
Correct. Fullsized.

Length 4 3/8 – 3/8 – 7/8 – 9 3/4 – inches. Tongue thin horny. & divided. Bill in some has a just perceptible notch. not in all. Tail 12. the inner webs blackish greenish. brown. Toes 1. 2. 3. 4 – Middle joined to inner half-way, to outer wholly up the 1st. joint. The feathers all over except tail are pointed. it is a ragged bird.
This is common all over Surhwall. both in hot & cold places. called Möst-pekurä. or Dhekurä. seen hopping about low bushes, motions much like a robin. builds in small bushes, or tufts of grass. nest of fine grass or feathers. says from 3 to 5 eggs. brown, black, red, & white mixed. Male & female alike. (insert.)
The tint of this birds feathers vary in different lights. flying about it appears all dull brown.

+ July 7th 1828. Fullsize.
correct. Paoree.

The Black & Scarlet Thrush.

Length 4 – 4 1/4 – 3/4 – 11 – inches. Bill a little hooked, & has a slight notch. Tongue flat, thin, fleshy at root, horny at tip, slightly bristled. The ends of the greater wing coverts are scarlet, and all the quills except the 2 outer & innermost, are scarlet on both webs, but not on shaft. The 2 outer have sometimes a little scarlet on in the inner web, & the 2 inner, on the edge of their outer webs. The 3 or 4 inner quills have sometimes a small patch of scarlet on their outer webs near the tips, which in some is joined to the larger patch. Tail 12 as drawn. Toes 1. 2. 3. 4 joints. Middle joined to the outer to the second joint.

Killed in the Doon. Found in warm places all over the hills. Bill has a slight notch.

Length 4 3/4 - 4 3/8 - Bill 9/10 Broad 13 - inches. Whole of the under parts bright yellow, rather lighter on the vent. Eyelids yellow. Irides greenish brown. Tongue very thin, flat, broad at root, narrow at point, where it is horny & divided. it has the hooked joint. Inner wing coverts yellow. The yellow wing patch has this appearance when closed. but when open, the wing has a regular bar of yellow. every quill but the two outer, being yellow on both webs, but not on the shafts. The four or five inner quills have a little yellow on the edge of outer webs near the tip. Toes 1, 2, 3, 4 joints. middle joined to the inner half-way, to the outer wholly up the 1st joint. Tail 12 as drawn. Called Nanee Chuŭa by the Goorkus (a common name for any small handsome bird) said to be a female. Male said to be all red.

July 7th. This is the female of the foregoing (the black & scarlet Thrush) I saw a large flock together & killed several of each. near Päoree. For the first year, the colors generally are not so bright. especially the yellow, which is light dirty greyish yellow. Nor does the greenish yellow extend so high up the back. The tips and edges of the quills are in some more, in some less, white, or yellow. in some scarcely at all. The quantity & intensity of the white edgings to the feathers on the upper parts, vary much in different birds.

+ Feby 16th. 1828. full size.

Fig 1.

+ April 10. Full size. correct
killed at Mussooree.
Length 3 3/4 - 2 5/8 - Bill 5/8 - Broad 9 3/4. Tongue flat
short. thin. bristled. The bill is very flat, & base broad.
inner web of quills, on both sides, & the outer web on its
underside is light blackish slate color. inner web
of tail d°. Tail 12. Toes 1, 2, 3, 4 joints. Middle
joined to inner half way up ye 1st joint, and to the
outer toe as far as the second joint. The eye has a
nictitating membrane from loreswards. Two or three bristles
at the corner of the mouth, & over the nostril. bill much hooked
at the end, & has a slight notch. June 3°. Shot one at Pokree
(Nagpoor) as it flew off its nest, which was made of green mos,
under the root of an oak. (O) this shape not 4 inches diam^r.
over all. 3 eggs light pinkish white, with a reddish brown ring
on the large end.

Fig 2.

+ April 26th Full size.
killed near Hurdwar.
Length 3/4 - 1 7/8 - Bill 5/8. Broad 8 - inches.
Tongue flat, thin, bristled at the end & has the hooked joint.
Colors as drawn. Toes 1, 2, 3, 4 joints. middle & outer
joined as far as 1st joint. Vent & under tail coverts only light rufous.
It has the motions of the shrike.
Aug 15th. I find these are common in most parts of Surhwall.
When young the tail feathers are tipped with rufous.
Called near Paoree Chetroo. builds in Phoolwas. nest of grass lined
with hair or wool. lays 3 to 5 eggs color green. This is the male.
the female is all light brown, dashed with darker. (by infor^n)

These are on the whole rather larger than the red ones. see Pl. 20. The body feathers are all bluish-black on the root-half; which in some shows so much as to make the back appear cinereous. The shafts of the back feathers & wing coverts are blackish; almost black in some.

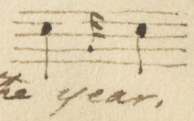
Paradise Flycatcher (Terpsiphone paradisi).

+ April 14th 1828

Length 4 3/4 - 12 1/2 - Bill 1. Broad 11/8 - inches. Back has a blue tinge on the white. Tail & under parts pure white. Tongue narrow flat, very thin, horny & divided at the end. Color of bill is greenish bluish black. Quills black & have white outer web, and also the edge of the inner white; very narrow on the outer quills, growing broader on the inner quills, till the three or four innermost have only a narrow stripe of black in the middle. Tail 12. Shafts all black except the end half of the two middle. The outer edge of the 3 outer feathers is black, & of the two fourthes very slightly. Toes 1. 2. 3. 4 - joints. middle joined to the inner to the 1st. to the outer to the 2nd joint.
Bill found in the Doon during April & May. Called Tăkoolecă by the Gurkwallees.
NB. The bill & eye-lids should have been more of a light blue. like Pl. 20.

+ June 2.
Full size.
Killed near Pokree in Nagpoor.
Length 4 - 3 3/4 - Bill 3/4 - Broad 10 3/4 - inches. Tongue flat fleshy, horny at end. Lancet shaped, pointed, & has the hooked joint. inner wing coverts like breast. Wing has this appearance when closed, but it has a bar of red; every quill but the three outer & two inner, being red on both webs in the middle; the inner web being lighter than the outer. Tail 12. like Pl. 15. but red & brownish black instead of yellow & black. Toes 1, 2, 3. 4. joints. Middle joined to outer, to the 2nd joint. Called Powe. builds in branches. nest of moss (simăla or siwăla) lays 3 white eggs. only seen the 6 summer months.
Said to be the female. male almost all red. Bill has a slight notch.

+ June 19th. Urkoon.
Full size. correct.
Length whole 7 3/8 inch. This must be the female. except being yellow where that is red, & generally the colors not being so bright it is precisely similar. The ash dashing of the ash on breast is the roots of feathers. Lower part of belly & under tail coverts almost white. The very tips of two or three of larger outer wing coverts, yellow. inner wing coverts do.

