Subclavius muscle.—Narrow below the bone; anterior muscles of neck long and strong.

"Contents of Stomach.—Only a number of minute dark-coloured stony particles, but no other food."

The sternum of Nasiterna, which is the only part of its osseous structure to which I have paid any attention, has the usual characteristic form of that of the Psittacidae. It is, however, rather shorter in proportion to its length than in most species of the group. There is no trace of a furcula. The two posterior foramina, which are present in most of the sterna of the Psittacidae, except in the Cacatuiace, are well marked.

As regards the best position for Nasiterna in the series of Psittacidae I am not able to give a decided opinion without further examination of the structure of the whole group. In its spinous tail it is conspicuously different from every other Psittacine form. I cannot agree with those authorities who have placed it with the Cockatoos, to which, in my opinion, it presents no sort of resemblance. The Cockatoos have mostly the top of the head bare of feathers, and covered by a crest of elongated plumes, which rise from the front of the head. There is nothing of this sort in Nasiterna. The Cacatuiace have also a well-developed furcula, and no foramina in the posterior end of the sternum. In Nasiterna the furcula is absent, and the foramina are present. Nor can we associate Nasiterna with the Lories, as its tongue does not present the characteristic formation of that division of the Psittacidae. There remain only the true Parrots (Psittacinae) and the Broad-tails (Platycercine). In the latter group the furcula is usually absent, which is also the case with Nasiterna. But in other respects Nasiterna presents but little resemblance, either in form or in habits, to the Platycercinae, which are mostly ground-loving birds; whereas Nasiterna is stated to be exclusively arboreal. I should therefore be rather inclined to place it as an aberrant form of the Psittacinae, amongst the weaker members of which the furcula is also deficient, unless it can be allowed to stand as the type of a distinct subfamily, which would probably be more correct.

I trust that Mr. Otto Finsch of Bremen, who is now engaged on the preparation of a Monograph of the Psittacidae, and to whom I propose to send my specimens of this curious bird for examination, will be able to give a more satisfactory account of its affinities.


(Plates XXXVI., XXXVII.)

This monograph contains an account of all the species in the National Collection, together with others described in recent publications.
1. Charaxes Saturnus
2. Charaxes Phoebus
3. Charaxes Cynthia
4. Charaxes Viola
5. Charaxes Smaragdalis
Genus Charaxes, Ochsenheimer.

Div. 1. Alae subtus variis characteribus albis difformibus basi scriptae, maculas griseas includentibus.

Alae supra fusce; margo posticus ferrugineus, nervis nigris interrup tus; posticeae marginae caudisque nigris; subtus fascia media nivea; basi ferrugineae, variis characteribus scriptae; margo posticus maculis caruleis submarginatus, superior maculis tricoloratis, hastatis; corpus fuscum; antennea nigra, filiformiclavatae; palpi extus albi; caput magnum, lanare, supra incirratum, oculis exstantibus, nudis.

1. Charaxes jason.


Eribaea unedonis, Hübner, Verz. bek. Schmett. n. 423.


Hab. Southern Europe; Asia Minor; Barbary. B.M.

2. Charaxes epijasius.


Hab. Senegal; Cazamance. B.M.

Alae supra fusce, fascia media ad marginem interiorem coarctata; antice elongatae, aliquando margine ferrugineo; posticarum margo posticus maculis caruleis submarginatus.

3. Charaxes pollux.


Papilio castor, Cramer, Pap. 37. f. E, F.

Hab. Ashanti; Guinea.

Eribæa pelopia, Hübner, Verz. bek. Schmett. n. 424.
Hab. Cape of Good Hope.

5. Charaxes saturnus, sp. n. (Pl. XXXVI. fig. 1.)

Upperside—front wings, basal half ferruginous, apical half black; crossed beyond the middle by a broad deeply dentated orange band, broader above than below, running nearly parallel to the hind margin; three orange spots along the front margin near the middle; outer margin orange, intersected with black at the nervules. Hind wings, basal half ferruginous, apical half black; crossed in the middle by an orange band tapering towards the middle of the inner margin, which is brown; outer margin with a submarginal row of six lunular orange spots, the three lower ones white at the sides and angular; a dull green marginal streak at the anal angle; three blue spots between the nervures towards the anal angle, the lowest one elongate. Body ferruginous.

