

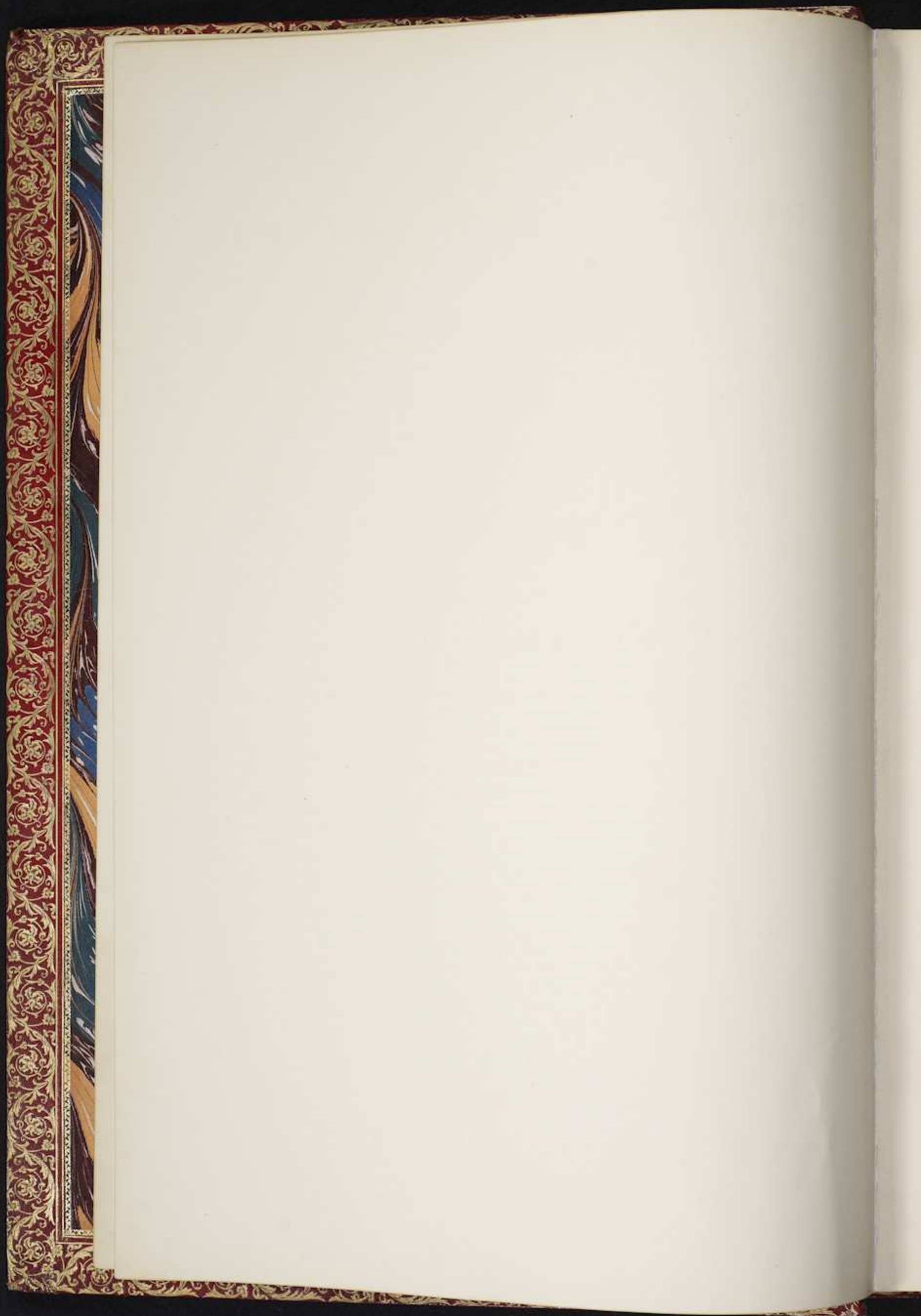




~~F. 108~~
ELLIS
F108
V.1

5. 166
24/11





THE
BIRDS OF NEW GUINEA

AND THE
ADJACENT PAPUAN ISLANDS,

INCLUDING MANY
NEW SPECIES RECENTLY DISCOVERED

IN
AUSTRALIA.

BY
JOHN GOULD, F.R.S.

COMPLETED AFTER THE AUTHOR'S DEATH

BY
R. BOWDLER SHARPE, F.L.S. &c.,

ZOOLOGICAL DEPARTMENT, BRITISH MUSEUM.

VOLUME I.

LONDON:
HENRY SOTHERAN & CO., 36 PICCADILLY.
1875-1888.

[All rights reserved.]



PRINTED BY TAYLOR AND FRANCIS,
RED LION COURT, FLEET STREET.

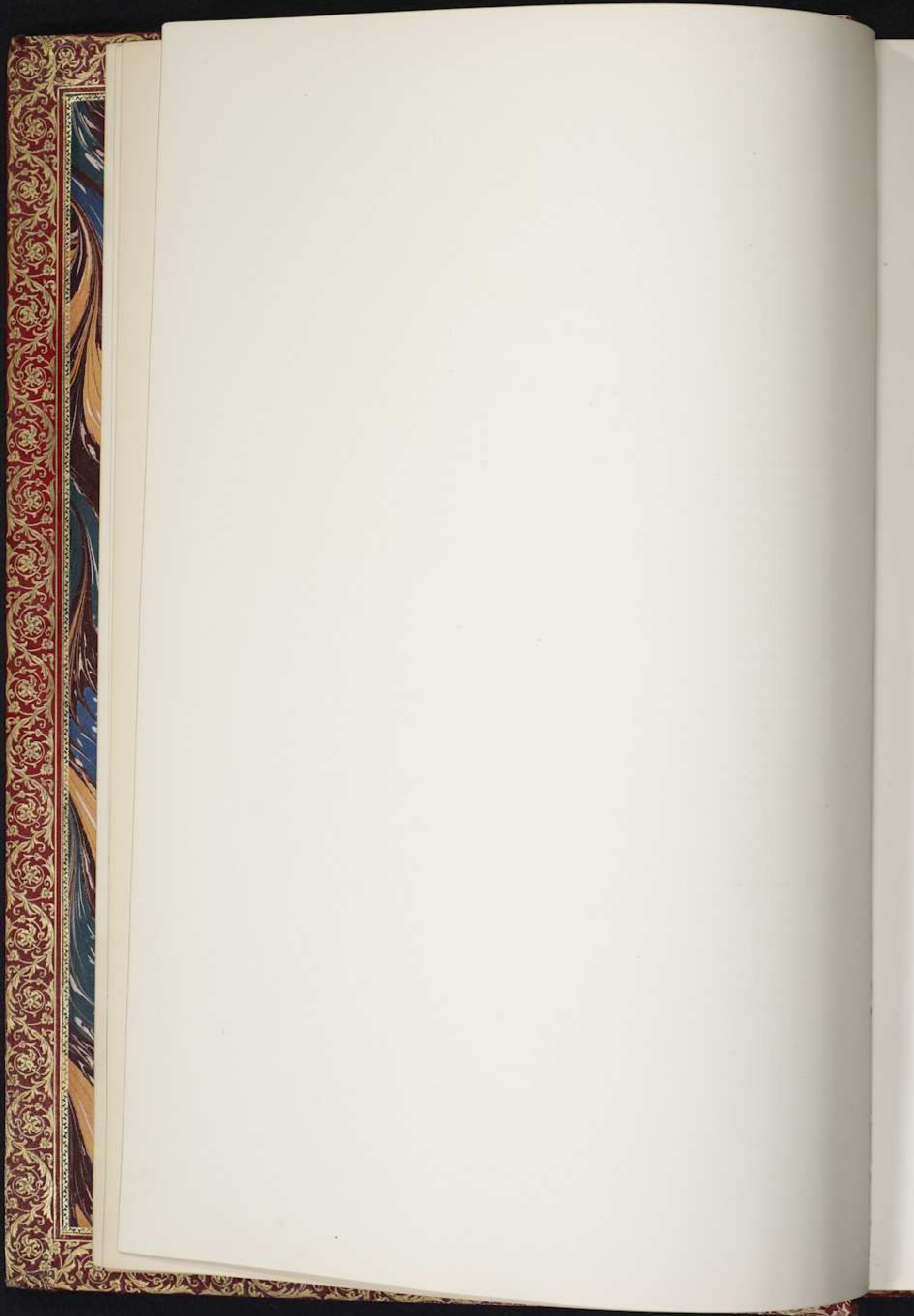
P R E F A C E.



IN fulfilment of the promise made by the Publishers to the Subscribers, and in accordance with the intention of the late Mr. GOULD, the present work has been brought to a close with the issue of the Twenty-fifth Part. For the last thirteen of these parts, which have appeared since the author's death, I have been solely responsible, as will be seen by the initials appended to the foot of each article; and I greatly regret that the pledges given to the Subscribers have necessitated the curtailment of the work at a period when the development of European enterprise in New Guinea and the neighbouring islands seems to point to the discovery of many new and highly interesting birds. The recent finding of two beautiful new Birds of Paradise in North-eastern New Guinea must be the forerunner of many other discoveries, and it is to be hoped that the Subscribers will feel sufficient interest in the subject to warrant the continuation of the present work, so that the Avifauna of Papuasia may be completely illustrated. Should such a wish be expressed, I shall be only too happy to continue the work.

R. BOWDLER SHARPE.

December, 1888.



INTRODUCTION.

THE halo of romance which for nearly a century has centred round New Guinea and its animals does not get dimmed as time speeds on: indeed it shines more brightly than ever, and all naturalists who have travelled in the Moluccas have either paid a visit to that wonderful island or are looking forward to the time when they will be able to land upon its shores. Mr. Gould was perfectly right when he alluded to the Birds of Paradise as being one of the most remarkable families of birds inhabiting the Papuan Sub-region, and their presence alone is sufficient to warrant our recognition of a zoological area distinct from that of the neighbouring Australian region. That there is a considerable affinity between the avifauna of Northern Australia and New Guinea is proved by the presence of a Cassowary in Queensland and of a *Malurus* in New Guinea; and this relationship is further accentuated by the presence in both subregions of such genera as *Ptilorhis*, *Microglossum*, *Tanysiptera*, and a large number of species of Meliphagidæ. Of the Lipotypes, or forms of birds conspicuous by their absence, in the Papuan and Australian Subregions, perhaps the non-appearance of any species of Woodpecker is the most remarkable.

No other country has produced in recent times more novelties in the way of birds than New Guinea, and every fresh expedition to the mountains of the interior appears to add to the number. Travellers of many nationalities have contributed to the disclosure of the hidden ornithological treasures which have been described during the last thirty years, as will be seen by the following brief *résumé* of the history of the subject.

In 1858, Dr. Sclater published, in the 'Proceedings' of the Linnean Society of London, a paper on the zoology of New Guinea. After visiting the museums of Paris and Leyden, and personally examining the specimens which they contained from this part of the world, he drew up a list of animals and birds known as inhabitants of the island, and he computed that of the former 10 species had been obtained, and of birds 170 species. The present extent of the described mammalian fauna I have no means of judging; but in 1865, Dr. Finsch, in his 'Neu-Guinea,' estimated the number of Mammalia at 15, and the birds at 252. Of course, as Count Salvadori's work deals with the ornithology of the Moluccas as well, no exact comparison of the avifauna of New Guinea, as known in 1858 and as at present known in 1888, is presented; but, as will be seen below, the various expeditions which have taken place have added enormously to the number of species, and we cannot suppose that the limit of our knowledge has yet been reached.

The area embraced by Count Salvadori's 'Ornitologia della Papuasias' is much the same as that admitted by Mr. Gould when he commenced the present book, as the few species from Australia which he included were only figured as a further Supplement to his 'Birds of Australia.' It may be remarked, however, that of the 1030 species enumerated by Count Salvadori, only 300 have been figured in the present volumes, and at least 700 remain to be described before a complete account of the ornithology of Papuasias will have been attained.

From Dr. Sclater's memoir before mentioned we take the following details of early exploration in New Guinea. Although Birds of Paradise were often sent, in a mutilated state, in early times, and some of them were figured in ancient books, very few other birds from this quarter of the globe were known to Linnæus, and our first real acquaintance with Papuan Ornithology is due to the French traveller Sonnerat, who went there in 1771, and procured some plants and animals, principally on the island of Jobi, in North-western New Guinea. The results of his discoveries were published in his 'Voyage à la Nouvelle Guinée,' in 1776. The French exploring-ship the 'Uranie' procured a few birds in 1824, and the 'Coquille' spent twelve days at a harbour in North-eastern New Guinea, which they named 'Havre Dorey'; about fifty species

of birds were obtained, most of which were new to science and were described by Lesson. The voyage of the 'Astrolabe' also contains the description and figures of some Papuan birds, written by Messrs. Quoy and Gaimard, the naturalists attached to this expedition, as they had been to that of the 'Uranie.' In 1854 the volume on the 'Zoology' of the 'Voyage au Pôle Sud' contained some more descriptions of New-Guinea birds, and then French enterprise in Papuasia seems to have stood still till quite recently, when a young naturalist, M. Léon Laglaize, sent from that region some very interesting and important novelties in the way of birds.

The Dutch, however, to whom belongs the western half of the island at the present time, were very active in New Guinea during the second half of the century, and some admirable collections were made by Solomon Müller and Maklot. These formed the foundation of the splendid series of Papuan birds in the Leyden Museum, which is still one of its chief glories. Many of the species were figured by Temminck in the 'Planches Coloriées,' and also by Müller and Schlegel in the well-known 'Verhandelingen.'

While Dr. Selater was writing his memoir, and placing the zoology of New Guinea as it were on a proper basis of knowledge, our great countryman, A. R. Wallace, was at work on that wonderful exploration of the Malay Archipelago which will render his name famous for all time. Most of Mr. Wallace's discoveries were epitomized and catalogued in the late George Robert Gray's 'List of the Birds of New Guinea' (1859); but many more species were described by the traveller himself, and a most complete list of the Mammals and Birds of Papuasia and the Moluccas was given by Dr. Otto Finsch in his 'Neu-Guinea und seine Bewohner' (1865).

Fired by the success of the English traveller Wallace in their East-Indian possessions, the Dutch nation provided a sum of money for several years to compass the zoological exploration of Papuasia, and, under the guidance of the late Professor Schlegel, several energetic collectors were despatched, Bernstein, Von Rosenberg, Hoedt, and others, who obtained extensive results, so that once more the scientific prestige of the Dutch nation was paramount in Papuasia, and many islands, hitherto unvisited by Europeans, yielded important novelties. Then came the celebrated expedition of Dr. A. B. Meyer, whereby a further number of new species were discovered, to be followed by the extensive explorations of Signor D'Albertis and Dr. Beccari. D'Albertis discovered *Drepanornis* in the Arfak Mountains in 1872, and visiting afterwards the southern and south-eastern portions of New Guinea, he met with *Harpyopsis* and other remarkable new genera of birds, many of which have been figured in the present work. Dr. Beccari sent some most interesting and wonderful birds from the Arfak Mountains and many of the islands of the Papuan Subregion, where also the hunters employed by an enterprising Dutch naturalist, Mr. Bruijn, have obtained many rare and new species. To this gentleman and to Mr. Riedel science is indebted for many important contributions to zoological science.

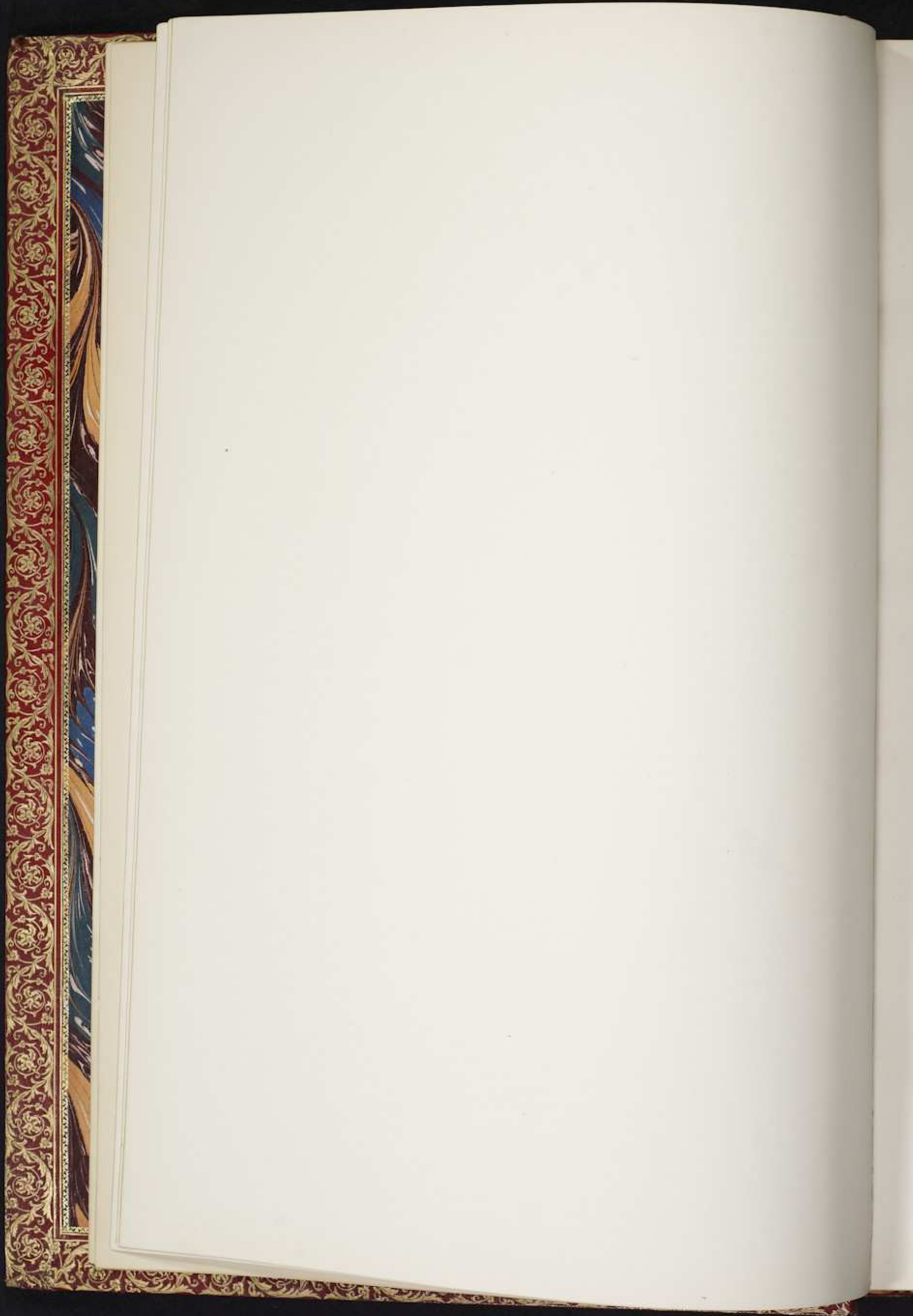
During the time which elapsed since Mr. Wallace's successful labours in the Malay Archipelago, Englishmen had been busy in exploring many of the outlying groups of islands to the eastward of New Guinea; and Captain Richards, Mr. Brazier, Mr. Cockerell, and other naturalists discovered many new species of birds in the Solomon Islands, and quite recently an energetic explorer, Mr. C. M. Woodford, has brought home a most interesting collection from this Archipelago. The Rev. George Brown and Mr. L. C. Layard have also done much to explore the natural history of New Britain and the adjacent islands, which were also visited by Dr. Finsch, to whom we owe much enduring work in the same locality and in the Caroline Islands. The collectors of the celebrated Hamburg firm, Messrs. Godeffroy, have also explored Ponapé and other islands to the west of New Guinea, and the names of Kubary, Graeffe, and Kleinschmidt will always remain famous amongst those of the explorers of these little-known and inaccessible localities. For the exploration of the Admiralty group of islands we are indebted to the 'Challenger' expedition. Nor have Englishmen been idle in their newly-acquired province of South-eastern New Guinea. Mr. Goldie, Mr. Octavius Stone, and the well-known missionaries the Rev. Mr. Lawes and the Rev. Mr. Macfarlane, have done wonders in procuring collections from the neighbourhood of Port Moresby, from whence also an interesting collection was sent by a young American explorer, Dr. James. The

Australians have also done much to increase our knowledge of the zoology of South-eastern New Guinea, and the collections of the 'Chevert' expedition and other explorers, Mr. Masters, Mr. Morton, Mr. Pettard, and Mr. Broadbent, have been described by Dr. E. P. Ramsay at Sydney, or by ourselves here in London. The Astrolabe Mountains have been visited by Mr. Goldie, Mr. Hunstein, and Mr. H. O. Forbes, and have yielded some surprising and beautiful novelties. Many of the species discovered originally in the Arfak Mountains have now been found in the Astrolabe Range, which, however, appears to possess a certain individual fauna, though we know so little of the mountain-ranges of the interior of New Guinea that it would be impossible to affirm that any species is peculiar to any portion of the mountain system and does not extend throughout its entire area.

Before concluding this sketch of zoological work in New Guinea and the Moluccas, we must allude to the excellent results obtained by Mr. H. O. Forbes and his heroic wife in the Tenimber Islands. They were the first Europeans to collect in the dreaded Timor Laut group, and though compelled to work, through the hostility of the surrounding natives, in a circumscribed space, the number of new species obtained reflected the greatest credit on the energy of these brave travellers. Mr. Riedel's hunters have also discovered a few new species on the Tenimber Islands.

In the pages of the present work frequent reference is made to the 'Ornitologia della Papuasias e delle Molucche' of Count Salvadori. The present writer knows how difficult, in these days of many books, is the task of the man who sets himself to write a monograph of any group of birds, and to write a complete account of the avifauna of any country is even more tedious. Although the collections stored in the Museo Civico at Genoa are most complete, the enthusiasm of the distinguished Director of that Museum, Marquis Doria, having drawn thereto the collections of the Italian travellers, as energetic and full of purpose as he is himself, yet the treasures in the other museums of Europe must be collated with the material accumulated by Italy, if a complete account of the ornithology of New Guinea has to be compiled. Travelling, therefore, from country to country, comparing the collections in his charge with those made by English, French, Dutch, and German travellers, Count Salvadori may well be congratulated on the result which his thoughtful earnestness obtained, and in the great work on Papuan Ornithology of which he is the author he has raised up for himself an imperishable reputation. The best tribute which the present writer can pay to his work exists in a reference to the number of times which he has been obliged to quote or to copy Count Salvadori's writings, because, on the subject of Papuan Ornithology, he left us little or nothing to add to the information given by him in the 'Ornitologia della Papuasias.'