+ June 2nd. Full size.
Killed near Pokree in Nagpoor.
Length 5 1/8 - 4 5/8 - Bill 7/8 - Broad 1 1/4 - inches. Tongue like the preceeding, but sharper at the end. The inner web of the quills rather lighter than the outer, and on the 3rd, 4th & 5th there is a patch of light whiteish grey. Toes 1, 2, 3, 4 joints. Middle joined to outer to the 1st joined. Called Koil. builds in holes in rocks, nest of moss. lays two white & black eggs. Cries chiefly at night, a skrill whistle like this  the natives fancy it says "pān sō pān. It is not heard in the 6 winter months, but seen all the year. Bill has a slight notch.

A beautiful little nest of spider web, lined with down of (Jumbara) thistle. egg white with yellow dots
Pl. 20 Spar

♂ Paradise Fly catcher (Terpsiphone paradisi).
(intermediate stage)

+ June 18th. 1828. Killed at Saree.
Correctly drawn. Full size.

Length 4 1/2 - 9 1/8 - 1 - 11/4 - inches. Tongue narrow, very thin, horny, gouged shaped, & divided for an eighth of an inch at the end. Gape very broad. Four inner quills like back - rest black with white outer-edge - except the two outer which are all black; & much shorter than the rest, outermost shortest of all. Three or four outer feathers of, the larger coverts are black with white edging. Tail 12. Toes 1, 2, 3, 4 joints. Middle joined to inner as far as 1st joint. to outer as far as 2d joint. Inner wing coverts reddish brown & white mixed. — The people tell me that this is the male of that in Pl. 17. — I shot another in which the crest was not so long, color the same, rest of the head dark blackish ash; throat bluish ash, gradually getting lighter to the belly which was white. Quills blackish where this is black, reddish brown where this is white. The two middle feathers were 1 half an inch, the other an inch longer than the two 5th in other respects the same. It had the appearance of a young bird, so is probably a young male; or should this be a different sort, it may be the female. This & the white are seen sometimes together, sometimes separate. The whole of the feathers of both, have a silky gloss. the white in both being peculiarly delicate. The head & crest, in some lights appears fine velvet black, in others glossy dark blue, in others glossy bottle-green.

NB. These birds differ considerably in the intenseness of their colors. In some the wings & tail are much lighter brown; the outer feathers of the latter being light ash, almost white. In some the whole of the underparts are tinged with rufous: darkest towards the vent, & sides of body.

These are said by the natives to imitate the cry of various birds, and therefore called the Brahmin from its cleverness. I have certainly heard it imitate the cry of the black-partridge. The natives say it thus decoys small birds within its reach and then kills them. It is a heavy flying bird, making short straight flights.

I have seen them with the bill even more hooked than this.

Fig 2. Full size. Copied from Old book. See End.

+ July. 1st. 1828. Pioree
Full size. very correct.

Length. 4 7/8 – 4 1/8 – 7/8 – 11 1/2 – inches. Bill has a notch. Tongue horny flat thin pointed & bristled. No white spot is on the inner web of 3rd outer web of 4th & fifth quills. Tail 12. Toes 1. 2. 3. 4 Joints. Middle & outer joined to the 1st joint. Nostrils pervious. Eyelids grey. Irides greenish brown. Inner wing coverts light cream color. — Found all the year. Called Burtoolloo: (In the plains Lutsorā). Builds in trees, of sticks and fine grass. lays 4 to 6 eggs dirty white mottled with reddish. When just able to fly the whole upper parts are beautifully mottled dark and light brown. rufous towards the rump. Chin white, all below so, with very light ash-colored bars. upper mandible slightly hooked.

The female is said to be the same, but I suspect it to have the colors not so bright. having shot several so, apparently full grown.

+ Pāoree. Augt 23d. 1828.
Full size. Well done.

Length 6 - 6/2 - 1/10 - 18/4 - inches. Tongue flat, thin, fleshy at root, horny at tip, not very pointed and divided. Upper breast rather lighter than back, feathers slightly fringed with white. Sides of body under wings & under tail coverts, the same, but the white fringe broader. Lower part of breast & belly, brown. Toes 1. 2. 3. & joints. Middle joined 1/2 way up 1st jt to inner; to 2nd jt to outer. Inner wing coverts black, with a spot of white near the tip. The general color of the bird is bluish, greenish black. each predominating in different lights. Head black not dark as rest, throat dark velvet black. Bill has a just perceptible notch. nostrils hidden. Both mandibles have projecting hairs. Those of under, fewer & smaller, & point slanting upwards. Tail 10 as drawn.

+ Pooree. Sept. 12th. 1828.
Full size. Correct. except the legs are
a little too stout.
Length 5 7/8 – 5 3/4 – 1 – 18 – inches. Bill has a notch at the tip of both mandibles. Tongue like the last. At first sight this
is similar to the last; but it is generally a darker bluish black tinge; and its head, & belly are the same color as the
rest of body: greater quills not so brown. The eye too differs q.v. in all other respects the same. I believe to be a different species.
Both known by the same name. viz Dhenchoo by Rohillas & some of the Gurhwall peeple. Konerä by the latter.
This was just beginning to moult. Sept 22. Shot one similar, without the white at corner of the mouth.

+ Fig 1. Full size by scale.
Dhera Nov. 1828.

phœnicura Frontalis

+ Fig 2. Dhera Nov. 1828.
Full size by scale.

Length 3 7/2 – 2 3/8 – 5/8 – 8 1/2 – inches. Bill something like a shrike. gape wide. Both mandibles hollow. Tongue flat, horny, & fringed at the end. Upper mandible has a slight notch. Tail 12 rounded. Found in the Doon and plains below.

Fig 2. Length 4 – 2 7/8 – 3/4 – 10 1/4. Bill like a warblers. Tongue thin, horny, & divided at the end. Ears large. Inner wing-coverts light rufous. Tail 12 - two middle black on inner webs all but the root, on outer webs not quite as low down. Found in Gurhwall, & most parts of the Himaleyah that are warm, & in the plains below. That in Pl. 1. Fig 2. is I believe the female.
See End of book.

+ Shewn Octr 25th 1828.

Full sized. Correct.

The Gotalie Grackle. Lath. V. 3. P. 154.

Length 6 1/8 - 3 1/8 - 1 1/4 - 14 3/4 - inches. Tongue flat, thin, horny, & divided at the end. The upper parts are black with a tinge of dark-bottle-green. The wings & tail not quite so dark, & blackish brown, with the bottle green tinge not so strong. Lower part of rump like the belly. sides the same. The white on the wing is on the smaller coverts. Tail 12. a little rounded. Toes 1. 2. 3. 4 joints. middle joined to outer to the 1st joint. This bird was about half-moulted. Inner wing coverts light whiteish cream-color.

+ Killed at Seeruguer. June 20th 1828.
Very correct. Full sized.