Underside—basal half dull red, curiously marked, as in C. epi- jasius, with white streaks and spots with dusky centres; a white irregular central band. Front wings, outer margin broadly violaceous grey, enclosing a row of eight orange spots between the nervures, the two lower ones contiguous, all of them margined by black spots on their outer edge, and the six upper ones on their inner edge; outer margin with a marginal row of nine orange spots between the nervures; central band faintly roseate, enclosing an orange spot near the front margin. Hind wings, outer margin broadly olivaceous, separated from the central band by a row of six elongate dull red spots; marginal edge black, broadly bordered inwardly by white varied with orange; a submarginal row of seven elongate violaceous spots margined outwardly with black; a short curved elongate ochreous band at the anal angle, above the last violaceous spot. Body creamy white.

Hab. Interior of South Africa.

B.M.

Note.—This species is closely allied to C. pelias; it hardly differs in the front wings of the upperside; in the hind wings the spots of the submarginal band are more lunulate and become nearly white towards the anal angle, and the central band is much narrower and tapers towards the inner margin.

Below, the submarginal orange spots of the front wings are bounded by black spots on both sides, the band of the hind wing has no central spot, an inner submarginal row of large dull red spots takes the place of the small black ones in C. pelias, a submarginal row of purple lunular spots takes the place of the blue line, and the basal markings are quite different from those in the figure by Cramer.
Alæ supra ferrugineæ; posticæ sine maculis caeruleis; subtus maculis submarginalibus obscurissimis.

6. Charaxes phraortes.


Hab. Madagascar. B.M.

7. Charaxes castor.


Papilio pollux, Cramer, Pap. t. 37. f. C, D.


Papilio camulus, Drury, Ill. iii. t. 30. f. 2.

Hab. Sierra Leone; Congo. B.M.

8. Charaxes phæbus, sp. n. (Pl. XXXVI. fig. 2.)

Upperside—front wings ferruginous, paler just beyond the middle, with a broad submarginal black band along the outer margin; apical part of submarginal edge intersected with black at the nervures; a triangular black spot, its base resting upon the first subcostal nervule near the apex; a black elongate spot closing the cell; two spots, one above the cell, the other halfway between the subapical spot and the end of the cell; two black spots placed obliquely just below the end of the cell. Hind wings as above, but without any spots, and with black marginal edge. Body ferruginous.

Underside reddish olivaceous, basal half curiously marked with silvery spots and streaks with dark centres; central band silvery, very narrow, tapering from the inner margin of hind wing near the anal angle to the front margin of anterior wing near the apex. Front wings with a submarginal row of eight dusky black spots between the nervules along the outer margin; a row of six dusky spots on the central band. Hind wings with a submarginal olivaceous band varied with silver; anal angle ochreous, enclosing a violaceous spot.

Hab. Abyssinia. B.M.

Alæ supra atra, fascia media nivea ad apicem anticarum coarctata; corpus fuscum.

9. Charaxes brutus.


Eriobea brutus, Hübnner, Verz. bek. Schmett. p. 47. n. 422.

Hab. Sierra Leone; Coast of Guinea. B.M.

C. brutus, var. Port Natal. B.M.

10. Charaxes eudoxus.


Hab. Sierra Leone.

Div. 2. Alae subtus basi lineis nigris scriptae.

Note.—C. eudoxus is closely allied to the following species, but has the same marking underneath at the base of the wings as in the former species.

11. Charaxes lucretius.

Papilio lucretius, Cramer, Pap. t. 82. f. E, F; Fabricius, Ent. Syst. iii. pt. 1. p. 84. n. 261; Godart, Enc. M. ix. p. 352. n. 7.


Hab. Coast of Guinea.