R. BOWDLER SHARPE.

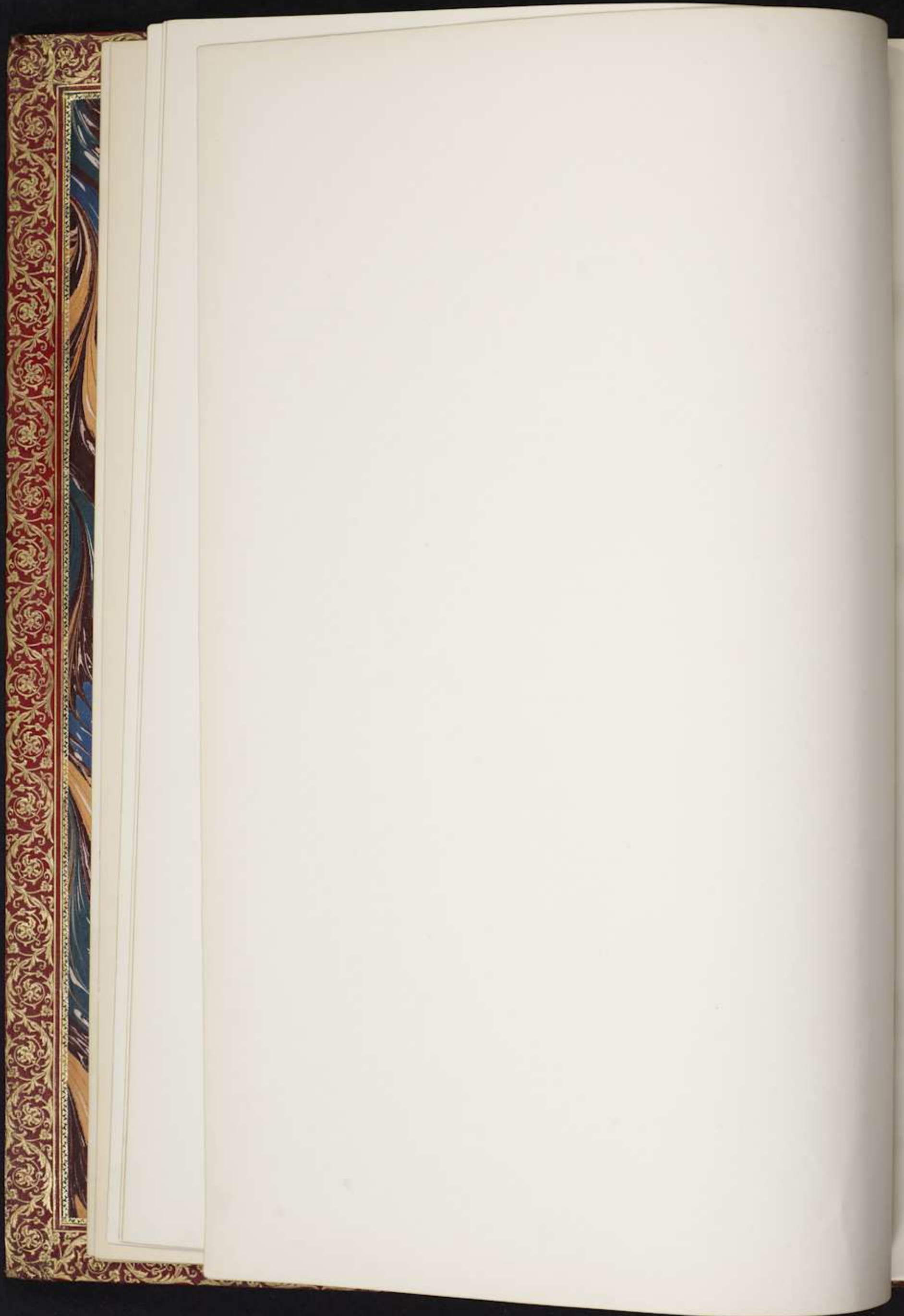


CONTENTS.

VOLUME I.

PREFACE.
INTRODUCTION.

PLATE			PART	DATE.
1.	Astur melanochlamys	Black-mantled Goshawk	XXII.	1886.
2.	Erythrotriorchis doriae	Marquis Doria's Goshawk	XXI.	1886.
3.	Harpyopsis novae guineae	New-Guinea Harpy-Eagle	XXV.	1888.
4.	Baza gurneyi	Gurney's Cuckoo-Falcon	XXV.	1888.
5.	Ninox odiosa	New Britain Hawk-Owl	XVII.	1884.
6.	„ forbesi	Forbes's Hawk-Owl	XV.	1883.
7.	„ dimorpha	Salvadori's Hawk-Owl	XXII.	1886.
8.	Epimachus ellioti	Elliot's Promerops	XI.	1880.
9.	„ speciosus	Great Promerops	VII.	1878.
10.	Drepanornis cervinicauda	Bennett's Bird of Paradise	XVIII.	1884.
11.	„ albertisi	D'Albertis's Bird of Paradise	I.	1875.
12.	„ bruijnii	Bruijn's Bird of Paradise	XXI.	1885.
13.	Craspedophora magnifica	New-Guinea Rifle-bird	IX.	1879.
14.	Seleucides nigricans }	Twelve-wired Bird of Paradise	XII.	1881.
15.	„ „ }			
16.	Paradigalla carunculata	Wattled Bird of Paradise	VII.	1878.
17.	Astrapia nigra	Gorget Paradise-bird	VIII.	1878.
18.	Lophorhina superba	Superb Bird of Paradise	VI.	1878.
19.	„ minor	Lesser Superb Bird of Paradise	XXIV.	1888.
20.	Diphyllodes respublica	Bare-headed Bird of Paradise	III.	1876.
21.	„ gulielmi III.	Waigiou Bird of Paradise	II.	1876.
22.	„ speciosa	Magnificent Bird of Paradise	II.	1876.
23.	„ chrysoptera	Golden-winged Bird of Paradise	II.	1876.
24.	Cicinnurus regius	King Bird of Paradise	III.	1876.
25.	Parotia sexpennis	Six-plumed Bird of Paradise	I.	1875.
26.	„ lawesi	Lawes's Bird of Paradise	XXIII.	1887.
27.	Paradisea decora	Grey-chested Bird of Paradise	XX.	1885.
28.	„ papuana }	Papuan Bird of Paradise	X.	1879.
29.	„ „ }			
30.	„ apoda	Greater Bird of Paradise	IX.	1879.
31.	„ sanguinea	Red Bird of Paradise	IV.	1877.
32.	„ raggiana	Marquis de Raggi's Bird of Paradise	IV.	1877.
33.	Manucodia comrii	Curled-crested Manucode	V.	1877.
34.	„ chalybea	Green Manucode	V.	1877.
35.	Phonygama purpureoviolacea	Purple-and-Violet Manucode	XXIII.	1887.
36.	Lycocorax obiensis	Obi Paradise-Crow	XXIV.	1888.
37.	Ailuraedus stonii	Stone's Cat-bird	XII.	1881.
38.	„ maculosus	Queensland Cat-bird	I.	1875.
39.	„ melanotis	Black-checked Cat-bird	I.	1875.
40.	„ arfakianus	Arfak Cat-bird	I.	1875.
41.	„ buccoides	Barbet-like Cat-bird	I.	1875.
42.	„ melanocephalus	Black-naped Cat-bird	XXIV.	1888.
43.	Scenopœus dentiostri	Toothed-billed Bower-bird	X.	1879.
44.	Chlamydodera orientalis	Queensland Bower-bird	XI.	1880.
45.	„ occipitalis	Large-frilled Bower-bird	X.	1879.
46.	Amblyornis inornata	Gardener Bower-bird	IX.	1879.
47.	„ subalaris	Orange-crested Bower-bird	XXII.	1886.
48.	Xanthomelus aureus	Golden Bird of Paradise	VI.	1878.
49.	Oriolus decipiens	Deceptive Oriole	XVI.	1884.
50.	Chætorhynchus papuensis	Arfak Drongo	XI.	1880.
51.	Dicranostreptus megarhynchus	New-Ireland Drongo	VIII.	1878.
52.	Rectes leucorhynchus	White-billed Wood-Shrike	XX.	1885.
53.	„ cerviniventris	Fawn-breasted Wood-Shrike	XX.	1885.
54.	„ uropygialis	Rufous-and-Black Wood-Shrike	XII.	1881.
55.	„ jobiensis	Jobi-Island Wood-Shrike	XII.	1881.
56.	„ aruensis	Aru-Island Wood-Shrike	XXV.	1888.







ASTUR MELANOCHLAMYS.

Mindern Bros. imp.







ASTUR MELANOCHLAMYS.

Black-mantled Goshawk.

Urospizias melanochlamys, Salvad. Ann. Mus. Civic. Genov. vii. p. 905 (1875).—Id. op. cit. xii. p. 38 (1878).—Id. Orn. Papuasie e delle Molucche, i. p. 63 (1880).

Astur melanochlamys, Sharpe, Mitth. k. zool. Mus. Dresd. Heft iii. p. 355 (1878).

THIS fine species is at present only known from the Arfak Mountains in North-western New Guinea, whence the first specimens were sent to Europe by Mr. Bruijn and Dr. Beccari. We have also seen a specimen in Dr. Guillemard's collection from the same locality.

This Goshawk is a very distinct species, and belongs to the Austro-Malayan section of the genus *Astur*, which embraces the species which have a rufous collar round the hind neck. It differs from all its allies, however, by having the ear-coverts slaty black like the head and back, and by the deep vinous chestnut of the under surface.

The following description was taken by us from the type specimen belonging to the Genoa Museum, a sight of which was granted to us by Count Salvadori during his last visit to England :—

Adult female. General colour above deep black; head black like the back, from which it is separated by a broad well-defined collar of vinous chestnut; quills and tail black like the upper surface, the inner webs rather browner, barred with black; entire sides of face black like the crown; throat also black, but mottled with white bases to the feathers, many of the latter being white barred with black; remainder of under surface of body deep vinous chestnut, with slightly developed whitish bars on the flanks and lower abdomen; under wing-coverts and axillaries vinous chestnut, with remains of lighter cross bars, the greater series and the inner webs of the quills greyish white with a vinous tinge and barred with blackish. Total length 15·2 inches, culmen 1·1, wing 10·0, tail 7·8, tarsus 2·65.

The Plate represents an adult bird of about the size of life, with a smaller figure in the background. Both are drawn from a specimen procured by Dr. Guillemard in the Arfak Mountains, and kindly lent to us by that gentleman.

[R. B. S.]

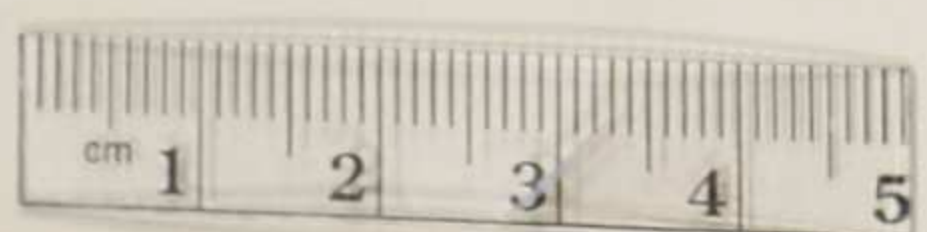






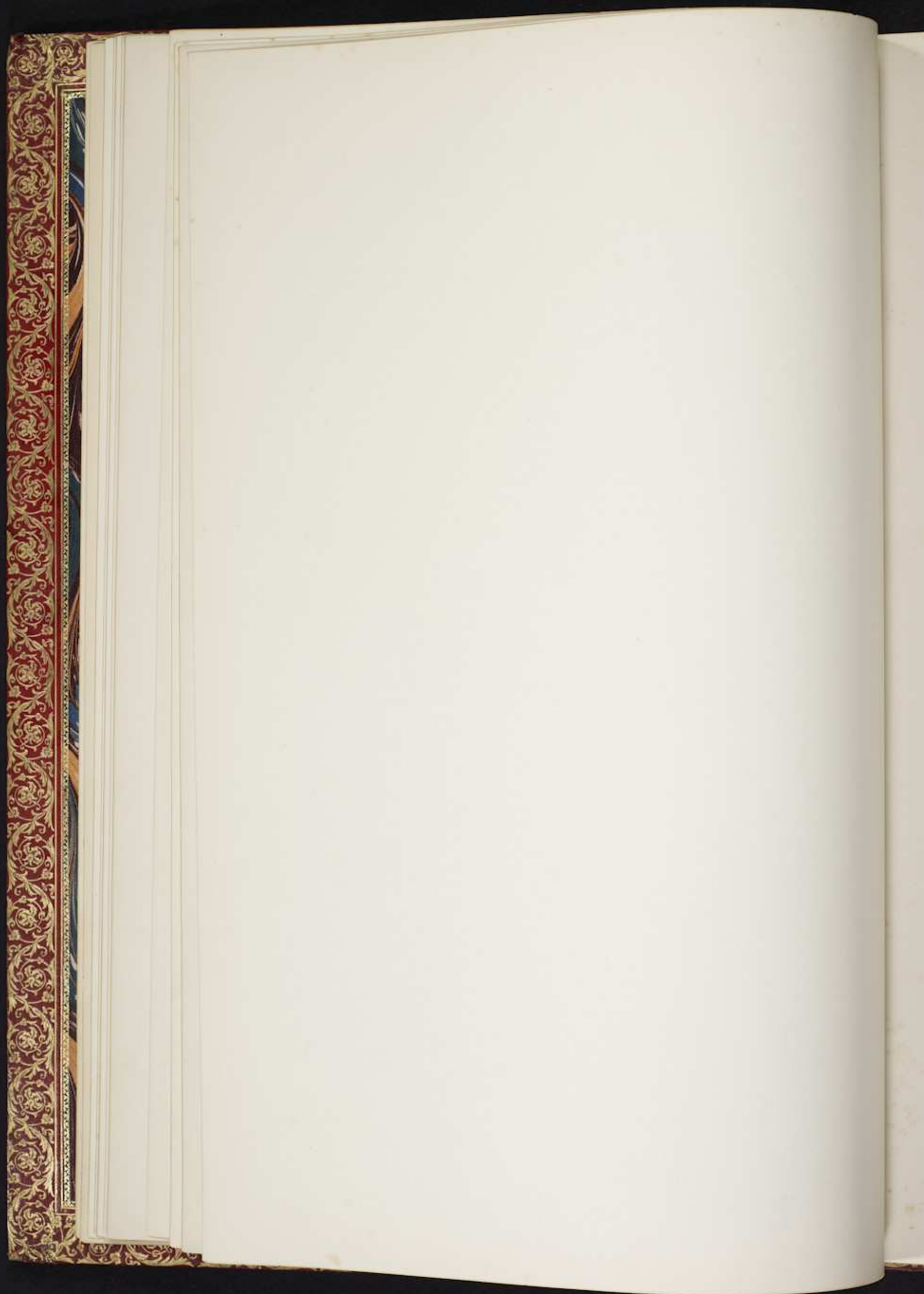
W. Hart del. et lith.

ERYTHROTRIORCHIS DORLÆ



Miner's Brev. imp.





ERYTHROTRIORCHIS DORIAE.

Marquis Doria's Goshawk.

Megatriorchis doriae, Salvad. & D'Albert. Ann. Mus. Civic. Genov. vii. p. 805 (1875).—Gurney, Ibis, 1877, p. 436.

—Id. Ibis, 1878, p. 87.—Salvad. Orn. Papuasias e delle Molucche, i. p. 41 (1880).—Gurney, List of Diurnal Birds of Prey, p. 45 (1884).

Erythrotriorchis doriae, Sharpe, Journ. Linn. Soc., Zool. xvii. p. 406 (1884).

THIS is one of the finest discoveries made by the celebrated Italian traveller D'Albertis during his voyage to South-eastern New Guinea, and it is one of the peculiar forms which inhabit both that great island and Northern Australia.

The original specimen came from Hall Bay, in South-eastern New Guinea, and this is the bird which forms the principal figure in the Plate, and which we consider to be immature. The second specimen figured in the Plate is apparently a fully adult bird, and was obtained by Mr. Goldie on the Astrolabe Mountains in South-eastern New Guinea. We believe it to be an adult male, and the type to be an immature female, notwithstanding some discrepancies in the proportions of the quills and tail-feathers exhibited by the two specimens. If we are correct in thus assigning the relation of these two individuals, then it is evident that the genus *Megatriorchis* is the same as the Australian genus *Erythrotriorchis*, of which *E. radiatus* is the representative species on the latter continent. A larger number of specimens is, however, requisite to settle the point satisfactorily.

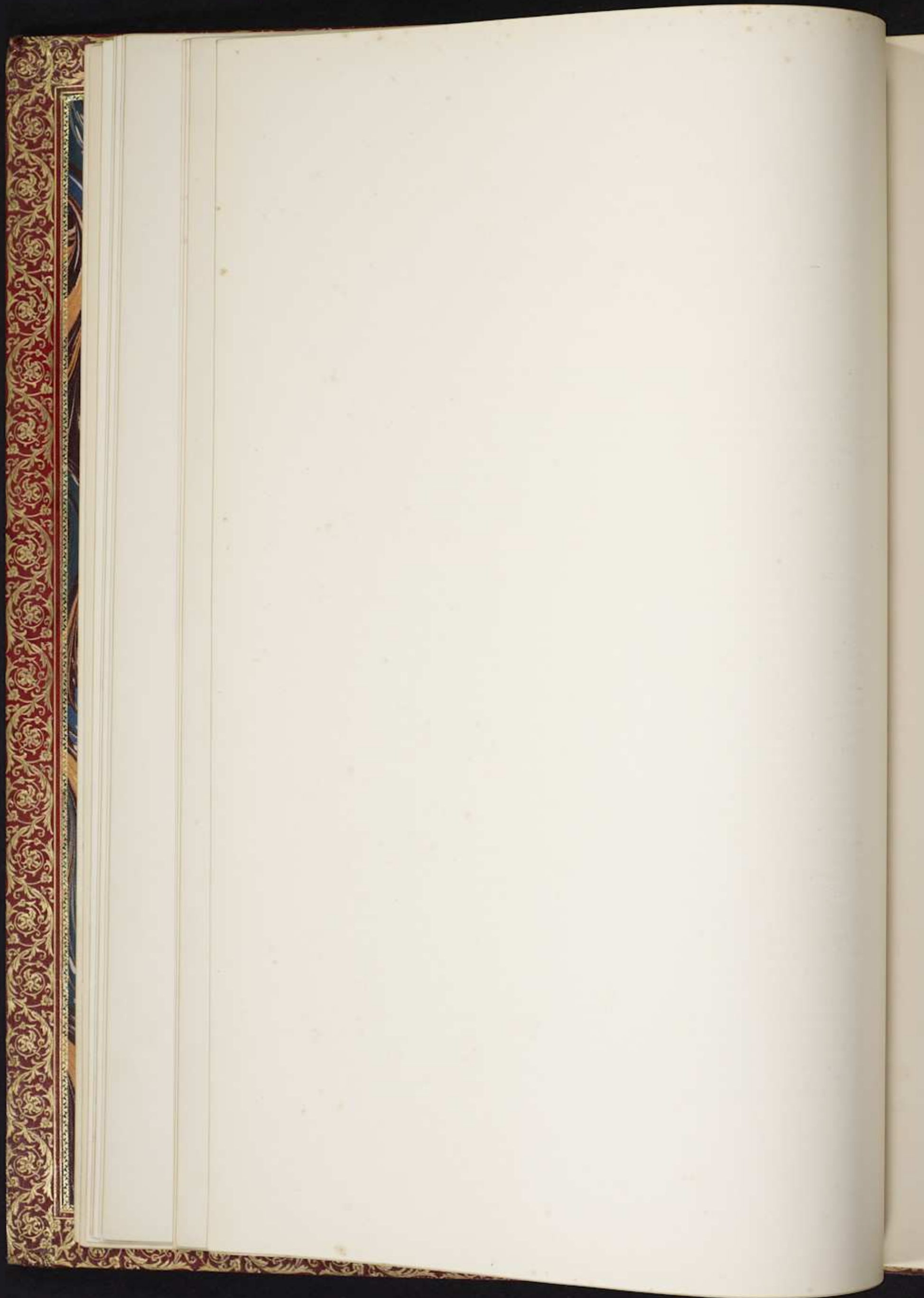
The following are exact descriptions of the two specimens referred to:—

Adult. General colour above glossy black, with nearly obsolete rufous margins to the feathers of the upper surface; wing-coverts black, very plainly and broadly edged with chestnut; bastard-wing and primary-coverts black, with indistinct bars of ashy brown, nearly obsolete on the bastard-wing; quills black, barred across with brown, these bars less distinct on the inner webs; tail-feathers black, barred with ashy grey, about twelve bars being discernible on the central feathers; the outer tail-feathers with about the same number of brown bars, as well as one at the tip; crown of head uniform black, the nape crested; feathers below the eye and ear-coverts black, the feathers edged with rufous buff, imparting a streaked appearance; cheeks and throat rufescent buff, streaked with black down the centre of the feathers; remainder of under surface white, broadly streaked with black, and marked slightly with chestnut, especially on the sides of the body; the black bars rather broken up and in the form of large spots on the flanks, abdomen, and under tail-coverts; thighs broadly barred with black and white, with a chestnut spot in the centre of the black bars; under wing-coverts black in the centre, rufous or rufous white on the edges; the lower series blackish, barred with ashy or greyish white like the lower surface of the quills. Total length 20 inches, culmen 1·05, wing 12·8, tail 10·0, tarsus 3·1.

Immature. General colour above brown, regularly barred across with lighter brown, the edges of the feathers rather more rufous or fawn-coloured; head brown, streaked with rufous, the feathers edged with this colour and having creamy white bars; broad eyebrow of white feathers streaked with black; a small crest of pointed plumes; nape-plumes white, with a rufous tinge, and mesially streaked with black; hind neck like the back, but more mottled with black spade-shaped terminal spots to the feathers; wing-coverts ashy brown, tipped with fawn-colour, and broadly barred across with darker brown; quills ashy brown, broadly barred across with blackish brown for their entire length, the interspaces on the secondaries lighter, these quills being much paler tipped; upper tail-coverts and tail-feathers ashy brown, tipped with greyish, slightly tinged with rufous on the former, the tail-feathers crossed with twelve bars of blackish brown; sides of face and ear-coverts white, the feathers mesially streaked with dark brown, the ear-coverts tipped with blackish brown, forming a distinct patch; under surface of body creamy white, streaked with dark brown, very narrowly on the throat, broader on the abdomen and lower breast, the thighs and under tail-coverts with nearly obsolete mesial streaks; fore neck and breast broadly streaked with light rufous, browner on the former, the breast-feathers with a shaft-streak of dark brown; under wing-coverts and axillaries white, with a dark brown shaft-streak; quills ashy below, white near the base, barred with dark brown, the bars about nine in number: "bill black, the cere and eyelids ash-colour; feet whitish grey; iris chestnut-brown" (*D'Albertis*). Total length 7·5 inches, culmen 1·7, wing 13·7, tail 12·8, tarsus 3·4.

The principal figure in our Plate is drawn from the type specimen, *Megatriorchis doriae*, which was kindly lent to me by the Marquis Doria. The hinder figure is taken from the specimen in the British Museum, which we have identified as the adult male of the species.

[R. B. S.]







HARPYOPSIS NOVAE-GUINEAE, *Salvad.*

W. Hart del et lith.

Mintern Bros. imp.







HARPYOPSIS NOVÆ GUINÆÆ, *Salvad.*

New-Guinea Harpy-Eagle.

Harpyopsis novæ guinææ, Salvad. Ann. Mus. Civic. Genov. vii. p. 682 (1875).—Id. & D'Albert. tom. cit. p. 805 (1875).—Salvad. op. cit. ix. p. 10 (1875), x. pp. 115, 117 (1877), xii. p. 36 (1878).—Gurney, Ibis, 1877, p. 435; 1878, p. 87.—Sharpe, Mitth. k. zool. Mus. Dresden, i. p. 355, pl. xxix. (1878).—D'Albert. & Salvad. Ann. Mus. Civic. Genov. xiv. p. 28 (1879).—Sharpe, Journ. Linn. Soc., Zool. xiv. p. 627 (1879).—Salvad. Orn. Papuasie e delle Molucche, i. p. 40 (1880), iii. App. p. 507 (1882).—D'Albert. New Guinea, i. p. 278, pl. x. (1880).—Sharpe, Journ. Linn. Soc., Zool. xvi. p. 424 (1882).—Gurney, List of Diurnal Birds of Prey, p. 46 (1884).—Finsch u. Meyer in Madarász, Zeitschr. ges. Orn. iii. p. 2 (1886).