The Malabar Grackle of Latham. V. 3. P. 151.

Length 5 1/2 – 2 3/4 – 1 – 12 3/4 Bill like an orioles. nostrils with a very slight rim round. Tongue flat, thin, horny, gouged & divided. The head breast, neck hackled. these hackles extend down the back. The Half the outer quills blackish brown, with in some lights a greenish tinge, with grey tips except the two or three outermost. Tail 10. The four middle like the back, with shades of dark chocolate brown. The rest reddish chocolate at end-half. brownish chocolate at root-half. Toes 1. 2. 3. 4. middle & outer joined to the 1st joint. The legs be have a gilded gloss, strongest ~~at~~ claws. Inner wing coverts, pinkish creamish white. Called Kutt Powe. Male & female saith be alike.

July 15th 1828. Paoree.

Full size. correct.

The Paradise Grakle. Lath. V. 3. P. 147.

Length 7 1/2 — 3 3/4 — 1 3/8 — 18 3/4 — inches. Bill has a just perceptible notch. Nostrils guarded by a rim on upper side. Tongue, horny, grooved thin, divided at end. both eyelids ciliated. Irides very curious. bronzed greenish brown, with yellow specks. Feathers of the head like small hackles. 8 outer quills white for nearly half their length at root end. also some of the larger coverts. middle quills bronzed greenish brown (which in nature has a fine gloss) on the outer webs, black on inner. smaller quills bronzed grth brn on both webs. Under wing coverts white. Tail 12. the two middle have just perceptible white tips. under tail coverts, within 3/4 inch as long as tail. Toes 1. 2. 3. 4 joints. Middle joined to outer to the 1st joint.

Fig 2. Full size. Copied from old book.
See End of book.

+ Fig 1. Pairee 30 July 1828. well done.
Drawn from one in a cage, & from
a killed wild one. full size

The Pagoda Grackle.
of Lath. Vol 3. P. 159.

Fig 1. Length 6 - 2/12 - 1/10 - 12 3/4 - inches. Nostrils guarded above by a projecting rim. 9 outer quills black. next 4 blackish with a stripe of the outer web light slate color. rest ~~as~~ Brown. inner wing-coverts pure white. Tail 12. 1/8 inch of middle white 1 inch of the outer, the intermediate by gradation. Toes joints. Mid & outer joined to 1st joint.
Found in the warmer parts of Gurhrwall & in the plains. Called Powe. builds in hollow trees. nest of grass & feathers. lays from 4 to 6 eggs. dirty white with black & a few red spots. eats fruits. much prized by natives. kept for its song & taught to speak & imitate other birds. has the epithet of Hugardastan.
Tongue horny neither very sharp or very rounded.

+ Aug 16th. 1822. Fullsize
Pāoree. Pretty well done.
Length 5 – 2 3/4 – 1 1/8 – 10/12 – inches. Tongue flat, thin, horny, & divided at end. Inner wing coverts. & sides of body, color of belly & rump. Tail 12. of which the two middle have narrow ragged webs. Toes 1. 2. 3. 4 joints. middle and outer joined to 1st joint. The white patch is on the outer web of the inner half of the quills.
Found in most parts of Surhwall. called Ōōdāreeā. Male and female alike. Builds in holes under rocks. & Dhoolnās. (whence its name) nest of grass, hair, feathers. lays 3 or 4 eggs. light purple color. lays from end of March to beginning of May. On the above date shot one which was about half-moulted.
Octr 4. Shot one at Beenugur half-moulted. the feathers of the back were slightly tinged with light brown. it was much stouter. apparently a very old bird.

+ Paoree. Septr 10. 1828.
Full size. well done.

Length 3 – 5 – 1 7/16 – 20 3/4 - inches. Tongue flat, thin, fleshy; but horny & bristled just at the tip. Nostrils have a slight rim on the root side. under side of wing, wholly black. 3 or 4 greater quills black. next three or four have a little blue on outer web. rest all blue on outer web. but black on inner. Tail 12. inner webs black. Toes 1. 2. 3. 4 joints. Middle & outer joined to first joint.
This bird was about 3 Jaunts moulted. Found in Gurhwall. chiefly in the warmer valleys. Called Kulget.

Pl. 31.

+ Sheree. 25 Octr. 1828.
Full size correct.

Length 3 3/8 - 1 1/4 - 7/16 - 7/4 - inches. Tongue like a grosb. beaks. Inner wing coverts cream color, with a reddish brown shaft. The black is velvety. that of the head has in some lights a tinge of blue or green. Tail 12. Toes 1. 2. 3. 4. Middle joined to outer to 1st joint. The irides

+ Sigl.
July 29th 1828. Full size correct. Paree.

rump & upper tail coverts more fiery than the other parts. but flying in the sun a flock of them appear brilliant red.

Length 3 1/4 - 1 3/8 - 7/16 - 6 3/8 - inches. Tongue like a Grosb-beaks. all the back down to the rump has whiteish shafts to the feathers. Rump cinerous with a yellowish tinge. Upper tail-coverts dirty brownish yellow, both barred like the breast. Tail 12. dirty yellowish brown on outer. light brown on inner web. Toes 1. 2. 3. 4 joints. Middle joined to outer to the 1st joint. The smaller quills & back feathers as barred with blackish, but so light as only to be seen by close inspection. Inner wing-coverts cream-color. (NB this shows the markings of the barred feathers. Called Sorrā. seen in great numbers in the hemp-fields, when the plant is ripe; picking its seeds.

Sept. 9th. caught one alive, of this year. Upper parts wholly olive-greenish-brown. inner webs of quills & tail, blackish-brown. Throat & upper part of breast light rufous. rest of under parts cream-color. apparently not long left the nest. tried to keep it alive, but it would not eat. Builds a large round nest of grass; with a small entrance at one side. in low thick barberry or raspberry bushes. lays as many as 8 or 10 eggs pure white.

Fig 2. Full size.

+ Mympooree. Jany 26. 1829.
Full size.

Length 6 — 2 5/8 — 1/4 — 15/4 — inches. Bill like a grackles. Nostrils guarded on upper side by a rim. Bastard wing & the roots of the 9 outer quills, rufous cream-color on outer, white on inner, webs; with white shafts. does not appear when wing is closed. inner wing coverts rufous cream-color. Tail 12. all but the 2 middle tipped with the same, most towards the outer ones. Toes 1. 2. 3. 4. joints. rough & scaly. middle joined to outer to 1st joint. Common in Hindostan.

Fig 2. Length 3 1/2 — 2 1/2 — 1/2 — 10 - inches. Bill & tongue like a Grosbeaks. Middle & outer toes joined to 1st joint.

Corvus Leucolophus Female.
+ Shene Nov.r 5. 1828.
Tullbige.