B.M.

12. Charaxes cynthia, sp. n. (Pl. XXXVI. fig. 3.)

Upperside black-brown, crossed by a central ferruginous band, as in C. lucretius, divided into spots by the nervures towards the apex of the front wings, and incurved towards the anterior margin; outer margin deeper ferruginous, divided into marginal spots by the nervures in the front wings; base reddish brown; inner margin of hind wings covered with long brown hairs; front marginal edge of anterior wings reddish brown, with four spots of the same colour in couples just below it, two at the end of the cell, and two just beyond. Body golden brown; abdomen pale; head and prothorax reddish; palpi white externally.

Underside—front wings reddish grey, crossed beyond the middle by a band of large pale oval ferruginous spots, tapering towards the apex, and curving at the top towards the anterior margin, enclosing ochreous lunules, and bordered outwardly by faint silvery lunules; the last three spots bordered inwardly, the lowest one with green-grey deeply margined with black, the other two with ochreous bordered outwardly with ferruginous; a large irregular black patch marked with three silvery streaks near the anal angle; a reddish elongate spot at the anal angle; front marginal edge silver from the base to the end of the cell; cell ochreous, enclosing four irregular reddish spots; two similar spots at the end of the cell, margined outwardly with ochreous, and three similar lunular spots placed obliquely just beyond; a black and ferruginous spot just below the
middle of the median nervure. Hind wings ferruginous; basal half crossed by three wavy bands of grey, the central one distinct, silvery; apical half with irregular reddish grey submarginal bands, bordered outwardly by a lunulate line of violaceous; wings crossed by a central irregular silver band from the middle of the front margin to the inner margin just above the anal angle; an irregular row of eight spots between the nervures, outside the central band, the seven upper ones ochreous, lunular, the eighth silver, linear; a yellowish green spot at the anal angle, bounded inwardly by a fine pale blue line and two black dots; inner margin streaked with grey. Body whitish ochreous.

*Hab*. Ashanti. B.M.

*Alce maris sine fascia media, basi non ferrugineae.*

13. **Charaxes protoclea.**


*Hab*. Cazamanca, Western Tropical Africa. B.M.

14. **Charaxes anticlea.**

*Papilio anticlea*, Drury, Ill. iii. t. 27. f. 5, 6; Godart, Enc. M. ix. p. 353. n. 9.


*Papilio horatius*, Fabricius, Ent. Syst. iii. pt. 1. p. 64. n. 202; Jones, Icon. v. t. 16. f. 3, 4.


*Hab*. Sierra Leone. B.M.

15. **Charaxes ethalion.**


*Nymph. erithalion*, Boisduval, MS.


*Hab*. Zooloo, Port Natal, &c. B.M.

16. **Charaxes viola**, sp. n. (Pl. XXXVI. fig. 4.)

*Female*. Upperside—front wings brown; outer margin reddish; a broad ferruginous band near the hind margin, interrupted above by a brown patch and by the nervures. Hind wings, basal half brown, apical half white tinted with blue-green; outer margin brown, with orange upper edging, green below the outer tail; a submarginal row of violaceous lunules; two black spots at the anal angle. Underside only differs from *C. ethalion* in the brighter red of the submarginal lunules, in the central white band being only indicated by a paler shade of brown, and the less distinct black markings.

*Hab*. West Africa. B.M.
MR. A. G. BUTLER ON THE SPECIES OF CHARAXES. [Nov. 14,

*Ace maris fulve, fasciis nigris maculatis.*

17. **Charaxes bouetii.**

*Hab.* Gambia.

18. **Charaxes candiope.**

*Hab.* Congo.

19. **Charaxes fabius.**

*Hab.* India; Indian Islands.

20. **Charaxes lampedo.**

*Hab.* ——?
*Note.*—This species is closely allied to *C. fabius,* but does not agree with it in the subapical portion of the band of the fore wing, or the submarginal spotting on the underside.

21. **Charaxes iocaste.**

*Hab.* Senegal.