THIS magnificent bird of prey is one of the most important and at the same time one of the most interesting of all the discoveries made by Signor D'Albertis during his travels in New Guinea. It is a veritable Harpy, like the Harpy-Eagle of South America (*Thrasaetus harpyia*), which it so closely resembles in outward form that we had great difficulty in finding characters for its generic separation from the South-American bird. It has the crest differently formed to that of the true Harpy, and the wing is shorter in proportion to the length of the tail; but there can be no doubt that the two forms are intimately allied. How such a close similarity has been obtained between two Eagles inhabiting such widely different localities as South America and New Guinea, the avifaunæ of which have, generally speaking, very little in common, is a problem of geographical distribution which our present knowledge has no means of explaining.

D'Albertis first met with the *Harpyopsis* at Andei, in North-western New Guinea, and here it was also procured by Dr. Meyer, whose specimen was beautifully figured by Mr. Keulemans in the 'Mittheilungen' of the Dresden Museum (*l. c.*). During his travels in South-eastern New Guinea D'Albertis again met with the species in Hall Bay and on the Fly River, and a figure, copied from the before-mentioned plate of Mr. Keulemans, is given in his work on New Guinea. Mr. Broadbent found the Harpy at Fairfax Harbour, Port Moresby, and it was also procured by Mr. Hunstein in a small island off East Cape.

Mr. H. O. Forbes has sent a beautiful example from the Sogeri district in the Astrolabe Mountains, and Mr. Goldie has met with it in the same region. He says that the native name is "Duna," and he also forwarded to England two white eggs supposed to be those of the Harpy, but they appeared to us to be the eggs of some large Hornbill rather than those of a bird of prey.

Mr. Broadbent describes it as a "scrub bird," but nothing definite of its habits has yet been published. Signor D'Albertis shot a specimen on a tree stump, in the act of devouring a kangaroo (*Macropus papuanus*).

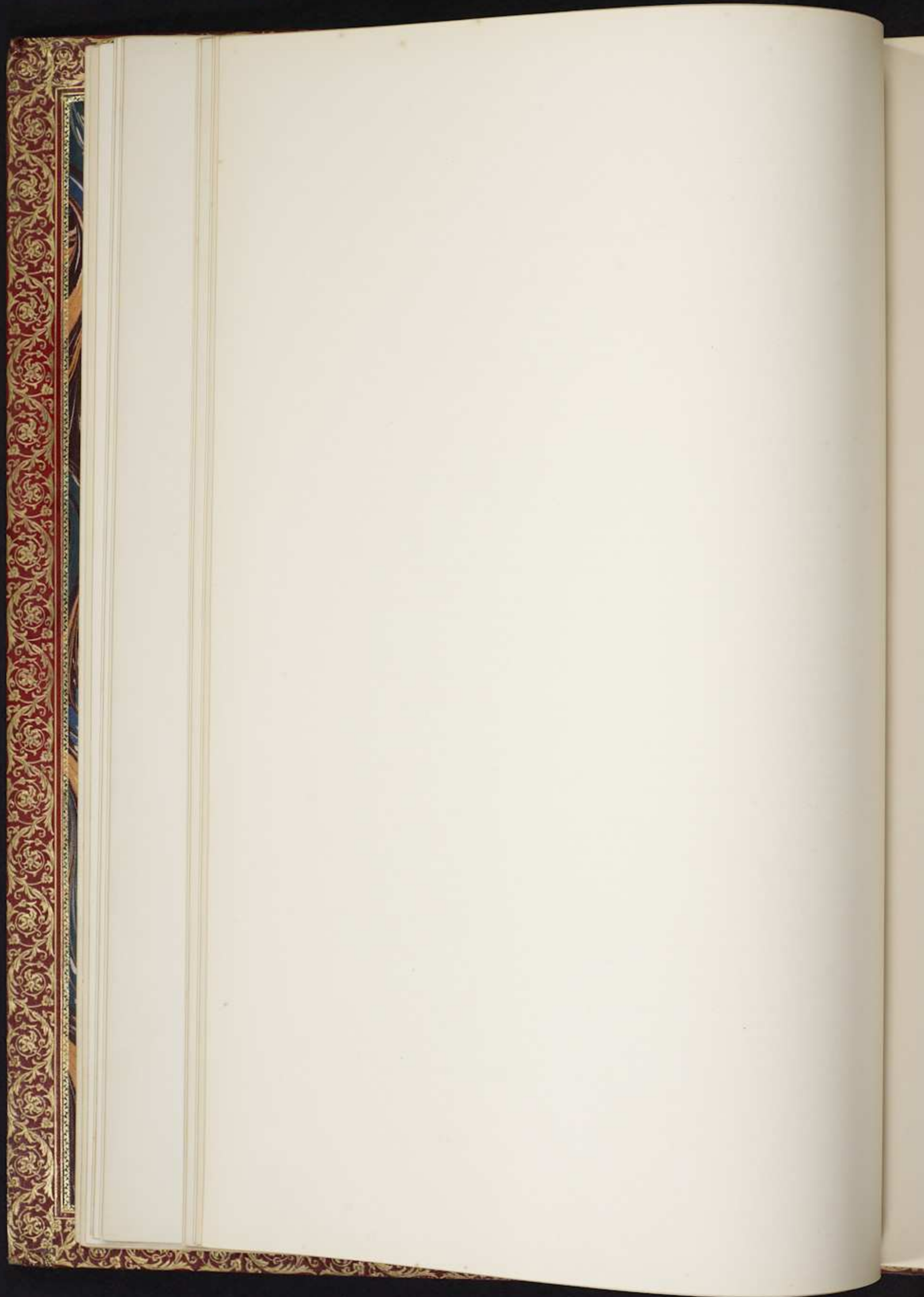
The following is a description of the specimen procured by Dr. Meyer at Andei:—

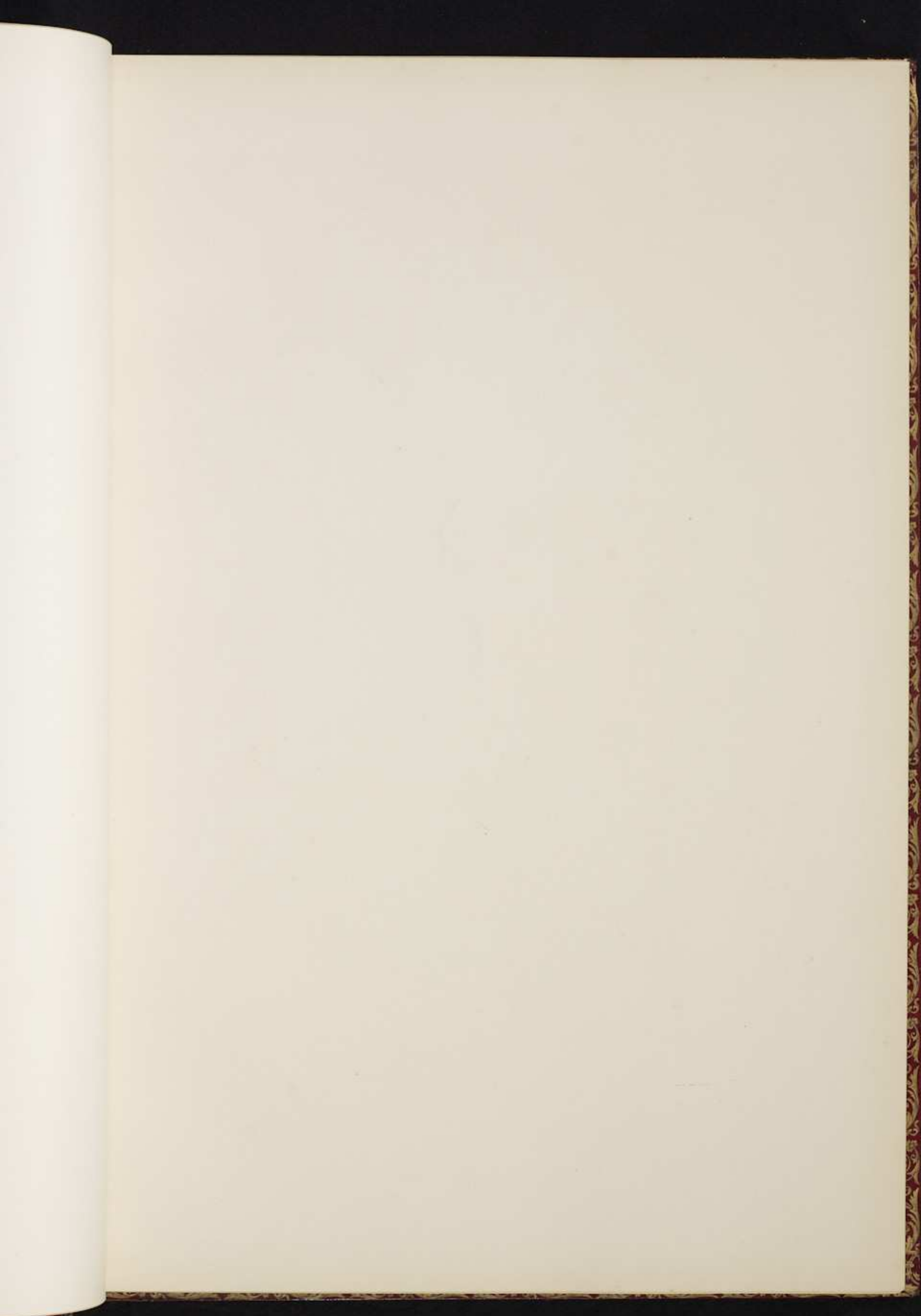
Adult. General colour above brown, with a slight bronzy gloss in certain lights, most of the feathers with a dull whitish edging, more distinct on the feathers of the head and neck, which are edged with hoary whitish, and form rather a full crest; lesser wing-coverts conspicuously margined with white, all the feathers dark brown before the tip, the greater series with one or two dark bars; quills brown, regularly barred with darker brown, the terminal bar broader than the others; tail brown, mottled with whity brown towards the base, and crossed with seven bars of darker brown, all the feathers narrowly edged with whitish at the tip; lores and region of the eye bare, scantily haired; sides of face and sides of neck brown like the crest, with paler and more fulvescent margins; chin whitish; lower throat brown like the sides of the neck, and with the same pale edges; rest of under surface white, ashy on the chest, some of the flank-feathers slightly washed with brown; under wing-coverts white; lower surface of quills greyish white, with broad bars of dark brown, breaking up into mottlings towards the base of the feathers: "bill blackish horn-colour; feet very pale yellow; iris chestnut-brown." Total length 30·5 inches, culmen 2·5, wing 16·5, tail 14·6, tarsus 5·0.

In a male collected by Mr. Broadbent the eyes were recorded as dark brown, and the measurements were as follows:—Total length 31 inches, culmen 2·7, wing 18·6, tail 15·5, tarsus 5·2.

Mr. Forbes's specimen, a figure of which is given in the accompanying Plate, of about two thirds of the natural size, measures as follows:—Total length 30 inches, culmen 2·2, wing 16·0, tail 15·5, tarsus 5·5.

[R. B. S.]







W. Hart del. et lith.

BAZA GURNEYI, Ramsay.

Minster Bros. imp.







BAZA GURNEYI, Ramsay.

Gurney's Cuckoo-Falcon.

Baza reinwardti (nec Müll. & Schl.), Tristram, Ibis, 1882, pp. 133, 141.

Baza gurneyi, Ramsay, Journ. Linn. Soc. xvi. p. 130 (1883).—Salvad. Orn. di Papuasie e delle Molucche, iii. App., p. 506 (1882).—Grant, Proc. Zool. Soc. 1888, p. 188.

For a considerable time the Cuckoo-Falcon of the Solomon Islands was supposed to be specifically the same as *B. reinwardti*, a species of somewhat extended distribution in Papuasie, as it occurs over the greater part of New Guinea and Salwati, as well as in the islands of Mysol, Misori, Ceram, Amboina, and the Ké and Aru groups. The history of the separation of the Solomon-Island bird is not very clear, but appears to be somewhat as follows:—In 1880 Mr. E. P. Ramsay described Mr. Cockerell's collections from the Solomon group, and recorded an example of a *Baza* from "Cape Pitt," which he said agreed exactly with Port-Moresby specimens. Later, in 1882, he described the species from the Solomon Archipelago as *Baza gurneyi*, and he observes:—"When I first notified *B. reinwardti* from the Solomon Islands, I was under the impression I had a veritable Solomon-Island bird before me. It now turns out that such was not the case: hence the mistake." Mr. Ramsay omits to tell us where the supposed "Cape Pitt" specimen *really* came from after all, and as he gives the localities for his *Baza gurneyi* as "Ugi" (Rev. G. Brown) and "Cape Pitt" (Cockerell), it will be seen that he has left the subject in a state of considerable uncertainty. What seems certain is that *B. gurneyi* is confined to the Solomons, one of Lieut. Richards's skins from Russell Island being now in the British Museum (cf. Tristram, *l. c.*), and the same institution has recently received two specimens collected by Mr. C. M. Woodford in Guadalcanar; the two last-named localities can be depended upon, as well as that of the island of Ugi.

When writing his account of *Baza reinwardti* for his work on Papuan ornithology, Count Salvadori remarks on a specimen collected by the Rev. G. Brown, but to which no locality was attached. This specimen is in the Tweeddale collection, and agrees thoroughly with a New-Ireland specimen also obtained by Mr. Brown and now in the British Museum, so that there can be little doubt as to the habitat of New Ireland being correct for the first specimen, as suggested by Count Salvadori. Both these individuals likewise agree with the specimen described and figured in the present work, which is a male from New Britain, collected by the late Dr. Kleinschmidt. The truth is that *B. gurneyi* is only an insular form of Papuan *B. reinwardti*, distinguished by its light under surface, broader terminal black band to the tail, and almost pure white under wing-coverts. The birds from New Britain and New Ireland are, again, a paler edition of *B. gurneyi*, with the same light under surface and white under wing-coverts, but still further distinguished by the light grey bars of the under surface. They are quite as worthy of a name as *B. gurneyi*; and as the Germans have called these islands by the title of the Bismarck Archipelago, we will attach the name of the great Chancellor to the Cuckoo-Falcon of that locality, as we fully believe it to be distinct. In the event of our surmise proving correct, the Plate of the present work must be referred to *Baza bismarckii*.

The figure in the Plate is of the natural size and is drawn from the specimen mentioned above.

[R. B. S.]







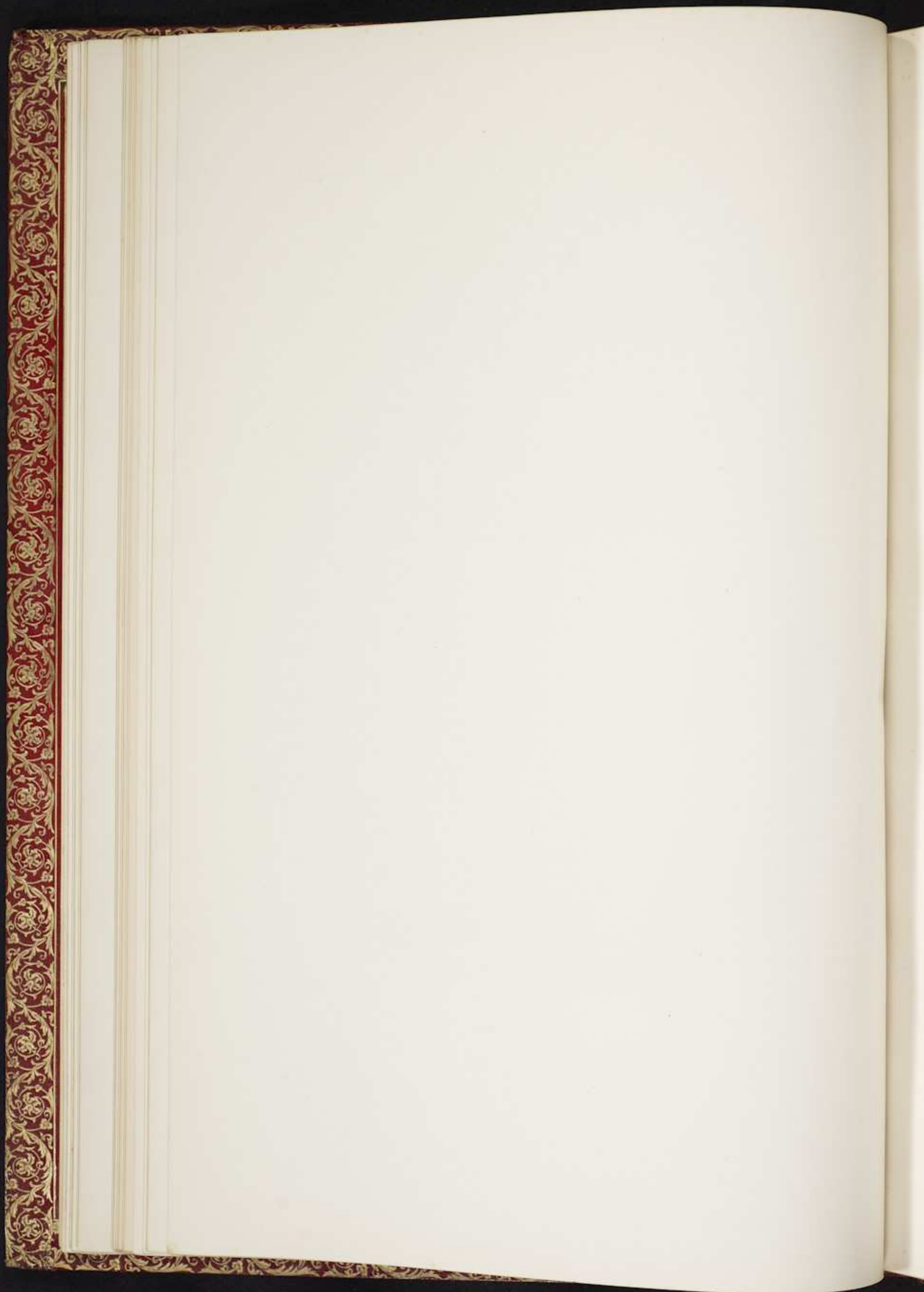
W. Hart del. et lith.

NINOX ODIOSA, *Sclater.*

Monter Bros Imp.







NINOX ODIOSA, *Sclater*.

New-Britain Hawk-Owl.

Ninox taniata (?), Ramsay, Proc. Linn. Soc. N. S. W. i. p. 369 (1876).

Ninox odiosa, Sclater, P. Z. S. 1877, p. 108.—Salvad. Ann. Mus. Civic. Genov. xii. p. 41 (1878).—Ramsay, Proc. Linn. Soc. N. S. W. iii. p. 249 (1879).—Salvad. Orn. Papuasias, etc. i. p. 86 (1880).—Id. Atti R. Accad. Torin. xvi. p. 620 (1881).—Gurney, Ibis, 1882, p. 131.—Salvad. Orn. Papuasias, etc. iii. p. 511 (1882).

THE original specimen of this Owl was sent from New Britain by the Rev. George Brown, and since the arrival of the first example, several more have been procured by Lieut. Richards, Mr. Kleinschmidt, Dr. Finsch, and others; but it appears to have been found only in New Britain, and not in any of the adjacent groups of islands.

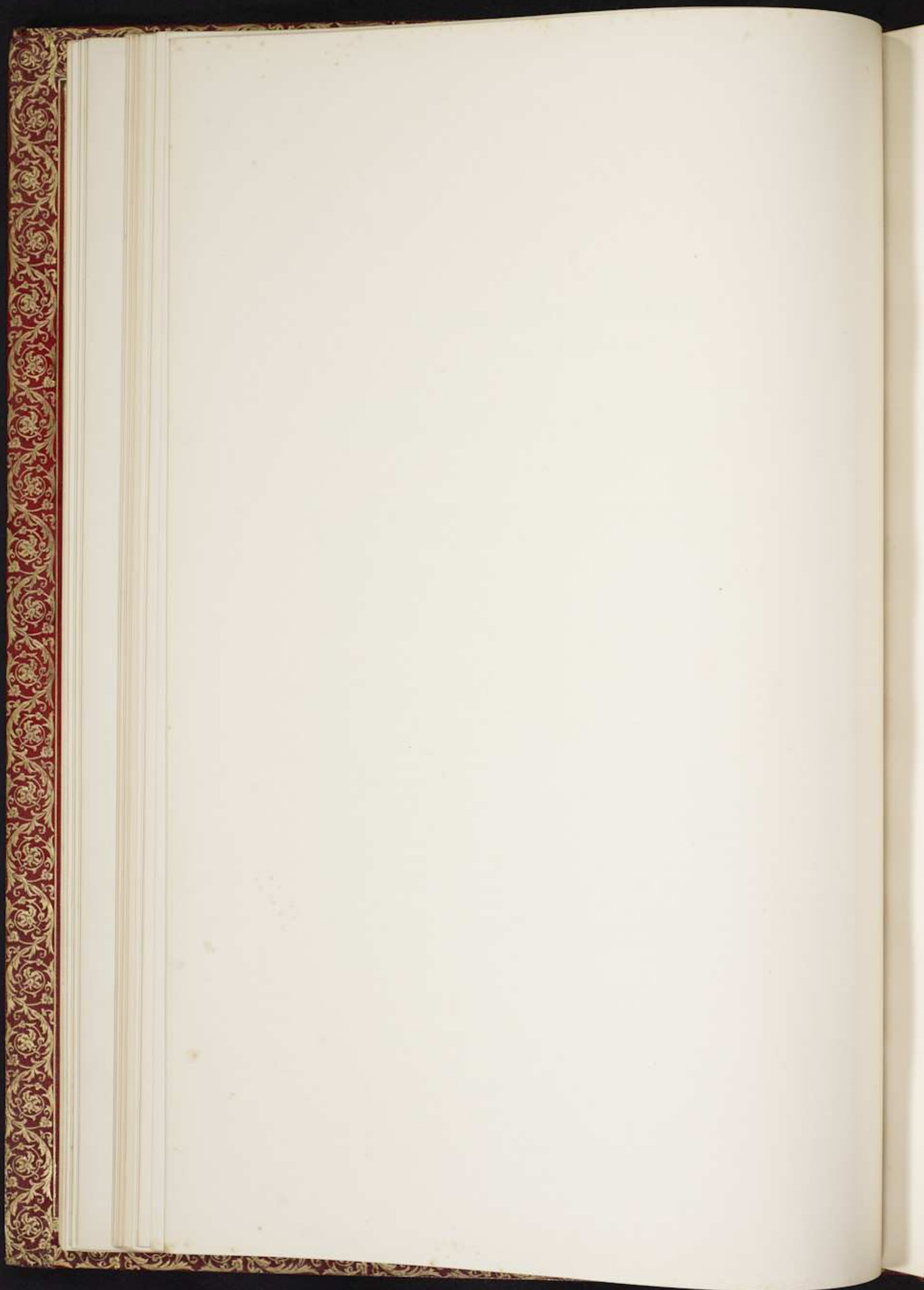
As suggested by Dr. Sclater in his description of the species, there can be no doubt that in many respects the present bird is allied to *N. punctulata* of Celebes; but there are so many points of difference that they cannot be confounded together. In the Celebean bird the back is spotted, as well as the head, and there are none of the white marks on the scapulars and wing-coverts which are conspicuous in *N. odiosa*. Underneath, the finely striated breast and abdomen distinguish the latter species from the thickly mottled and barred under surface of *N. punctulata*.