Length. 7 – 5½ – 1⅞ – 15½ – inches.
Bill like a thrush. Tongue horny, flat, thin, slightly bristled at the end. Tail 12. the four middle q. v. the other eight white tipped.
I believe this is the female of that in Pl. 12.

+ Shene Nov.r 5. 1828.
Full sized.

Length. 5 1/2 – 5 – 1. – 14. – inches. Bill like a grackles. Tongue thin, flat, horny, & divided. irides a glassy pale yellow. eyelids the same. Rump & upper tail-coverts has a very slight tinge of blue, in the brownish green. Tail 12. rounded. Toes 1. 2. 3. 4 joints. middle webbed to the inner at the base, joined to outer to the 1st joined.

+ Fig 1. Septr 8th. 1828.
Paoree. Well done. full-sized.

A Bunting.

Fig 2. (See end of book.)

Length 3¾ – 2½ – ½ – 9½ – inches. The color of the head breast back, rump, is a dark glossy black, with in some lights a tinge of very dark blue. the belly & vent, under tail coverts not quite so dark, & without the blue tinge. Wings and tail, inside & out, and shoulder wing coverts, color as drawn. inner webs of quills & tail a little darker than outer. Tail 12 – Toes 1. 2. 3. 4. middle & outer joined to 1st joint. This is an elegant lively bird, has a pleasant voice more than a chip, hardly enough to be called singing. Found all over Bushwall, in both hot & cold places. Called Choopul (crest, topknot, pig-tail)

Septr 22. Shot one apparently a young one of this year. The upper parts were all dull brown, with a reddish tinge on the inner webs of quills, & on the edges of the outer wing coverts. The under parts wholly dirty whitey-brown, mixed with darker. It had a crest just appearing.

Red-wattled Lapwing (Sarcogrammus indicus) + Hurdwar. 13 Nov 1829
Two thirds size. correct.

The Goa Sandpiper. of Latham. Vol. 9. P. 304.

Length 8½ – 5⅔ – 1⅜ – 29 – Perp. 10½ – inches. Tongue fleshy, flat on upper, round on lower side, just at tip a little horny. Nostrils in a furrow, pervious. The black of the head & breast has a slight tinge of bottle-green. The red stripe is a wattle fixed close to the eye, the rest loose. Inner wing coverts, sides of body, & tips of outer wing coverts pure white. Quills black, with the roots of the outer white, which encroaches more & more till three quills are all white, next to the four innermost ones which are as drawn. Upper tail coverts white, with a slight ochreish (yellow) tinge. Tail 12, white for half the length at the root, then dark blackish brown for a quarter the length. The remainder white except the two middle, whose ends are like the back. The upper parts are a mixture of olive-green, light brown, pink, & violet. The feathers all over are a beautiful glossy, silky texture. Toes 1. 2. 3. 4 joint. Middle webbed to inner at the base, to outer as far as first joint. The back toe so small & high up as to be useless. Found all over Bengal, Hindostan, & Surhwall, called Jutteree from its cry. often cries at night. Found near marshes, in dry plains, & in cornfields. runs very fast, flies clumsily, flapping its wings much, flights short, often returning to the same spot.

Hoopoe (Upupa epops).

+ Septr 3d. Paoree
Full size. Well done.

The Common Hoopoe of Latham.

Length 8 3/4 – 4/2 – 2/2 – 18 3/4 inches. Tongue > sized shape. The outer quill short as drawn. The next 6 have one patch of white on both webs and shaft about 1 or 1/4 inch from the end. the 8th on shaft & inner web. the next two only on inner web & 1/4 inch from end. remaining have 4 rows the 11th only on inner web. the 12th on inner & 2 patches on outer. 13th on inner & 3 patches on outer. remainder on both webs & shaft. except the 3 smallest as drawn. The outer coverts have 2 bars of white. thus giving 5 bars in the drawing, as the rootmost one of the quills is hidden. Inner wing coverts light fawn-color. The sashes on the breast are in some feathers on right, in some on left web. Tail 10. upper coverts black. Common all over Hindostan & furlwalls. called Hood-hod by Putans. Thokbunyu. Khatkhor, & Bun Bagh. by Dom & Hillpeople.

+ Khänoro Choki. Novr. 12. 1828. Full-size.

The Huroöa Bee-eater.
Latham Vol 4. P. 125.

The Wry-neck.
Latham V. 3. P. 332.

+ Fig 2. Meerut. Jany 3d 1829 Full size. Correct, except the mottling not fine enough.

Length. 4 3/10 – 2 3/4 – 1 – 11 3/4 – inches. Bill something triangular. Tongue flat at tip, rounded at bottom near the root, fringed at the tip into quite a silky brush. Nostrils partly covered by a membrane at the root side. inner wing coverts light grey-ish green. Sides greenish brown. Tail 12. wen. Toes 1. 2. 3. 4 joints. Middle & outer joined to the 1st joint.

Fig 2. Length 4 5/8 – 2 5/8 – 3/4 – 11/4 – inches. Tongue like a woodpeckers. can project 3 inches beyond point of bill. Toes 1. 2. 3. 4 joints. Tail 10. inner webs broad. inner webs of quills blackish brown. Motions like a creeper. Seen also at Sukharnee poor. inner wing coverts like belly. under tail coverts the same.

Fig 1.
Killed in the Doon.
Length 6 1/2 - 3 7/8 - Bill 1/10 - Broad 1 5/2 - inches. Tongue flat, thin slightly bristled at the end. The bluish black dashes on the head are on the shafts of the feathers. Irides olive-brown. inner wing-coverts reddish fawn-color. Belly white with a slight tinge of ash. Sides of body the same with dashes of olive brown on the shafts. Toes 1, 2, 3, 4 joints. Middle and outer joined to the first joint. Back claw the strongest. Feet & toes scaled. Tail 12. slightly rounded. color of it and of upper tail-coverts like the back.

Fig 2. Full size.
Killed in the Doon.
Length 4 1/8 - 2 5/8 - Bill 3/4 - Broad 10 1/2 - inches. Tongue ⊃ this shape, rather thick at root. flat towards the end, & a little bristly. A patch of light blue on the lower part of neck and on the shoulders. That as well as the light blue on the head rump, upper tail-coverts &c, is a little too dark in the drawing. and it and indeed the whole bird has a most beautiful silky gloss. Under wing coverts like the breast, which color extends to the vent & under tail-coverts. The outer web of the quills & tail feathers is light glossy blue. inner webs dark blackish blue, almost black. Tail 12. Toes 1, 2, 3, 4 joints. Middle & outer joined to the first joint. Irides olive-greenish-brown. (not exactly the color in the drawing).

Fig. 1. July 7. 1828

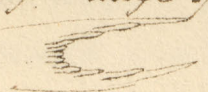
Fig. 2. July 7th 1828

Pl. 40.

Fig 1.

a little larger. bill up

Killed in the Doon.