22. **Charaxes solon.**

*Hab.* ——?
23. Charaxes eteocles.


_Eribea eteoclessa_, Hübner, Verz. bek. Schmett. n. 431.

_Hab._ Coast of Guinea; Sierra Leone.

24. Charaxes ephyra.


_Hab._ Cazamansa, West Coast of Africa.

25. Charaxes etesipe.


_Papilio etheocles_, Drury, Ill. iii. pl. 10.


_Hab._ Sierra Leone.

_Alea maris fusce, maculis ceeruleis viridibusve submarginatæ : feminæ antica plerumque fascia obliqua media alba, raro ferrugineæ._


_Hab._ Madagascar (Coll. Mr. Hewitson).

27. Charaxes etheta.


_Hab._ West Coast of Africa.

28. Charaxes tiridates.


*Nymphalis marica*, Mus. Banks.
*Hab.* Sierra Leone; Ashanti.

29. **Charaxes numenes**.
*Nymphalis numenes*, Hewitson, Exot. Butterf. ii. pl. 38. f. 9,10,11.
*Hab.* Sierra Leone.

30. **Charaxes amelie**.
*Charaxes amelia*, Guérin Méneville, sér. 2. t. 13. (1861) p. 171, pl. 5. f. 1.
*Hab.* Gaboon; Sierra Leone.

31. **Charaxes bohemani**.
*Hab.* South Africa?

32. **Charaxes smaragdalis**, sp. n. (Pl. XXXVI. fig. 5.)

*Male*. Upperside—front wings deep brown, inner margin glossed with greenish blue; a submarginal row of six pale blue-green spots along the outer margin, the two nearest the apex very pale, placed obliquely from the costal nervure. Wings crossed in the middle by a broad oblique blue-green band, very broad below, becoming abruptly narrower above the third median nervure. Hind wings, basal half deep brown, glossed with greenish blue; apical half pale green; outer margin deep brown, with a pale green sinuate lunulate edge and a submarginal row of seven pale green spots with white centres between the nervures. Tails very short; inner margin densely clothed with pale brown hairs. Body deep brown.

Underside olivaceous; front wings, basal portion ochreous; cell crossed by three small irregular angulated black bands, margined with grey; three similar markings below the cell; a similar line margined outwardly with ochreous at the end of the cell, and a lunulate black band, also margined with ochreous, placed obliquely from just below the end of the cell to the submedian nervure, the outer edge of the lowest lunule bluish below; outer margin ochreous, with a submarginal row of spots, the two uppermost ones white, the two lowest ocellate, tricoloured (grey, ochreous, and black), the rest ochreous. Hind wings olivaceous, marked with various lines and spots as in *C. tiridates*; but the lines are a little more angular, and the inner submarginal ochreous lunules are better defined.

*Hab.* Congo.

This species is allied to *C. tiridates*, from which it scarcely differs underneath.
33. Charaxes citheron.
Hab. Port Natal.

34. Charaxes thieste.
Papilio thieste, Stoll, Suppl. Cramer, pl. 32. f. 2, 2 B.
Eribca thiestessa, Hübner, Verz. bek. Schmett. n. 432.
Hab. Caffraria.

35. Charaxes xiphares.
n. 25.
Hab. Cape of Good Hope.
Note.—This species will probably prove to be the female of thieste.

Alæ maris nigra; posticæ marginе albo-viridiscеntе, ocellis nigri
albo-pupillatis: subtilus omnes fusco cœruleoque variegatæ,
fascia flava distincta.

36. Charaxes euryalus.
♂. Papilio euryalus, Fabricius, Ent. Syst. iii. pt. 1. p. 70. n. 218; Cramer, Pap. t. 74. f. A, B.
Hab. Amboyna.

Alæ ferrugineæ; posticæ ocellis nigris albo pupillatis: subtilus
ochreae, basi lineis nigris variegatæ, posticæ ocellis violaceis
submarginae, lunulisque ferrugineis.