The following is the description of the adult male:—

General colour above pale chocolate-brown, nearly uniform; the scapulars with concealed bars of white and longitudinal ovate markings of the same on the outer web; the rump and upper tail-coverts with a few minute spots or bars of pale ruddy brown; wing-coverts nearly uniform, with a few spots and small bars of white, larger and more conspicuous on the greater series, which have the same ovate markings as the scapulars; bastard wing pale chocolate-brown, the primary-coverts rather more dusky brown, both series being perfectly uniform; quills dusky brown, externally pale chocolate, with a few spots of white on the edge of the outer and inner webs; head and nape dull umber-brown, profusely spotted with rather narrow bars of brownish white; nasal plumes brown with blackish centres; above the eye a broad streak of white; feathers below the eye also whitish; the ear-coverts chocolate-brown, barred with blackish and having whitish shaft-lines; throat white, the feathers on the sides of the throat having blackish tips and forming a disk; remainder of under surface white, the feathers centred with narrow brown streaks, somewhat widening towards the ends; sides of breast chocolate-brown, mottled with spots and bars of white; thighs dull white, slightly streaked on the upper parts with chocolate; under wing-coverts white with chocolate-brown tips; axillaries and under wing-coverts white, mottled with chocolate-brown on the edge of the wing, the lower series dusky brown barred internally with yellowish white, thus resembling the lower surface of the quills; "bill ash-colour; feet drab; iris yellow" (*Richards*). Total length 10 inches, culmen 0·8, wing 6·4, tail 4·2, tarsus 1·3.

The specimen is one which Mr. Ramsay lent to us; it is a male procured by Captain Richards in New Britain on the 30th of July, 1879, and is represented in the Plate of the full size. The description is taken from the same specimen.

[R. B. S.]



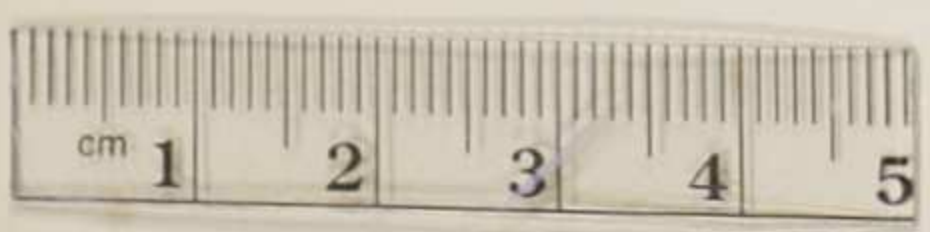




W. Hart del. et lith.

NINOX FORBESI, Sclater.

Walter, Imp.







NINOX FORBESI, *Sclater*.

Forbes's Hawk-Owl.

Ninox forbesi, Sclater, Proc. Zool. Soc. 1883, p. 52, pl. xi.

THE present species, which has been named in honour of Mr. H. O. Forbes, who discovered it in the Tenimber Islands, belongs to a little group of Hawk-Owls which have the head uniform. *N. squamipila* of Ceram has many points of resemblance to the subject of our present article, but is altogether of a darker rufous colour, has the toes scantily feathered, the upper tail-coverts barred with white, and not more than seven broad blackish bars on the tail-feathers. Below, both species are similar, but *N. forbesi* does not have the under wing-coverts barred as in *N. squamipila*.

The nearest ally of *N. forbesi* is undoubtedly *Ninox hantu* of Wallace from Bourou; but this bird, though agreeing in the paler and more cinnamon-rufous colours of the plumage, is distinguished by its scantily feathered toes, which have only a few hair-like bristles. Both species have the under wing-coverts uniform like the breast; but *N. hantu* is a much darker bird, with broader bars on the tail-feathers and no white on the wing-coverts; the under surface also is more uniform cinnamon-rufous, and does not show the white bars which distinguish *N. forbesi*.

Mr. Forbes informs us that he only met with this species on one occasion in Timor Laut, and this was during an excursion to the mainland on the 9th of August, 1882. While conducting a palaver with the natives to obtain permission to shoot near the village of Loetoe, his native hunters managed to procure a pair of this Owl while they were awaiting the result of Mr. Forbes's negotiations with the villagers. The birds were sitting in a thick bushy tree at no great height from the ground.

The following is a description of the typical specimen figured by Dr. Sclater:—

Adult male (type of species). General colour above reddish brown, rather more rufous on the upper tail-coverts; scapulars barred with white or yellowish buff, with narrow cross bars of dusky brown; wing-coverts like the back, the greater series barred with dusky brown and fulvous or white; bastard wing like the other coverts; primary-coverts nearly uniform dark brown, with slightly indicated reddish-brown cross bars; quills reddish brown barred with blackish, the interspaces being paler and either fulvous or whitish, the inner secondaries less barred; tail-feathers light rufous-brown, with eleven bars of dusky blackish on the centre ones, sixteen on the outer feathers, which show whitish interspaces for more than half of the length of the outer web; head and hind neck more dingy rufous-brown than the back, with the colour of which it is in slight contrast; base of forehead and lores white, extending above the fore part of the eye and having black shaft-lines; feathers below the eye and ear-coverts dingy reddish brown, like the head; base of cheeks and base of chin white; throat and breast tawny rufous, the latter slightly mottled with paler cross bars of fulvous or narrower ones of dusky; abdomen and flanks barred broadly with white and more narrowly with dusky brown, the latter with a conterminous line of tawny buff; thighs and under tail-coverts tawny rufous, the latter barred with dusky and with broader bands of yellowish white; under wing-coverts and axillaries tawny rufous, the edge of the wing white, the greater series of coverts and the quills below paler and more yellowish buff, more reddish brown towards the end of the quills, which are barred across with blackish brown; "bill pale corneous; feet pale yellow, covered with bristly hairs, soles of feet nearly orange; iris rich golden" (*H. O. Forbes*). Total length 11·5 inches, culmen 1·05, wing 7·4, tail 4·5, tarsus 1·1.

The female bird, which was brought over by Mr. Forbes on his return from Timor Laut (too late for us to figure on the Plate, which had unfortunately been printed off before Mr. Forbes's arrival), only differs from the male in being paler and in having the breast barred with pale cinnamon like the abdomen, but not so broadly.

The Plate is drawn from the type specimen, which Dr. Sclater was kind enough to lend us, and portrays the adult male, of about the full size, in two positions.

[R. B. S.]







W. Hart del. et lith.

NINOX DIMORPHA.

Modern Press imp.







NINOX DIMORPHA.

Salvadori's Hawk-Owl.

Athene dimorpha, Salvad. Ann. Mus. Civic. Genov. vi. p. 308 (1874).

Ninox dimorpha, Sharpe, Ibis, 1875, p. 258.—Id. Cat. Birds in Brit. Mus. ii. p. 175 (1875).—Salvad. Ann. Mus. Civic. Genov. x. p. 118 (1877), xii. p. 40 (1878).—Ramsay, Proc. Linn. Soc. N. S. Wales, iii. p. 248 (1879).—Salvad. Ibis, 1879, p. 319.—Id. Orn. Papuasie e delle Molucche, i. p. 83 (1880).

? *Athene*, sp., Ramsay, Proc. Linn. Soc. N. S. Wales, i. p. 388 (1876), ii. p. 19 (1877).

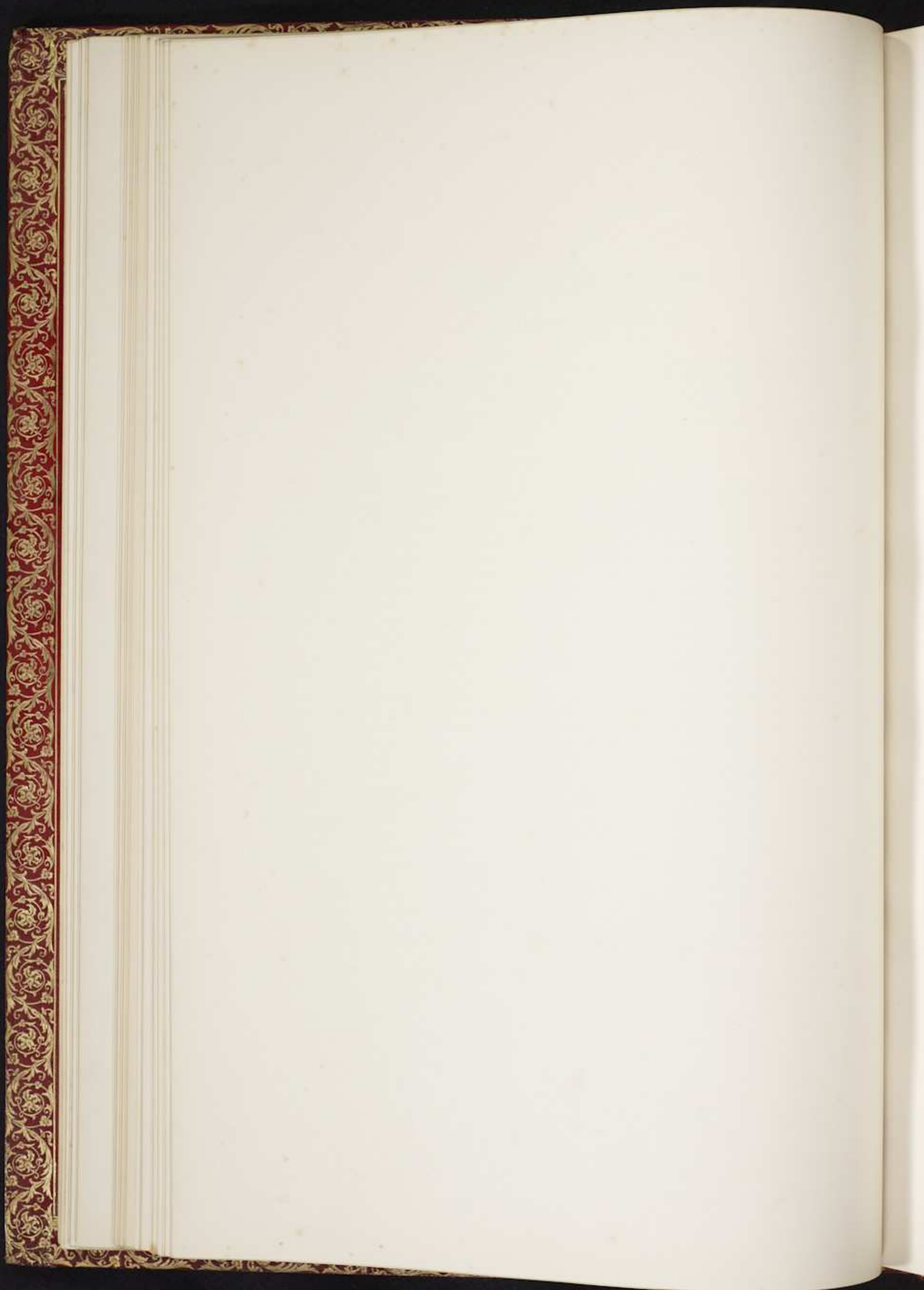
WHEN we wrote the second volume of the 'Catalogue of Birds' this species was unknown to us, and we were indebted to the kindness of Count Salvadori for a sketch of the type specimen, from which we gathered that it might belong to the genus *Glaucidium*, or that it might even be the type of a new genus. The genus *Glaucidium*, however, is unknown in the Australian region, and the discovery of a species in Papuasie would have been somewhat surprising; but an examination of a specimen of *Ninox dimorpha* proves that all these speculations were wrong, and that the bird is a true *Ninox*, as might have been expected from the locality.

Its position in the last-named genus is very easily defined, for it can be recognized at once by its streaked breast, spotted hind neck, and banded wing-coverts, the latter resembling the back. It was originally discovered near Sorong, in North-western New Guinea, by Signor D'Albertis, and Mr. Ramsay has received an adult and a nestling bird from the vicinity of Port Moresby; of the identity of the latter specimen there may be some doubt, but that the species occurs also in South-eastern New Guinea is unquestionable, as Mr. H. O. Forbes has sent a specimen from the Sogeri district of the Astrolabe Mountains, of which we give a detailed description:—

Adult. General colour above dark brown, regularly banded across with light rufous, whiter on the scapulars, which have also large white patches externally; wing-coverts like the back, the rufous bars obscure on the lesser coverts, but especially distinct on the greater series, which resemble the quills; bastard-wing and primary-coverts blackish, with a few obscure rufescent bands; quills blackish, banded with rufous externally, the bands more ashy on the inner webs and at the ends of the feathers; upper tail-coverts like the back; tail-feathers blackish, barred with ashy rufous, the bands twelve in number on the centre feathers, as well as the outer ones, on which, however, they are not strictly conterminous on both webs; crown of head blackish brown, streaked with tawny rufous, with which colour the feathers are edged, the nape and hind neck being pale tawny rufous with large blackish-brown mesial spots; lores white, with some hair-like black plumes; eyebrows and base of forehead white, streaked with black; ear-coverts ashy grey, streaked with black; cheeks, feathers below the eye, and chin white with narrow black shaft-lines, the hinder cheeks tinged with tawny buff and more broadly streaked with blackish; sides of neck like the hind neck; throat, chest, and under surface of body pale tawny buff, streaked with black; the lower breast and abdomen rather whiter and more boldly streaked, sides of body and flanks buffy white; thighs and under tail-coverts white, the latter streaked with black; under wing-coverts and axillaries pale tawny buff, streaked with black; quills below blackish brown, profusely banded with ashy brown or fulvous: "bill lead-colour; toes yellow; iris yellow" (*D'Albertis*). Total length 11·5 inches, culmen 1·0, wing 8·1, tail 5·5, tarsus 1·3.

The figure in the Plate represents an adult bird, and is drawn from the specimen obtained by Mr. Forbes and described above.

[R. B. S.]

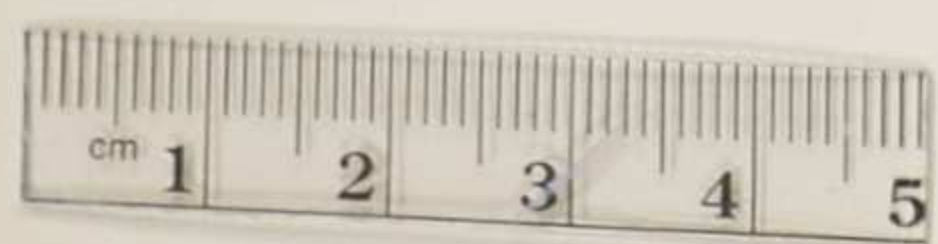






J. Gould & W. Hart del et lith.

EPIMACHUS ELLIOTI, Ward.



Walter, Imp.





EPIMACHUS ELLIOTI, *Ward.*

Elliot's Promerops.

Epimachus ellioti, Ward, Proc. Zool. Soc. 1873, p. 743.—Elliot, Monogr. Parad. pl. 20.—Beccari, Annali Mus. Civic. Genov. vii. p. 710.—Salvad. op. cit. ix. p. 190.—Sharpe, Cat. Birds Brit. Mus. iii. p. 163.

I AM fortunate in possessing the unique type of this splendid bird, which has been placed in the genus *Epimachus* by Mr. Edwin Ward, the original describer, and allowed to remain there by Mr. Elliot and Mr. Bowdler Sharpe, both of whom have recently monographed the Birds of Paradise. I retain it in the genus *Epimachus*, but with some hesitation; for it differs considerably in its structure from *E. speciosus*, the only other representative of the genus. I would point out the difference existing in the sharply ending tail-feathers of the present bird, and still more the very different shape of the beautiful flank-plumes. In *E. speciosus* they form gracefully falling plumes illuminated by a subterminal metallic band; but in *E. ellioti* there are three series of plumes on the flanks, alike in colour, but differing in size. Whether these differences are generic will remain for subsequent writers to decide, when perfect specimens of both sexes of *Epimachus ellioti* reach Europe. The style of coloration of the present bird is also very distinct, *E. speciosus* showing none of the beautiful velvety texture which strikes the observer at the first glance on beholding *E. ellioti*.

At present we are in ignorance as to the habitat of the latter bird. A single skin came into the possession of Mr. Ward, by whom it was described; and it afterwards passed into my hands, after being figured in Mr. Elliot's Monograph of the Paradise-birds. Dr. Beccari, though he tried hard to discover the species during his expedition to the Papuan Islands, did not succeed in discovering its home; but he believes that it will ultimately be found to inhabit the mountains of Waigiou. One may be almost certain that the same locality which possesses this brilliant species will also produce other interesting birds new to science.

The following is Mr. Elliot's description of the typical specimen :—

“Top of head rich amethyst; occiput and sides of neck also amethyst, changing in certain lights to a rich light greenish gloss; back, wings, upper tail-coverts, and tail brilliant violet-purple; the wings and the tail also marbled with a dark amethyst hue, like watered silk, changing according to the light; throat and upper portion of breast deep maroon colour, with purple reflections; a narrow reddish purple band crosses the lower part of the breast; sides of the breast, flanks, and rest of underparts dark green, the flank-feathers much elongated, and stretching beyond the wings; beneath the shoulder of the wing spring two rows of plumes, which are greenish at the base, graduating into deep purple, and terminating in a brilliant metallic blue, very much narrower on the upper row than the lower one. The plumage of the entire bird is very velvety in texture, and, with the exception of the metallic parts, appears black in ordinary lights; bill black, rich orange-yellow at the gape.”

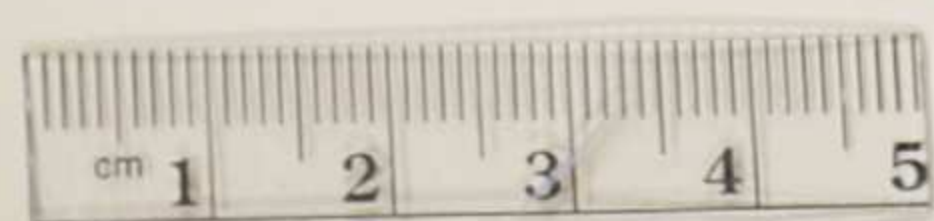
The principal figure in the Plate represents the species of nearly the size of life, and is drawn from the type specimen in my collection.







EPIMACHUS SPECIOSUS.







EPIMACHUS SPECIOSUS.

Great Promerops.

- Le Grand Promérops de la Nouvelle-Guinée*, Sonn. Voy. N. Guin. p. 163, pl. 101.
Le Promerops brun de la Nouvelle-Guinée, id. tom. cit. p. 164, pl. 100.
Grand Promerops à paremens frisés, Buff. H. N. Ois. vi. p. 472.
Promerops de la Nouvelle-Guinée, Buff. Pl. Enl. vi. pls. 638, 639.
Upupa speciosa, Bodd. Tabl. Pl. Enl. p. 39.
—— *striata*, Bodd. tom. cit. p. 39.
New-Guinea Brown Promerops, Lath. Gen. Syn. i. pt. 2, p. 694.
Grand Promerops, Lath. tom. cit. p. 695.
Upupa fusca, Gm. S. N. i. p. 468.
—— *magna*, Gm. tom. cit. p. 468.
Le Promérops rayé, Audeb. et Vieill. Ois. Dor. i. pl. 7.
Le Promerops à large parure, Levaill. H. N. Promér. et Guêp. pls. 13, 15.
Promerops striata, Shaw, Gen. Zool. viii. p. 144.
—— *superbus*, Shaw, tom. cit. p. 145.
Falcinellus superbus, Vieill. N. Dict. d'Hist. Nat. xxviii. p. 166.
—— *magnificus*, Vieill. tom. cit. p. 167.
Epimachus magnus, Cuvier, Règne Anim. i. p. 407.
—— *superbus*, Steph. Gen. Zool. xiv. p. 77.—Wagler, Syst. Av. *Epimachus*, sp. 1.—Less. Traité, p. 321, Atlas, pl. 73. fig. 1.—Rosenb. J. f. O. 1864, p. 123.
Cinnamolegus papuensis, Less. Ois. Parad. Syn. p. 32.—Id. H. N. pls. 39, 40.
Epimachus speciosus, Gray, Gen. B. i. p. 94.—Schl. Mus. P.-B. *Coraces*, p. 94.—Elliot, Monogr. Parad. pl. xix.
—— *Salvad. Ann. Mus. Civic. Genov. vii. p. 785, ix. p. 190.*—Sharpe, Cat. B. iii. p. 162 (1877).
—— *magnus*, Bp. Consp. i. p. 411.—Wall. Ibis, 1861, p. 287.—Id. P. Z. S. 1862, p. 160.—Id. Malay Arch. ii. p. 255.—Schl. J. f. O. 1861, p. 386.—Id. N. T. D. i. p. 332.
—— *maximus*, Gray, P. Z. S. 1861, p. 433.—Id. Hand-l. B. i. p. 105.—Beccari, Ann. Mus. Civic. Genov. vii. p. 710.—Id. Ibis, 1876, p. 249.

In spite of the long list of synonyms with which this species has been burdened by naturalists, the actual information respecting its habits is almost wanting; neither can I pretend to give a long account of the bird, simply for the reason that there is nothing to tell. I cannot weary my readers with a dissertation on the various incidents through which this fine Bird of Paradise has reached the very complicated synonymy which has marked its scientific history. Suffice it to say that, owing to our meagre knowledge of the bird in a natural state, the males and the females have generally been taken for separate species; and although imperfect skins have been sent to Europe in some numbers for the last hundred years, we have had to wait until quite recently for the gladdening of our eyes by the receipt of the perfect bird.

It is at once the largest and the most remarkable, if not the most beautiful, of the thin-billed Birds of Paradise, which comprise the Rifle-birds, the Twelve-wired *Seleucides*, and the lately discovered Sickle-billed *Drepanornis*. Only two species of *Epimachus* are known—the subject of the present article, and *E. ellioti*; the latter is still represented by the single type specimen in my collection, the habitat of which, though supposed to be the island of Waigiou, is not yet known for certain.

Mr. Wallace did not meet with the present species during his explorations in Papuasias. He says, “This splendid bird inhabits the mountains of New Guinea, in the same district with the Superb (*Lophorina atra*) and the Six-shafted (*Parotia seapennis*) Paradise-birds, and, I was informed, is sometimes found in the ranges near the coast. I was several times assured by different natives that this bird makes its nest in a hole underground, or under rocks, always choosing a place with two apertures, so that it may enter at one and go out at the other. This is very unlike what we should suppose to be the habits of the bird; but it is not easy to conceive how the story originated if it is not true; and all travellers know that native accounts of the habits of animals, however strange they may seem, almost invariably turn out to be correct.”

The following note appears in Dr. Beccari's Ornithological Letter:—

“The *Epimachi* have been separated from the other birds of Paradise; but I think this is paradoxical. The form and the length of the beak of *Epimachus maximus* is most variable; the young males and females

are found with the beak only half the length of that of the adult males and females. This fact made me think at first that I had found the female of *E. ellioti*; but I was mistaken. An *Epimachus* seems to be found at Waigiou, and will probably be *E. ellioti*; but I was not able to return there as I had intended. *Epimachus maximus* and *Astrapia gularis* are only found on the highest and most difficult peaks of Mount Arfak, nearly always above 6000 feet elevation. Specimens in dark plumage are common enough; but those which have attained perfect plumage are rare, perhaps because they take some years to acquire it. Both of them live on the fruits of certain Pandanaceæ, and especially on those of the *Freycinetia*, which are epiphytous on the trunks of trees. The irides of the large *Epimachus* are dark brick-red."

The descriptions are taken from Mr. Bowdler Sharpe's 'Catalogue of Birds.'