Length 9/2 – 7 3/8 – to the middle feather 3/8 – Bill 2 – Broad 34 – inches. Tongue 2/3 as long as the bill, deep, narrow, rather hollow on upper surface, rather pointed and horny at the end. Its color and that of the inside of the mouth, same as bill. Upper parts wholly light bluish slate color with a tinge of pink, growing lighter towards the end of the tail and quills. under parts wholly white with a slight tinge of the color of the upper parts. This tinge stronger towards the throat, lighter towards under tail-coverts. Tail 12  the 6 middle nearly the same length. Toes 1. 2. 3. 4 joints. palmated. Back toe membraned to the inner front slightly.

March 8th 1829. Bunnur. Shot several. Bill black. top of head light black dashed with cinereous. Upper parts dirty light greyish slate color. legs dull dirty red. probably birds of last year.

Fig 2.

Killed in the Doon. Called Rance Chiru. retires to the cold ridges in the hot weather.

Length 3 3/4 – 1 8/10 – Bill 5/8 – Broad 8/4. Tongue fleshy, horny at the end, has the "hooked joint. Inner wing coverts like belly. sides of body, darker than the belly, lighter than the back. Outer quills yellow edged. middle quills only so in their centre. inner have green outer webs. Tail 12 black on shafts and near the tips. the green too is much darker than that of the body. Toes 1. 2. 3. 4 joints. Mid & outer joined to first joint. Builds in small bushes, where underwood is pretty thick. nest of grass, hair. lays four or five eggs black with yellow spots. Male and female said to be alike. I saw many & shot 5 at one shot on the ground pecking at worms or insects, for it was in the gravelly bed of a stream just made dry. they all appeared alike.

+ Fig 1. Feby 2d. 1828.

+ Fig 2. Feby 2nd.

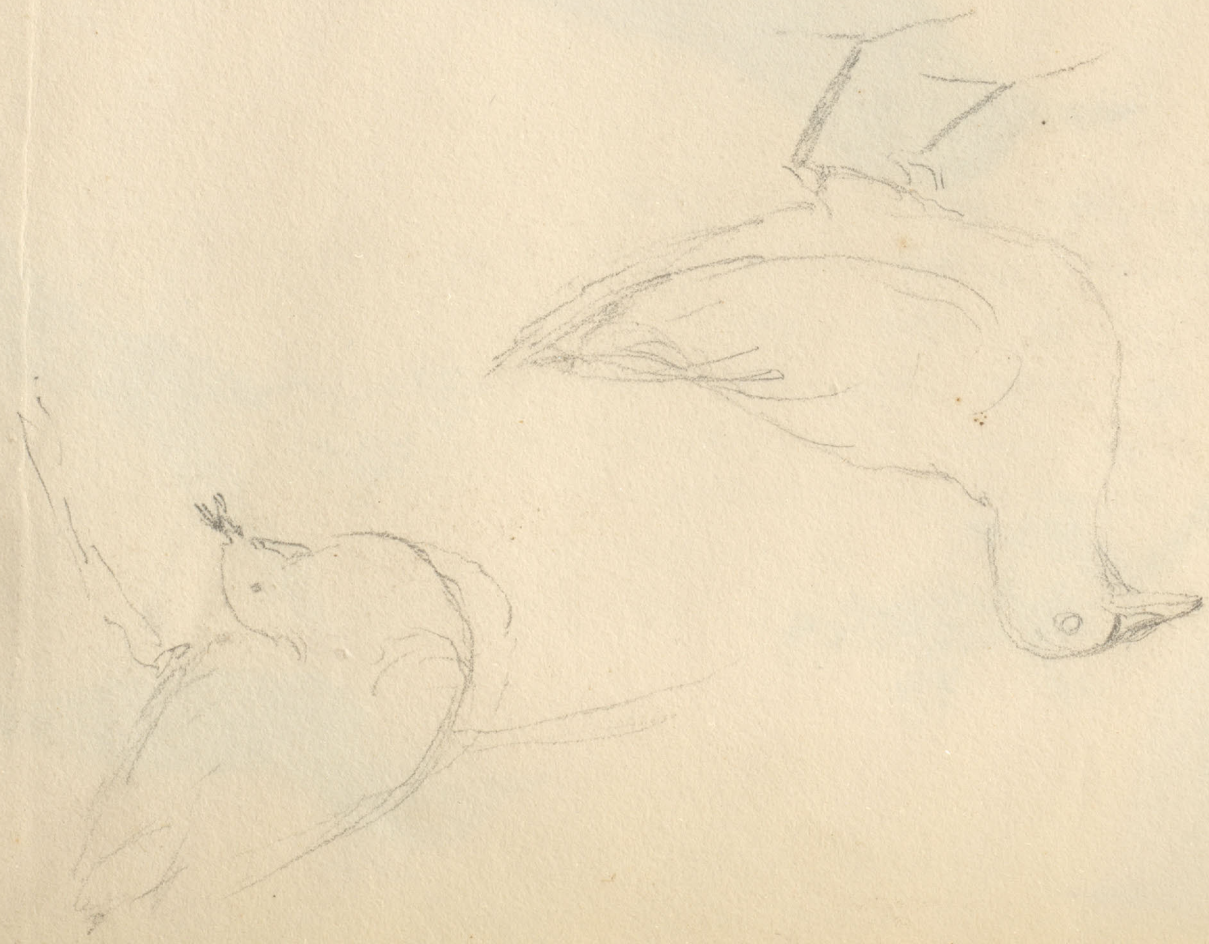
Fig. 1.
Killed in the Doon.
Length 2 5/8 – 2 1/4 – Bill 5/16 – Broad 6/8. Tongue broad at base, pointed, horny. Quills bluish black, with rather lighter edges. Tail 12. two middle, have light black webs. rest light black, with a white edge to the inner web, & white tip. The shafts all white. Toes 1. 2. 3. 4 joints. Middle joined to both the others nearly as far as the first joint. irides brownish green. Full size.

Fig 2
Killed in the Doon.
Length 6 3/4 – 4 1/4 – Bill 1 1/4 – Broad 17 – inches. Apparently a thrush. killed in my garden at Dhera, after a heavy fall of snow on the Hills. Tongue flat, thin, narrow at the end and divided. horny. Nostrils pervious. Inner wing coverts like the breast but a shade of brown on them. Down the middle of the belly are some greyish cream colored feathers, getting broader towards the lower part. Sides of body like breast. The feathers of the under tail coverts are each light whitish cream color in the middle (length ways.) blackish brown on each web, and fringed with light brownish reflous, appearing as Dawn. Tail 12 – blackish brown. Toes 1. 2. 3. 4 joints. Middle and outer joined to first joint. Saw two apparently alike. the only ones I ever saw. Irides greenish brown. The eye lids should be more of a cream color. Back claw longest and strongest. 2/3rds size

+ Fig 3. June 7. 1828. Full size. very correct. killed at Pokree. Total length 4 1/8 inches. I suspect Fig 1. & this are male & female.