37. Charaxes latona, sp. n. (Pl. XXXVII. fig. 1.)
Upperside ferruginous, paler towards the outer margin; a sub-
marginal row of black spots with white centres along the outer mar-
gin in the hind wings; outer marginal edge brown; a zigzag pale
brown submarginal line extending from the front margin of the front
wings to the middle of the hind wings, in the hind wings scarcely
perceptible. Front wings elongate; a black spot at the end of the
cell; three lunular spots placed vertically just beyond it, and ex-
tending to the third median branch; two contiguous hastate spots a
little way beyond the cell; apex brown. Body ferruginous; antennæ black.

Underside ochreous; basal half with two irregular, oblique, dull ochreous bands outlined with black, much the same form as in *C. euryalus*; a lunulate line, extending from the anterior margin near the apex of the front wing to the anal angle of the hind wing, margined inwardly with dull ochreous. Front wings, outer margin dull ochreous, with a paler marginal line and a row of indistinct ferruginous submarginal spots, getting smaller and less distinct towards the front margin. Hind wings, marginal edge dull ochreous; a submarginal row of violaceous ocelli; the pupil black, surrounded with greenish on the outer edge of each ocellus; a submarginal row of ferruginous lunules below the common lunulate line; between the lunules and ocelli dull ochreous.

*Hab.* Timor.  

**B.M.**

**Div. 3.** Alee subtus albo, fusco, rubro atroque variae striga caerulea; margo posticus posticarum plerumque lunulis flavis.

*Alee supra fuscæ, maculis ochreis submarginatae, fascia media ochrea ad anteriorem interrupta; margo posticus posticarum maculis rubris ochreisque submarginatis, lunulis flavis marginatis.*

**38. Charaxes caphontis.**


*Hab.* Fiji Islands (*Coll. Mr. Hewitson*).

*Alee supra alæ; margine atro, albo-punctato; corpus album, antennis nigris.*

**39. Charaxes pyrrhus.**


*Hab.* Amboyna.

**Note.**—The specimen in the Banksian Collection has no connexion whatever with this species, it certainly has the old label attached to it with the name "pyrrhus" inscribed upon it; but it is only a variety of *C. athamas*. The specimen described and figured by Lucas as *C. pyrrus* (sic) is so different in aspect to all the other figures of this species that I am almost inclined to think it distinct; the anal tail is almost gone, the submarginal spots and bands all seem to meet at the anal angle, and the whole of the outer marginal portion of the hind wing is suffused with purple; these differences may be occasioned by a desire of the artist to improve upon nature; but if not, there is no doubt as to its being a new species.
40. **Charaxes galaxia**, sp. n. (Pl. XXXVII. fig. 2.)

Upperside—front wings, basal half cream-coloured, apical half black-brown; four cream-coloured spots in couples placed beyond the cell; a submarginal row of eight similar spots along the outer margin. Hind wings, basal half broadly cream-coloured, becoming greenish along its outer edge; apical half brown-black; a marginal row of green lunular spots from above the third subcostal nervule to the anal angle; an orange spot at the anal angle. Tails long. Body, head brown, spotted with cream-colour; thorax greenish grey; abdomen cream-coloured.

Underside—front wings olivaceous, with irregular central white band and greyish anal angle. The markings are the same as in *C. sempronius*, excepting that the submarginal spots are smaller and further from the edge of the wing, and the black spot at the end of the cell is much larger and continued below the cell. Hind wings olivaceous, with a small central white patch tapering from the front margin to the end of the cell. The markings the same as in *N. sempronius*, excepting that the hind marginal yellow lunules are very small, the narrow black band at the end of the cell is more irregular and terminates a little below the cell, and the three subapical blue spots are wanting.

*Hab.* Timor.

41. **Charaxes kadunii**.


*Hab.* Caraccas.

42. **Charaxes sempronius**.


*Hab.* Australia.

43. **Charaxes schreiberi**.


*Hab.* Java.
44. Charaxes cognatus.