Adult male. Above velvety black, with metallic feathers of coppery green on the head, middle of the back, and rump; lores and feathers on the side of the head metallic like the crown; entire under surface of body velvety black, with a purplish brown gloss on the sides of the body; on each side of the breast springs a tuft of sickle-shaped plumes in the shape of a fan, velvety black, tipped with a broad band of steel-blue, before which is a narrow subterminal band of purplish blue; flank-feathers long and drooping, the outer ones broadly tipped with metallic bronzy-green, before which is a double subterminal band of velvety black and purplish blue; wings velvety black, with a gloss of steel-blue; tail-feathers black, all but the three outermost feathers washed with steel-blue, the two centre ones entirely of this colour; bill and legs black.

Total length 26 inches, culmen 2·85, wing 7·2, tail 16·7.

Female. Upper part of head brownish red; rest of upper parts olive-brown, becoming slightly rufous on the rump and upper tail-coverts; secondaries reddish brown, edged with rufous; primaries dark brown, edge of outer web rufous; cheeks, throat, and upper part of breast brownish black; underparts white, narrowly barred with black; tail light brown, with a rufous tinge; bill long and slender, much curved, and, with the feet and tarsi, jet-black.

The figures in the Plate, which represent a male of about two thirds the natural size, and a male and a female very much reduced, are taken from a superb pair of skins in my own collection.

This fact made me
seems to be found
and intended. *Epi-*
es of Mount Arfak,
enough; but those
to acquire it. Both
etiae, which are epi-

middle of the back,
are under surface of
of the breast springs
band of steel-blue,
drooping, the outer
band of velvety black
but the three outer-
and legs black.

ing slightly rufous on
primaries dark brown,
k; underparts white,
er, much curved, and,

ize, and a male and a



W. Hart del. et lith.

DREPANORNIS CERVINICAUDA.

Mutern Bros. imp.







DREPANORNIS CERVINICAUDA.

Bennett's Bird of Paradise.

Drepanornis albertisii (nec Sclater), Sharpe, Journ. Linn. Soc., Zool. xvi. p. 445 (1882).—Salvad. Orn. Papuasie, etc. iii. App. p. 552 (1882).

Drepanornis d'albertisii, Ramsay, Proc. Linn. Soc. N. S. W. iv. p. 469 (1880).—Id. op. cit. viii. p. 28 (1883).

For some time it was suspected both by Mr. Ramsay and by ourselves that the *Drepanornis* from South-eastern New Guinea was a different species from that of the Arfak Mountains, as the tail was always so much paler than in the north-western bird. Unfortunately only female specimens were at first obtained by the collectors in the Astrolabe Mountains, and it was only quite recently that Mr. Goldie succeeded in procuring the males.

Dr. Bennett of Sydney, who has always proved himself a true friend to science, became the possessor of specimens from the Astrolabe range in South-eastern New Guinea, and the British Museum is indebted to his liberality for the beautiful skins which now adorn that collection. They were previously submitted to Dr. Sclater, who exhibited them at a meeting of the Zoological Society on the 4th of December, 1883, and gave to them the name of *cervinicauda*.

Mr. Ramsay has likewise procured a series for the Sydney Museum, and has had the additional good fortune to obtain the nest and egg of this new Bird of Paradise, which he describes as follows:—

“The nest is a thin, rather flat structure, built between a horizontal bough in a fork of a thin branch; it has a slight depression about one inch deep, a network of wire rootlets are stretched across the fork, and the nest proper built on them; it is composed of wiry grasses of a light reddish-brown colour, the platform being of black wiry roots.

“The egg is in length 1·37, by 1 inch in breadth; it is of a light dull cream-colour, with a reddish tinge, spotted all over with oblong dashes of reddish brown and light purplish grey, closer on the thick end.”

It is unnecessary to give a complete description of this species. It may be said to be exactly like *Drepanornis albertisi* from North-western New Guinea, but distinguished by its much paler rump and tail.

The type specimens are figured in the Plate, a representation of the male and female being given of about the natural size.

[R. B. S.]







Macaulay & Whistler, del. & lith.

DREPANORNIS ALBERTISI, *Schlater*.

Walter imp.







DREPANORNIS ALBERTISI, *Sclater*.

D'Albertis's Bird of Paradise.

Drepanornis albertisi, Sclater, P. Z. S. 1873, p. 558, pl. 47.—D'Albertis, *t. c.* p. 558.—Elliot, Monogr. Paradiseidæ, pl. 21.

Epimachus wilhelminæ, Meyer, J. f. O. 1873, p. 404.—Id. Ibis, 1874, p. 303.

THIS remarkable new form of Paradise-bird was one of the most interesting discoveries made by Signor d'Albertis during his recent explorations in the island of New Guinea. He found it at Mount Arfak; and almost simultaneously, Dr. Meyer discovered it in the same locality. We are also informed by Dr. Sclater that previous to this, Baron von Rosenberg had seen a female in the collection of Mr. Van Duivenbode, at Ternate, as long ago as April 1871 (*cf.* Ibis, 1874, p. 187).

The following are the notes given by Signor d'Albertis with regard to its habits:—

“This will probably prove to be a new bird, both generically and specifically. It is a very rare bird, and many of the natives did not know it; but others called it ‘Quarna.’ The peculiarity of this species consists in the formation of the bill, head, and softness of the plumage. At first it does not appear to have the beauty peculiar to other birds of this class; but when observed more closely, in a strong light, the plumage is seen to be rich and brilliant: the feathers rising from the base of the beak are of a metallic green, and reddish copper-colour; the feathers of the breast, when smooth, are of a violet grey, and when raised form a semicircle round the body, reflecting a rich golden colour; other violet-grey feathers arise from the flanks, which are edged by a rich metallic violet tint; and when the plumage is entirely expanded the bird appears as if it had formed two semicircles round itself, and is very handsome.

“The tail- and wing-feathers are yellowish; underneath they are of a darker shade. The head is barely covered with small round feathers, which are rather deficient at the back of the ear. The shoulders are tobacco-colour; and under the throat black, blending into olive. The breast is violet-grey, banded by a line of olive, the rest white. The beak is black, eyes chestnut, and the feet of a dark leaden colour.

“This species is met with in the vicinity of Mount Arfak. Its food is not known, nothing having been found in the stomachs of those prepared except clean water.”

The following complete descriptions are taken from Mr. Elliot's ‘Monograph of the Paradiseidæ:’—

“*Male*.—Head covered with short, rather stiff, light-brown feathers, tipped with deep purple. Two spots of metallic-blue feathers between the eyes and bill, projecting above the eyes like horns; a spot of bare skin behind the eyes apparently red. Neck and back rufous brown. Primaries blackish brown, edged with light-rufous feathers on the outer webs. Secondaries light rufous brown on outer web, black on the inner, edged with very light reddish brown. The three innermost secondaries light reddish brown on both webs. Upper tail-coverts and tail bright reddish brown. Chin and throat metallic deep purple, black in certain lights. Breast covered with long feathers, grey, with rich purple reflections, and edged on the lower part with dull green, crossing the body in a narrow bar. From either side, near the shoulder of the wing, spring two tufts of feathers that extend beyond the breast-shield, of an intense metallic fiery red, tipped with purple. These when not elevated are altogether hidden by the outer feathers, which are uniform purple like the breast. From the flanks, just above the termination of the breast-shields, on either side project two long tufts of plumes, which extend to the end of the under tail-coverts, of the same colour as the breast, brownish grey, each feather tipped with very brilliant deep purple. The abdomen and under tail-coverts pure white, the former streaked with purplish grey on the upper portion. Bill very long, slender, and much curved, black. Feet and tarsi dull lead-colour.

“*Female*.—Head chestnut brown. Back and wings rufous brown. Primaries and secondaries blackish brown on inner web, outer web brown. Upper tail-coverts and tail light red. Chin and throat blackish brown, each feather with a central streak of light brown. Breast light brown, irregularly barred with dark brown. Flanks and lower parts of body yellowish brown, indistinctly barred with dark brown, except in the centre of the abdomen, which is light reddish white. Thighs reddish, barred with brown. Under tail-coverts pale reddish. Iris chestnut. Bill long, curved, and slender like that of the male, black. Feet and tarsi lead-colour.”

For the opportunity of figuring the typical specimens of this bird, I am indebted to the courtesy of Signor d'Albertis. The birds are represented about the natural size.







W. Hart del et lith.

DREPANORNIS BRUIJNII, *Cust.*

Mintern Bros. imp.





est.

John G. ...



DREPANORNIS BRUIJNII, Oustalet.

Bruijn's Bird of Paradise.

Drepanornis bruijnii, Oustalet, Bull. Assoc. Scient. de France, 1880, p. 172.—Salvad. Orn. Papuasie e delle Molucche, ii. p. 553 (1881).—Guillemard, Proc. Zool. Soc. 1885, p. 649.

It is much to be regretted that we have been unable to procure a fully adult bird for our illustration of the present species, for to all appearances the specimen which has been lent to us by Dr. Guillemard for the purposes of this work is immature. At the same time it is somewhat singular that all the specimens so far procured by Mr. Bruijn's hunters in North-western New Guinea have been similar to the bird here figured.

Dr. Guillemard, who obtained two specimens during the cruise of the 'Marchesa' with Mr. Kettlewell, gives the following account of his getting them:—"While in Ternate Mr. Bruijn showed me the skins of two birds of the genus *Drepanornis* obtained by his hunters on the north coast of New Guinea a little to the eastward of the mouths of the Amberbaki River. One was marked 'female,' the other 'male'; but both were destitute of any brilliant colouring whatsoever. . . . Mr. Bruijn informed me that his hunters had obtained seven or eight examples of this species, but that, though of different sexes, they were all of the same sober colouring. Judging from the habits of others of the *Paradiseidae*, notably in the case of *P. rubra*, where the immature males and females appear to live in districts quite apart from the adult male at certain seasons of the year, and from the fact that in this group of birds the males are all of brilliant colouring, we can safely predict that the adult male of this species has yet to be discovered, and that it will probably show a development of subalar plumes closely resembling that of *D. albertsi*."

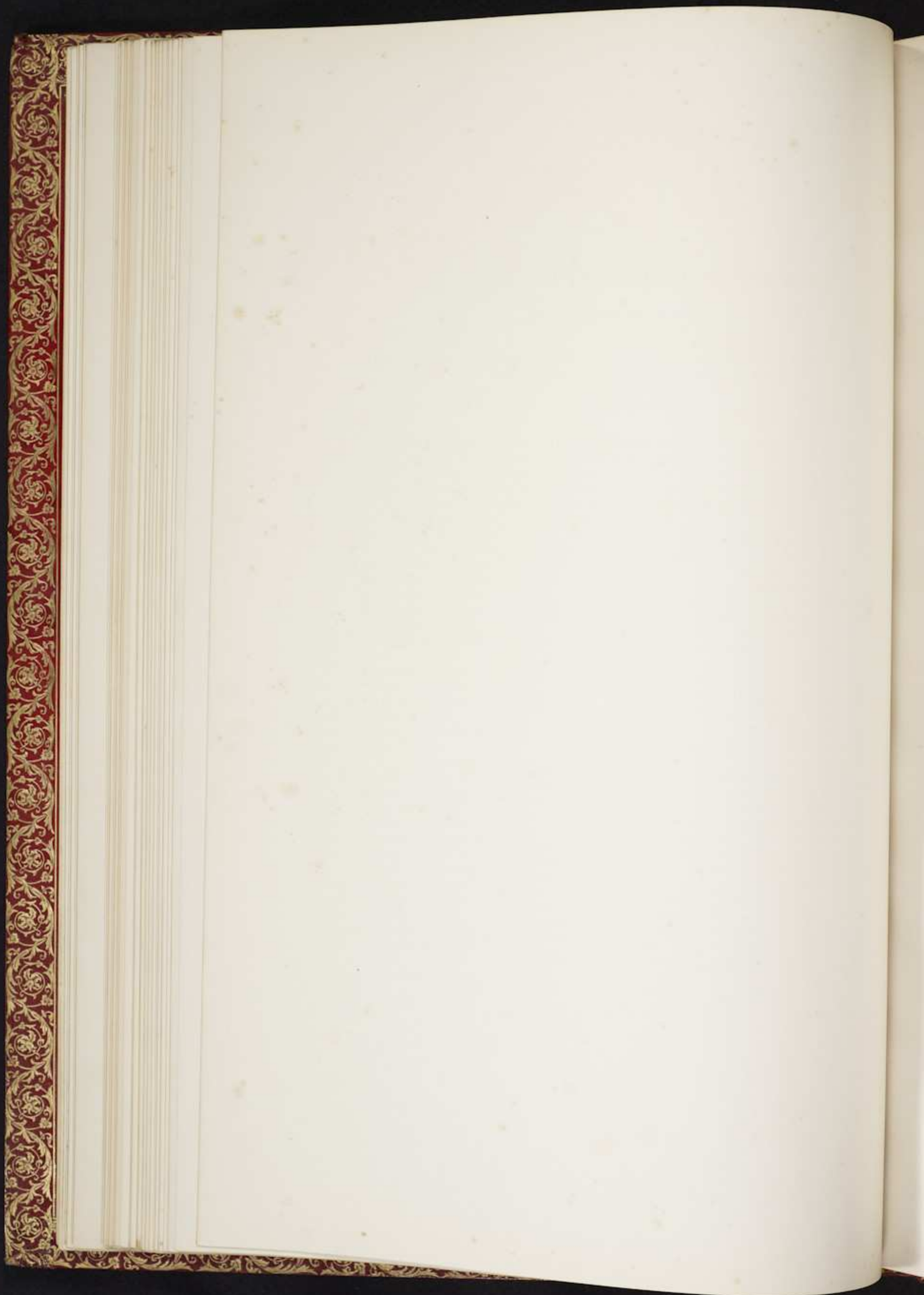
It is no doubt true that when the fully-plumaged male becomes known considerable resemblance to the same sex of *D. albertsi* will be discovered, and a more accurate comparison of the two species will then be possible; but there can be no doubt that *D. bruijnii* is a well-marked species, even when founded on the immature bird. The size of the bill alone is sufficient to distinguish it, and the distribution of the bare patches on the face is also different; but the chief characters will no doubt be discovered when skins of the adult male are sent to Europe.

The following is a description of the specimen kindly lent to us by Dr. Guillemard:—

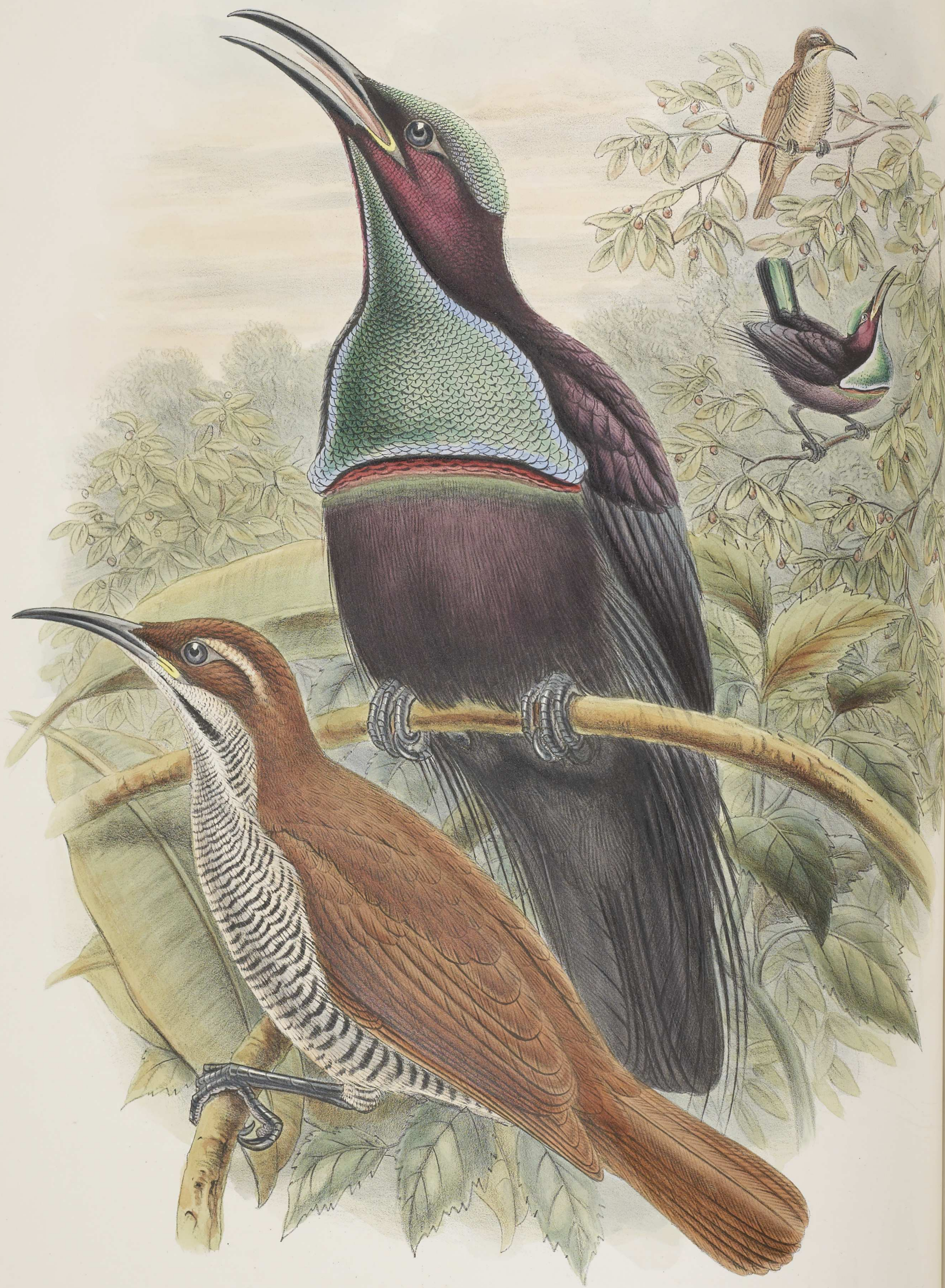
General colour above brown, with a slight tinge of olive; wing-coverts like the back, the outer median and the greater coverts washed externally with dull fawn-colour; bastard-wing and primary-coverts dusky brown, the latter shaded with fawn near the base; quills dusky brown, externally pale olive-brown, the secondaries washed with fawn-colour on the outer web; upper tail-coverts dull fawn-colour, washed with brown in the centre; tail-feathers clear fawn-colour; crown of head blackish, the feathers being of a velvety texture; the hind neck also shaded with blackish; sides of face bare; lores and a line of feathers from the gape along the side of the face blackish, the cheeks whitish brown, black anteriorly, followed by a broad malar line of black; throat and under surface of body pale fawn-buff, regularly barred with blackish, the throat and fore neck more dusky and the cross bars smaller and more indistinct; the abdomen clearer buff and the bars wider and more distinct; sides of body and flanks like the abdomen; thighs and under tail-coverts also fawn-buff, barred with blackish; under wing-coverts and axillaries paler fawn-buff than the breast and indistinctly barred; quills below dusky, fawn-buff along the inner edge. Total length 12 inches, culmen 2·7, wing 5·6, tail 4·3, tarsus 1·25.

The figure in the Plate represents the bird of the size of life and is taken from Dr. Guillemard's specimen mentioned above.

[R. B. S.]



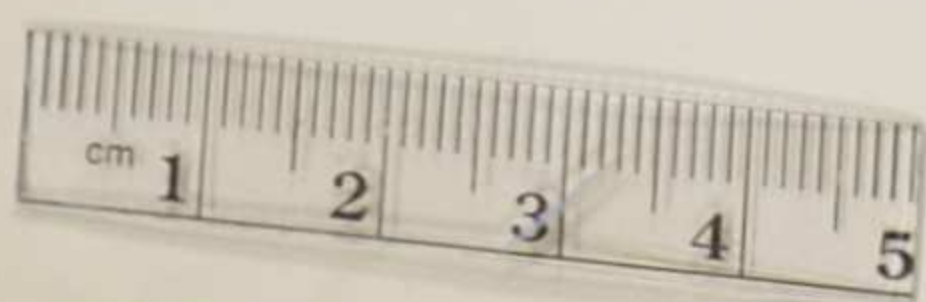




J. Gould & W. Hart del et lith

GRASPÉDOPHORA MAGNIFICA.

Walter Inge







CRASPEDOPHORA MAGNIFICA.

New-Guinea Rifle-bird.

- Le Proméfil*, Levaill. Ois. de Parad. p. 36, pl. 16 (1806).—Less. H. N. Ois. Parad. pl. 29 (1835).
Falcinellus magnificus, Vieill. N. Dict. d'Hist. Nat. xxviii. p. 167, pl. G 80. no. 3 (1818).
Epimachus splendidus, Steph. Gen. Zool. xiv. p. 77 (1826).
Epimachus magnificus, Wagler, Syst. Av., *Epimachus*, sp. 10 (1827).—Cuvier, Règne Anim. 1829, p. 440.—Less. Cent. Zool. p. 22, pls. 4, 5 (1830).—Id. Ois. Parad. Syn. p. 27 (1835).—Id. H. N. Ois. Parad. p. 218, pls. 32–34 (1835).—Bp. Consp. i. p. 412 (1850).—Gray, P. Z. S. 1859, p. 155.—Schl. J. f. O. 1861, p. 386; id. Mus. P. B., *Coraces*, p. 96 (1867).
Craspedophora magnifica, Gray, List Gen. B. p. 15 (1841).—Reichenb. Handb. *Scansoriae*, p. 330, Taf. lxi. figs. 4089–91 (1850).—Wall. P. Z. S. 1862, p. 160.—Rosenb. J. f. O. 1864, p. 128.—Salvad. Ann. Mus. Civic. Genov. ix. p. 191 (1874).
Epimachus paradiseus, Gray, Gen. B. ii. pl. xxxii. (nec Swains.).
Ptilornis magnificus, Gray, Handl. B. i. p. 105 (1869).
Ptiloris magnificus, Elliot, P. Z. S. 1871, p. 583.—Id. Mon. Parad. pl. xxiii. (1876).—Salvad. Ann. Mus. Civic. Genov. vii. p. 785 (1874).
Ptilorhis superbus, Beccari, Ann. Mus. Civic. Genov. vii. p. 173 (1875).—Sclater, Ibis, 1876, p. 252.
Ptilorhis magnifica, Sharpe, Cat. B. Brit. Mus. iii. p. 158 (1877).

SEVERAL years ago I described and figured a species of Rifle-bird from North-eastern Australia as *Ptilorhis magnifica*; and for a long time it was supposed by ornithologists that one species was common to New Guinea and the Cape-York peninsula. Mr. Elliot, however, in his work on the Birds of Paradise, pointed out certain differences between these two forms, which appear to justify their specific separation, and adopted for the Cape-York species the MS. name of *Ptilornis alberti*, proposed by the late Mr. G. R. Gray, after a study of the specimens in the British Museum. Mr. Bowdler Sharpe also concurs in the specific separation of these two Rifle-birds; and he points out that in the male of *P. magnifica* the breast becomes purple below the double pectoral band, and has not the oily-green lustre which distinguishes the same sex of *P. alberti*. I must also mention that the metallic lustre on the pectoral shields of these birds is of a different hue, although perhaps the greatest difference between the two species is exhibited by the female birds. Thus, the female of the New-Guinea Rifle-bird is entirely rufous on the upper surface, and has the head of the same colour as the back, whereas in the female of Prince Albert's Rifle-bird the head is ashy brown. As is the case with so many of the birds of New Guinea, we know nothing of the habits of the Rifle-bird inhabiting that region; but we may well suppose that they do not differ from those described by me in my work on the Birds of Australia. Dr. Beccari states that the eggs of the New-Guinea Rifle-bird have been discovered by one of Mr. Bruijn's hunters "in the branches of a tree called at Ternate 'Kaju tjapilong,' which is the *Calophyllum inophyllum*." He adds, "At present I have not the eggs before me; so I will write about them more fully another time, when I have been able to examine the man who found them."