Fig 1. Feby 4. 1828.

Fig 2. Feby 12. 1828.



+ Fig 1. Feby 18th. 1828. Half size.

Length 10 1/4. 2 3/8. Bill 1/10 - Broad 20 5/8 - inches. Tongue soft, fleshy. flat at top, round at bottom. Nostrils pervious. irides Dark bottle-green, inside which is the yellow ring. then the black pupil. Tail 12. rounded. almost hid by upper, quite by under tail coverts. Toes 1. 2. 3. 4 joints. divided to origin. Middle toe 2 1/8 inch. Called Jul moorga by Dorn people. (water fowl). Chota moorgabee by Planis men (small water fowl)

Half size. + Fig 2. Feby 18. 1828

Length 7 1/4 - 6 3/4 - Bill 1 3/4 - Broad 25 3/4 - inches. all over a delicate silky gloss. inside of wings pure white Tongue thick fleshy at root, thin pointed at end. Nostrils pervious. Toes 1. 2. 3. 4 joints. semipalmated. Back toe small & has no claw. Tail 12 like that of Fig. 1 Pl. 41. Called Chelsoree by the Lukunghat boatmen.

Stone-Curlew (Burhinus œdicnemus).

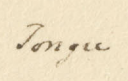
Feby 1. 1828.
Half-size.

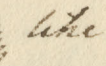
Length 11/4 - 4 3/4 - Bill 1 7/8 - Broad 29 3/4 - Perpendicular height 11/2. - inches - Eyelids have some lashes on them. Irides bright yellow, surrounded with black; and is marked with beautiful fine black veins. It has a film from forewards, so fine as only to dim, without hiding the eye. Tongue fleshy, soft, rounded at under side, flat at upper side. horny & thin at the tip. Nostrils pervious. Quills black, but every one has the root half of the inner web white like & three of the middle quills white on root. half of both webs. Scapulars very long. Upper tail-coverts like the back. Tail is much rounded. The two middle like the back. all the rest tipped with black, then a patch of white; the rest of the feather light brown barred with dark. but the white encroaches on the latter color, towards the outer feathers, till the 2 outer are almost all white (excepting the black tip. Toes 0, 2, 3, 4 joints. Claws small and fixed far back on the upper part of the toe.

Killed in Chandee. it runs very quick.

This is correct. the eye is not too large. its head is very broad, & large for its size.

+ Feby 3d. 1828
one fourth size.

Length 22 1/2 – 8 – Bill 6 1/8 – Broad 51 3/4 – Height 15 – inches. Nostrils a thin slit Tongue  this size & shape. very thin. Inner wing-coverts like the outer. Tail 12 a little rounded. Toes 1. 2. 3. 4. joints. Middle webbed to both the others to the 1st joint. Claws blackish-horncolor. Body wholly that greenish-brown color, with in some lights a dash of greenish blackish-blue in some parts. The wings have in some lights a tinge of green.

The head & throat, is completely bare of feathers. the front part or forehead has little light blueish ash knobs. The back part has red bits of flesh projecting  like this.

Killed in the Doon. Found all over Hindostan. Called Kurakol. & Bazzee in some parts.

March 16th. 1829. Shot one with indes yellow.

Green Bee-Eater (Merops orientalis)

Indian Bee-eater. Vol 4. P. 122.

Fig 2. Copied from old book. Full size.

+ Futtehghur 29. Jany. 1829
3/4 size. pretty correct.
Length 4/4 — 3 to the end of the 5 outer 4/2 to end of middle ones — 1 3/8 — 11 5/8 — inner wing-coverts light buff. General plumage green with a tinge of blue & light orange, varying in different lights. & some stronger than others. has a silky gloss. belly & under tail-coverts lighter. Foot like a King-fisher. Toes 1. 2. 3. 4 joints, Middle joined to inner to 1st. to outer to 3d joint.

Fig 2. Length 3 3/4 — 2/8 — 5/8 — 8/2 — inches. Bill like a fly-catcher. Tongue horny & sharp-pointed. Inner wing coverts white. Belly & vent, undertail-coverts dirty white. Tail 12. black on inner blue on outer webs. Legs brownish slate color. Found in Surhwall has the motions of a robin. Can erect the head feathers slightly now & then.

Fig 1. March 17th. 1828.
Length 6 1/8 - 2 7/8 - Bill 7/8. Broad 15 1/2 - Breadth of bill 8/10. It and the whole head immense in proportion to rest of body. Tongue like the grosbeak. Back rump, & upper tail coverts fringed with yellowish. The 3d to 8th quills white at the root. inner wing covts grey & yellow mixed. Tail 12. Toes 1. 2. 3. 4 joints. mid, & outer joined to 1st joint.
Killed a little above Rajpoor.

+ A Bunting.
May 2d. killed at Amola. Full size.
Length 4 3/8 - 2 5/8 - Bill 5/8 - Broad 9 7/8 - inches.
Inner webs of quills redish brown, except the tips. Toes 1. 2. 3. 4 joints. middle & outer joined to 1st joint.
This is the female of Fig 1. Pl. 35. some of the females have a feather or two projecting by way of a crest. the males of the 1st year are like the females.

+ Fig 1. March 22d. 1828.

Length 25 3/4. 7 3/4 - Bill 4 3/8 - Broad 5 5/2.
High 19 - inches. drawn 1/4 size.
Its tongue is ⊃ this size and shape. thick and fleshy. Nostrils it has apparently none, but in their place, a small just perceptible slit, which did not appear to penetrate. Neck and whole of body dark bluiish, greenish black. Tail 14. The head and upper part of the neck is the same color as the rest. but that part has also an immense number of small white narrow feathers, projecting beyond the others and so numerous as nearly to hide them. It has a very small occipital crest. The white on the outside of the thigh extends to the back of the body.
Toes 1. 2. 3. 4 joints. four all placed forewards. These and the sort in Vol. P. may be seen in flocks on the Ganges & Jumna near Poonta on the latter, I saw them roosting on trees. These are much more sky than the others. It has a fine silky gloss all over and is a handsome bird.

Rosy Pastor (Pastor roseus).

+ April 28th full size.
Killed in the Chandee jungles.
Length 6 3/4 – 2 3/4 – Bill 1 1/8 – Broad 15 3/4. Tongue thin, narrow, gouged, horny & divided at the end. a slight rim on the upper side of nostrils, over which the head feathers reach, but are there small hairs. sides of body like belly. inner wing coverts light brownish slate-color, with white edges. the 4th quill from the body light brown. Tail 12. Toes 1, 2, 3, 4 joints middle & outer joined to 1st joint. — I saw some thousands (but never before) eating the fruit of the bowella tree. Shot a dozen at a shot. all alike. they are most delicious eating, having 1/4 inch of fat on upper part of breast. It is a ragged looking bird. They are only seen in the spring till the rains. called by the Boksas Powe. The eye has a nictitating membrane from forwards.