Charaxes cognatus, Van der Hoeven, Tijdsch. voor Entom. pt. 1–4 (1859–61), pl. 9. f. 1, 2.

Hab. Moluccas.

Alæ supra fusce, fascia communi sulphurea; posticæ aliquando omnino sulphureæ, margine fusco, maculis albis submarginatæ.

45. Charaxes athamas.

Papilio athamas, Drury, Ill. i. t. 2. f. 3, 4; Cramer, Pap. t. 89. f. C, D; Godart, Enc. M. ix. pt. 1. p. 353. n. 11; Swainson, Zool. Ill. 2nd ser. t. 90.

Hab. Moluccas.


Papilio athamas, Drury, Abbild. und Beschreib. exotisch. Insek. t. 2. f. 4.

P. pyrrhus, Donovan, Ins. India, pl. 29. f. 3.

Eribœa athamis, Hübner, Verz. bek. Schmett. n. 430.

P. pyrrhus, Mus. Banks.

Hab. India; China. B.M.

46. Charaxes hebe, sp. n. (Pl. XXXVII. fig. 3.)

Upperside—front wings, basal half, except the cell, pale greenish; base and inner margin ochrous; cell grey, brownish in front; apical half dark brown, with a green oval spot halfway between the end of the cell and the apex. Hind wings pale greenish, base grey; inner margin brownish ochrous; outer margin grey, with brown marginal edge and two submarginal rows of black spots with white spots between them; a narrow blue line down each of the tails. Body fusaceous; thorax grey; head spotted with ochrous; antennæ brown, tipped with red.

Underside pale reddish brown; outer margin deeper-coloured; a broad central greenish silky patch, rounded in front, widest at the inner margin of front wings, in the hind wings angulated at the median nervure and abruptly tapering to a point at the third median nervure, margined with rich brown, and outwardly by a row of reddish spots extending from near the apex of the front to the anal angle of the hind wings, lunulate from the middle of the front, to the anal angle of the hind wings, the lunule at the angle of the central patch margined inwardly with white and outwardly with blue, those below it margined with blue inwardly; a greenish oval spot on the front wings, as above; a black line near the base, crossing the cells obliquely; two black lunules on the lower part of the abdominal fold; a submarginal row of small black spots and a blue and yellow line along the outer margin of the hind wings. Tail brown. Body brownish ochreas.

Hab. Sumatra. B.M.

This insect is closely allied to C. athamas, but is much more ro-
bust; the upper wings are much more rounded and longer, the situation of the outer margin is not so deep, and the wing is more obliquely slanted inwards at the anal angle; the apex is very much rounded; the hind wings are longer, and the outer tail half as long again as the inner one; underneath, the central band is very much further from the outer margin, only extending to the end of the cell.

Div. 4. Alæ supra albae, margine fusco, albo-maculato; subtus niveae, fulvo rubro-ve virgatae, raro variis coloribus maculatæ.

_Alace subtus niveae, fulvo rubro-ve virgatae._

47. **Charaxes eudamippus.**


_Hab._ Silhet; Assam.

48. **Charaxes narceus.**

_Nymphalis narceus,* Hewitson, Exot. Butterf. i. p. 87, pl. 44. f. 1, 4.

_Hab._ North China.

49. **Charaxes dolon.**

*Charaxes dolon,* Westwood, Cabinet, Orient. Entom. p. 55. pl. 27.

_f._ 2, 3; Westw., Doubl. & Hewits. Gen. Diurn. Lepid. p. 309. n. 34.

_Hab._ East Indies.

_Alace supra albae, apice late fusco, unimaculato; subtus variis coloribus maculatœ._

50. **Charaxes delphis.**


_pl._ 10. f. 1–3.

_Hab._ Silhet; Assam.

Div. 5. Alæ basi ferrugineæ, raro fulvae, apice atrœ, subtus lineis, punctis strigaque pallida variegatae.

_Alace basi fulvae; apice atrœ, maculis fulvis submarginatœ; corpus fuscum._

51. **Charaxes nitebis.**


_Hab._ Celebes.