The following descriptions are taken from Mr. Bowdler Sharpe's Catalogue of Birds.

"*Male*. Top of head and occiput, centre of throat, and entire upper part of breast shining bluish green, purple in certain lights; entire upper parts deep velvety black, with rich dark purple reflections; primaries black, with green reflections; a narrow line of green, red in some lights, beneath the metallic of the breast; flanks and abdomen purple; side plumes also purple, basal half and filamentary ends black; two centre tail-feathers shining green; remainder velvety black, with green reflections on their outer webs; bill, feet, and legs stout, black.

"*Female*. Above cinnamon-rufous, the wings and tail entirely of the same colour as the back, the inner webs browner; over the eye a narrow streak of white; lores and sides of face dusky brown, the former washed with rufous; the ear-coverts minutely streaked with rufous along the shafts of the feathers; cheeks white, the feathers somewhat scaly in appearance; a malar streak of dark brown on each side of the throat;

throat white, slightly mottled with minute dusky cross markings; rest of under surface of body dull white, very numerous and thickly barred across with dusky blackish. Total length 12 inches, culmen 1·95, wing 6·6, tail 4·45, tarsus 1·65.

“*Young male*. Similar to the adult female, but of a deeper rufous, the head and neck rather dingier than the back; a tolerably well-defined white eyebrow, the feathers edged with brown; lores and ear-coverts dusky chocolate-brown, with very few ochraceous shaft-streaks; under surface of body dirty white, very thickly barred across with black; the flank-plumes elongated, but barred exactly like the breast; from the base of the lower mandible a malar streak of dusky black, continued down the sides of the throat onto the sides of the chest. Total length 14·5 inches, culmen 2·3, wing 6·95, tail 4·9, tarsus 1·65.”

It will be seen that I have not followed the nomenclature employed by me in the Supplement to the ‘Birds of Australia.’ The present bird and *P. alberti* ought to be placed in a separate genus from that which contains *P. paradisea* and *P. victoriæ*; and I therefore propose to adopt Mr. G. R. Gray’s generic name of *Craspedophora* for the above two birds.

The figures represent a male and a female, about the natural size, drawn from specimens in my collection.

er surface of body dull white.
12 inches, culmen 1.95, wing

and neck rather dingier than
brown; lores and ear-coverts
ice of body dirty white, very
tly like the breast; from the
e sides of the throat onto the
tarsus 1.65."

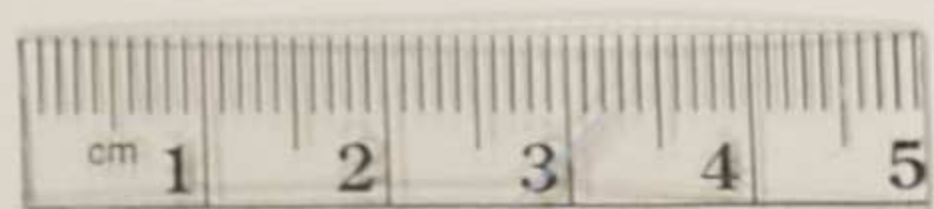
the Supplement to the 'Birds
arate genus from that which
G. R. Gray's generic name of

drawn from specimens in my



SELEUCIDES NIGRICANS.

J. Gould & W. Hart del et lith.



Walter, imp.





SELEUCIDES NIGRICANS.

Twelve-wired Bird of Paradise.

- Le Manucode à douze filets*, Audeb. et Vieill. Ois. Dor. ii. p. 29, pl. 13.
Le Nébuleux, Levaill. Ois. de Parad. i. pls. 16, 17.
Le Promerops multifil, Levaill. H. N. Promer. et Guêp. pl. 17.
Paradisæa nigricans, Shaw, Gen. Zool. vii. pt. 2, p. 489 (1809).
 ——— *alba*, Blumenb. Abbild. nat. Gegenst. pl. 96.—Schleg. J. f. O. 1861, p. 386.
 ——— *resplendescens*, Vieill. Nouv. Dict. xxviii. p. 165.—Id. Galerie Ois. p. 107, pl. 185.
Epimachus albus, Temm. Man. d'Orn. i. p. lxxxvi.—Wagl. Syst. Av. 1827, *Epimachus*, sp. 9.—Gray, Gen. B. ii. p. 94.—Id. P. Z. S. 1858, p. 190.—Id. List B. New Guinea, pp. 21, 55.—Id. P. Z. S. 1861, p. 433.—Wallace, P. Z. S. 1862, p. 160.—Schleg. Mus. P.-B., *Coraces*, p. 95.—Id. Nederl. Tijdschr. Dierk. iv. p. 49.—Gray, Hand-l. B. i. p. 105.
Twelve-wired Paradise Bird, Lath. Gen. Hist. iii. p. 199, pl. 48.
Seleucides acanthylis, Less. H. N. Ois. Parad. pls. 36–38.—Id. Syn. p. 29.
Nematophora alba, Gray, List Gen. B. i. p. 12.
Seleucides alba, Gray, List Gen. B., Addenda, p. 1.—Bp. Consp. i. p. 412.—Cab. Mus. Hein. i. p. 215.—Reichenb. Handb. Spec. Orn. Scansoriæ, p. 331, taf. 612, figs. 4092, 4093.—Wallace, Malay Archip. ii. p. 250.—Elliot, Monogr. Parad. pl. xxii.—Salvad. Ann. Mus. Civ. Genova, vii. p. 785.—Beccari, *t. c.* p. 713.—Scl. P. Z. S. 1876, p. 252.
Ptiloris nebulosus, Licht. Nomencl. p. 10.
Seleucides resplendens, Rosenb. Nat. Tijdschr. Nederl. Ind. xxv. p. 238.—Id. J. f. O. 1864, p. 123.
Epimachus resplendens, Rosenb. Reist. naar Geelvinkb. pp. 101, 116.
Seleucides ignota, Salvad. Ann. Mus. Civ. Genova, viii. p. 403; ix. p. 191; x. p. 154.—D'Albert. & Salvad. op. cit. xiv. p. 107.
 ——— *niger*, Sharpe, Cat. B. iii. p. 159.
Epimachus resplendescens, Rosenb. Malay Arch. p. 552.
Seleucides nigricans, Salvad. Orn. della Papuasias &c. p. 561 (1881).

THE list of names given above shows that this species of Bird of Paradise has been known to writers for a long period. Most of the synonymy I have derived from Mr. Bowdler Sharpe's 'Catalogue of Birds,' and from the more complete list of works given by Count Salvadori in his recently published book on the birds of New Guinea. When I state that I have by no means exhausted the synonymy of the species as set down by Count Salvadori, it may readily be imagined that the number of books in which reference is made to the species is very large indeed. I have not, however, full space for such lengthened synonymy in the present work, and must refer the reader to the above-mentioned volumes for further quotations. The Twelve-wired Bird of Paradise is the only representative of the genus *Seleucides*, which belongs to the slender-billed section of the Paradiseidæ. It is remarkable for its elongated flank-feathers, which are of a fine yellow colour, and have six shafts produced into thread-like plumes, whence the bird has received its ordinary English name. Unfortunately the beautiful yellow colour on the flanks fades away after death, and becomes white, when the bird loses much of its original beauty.

With regard to the nomenclature of the bird, I have come to the conclusion that the first name, which ought to be employed, is that of *nigricans* of Shaw, as has been set forth by Count Salvadori. As far as we know at present, it is entirely confined to New Guinea, over the whole of which great island it appears to be distributed. It is abundant on the Fly river, to judge by the large series obtained by Signor D'Albertis during his residence in Southern New Guinea. He found it living solitary, and frequently resting on the dead branch of a tree, uttering its note (which sounded like *Có-có-có*) in the early morning at the rising of the sun; during the day it was silent. Mr. Wallace, in his 'Malay Archipelago,' gives the following account of the species:—"The *Seleucides alba* is found in the island of Salwatty, and in the north-western parts of New Guinea, where it frequents flowering trees, especially sago-palms and pandani, sucking the flowers, round and beneath which its unusually large and powerful feet enable it to

cling. Its motions are very rapid. It seldom rests more than a few moments on one tree, after which it flies straight off, and with great swiftness, to another. It has a loud shrill cry, to be heard a long way, consisting of 'cáh, cáh,' repeated five or six times in a descending scale; and at the last note it generally flies away. The males are quite solitary in their habits, although, perhaps, they assemble at certain times like the true Paradise-birds. All the specimens shot and opened by my assistant Mr. Allen, who obtained this fine bird during his last voyage to New Guinea, had nothing in their stomachs but a brown sweet liquid, probably the nectar of the flowers on which they had been feeding. They certainly, however, eat both fruit and insects; for a specimen, which I saw alive on board a Dutch steamer, ate cockroaches and paya fruit voraciously. This bird had the curious habit of resting at noon with the bill pointing vertically upwards. It died on the passage to Batavia; and I secured the body and formed a skeleton, which shows indisputably that it is really a Bird of Paradise. The tongue is very long and extensible, but flat, and a little fibrous at the end, exactly like the true Paradiseas.

"In the island of Salvatty the natives search in the forests till they find the sleeping-place of this bird, which they know by seeing its dung upon the ground. It is generally in a low bushy tree. At night they climb up the tree, and either shoot the birds with blunt arrows, or even catch them alive with a cloth. In New Guinea they are caught by placing snares on the trees frequented by them, in the same way as the Red Paradise-birds are caught in Waigiou."

Only on one occasion has the present species been known to have been brought alive to Europe, a single example having been procured by Signor G. E. Serruti in New Guinea, and presented by him to the late King of Italy. It survived, however, only a few months in Europe.

I take the following descriptions from Mr. Sharpe's 'Catalogue of Birds':—

Adult male. General colour above velvety black, with a strong gloss of oil-green when viewed from the light, with coppery bronze reflections; scapulars and wing-coverts resembling the back; greater coverts and secondaries fiery purple, the primaries black, with an external gloss of violet; tail fiery purple; head all round of a velvety texture, coppery purple above, oily green on the sides of the face and throat; fore neck and chest velvety black, forming a shield, somewhat shaded with oily green in the centre, the lateral plumes all tipped with bright metallic emerald-green, forming a fringe; rest of the under surface of body buffy yellow, the plumes of the flanks elongated and silky, and furnished with six thread-like shafts, produced to a great length, and curved backwards on the body; under wing-coverts black; bill black. Total length 12 inches, culmen 2·7, wing 6·45, tail 3·15, tarsus 1·75; threads reaching 10·2 inches beyond the flank-feathers.

Adult female.—General colour above bright chestnut-red; back of the neck and sides of the same black; the feathers of the mantle also mottled with black, the bases of the feathers being of this colour; crown of head and nape velvety black, with a purplish gloss when seen away from the light; wing-coverts and secondaries chestnut-red, like the back, the primaries black, chestnut on their outer webs; tail uniform chestnut; space around and behind the eye bare, as also a spot on the auricular region; ear-coverts black; sides of face and throat greyish white, faintly mottled with dusky bars of blackish; rest of under surface of body buffy brown, washed here and there with pale rufous, the whole transversely barred with somewhat irregular cross lines of blackish brown, broader on the fore neck and breast, and more faintly indicated on the abdomen, and especially on the long flank-feathers and under tail-coverts; under wing-coverts bright chestnut, with dusky blackish cross bars. Total length 12·5 inches, culmen 2·55, wing 6·5, tail 4·3, tarsus 1·7.

Young male.—At first resembles the adult female. A specimen collected by Mr. Wallace is in perfect plumage as regards its head, mantle, and breast, the rest of the body being in the chestnut plumage of the female, the tail being still entirely chestnut. At the same time the beautiful purple colour is being put on the wings by a gradual change of feather, and not by a moult; half the inner secondaries are chestnut, but more or less mottled with black, the purple colour appearing very plainly on the inner webs.

The first Plate represents the male bird, of the natural size; and I have thought it necessary to give a second illustration of this species, in order to show some of the changes of plumage. The second Plate represents a female and a young male in its first plumage, together with another bird, of the same sex, commencing to put on his adult livery.

ments on one tree, after which a
ll cry, to be heard a long way
and at the last note it generally
they assemble at certain times
sistant Mr. Allen, who obtained
muchs but a brown sweet liquid,
certainly, however, eat both fruit
ate cockroaches and pava fruit
bill pointing vertically upwards
keleton, which shows indisputably
ble, but flat, and a little flange

the sleeping-place of this bird
low bushy tree. At night they
atch them alive with a cloth. In
y them, in the same way as the

brought alive to Europe, a single
nd presented by him to the late

—

oil-green when viewed from the
oling the back; greater coverts
f violet; tail fiery purple; hind
ides of the face and throat; lin
green in the centre, the lines
est of the under surface of body
d with six thread-like shafts,
wing-coverts black; bill black
; threads reaching 10.2 inches

neck and sides of the same black;
ers being of this colour; crown
om the light; wing-coverts and
their outer webs; tail under
e auricular region; ear-coverts
bars of blackish; rest of under
e whole transversely barred with
eck and breast, and more faintly
under tail-coverts; under wing-
5 inches, culmen 2.55, wing 6.5

ed by Mr. Wallace is in perfect
ing in the chestnut plumage of
autiful purple colour is being put
e inner secondaries are chestnut
nly on the inner webs.
ve thought it necessary to give a
of plumage. The second Plu-
a, another bird, of the same sex.





SELEUCIDES NIGRICANS, ♀ and ♂ juv

J. Gould & W. Hart, del et lith.

W. Ver. imp.





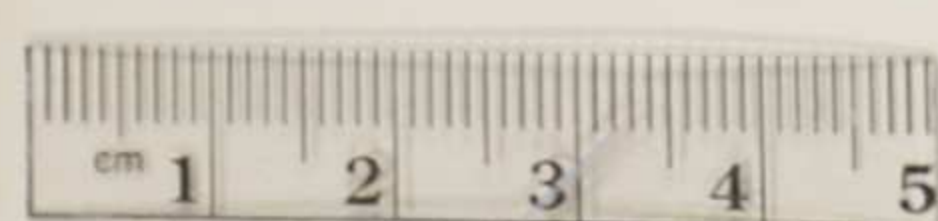




J Gould & W Hart, del et lith

PARADIGALLA CARUNCULATA.

Walter, Imp.





A.

100

PARADIGALLA CARUNCULATA, Lesson.

Wattled Bird of Paradise.

- Paradigalla carunculata*, Less. Ois. Parad. p. 242 (1835); id. Rev. Zool. 1840, p. 1; Bp. Consp. i. p. 414 (1850); Slater, P. Z. S. 1857, p. 6; Wall. P. Z. S. 1862, p. 160; id. Malay Arch. ii. p. 257 (1869); Elliot, Monogr. Parad. pl. xvii. (1873); Salvadori, Ann. Mus. Civic. Genov. vii. p. 784 (1875); Beccari, *t. c.* p. 711 (1875); Slater, Ibis, 1876, p. 250; Salvadori, Ann. Mus. Civic. Genov. ix. p. 190 (1877); Sharpe, Catalogue of Birds, iii. p. 165 (1877).
- Astrapia carunculata*, Eydoux et Souleyet, Voy. Bonite, p. 83, pl. 4 (1841); Gray, Gen. B. ii. p. 326 (1846); Schlegel, J. f. O. 1861, p. 386; Rosenb. J. f. O. 1864, p. 131; Gray, Handl. B. ii. p. 17 (1870).

THE extreme rarity of the present species in European collections may be imagined from the fact that Mr. Elliot, when writing his monograph of the birds of Paradise five years ago, could only cite two specimens as existing in the museums of the world. One of these was the original specimen procured by MM. Eydoux and Souleyet during the voyage of the 'Bonite,' and still preserved in the Paris Museum; and the second example was contained in the rich collection of the Philadelphia Academy. Since that time, however, perfect specimens have been obtained by the European travellers who have visited and explored the Arfak Mountains in North-western New Guinea.

It appears, indeed, to be somewhat rare even in this part of the great Papuan island; for out of five hundred and thirty-two specimens of Paradise-birds forwarded to Italy by Dr. Beccari and Mr. Bruijn, only fifteen belonged to the present species. The more recent explorers, MM. Laglaize and Raffray, have also met with the bird; and I possess in my own collection a fine pair procured by M. Laglaize in the Arfak Mountains.

Very little has been recorded concerning the habits of the Wattled Bird of Paradise, as the original discoverers did not themselves meet with the species in a living state; and the first person who has given us any account of the bird is Dr. Beccari, who has done so much to make us acquainted with the economy of the Paradiseidæ. In his Ornithological Letter, he writes:—"As to *Paradigalla carunculata*, I shot one from my hut, whilst it was eating the small fleshy fruits of an *Urtica*. It likes to sit on the tops of dead and leafless trees, like the *Mino dumonti*. The finest ornament of this bird are the wattles, which in the dried skin lose all their beauty. The upper ones, which are attached one on each side of the forehead, are yellow; those at the base of the lower mandible are blue, and have a small patch of orange-red beneath. The Arfaks call the *Paradigalla* 'Happoa.'"

As is the case with so many of the Birds of Paradise, the genus *Paradigalla* contains but one single species; and indeed it is impossible to find any one which is nearly allied to it. Its somewhat elongated tail places it close to *Astrapia*, which it also resembles in not possessing any of the wiry shafts which adorn the tail-feathers of most of the forms of Paradiseidæ. A glance at the Plate of *Astrapia nigra* will show how entirely different it is even from that, its nearest ally.

The following description is taken from Mr. Sharpe's 'Catalogue of Birds':—

Adult male. General colour velvety black above and below, a little browner on the under surface; wings and tail black, the inner secondaries with a purplish gloss under certain lights; head glossed with metallic steel-green; forehead, lores, and base of lower mandible bare; over each nostril a small tuft of black feathers; on each side of the base of the bill an erect wattled skin; round the eye a ring of black plumes; space below and behind the eye bare; bill and legs black. Total length 11·2 inches, culmen 0·55, wing 6·15, tail 4·85, tarsus 1·9.

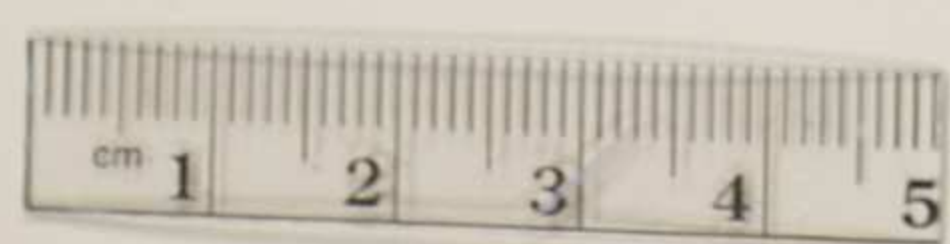
Adult female. Similar to the male, but smaller.

The figures in the accompanying Plate represent the pair of birds in my own collection, obtained by M. Laglaize in the Arfak Mountains. For the opportunity of figuring the wattles as they appear in a state of nature, I am indebted to my friend Mr. D. G. Elliot, who sent me a sketch of these parts coloured from the recently killed bird by M. Raffray.





ASTRAPIA NIGRA.



J. Gould & W. Hart del. et lith.

Walter Inp.





V.
far
na
ot
str
wh
the
the
ag
so
to
bil
bir
of
per

Be
cap
of
enc
to
Fr
rec
ma
(tw
wo
to
Un
mo
to
col
bla
wit
map

ASTRAPIA NIGRA.

Gorget Paradise-bird.

- Gorget Paradise Bird*, Lath. Gen. Syn. i. p. 478, pl. 20 (1782).
Paradisea nigra, Gm. S. N. i. p. 401 (1788, ex Lath.).
Paradisea gularis, Lath. Ind. Orn. ii. p. 196 (1790).—Shaw, Gen. Zool. vii. pp. 69, 70 (1809).
Le Hausse-col doré, Aud. et Vieill. Ois. Dor. ii. p. 22, pls. 8, 9 (1802).
La Pie de Paradis, ou l'Incomparable, Levaill. Hist. Nat. Ois. Parad. i. pls. 20, 22 (1806).
Astrapia gularis, Vieill. N. Dict. d'Hist. Nat. iii. p. 37 (1816).—Id. Gal. Ois. i. p. 169, pl. 107 (1825) Less.
 Traité d'Orn. p. 338 (1831).—Id. Ois. Parad. Syn. p. 18 (1835).—Id. Hist. Nat. p. 106, pls. 21-23.—
 Schleg. J. f. O. 1861, p. 386.—Beccari, Ann. Mus. Civ. Genov. vii. p. 711.—Sclater, Ibis, 1876, p. 249.
Astrapia nigra, Steph. Gen. Zool. xiv. p. 75 (1820).—Gray, Gen. B. ii. p. 263 (1846).—Bp. Consp. i. p. 414
 (1850).—Gray, P. Z. S. 1851, p. 436.—Wallace, P. Z. S. 1862, p. 154.—Finsch, Neu-Guinea, p. 173
 (1865).—Wallace, Malay Archip. ii. p. 257 (1869).—Elliot, Monogr. Parad. pl. ix. (1873).—Salvad.
 Ann. Mus. Civ. Genov. ix. p. 190 (1876).—Sharpe, Cat. B. Brit. Mus. iii. p. 165 (1877).
Epimachus niger, Schlegel, Mus. P.-B., Coraces, p. 94 (1867).

VARIOUS authors have endeavoured to accomplish the difficult task of classifying and defining the limits of the family *Paradiseidae*; and I can only think of two other groups which present the same obstacles to classification, namely:—the Hornbills, where the shape of the casque is considered by some naturalists to be of generic, by others of specific importance only; and the Malkoha Cuckoos (*Phænicophainæ*), where the shape and structure of the nostril varies so much as to induce some naturalists to place each species in a separate genus, whilst by others the form of the nostril is reckoned to be only a specific character. Mr. D. G. Elliot placed the Bower-birds along with the *Paradiseidae*; but Mr. Sharpe has not included them, and I learn from him that they will be placed near the Thrushes in his arrangement of the class Aves. Professor Schlegel, again, places the present bird in the genus *Epimachus* near *E. speciosus*; but I think that its stout bill, so different from the sickle-shaped slender bills of the *Epimachi*, shows that the place of *Astrapia* is near to the true Paradise-birds, though its long tail is very different in form from that of the other stout-billed genera. I must say, however, that it seems to me impossible to keep such widely different forms of birds under one genus; and I cannot help thinking that a family which includes such widely different forms of birds as *Astrapia*, *Lophorina*, and the true *Paradiseæ*, may yet prove (strange as this may appear to most persons) to be the proper recipient for the Lyre-birds (*Menura*) of Australia.