+ April 28.
Full size.
Killed at Hurdwar.
Length 3 3/8 - 1 1/4 - Bill 7/8 - Broad 5 3/4 - inches.
The upper half is a greenish, bluish, blackish hue,
and in some lights a violet hinge on the throat.
The lower half of the body, is Dark bluish black.
The yellow & orange patch is scarcely visible, when
the wing is closed. Tail 12 - color like the belly.
It hovers over a flower like a humming bird.
June 19. I find these are common in the warmer parts of Gurhwall.

+ Fig 2 -
April 28
Full sized
Killed at Hurdwar.
Length 3 3/8 - 1 1/4 - Bill 5/8 - Broad 6 - inches.
Tail 12 - This also hovers over a flower like a humming bird.
I saw another colors a little lighter & duller. perhaps ye female.

Both these have the humming birds Tongue.

+ June 19th. Poondaroo.
very correct. full size.
Total length 7 5/8 inches. I believe this to be the female. It is found in the warmer parts of Gurhwall. numbers together, hanging on & climbing the branches. The white of the wing is made by the inner web of the 1st, both webs of the 2nd to 7th, & outer web of 8th quill being white. Male the same. inner wing-coverts white with a dash of cream. From the breast downwards gradually lighter, to the under tail-coverts, which are like the inner wing coverts. Same have more rufous on the upper tail, & wing coverts.

+ May 8th. Full size.
Length 5 3/8 - 2 5/8. Bill 9/10. Broad 12 3/4 inches.
For description see Vol 1. Pl. 17.
that being badly done. I drew it over again.

+ May 12th. Fullsize. well-done
Killed near Khanda khall.

Length. 6 1/4 – 2 1/4 – Bill 1 1/8 – Broad 11/4. Tongue horny, narrow, thin, gouge shape, slightly divided at the end. Sides of body like the back but have a little more blue. Tail 10 – Toes 1. 2. 3. 4 joints. Middle joined halfway up the 1st joint to the inner, halfway up the 2nd joint to outer. It is a dumpy bird like a dab-chick. is found at the sides of streams in Gurhwall. hopping along the stones, & flitting in short slow flights over the water.

Blue cheeked. Vol 3, P. 223

+ June 19th. 1828. Killed at Poondaroo. Full size.

very correct, except that the breast & belly should have been a little lighter, & more yellowish. The back of neck should also have been dashed with yellowish. Length 6 3/4 – 3 – 15/16 – 14 – inches. Bill very hollow, under fits into the upper at the root. Nostrils in a slight furrow. Inner web of quills black edged with buff. inner wing coverts buff color. Tail 10 – even upper side like the upper tail coverts. Toes 1. 2. 3. 4 joints. two foreward ones joined to 1st joint. Found in the warmer parts of Sirhwalle. Calls both day & night making a noise something like Keekülon. Called Kat khora, (wood eater. a name given to any strong-billed bird.) It is a ragged feathered bird. I have shot several all alike. This is the same as that in V. 1. N. 3. Fig 1. that being badly drawn. Some have a narrow reddish brown space, round the eye. Tongue, flat, thin, horny, square at the end.

+ Paorce Octr 2d. 1828.
Correct. Full sized.
Length 2 1/2 – 2 1/4 – 1/2 – 7 3/4 – inches. Bill like a fly-catcher. Inner wing-coverts like the back. Tail 12. nearly even. Only the edge of the outer webs greenish-yellow. Toes 1. 2. 3. 4. Middle joined to inner to the 1st; to outer to the second joint.
Nov. 3. Shot one in the Doon.

+ Fig 2. Freemuqur Octr 5. 1828.
Full size.

Fig 2. Length 3 5/8 – 2 3/4 – 5/8 – 10 1/2 – inches. Tongue flat, thin, horny, & bristled at end. inside of mouth yellow. inner wing coverts like belly. Tail 12. Toes 1. 2. 3. 4. Middle joined to outer to 1st joint. rump like tail

+ Banson jhola. Octr 9. 1828.
Full size well done.

+ Fig 2. Thora Octr 15. 1828
Full size. correct.

Length 4 1/4 – 3 – 3/4 – 12 3/4 – inches. Bill has a slight notch. Tongue flat, thin, at the end, horny & jagged. Sides very dark greenish brown, so as only to be distinguished from the pupil by close inspection. Sides of body like belly. The black is a dark velvety black, the tail & quills being a little lighter. inner wing coverts dark black. Toes. 1.2.3.4. Middle & outer joined to 1st joint. Tail. 12.
This is found all over Sirhwall, hopping about the stones at the sides of streams. cocking its tail. flitting over the water apparently catching at insects. Called Chandeeā Churrā (from the white crown, which is a beautiful silky silvery white.) When flying in the sun the red appears bright & fiery. Builds in small bushes on the banks of streams. nest of fine graft. usually 3 eggs lt green.

Fig 2. is the female.

+ Chumcora Gurree Octr 11th 1828.
Full size. correct.
Length 3 1/4 – 2 5/8 – 9/10 – 8 1/4 – inches. Nostrils in a hollow. Tongue horny. very thin & narrow. & divided into several bristles at the end. breast & belly light creamy white. vent & under coverts dirty ash. Inner wing coverts cream color. Quills blackish brown in the middle of which is a patch of light rufous. tips light brown. Tail 12. Toes 1. 2. 3. 4 joints. middle joined to inner to 1st, to outer to 2nd joint. a creeper by its manners.

+ No. 2 Kheree Decr. 10. 1828.
Full size. correct.

No. 2. Length 3 1/4 – 3 – 9/16 – 8 3/4 – inches. Bill has a slight notch. Tongue horny & divided at end. Vent like thighs. The patch on the wing is on each quills except the two outer most and inner most. more yellow towards the outer. Toes 1. 2. 3. 4 joints. middle & outer joined to first joint.

Length 7½ – 3⅜ – 1¾ – 17½ – inches.

+ Hirundo rufa. Jos. 12. 1828
Bill. dyed.

No. 37.

+ Gazeepoor. March 6. 1829.
Full size. correct.

Length 5 1/2. – 3 3/4 – 1 1/8 – 1 1/4 - inches. Bill like a starlings. Nostrills covered with a prominent rim. Tongue flat. fleshy, thin. horny just & tip & divided. Inner wing coverts like under tail coverts, but the bars not so distinct. Tail 12. Toes 1. 2. 3. 4. joints. middle & outer joined to 1st joint.

+ Shem 7. Nov. 1828.
Full sized. Correct.

Length 8 3/8 – 5/3 – 2 – 24 5/8 – inches. Gape goes rather deep into the head. Inner wing coverts like belly. Quills light blue at the roots, dark in the middle, which in smaller reaches to tips. In larger light blue beyond the dark, & then the tips dark. Rump & upper tail coverts dark blue. Tail 12. the two middle greenish brown. Toes 1. 2. 3. 4 joints.