As in the case of the other Birds of Paradise, little is known of the habits of this grand bird; but Dr. Beccari, who has shot the species in the Arfak Mountains, has given the following short account of its capture:—" *Epimachus maximus* and *Astrapia gularis* are only found on the highest and most difficult peaks of Mount Arfak, nearly always above 6000 feet elevation. Specimens in dark plumage are common enough; but those which have attained perfect plumage are rare, perhaps because they take some years to acquire it. Both of them live on the fruits of certain Pandanaceæ, and especially on those of the *Freycinetia*, which are epiphytous on the trunks of trees. The irides of the large *Epimachus* are dark brick-red, those of the *Astrapia* almost black; the neck-feathers of the latter are erectable, and expand into a magnificent collar round the head. The first day I went out at Atam, on June 23, I got both these species (two specimens of each), besides one *Drepanornis albertisi*, three *Paradigallæ*, one *Parotia*, and several other wonderful kinds of birds. It was a memorable day, because I ascended one of the peaks, and was surprised to find myself surrounded by four or five species of *Vaccinium* and *Rhododendron*, I also found an Umbellifer (a *Drymis*) and various other plants common to the mountains of Java, and there were also some mosses a foot and a half in height."

The habitat of this Bird of Paradise is the north-west of New Guinea, though it is said, on native report, to be an inhabitant of the Island of Jobi.

The following description is taken from Mr. Sharpe's Catalogue of Birds.—" *Adult male*. General colour above velvety black, with a purplish gloss; the wings black externally, glossed with purple; tail-feathers black, with wavy lines of dusky black under certain lights, the two centre feathers very long and glossed with rich purple; feathers of the head black, dense and velvety in texture, with a steel-blue gloss; from the nape a shield of golden green feathers springs; and the feathers of the hind neck are very long and tipped

with the same golden green; from each side of the nuchal shield spreads a ruff of velvety steel-black plumes; the feathers of the throat also are steel-black, with a band of brilliant golden copper, which extends from behind the eye down the sides of the neck, and encircles the throat; rest of under surface of body rich velvety grass-green, the lateral plumes of the breast tipped with burnished emerald-green; the sides of the body and under wing- and tail-coverts dusky black; bill and legs black; 'iris almost black' (*Beccari*). Total length 28 inches, culmen 1·6, wing 8·8, tail 7, centre feathers 18."

The figures in the Plate are drawn from specimens in my own collection, and represent a male about the size of life, with reduced figures of a male and female in the distance.

half of velvety steel-black plumes;
green copper, which extends from
of under surface of body rich
emerald-green; the sides of the
iris almost black' (*Becan*).

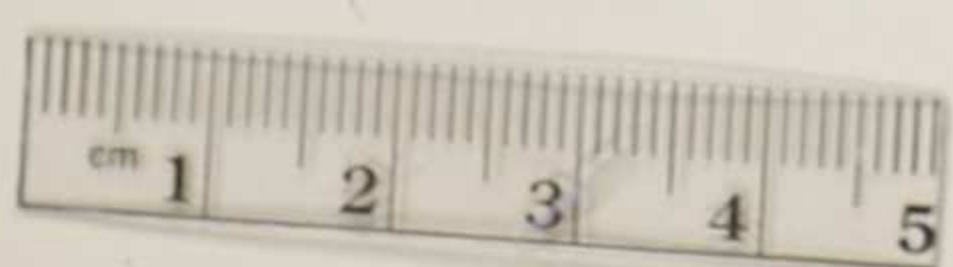
n, and represent a male about



J. Gould & W. Hart del et lith.

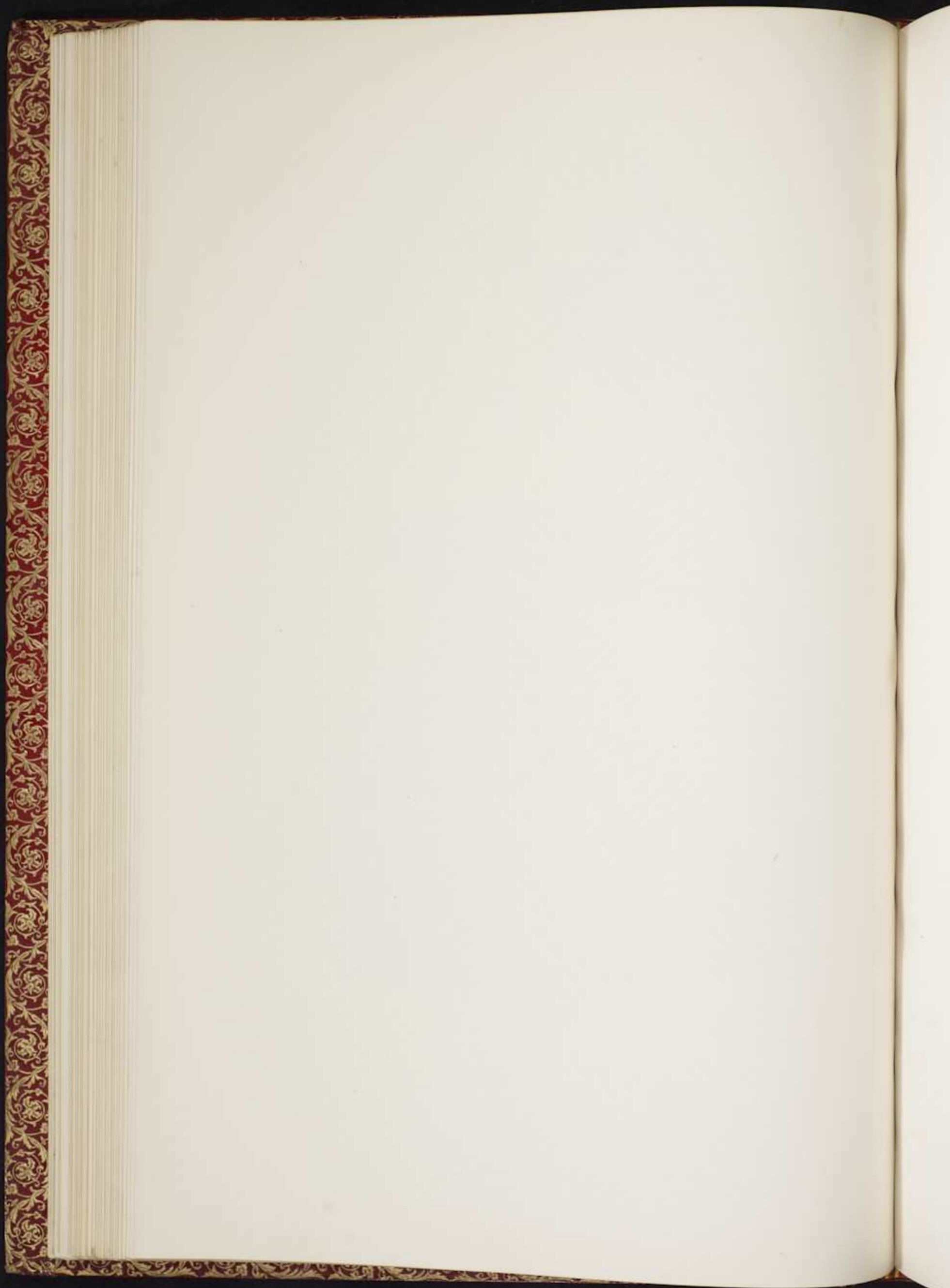
LOPHORHINA SUPERBA.

Walter Inq.





UPERBA.



LOPHORHINA SUPERBA.

Superb Bird of Paradise.

- L'oiseau de Paradis de la Nouvelle Guinée, dit le Superbe*, Brisson, Orn. iii. p. 169 (1760).—D'Aubent. Planches Enluminées, iii. pl. 632 (1774).
- Oiseau de Paradis à gorge violette*, Sonn. Voy. Nouv. Guinée, p. 157, pl. 96 (1776).
- Paradisea superba*, Pennant, in Forster, Ind. Zool. p. 40 (1781).—Scopoli, Del. Faun. et Flor. Insubr. ii. p. 88 (1783).—Shaw, Gen. Zool. vii. p. 494, pls. 63-65 (1809).—Id. & Nodder, Nat. Misc. xxiv. pl. 1021 (1813).—Wagler, Syst. Av. *Paradisea*, sp. 5 (1827).—Wallace, Ibis, 1859, p. 111.
- Superb Bird of Paradise*, Lath. Gen. Syn. vol. i. part 2, p. 479 (1782).
- Paradisea atra*, Bodd. Tabl. Pl. Enl. D'Aubent. p. 38 (1783).
- Le Superbe*, Audeb. et Vieill. Ois. Dor. ii. pl. vii. (1802).—Levaill. Hist. Nat. Ois. Parad. i. pls. 14, 15 (1806).
- Paradisea furcata*, Bechst. Kurze Uebers. p. 132 (1811).
- Lophorina superba*, Vieill. N. Dict. d'Hist. Nat. xviii. p. 184 (1817).—Id. Gal. Ois. i. p. 149, pl. xcvi. (1825).—Less. Traité, p. 337 (1831).—Id. Ois. Parad. Syn. p. 12 (1835).—Id. Hist. Nat. Ois. Parad. pls. 13, 14 (1835).—Bonap. Consp. Gen. Av. p. 414 (1850).—Wall. Ibis, 1861, p. 287.—Salvad. Ann. Mus. Civic. Genov. ix. p. 190 (1876).—Sharpe, Cat. Birds, iii. p. 179 (1877).
- Epimachus ater*, Schl. Mus. Pays-Bas, Coraces, p. 96, note (1867).
- Lophorina atra*, Wallace, Malay Arch. ii. p. 249 (1869).—Elliot, Monogr. Parad. pl. xi. (1873).—Salvad. Ann. Mus. Civic. Genov. vii. p. 783 (1875).—Beccari, *tom. cit.* p. 712 (1875).—Selater, Ibis, 1876, p. 251.

To any one studying the Paradise-birds it soon becomes evident that there are several natural groups comprising this interesting family. First of all there are the long-billed *Epimachi* and Rifle-birds, then the larger species, with their enormously long flank-plumes of red or yellow, and lastly the smaller and more fantastic kinds with decorated mantles and tails. Amongst the latter there is great diversity of form: whether it takes the shape of a bare head, as in *Schlegelia*, or of an elongated racket to the centre tail-feathers, as in *Cicinnurus*, or of an elaborated breast-shield, as in *Diphyllodes*, we find that there are scarcely any two which are alike in ornamentation. Take, for example, the subject of the present article. It stands apart from all the others in the extraordinary mantle, which it is able to elevate behind its head,—and also in its remarkable breast-shield, unlike that of any known species. And this strikes me as being one of the most curious phenomena connected with Papuan ornithology—that there should be all these isolated genera of Paradisiidæ, many represented by a single species, and each so different. There seems to be no connecting link between the genera—*Parotia* standing alone with its six ricketed plumes on the head, *Semioptera* with its streamlets on the wing, *Schlegelia* with its bare head, and so on, not one of these peculiar forms graduating into another.

The subject of our article is a native of the north of New Guinea, and it is still one of the rarest of the Paradisiidæ, specimens of it being still scarce in collections in this country.

Dr. Beccari does not give much information about the present species in his "Ornithological Letter" from North-western New Guinea. He merely observes:—" *Lophorina atra* is rather rarer than *Parotia*; but I must tell you that the abundance of fruit-eating birds in a given locality depends principally on the season at which certain kinds of fruit are ripe; therefore a species may be common in a place one month, and become rare or completely disappear in the next, when the season of the fruit on which it lives has passed."

The female of the Superb Bird of Paradise is similar in general appearance to that of *Parotia*, but is of course a smaller bird. I take the following descriptions from Mr. Sharpe's 'Catalogue of Birds':—

"*Adult male*. General colour above velvety black, somewhat glossed with bronzy purple; mantle produced into an elevated shield, composed of velvety black plumes, glossed under certain lights with bronze; wing-coverts velvety black, rather more distinctly glossed with purple than the back; quills and tail-feathers deep black, glossed with steel-blue; lores and nasal plumes forming an elevated crest of purplish black feathers; crown of head, nape, and hind neck spangled with metallic steel-coloured feathers, each of which has a sub-terminal bar of purple; sides of face, sides of neck, and entire throat deep coppery bronze; on the fore neck and breast a pectoral shield of bright metallic green plumes, most of which have a narrow edging of

copper; remainder of under surface purplish black. Total length 9 inches, culmen 1.15, wing 4.55, tail 3.6.

“Adult female. Above deep chocolate-brown, the feathers of the top and sides of the head blackish brown; over the eye a few white-spotted plumes; wing-coverts and quills blackish brown, externally reddish; tail brown, externally dull rufous brown; throat white, all the feathers being black tipped with white; rest of the under surface buffy white, inclining to rufous on the flanks and under tail-coverts, the whole under surface barred across with dull brown; under wing-coverts rufous, barred across with brown. Total length 8.8 inches, culmen 1.05, wing 5.1, tail 4, tarsus 1.3.”

The principal figure, drawn in a state of excitement, is of the natural size, with a reduced male and female in the distance.

9 inches, culmen 1.15, wing 43.

and sides of the head blackish brown,
blackish brown, externally reddish; tail
black tipped with white; outer
tail-coverts, the whole under
across with brown. Total length

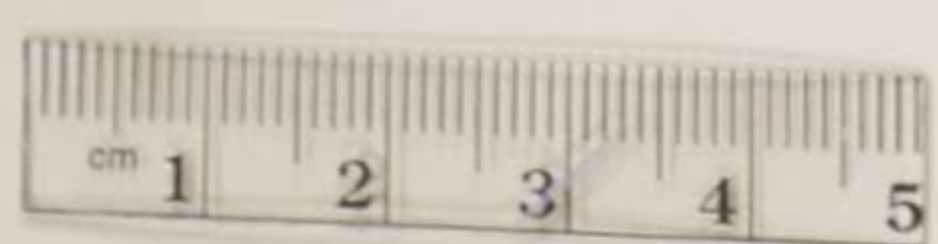
atural size, with a reduced natural



W. Hart del et lith.

LOPHORINA MINOR, Ramsay.

Modern. Brev. imp.

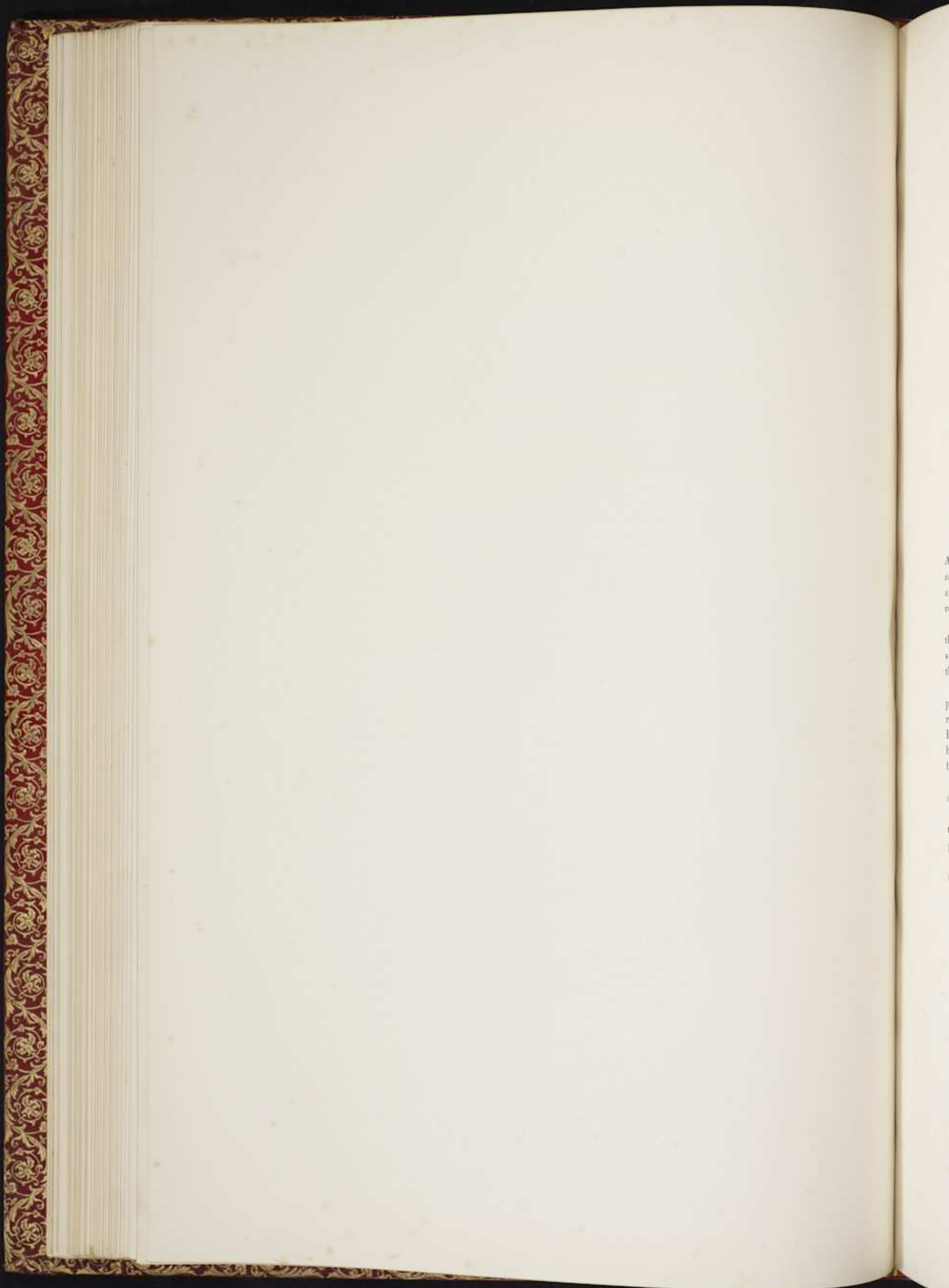




lansay.

Alfred. 1871





LOPHORHINA MINOR, *Ramsay*.

Lesser Superb Bird of Paradise.

Lophorhina superba minor, Ramsay, Proc. Linn. Soc. N. S. Wales, x. p. 242 (1885).

Lophorhina minor, Finsch u. Meyer, Zeitschr. ges. Orn. ii. p. 376, pl. xvii. (1885).—Meyer, op. cit. iii. p. 181, cum fig. (1886).

As Dr. Meyer has shown, the form of the head-shield in this species is different from that of *Lophorhina superba*, and would be quite sufficient to distinguish it, without the additional characters of the nasal plumes and the smaller dimensions, both of which serve to separate the south-eastern bird from its north-western representative in New Guinea.

In the single adult male of *L. minor* that has come under our notice, the nasal plumes are so disarranged that we cannot make out their form for certain, but they appear to be erect instead of spreading out in a small fan, as in *L. superba*. They are so figured by Dr. Madarász in the 'Zeitschrift' above quoted, and these plumes may be erroneously figured in our Plate of the present bird.

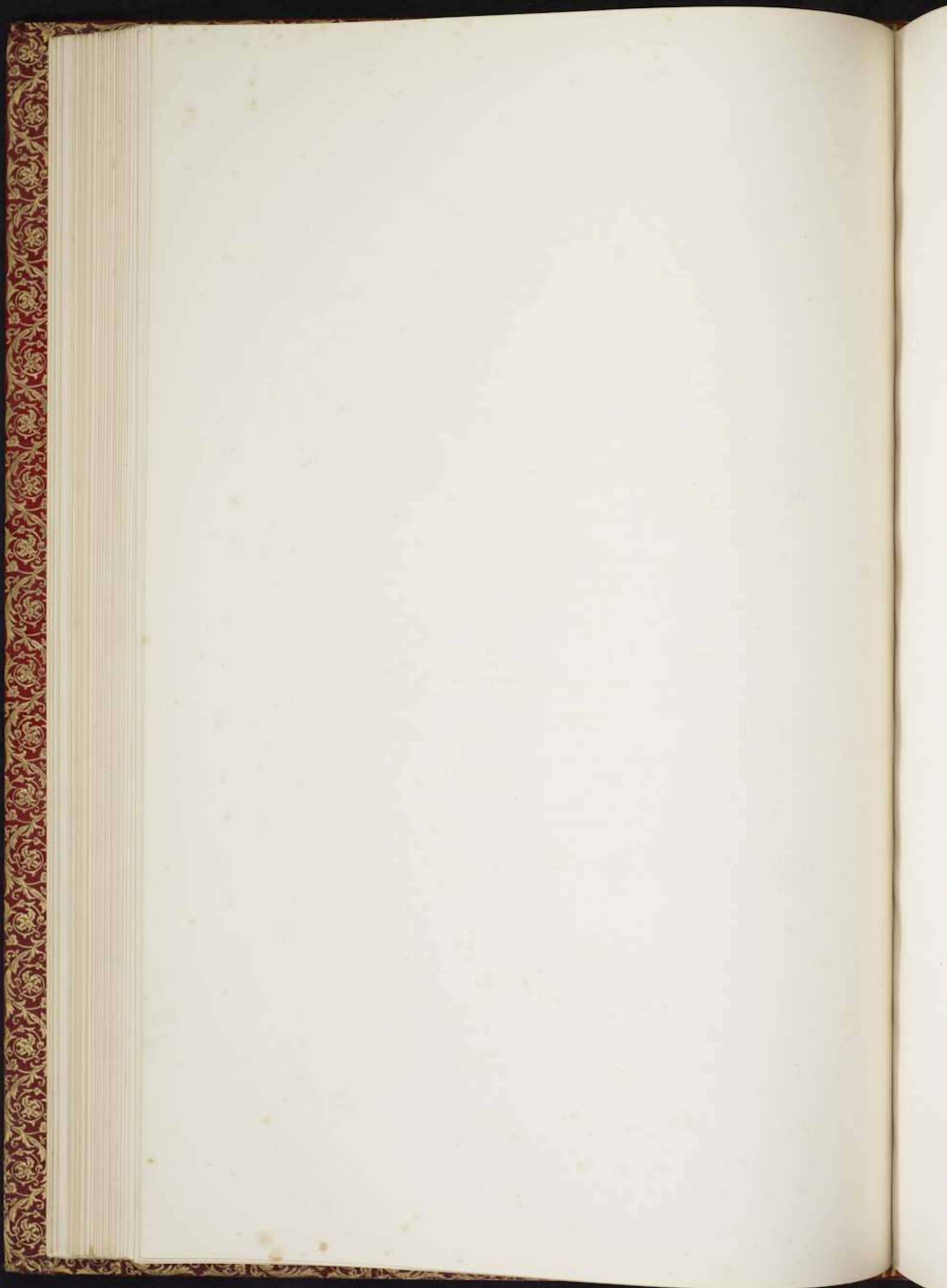
Lophorhina minor is so far only known from the Astrolabe Mountains in South-eastern New Guinea. The person who discovered it appears to have been Mr. Hunstein, one of the most energetic explorers in that region. He seems to have sent a considerable series of specimens from the Horseshoe range, as the British Museum was able to secure a pair of adults and a young male out of the duplicates. Mr. Forbes has more recently procured the species in the Sogeri district of the Astrolabe range; but unfortunately all his specimens were out of plumage, having been collected during the rainy season.

The differences between the males of *L. minor* and *L. superba* have been alluded to above, and they are apparent on a comparison of the Plates.

The female appears to differ from the female of *L. superba* in being olive-brown instead of chestnut on the back, and in having the wings bay externally instead of chestnut. The light eyebrow is also more prolonged and the underparts paler buff.

The figures in the Plate, which represent a male and female of the natural size, have been drawn from a pair of birds in the British Museum, collected by Mr. Hunstein.

[R. B. S.]



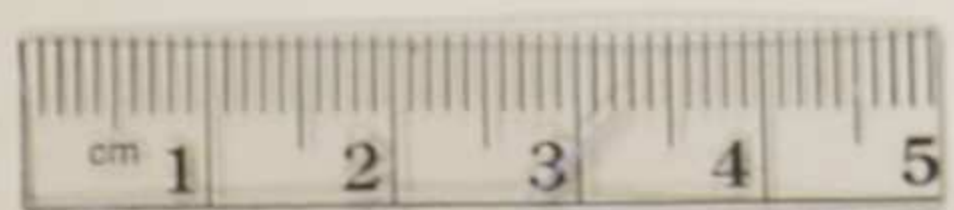




DIPHYLLODES RESPUBLICA, Bonap.