+ Punchoon Octr 8. 1828.
3/4th size. correct.
Length 6 3/4 – 10 3/4 – 1 3/4 – 19 – inches. Nostrils large hid under feathers. Tongue thick, short, fleshy, square at tip. The white wing spot is made by the inner web of 2d, both webs but not shafts of the 3d to 9th, & outer web of 10th quill. (Shot one which had not the white on the 10th quill.) Rump cinereous. Tail 12. Toes 1. 2. 3. 4. Middle joined to inner half way up the 1st, to outer half way up the 2d joint. Inner wing coverts like breast.
Found in the warmer parts of Purkwall called Kuräin. also in the plains called Muker. Said to eat insects, young birds, fruits & grain, to be particularly fond of rice. certainly members are seen in the rice fields just as the grain is ripe. all appeared alike.

+ Full size
Octr 1828.

Length 8 – 6 – 1 1/8 – 19 1/8 - inches. Tongue broad at root, pointed, very flat. & divided at the end. Nostrils large & round. Two smallest quills reddish-brown on inner web.

Rump pure white. so are upper tail coverts.

Found in Surhwall on ridges from 8000 to 10.000 ft above the sea. I have seen many all like this, but one was given me brought from farther in the Hills, in which the head feathers form a crest. in other respects precisely similar. called Karkin.

+ Khänsro Choki Nov.r 12. 1828
Full size.

Length 6/3 – 6 – 1/2 – 22 – inches.

Supra March 9th 1829.
Threequarter size. correct.

Tail incomplete and not healthy

Length 10 1/2 - 3 3/4 - 2 1/4 - 24 1/2 - Perr. 7 1/2 - inches. Nostrils pervious. Inner wing coverts like tail. Rump white also some of the coverts, the longer ones barred like the tail  like this. Toes 1. 2. 3. 4 joints, middle webbed to the outer as far as 1st joint. Claws set on far back on the toes.

Pl. 64

rch 23. Najmukul.
o. third Size.

ngth. 15 – 6/8 – 2 – 32. High 10 – outer toe 2/4 – inches.
rder description see end of book.

Pl. 65

y Muhul 23 March.
ee fourth size.
ngth 9 – 3 – 1/4 – 28 3/4. Height 10. Mid toe 2 1/2 – its claw 3/4 – inches. Tongue fleshy at root, horny at tip, as long as bill. Nostrils pervious. Inner wing coverts, greater outer ones, & sides of body, white. Bastard wing white tipped with black on inner web. Outer quill dark black chocolate, all but a little of inner web near the root; 2d do but more white. 3d still more white, after which they are only black tipped, diminishing towards the middle ones; whence they are white. Tail had 10 feathers, the four middle black brown, rest white, but I think was not complete. rump like back. upper tail coverts like smaller wing coverts. On the edge of wing a very small spur.

Pl. 66.

Jajmuhul 23 March.
Three fourth size.
Length 10 1/4 – 2 1/4 – 1 1/4 – 24 1/4 – High 9 3/4 – Mid toe 2 8/10 – its claw 1/12 – Back claw 2 1/10 – inches.
That over the forehead is a lose wattle, fixed at its lower end to the bill. Tongue like foregoing.
The head neck breast, have a variety of hues. blue, dark-green, pink. Rump fine chesnut.
Inner wing coverts blackish brown chocolate. Tail 10. curieform. fine chesnut color.

Nr. Kilmanaugur. March 27.
Two thirds size.
Length 11 1/2 – 3/3 – 3 3/16 – 26 – High 10 1/2 – inches. Tongue thin flat, fleshy nearly half as long as bill. Nostrils pervious. Inner wing coverts white, except just at the upper edge of wing. Greater outer ones, & bastard wing tipped with white. The quills are white on the root half, rest blackish brown. Hump like shoulder of wing. upper tail coverts white, some of the longest tipped with dark black. Tail white at the root black with a tinge of green at the other parts which the very ends straggled with dirty white. Toes 1. 2. 3. 4. divided to origin.

Pl. 68

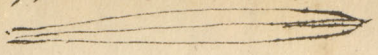
Amadavades.

+ June. 1829. Full size.

Length 2 1/2 — 1 3/8 — 3/8 — 5/2 inches. Bill & tongue are like a Grosbeaks. The middle one is the first stage both of male & female. the under parts are greenish yellowish buff. inner wing coverts the same. The females I believe remain so except, that as they grow older they acquire more of a blackish grey tinge, & a few white spots on wing-coverts & sides. The right hand one is the next stage of the males, the under parts being greenish yellowish buff with a grey tinge. The left hand one is a complete male, but as they grow old, they acquire still more red on the under parts, head, & upper tail-coverts, and are almost covered with white spots. Tail 12 feathers.

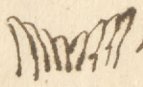
Copied from old Book.
Half size.

Length 12 – 6½ – 2¼ – 33 inches. Nostrils large & round, hid under the bristles. Whole plumage fine black. The head, neck, throat, & upper part of breast like velvet. Inhabits the Districts within the Himalayah, called the Bhote Pubgunas. Shot this at Kedarnath in June 1827. Snow then in many places five feet deep. Saw a pair apparently alike, but only shot one. It makes a screeching noise. Called Sagaree Kak (Snowy Crow).

To Pl. 65. It had no perceptible [illegible] a cylindrical membrane [illegible] the water in middle, but joined to it its whole way. Body & inner wing coverts wholly black. The wing feathers are a difficult color to hit, as they have a hoary tinge over them which I could not hit. Tail 10 (appeared not complete). webs very narrow near the roots, & the shaft is so thick that it is above the webs in relief  this shape.

To Pl. 21. Fig 2. Length 3/2 – 1 3/4 – – 8/4 – inches. Probably a thrush or a warbler. Nostrils pervious. Tail 12. Found in Jushwall. Called Chutturalee. Builds of small bits of grass in holes in ground or under lumps of rock. Lays three eggs whitish with black spots at the ends.

To Pl 24. Fig 2. Feby 22. Shot a bird similar in shape & motions. Upper parts all bluish slate-color, with the edges of quills like this. Tips of wing coverts white. Under parts mixed light ash, & bluish slate-color. Tail light where this is dark black. white where this is reddish brown. From softness of beak & claws it was evidently a young bird of last season. Probably one of this species.

To Pl. 28. Fig 2. Length 4 – 1 3/4 – – 9/2 inches. Toes divided to origin. Tail 12  this shape. Found in Jushwall near villages. Has a cheerful chirp. Called Sōorrā. which as well as Jendoora is a common name for several finches.

To Pl. 35. Fig 2. This is the female of Pl. 32. Fig 2. and it the proper figure, being taken by scale. the other by the eye. The male varies much in color at different seasons, being some-times with almost all pink, at others almost all brown. & this in the same bird