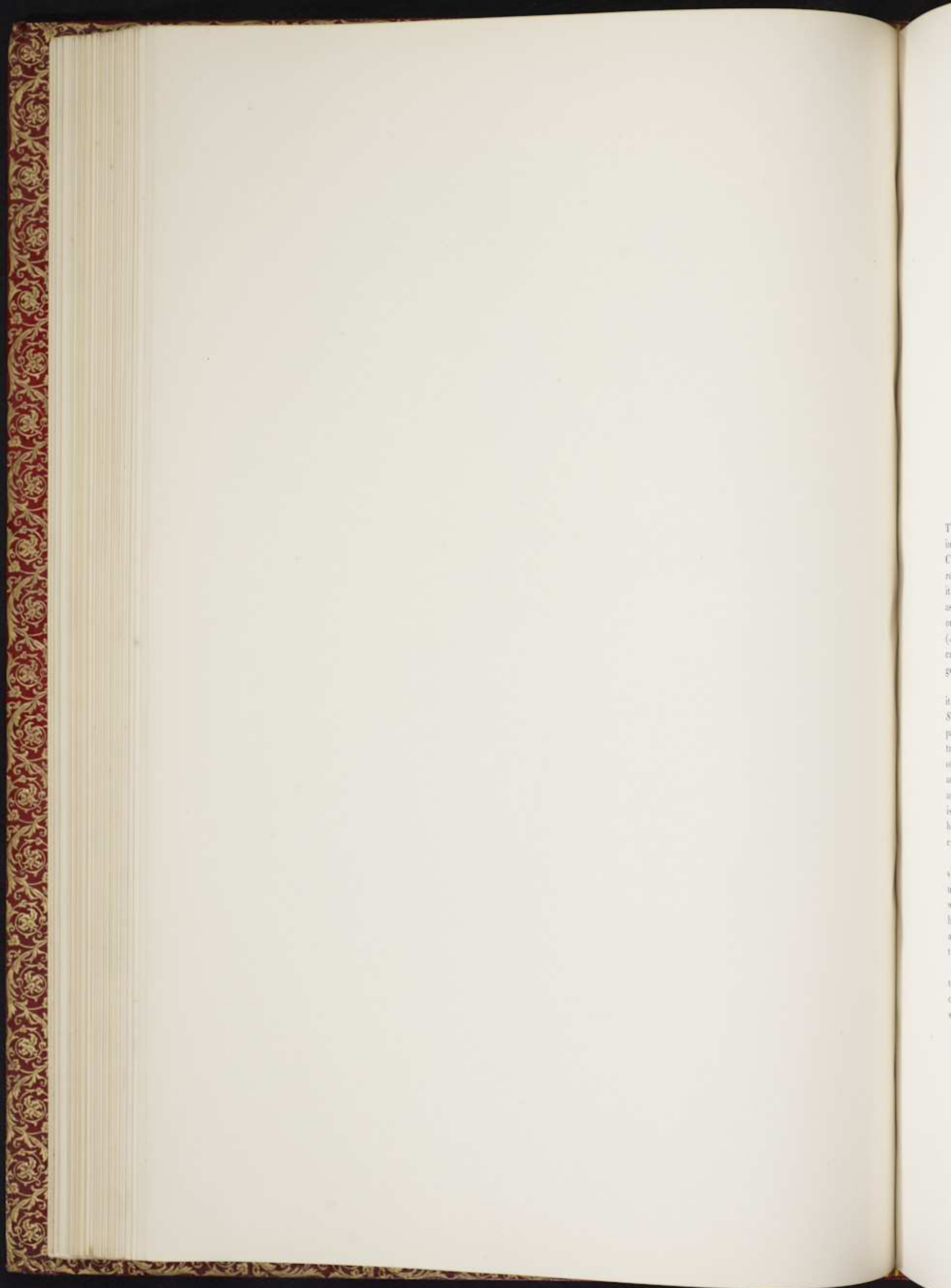
J. Gould & W. Hart del. et lith.

Walter imp.





BLICA. Bonap.



DIPHYLLODES RESPUBLICA.

Bare-headed Bird of Paradise.

Lophorina respublica, Bp. C. R. 1850, p. 131.

Diphyllodes respublica, Bp. Consp. i. p. 413 (1850).—Sclater, P. Z. S. 1857, p. 6.—Rosenb. J. f. O. 1864, p. 130.—Elliot, Monogr. Parad. pl. 14. (1873).

Paradisea wilsoni, Cassin, Journ. Acad. N. Sci. Philad. ii. p. 133, pl. 15. (1850).—Gray, P. Z. S. 1861, p. 436.—Sclater, P. Z. S. 1865, p. 465.—Schl. N. T. D. iii. p. 249 (1866).—Id. Mus. P.-B. *Coraces*, p. 87 (1867).—Gray, Hand-l. B. ii. p. 16 (1870).

Diphyllodes wilsoni, Wallace, P. Z. S. 1862, p. 160.—Newton, Ibis, 1865, p. 343.—Wall. Malay Arch. ii. p. 248 (1869).

Paradisea calva, Schl. N. T. D. ii. p. 1 (1865).

Schlegelia calva, Bernst. N. T. D. iii. p. 4, pl. 7 (1866).

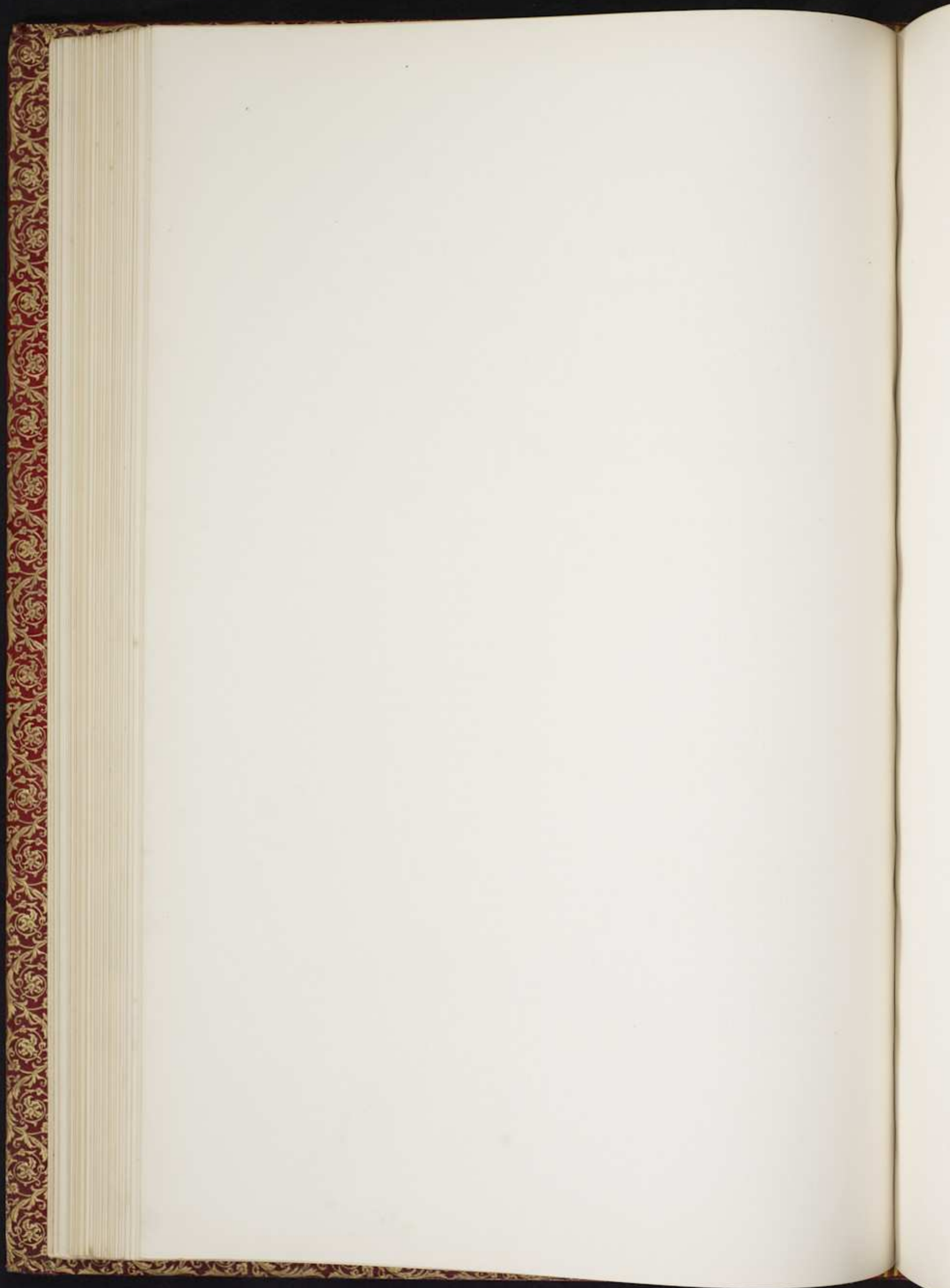
THIS very beautiful Bird of Paradise was simultaneously described in the year 1850 by Prince Bonaparte in Europe and by the late Mr. Cassin in Philadelphia, but apparently in each case from an imperfect skin. Certainly the type of *P. wilsoni* in the Philadelphia Museum has not got its proper head, although all the rest of the body seems to be quite perfect; and as Prince Bonaparte does not mention the head, which, if it had been attached to the skin, could not have failed to attract his attention, we may suppose that, as in Mr. Cassin's specimen, the head of some other bird had been attached. Indeed the bare cranium is one of the chief peculiarities of the species—so much so that Dr. Bernstein instituted a new genus (*Schlegelia*) for it; but inasmuch as the allied species of *Diphyllodes*, if not absolutely bare, have the cranium clothed only with short stubby plumes, I have not deemed the characters sufficient to warrant a generic separation; this is also Mr. Elliot's conclusion.

To Dr. Bernstein, however, belongs the credit of discovering the home of this fine species. He found it in the island of Waigiu; and in the original note published by him, he thus characterized his proposed *Schlegelia calva*:—"Of the same size and general form as *Paradisea speciosa* and *P. wilsoni*; but the upper part of the head, from the forehead even to the nape, covered with bare skin, broken only by some transverse rows of little plumes. This bare skin is in the male of a very brilliant cobalt blue, in the female of a dirty blue, varied with red and with grey. The rows of little plumes, of which we have just spoken, answer almost to the sutures of the skull in young individuals. The other parts of the head and the chin are black; the posterior portion of the neck and the mantle are straw-yellow; the remainder of the back is of a fine red like that which adorns the plumage of *P. regia*; the fore neck and pectoral shield are of a beautiful dark green with metallic reflections; the breast and belly are black. The distribution of the colours in the female calls to mind those of the Wryneck (*Jynx torquilla*), especially on the lower parts."

In a further communication Dr. Bernstein states that the young male exactly resembles the female, but shows the velvety black plumes on the throat and lower part of the cheeks which are seen in the adult male. In the third volume of the 'Nederlandsch Tijdschrift' the species is fully described by him, and he writes in conclusion:—"This species, being distinguished from all the other known kinds of Paradise-birds by its crown and occiput being for the most part bare, I consider myself entitled to regard it as representing a new genus. This genus is allied, on account of its two centre tail-feathers being elongated and spirally twisted, to the genus *Diphyllodes* of Lesson, by the side of which it is convenient to range it.

"This bird is found in the island of Waigiu; but it inhabits the parts of the country more or less in the interior, and is much more rare than *Paradisea rubra*, which is moreover met with in the adjacent island of Gemien." Afterwards, however, Dr. Bernstein procured the species in the island of Batanta; and ten specimens of his collecting in these two localities are in the Leiden Museum.

The figures in the Plate are of the natural size.





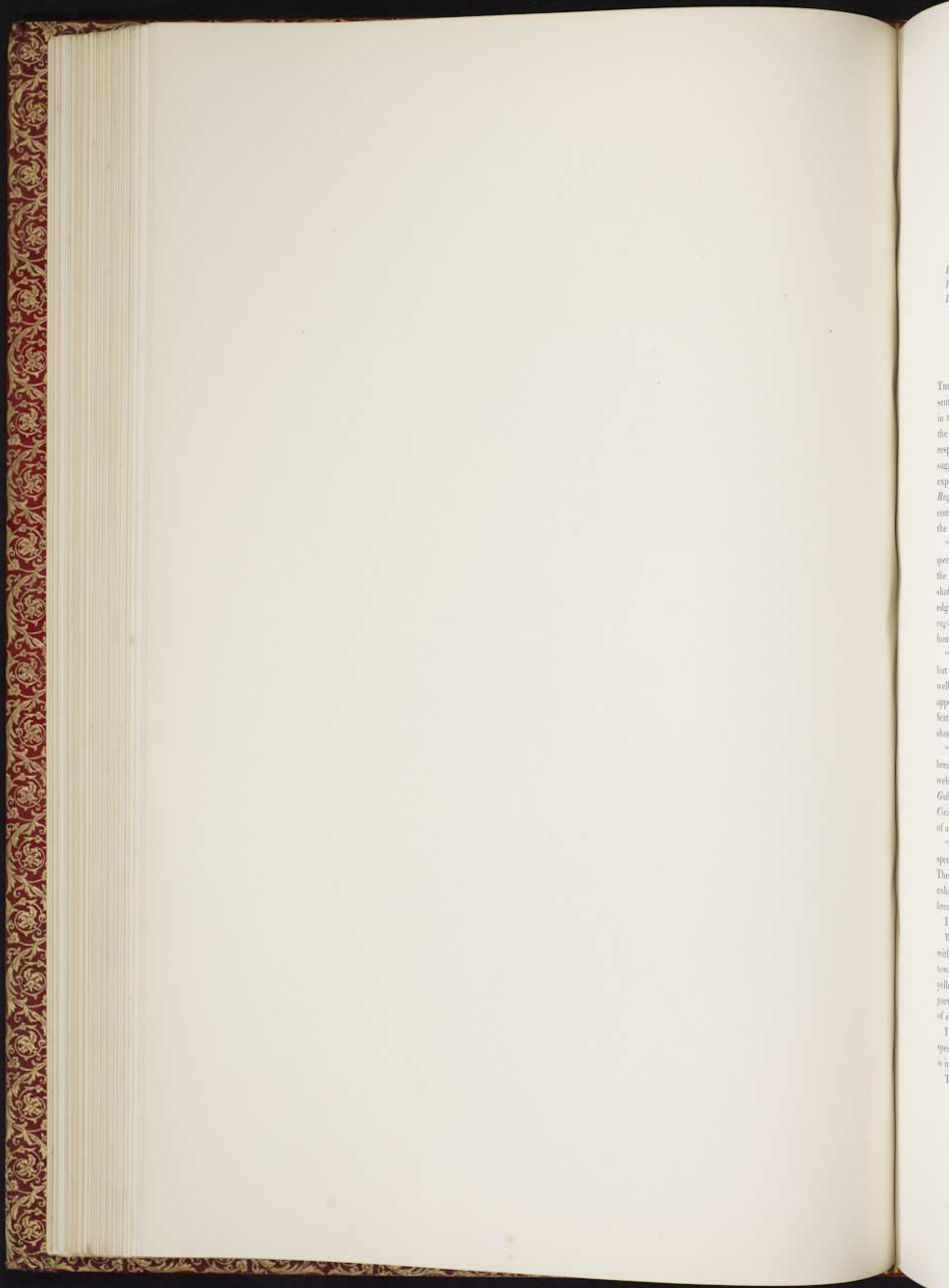


DIPHYLLODES GULIELMI, III, Meyer.

Walter imp







DIPHYLLODES GULIELMI III., Meyer.

Waigiou Bird of Paradise.

Diphyllodes Gulielmi III., Meyer, P. Z. S. 1875, p. 31.

Paradisea (Diph.) Gulielmi III., Van Musschenbroek, Zool. Garten, 1875, p. 29.

Diphyllodes Gulielmi III. (v. Mussch. in lit.), Meyer, Mittheilungen a. d. kgl. zool. Mus. Dresden, 1875, pp. 4-8, pl. 1.

THE present bird was discovered, in 1874, in the mountains of eastern Waigiou; and a short description was sent by Mr. S. C. T. Van Musschenbroek, the Dutch resident at Ternate, who is well known for his exertions in the cause of science. The original communication was made through Baron von Rosenberg, who takes the opportunity of remarking that it is also most likely to be found on the island of Batanta, as in general respects the avifaunas of the two islands are identical. Of course there is the probability of the above suggestion ultimately turning out correct; but it is a bold suggestion for a traveller of Von Rosenberg's experience to have made. The same paper expresses his opinion that the splendid new *Paradisea Raggiana* is a manufactured species, a supposition equally untrustworthy! Dr. Meyer about the same time communicated a note on the species to the Zoological Society, which I reproduce, as it so well expresses the differences between it and its allies.

"Notwithstanding there are more points of resemblance between the new species and *Diphyllodes speciosa* and *D. respublica* than between it and *Cicinnurus regius*, some features immediately remind one of the latter, *e. g.* the red colour and structure of the glossy feathers of the upper parts, the webless tail-shafts, at least at the beginning, and chiefly the similar fan, formed by elongated, broad and metallic-green-edged feathers, on the sides of the breast, not quite but nearly of the same colour and size as in *Cicinnurus regius*. This fan has been hitherto known to exist only in the latter species, except as regards the homologous organization of the large *Epimachus speciosus*.

"*Diphyllodes Gulielmi III.* has nearly the same-shaped crest, inserted on the neck, as *Diphyllodes speciosa*; but the crest seems to be somewhat smaller, and the colour of it differs from that of the latter species, as well as all other colours of the upper surface of the two birds, whereas the form and colour of the bill appear to be very similar in the two species. The new bird shows nothing of the broad line of iridescent feathers extending down from the chin over the breast, and nothing of the light-brown feathers of the shoulders and of the neck occurring in *Diphyllodes speciosa*.

"*Diphyllodes Gulielmi III.* reminds one of *D. respublica* in the shape of the green velvet feathers of the breast, and especially in the shape of the two elongated tail-shafts, with the single difference that these are webbed in *Diphyllodes respublica* from the beginning, and that they do not project so far as in *Diphyllodes Gulielmi III.*; but the breadths of the webs agree. The colour of the web is between that of the button of *Cicinnurus regius*, which is more of a green, and that of the web of *Diphyllodes speciosa*, which is more of a blue.

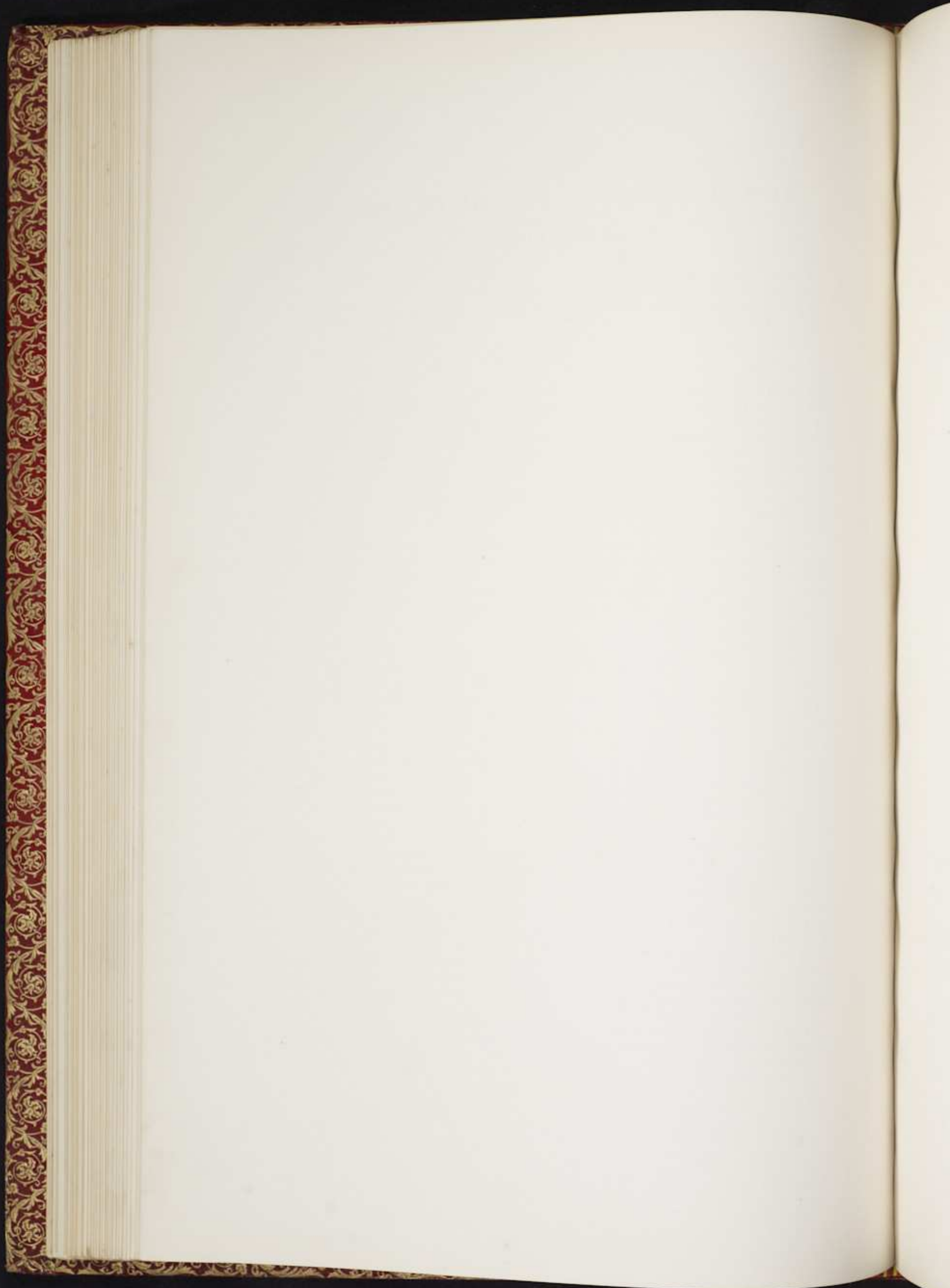
"From this short comparison with the allied species, it follows that *Diphyllodes Gulielmi III.* is a new species with very characteristic features, not to be confounded for a moment with any other hitherto known. These characteristic features are chiefly the shape of the elongated tail-shafts, with their web, the reddish colours of nearly all the upper parts, the violet-coloured belly, and the fan-like tufts at the sides of the breast."

I here insert a description of the female, with which I have been kindly favoured by Dr. Meyer:—

Whole upperside olive-brown; chin, throat, breast, belly, abdomen and under wing-coverts light yellow with fine brown stripes; each feather has several such light and dark markings, the lines getting smaller towards the upper part of the body; upperside of the wings brownish, secondaries and tertiaries margined yellow on the outer webs; underside silver-grey, basal portions of the inner webs cream-coloured; upper part of shafts brown, lower part whitish, underside of tail changing into grey, outer web lighter, lower parts of shafts white, upper part brown.

I owe the opportunity of figuring the present bird to the kindness of M. A. Bouvier, who lent the male specimen in his possession to Mr. Sharpe to bring from Paris for the purpose of this work. The example is intended for the Warsaw Museum.

Two males are represented in the Plate, of the natural size.







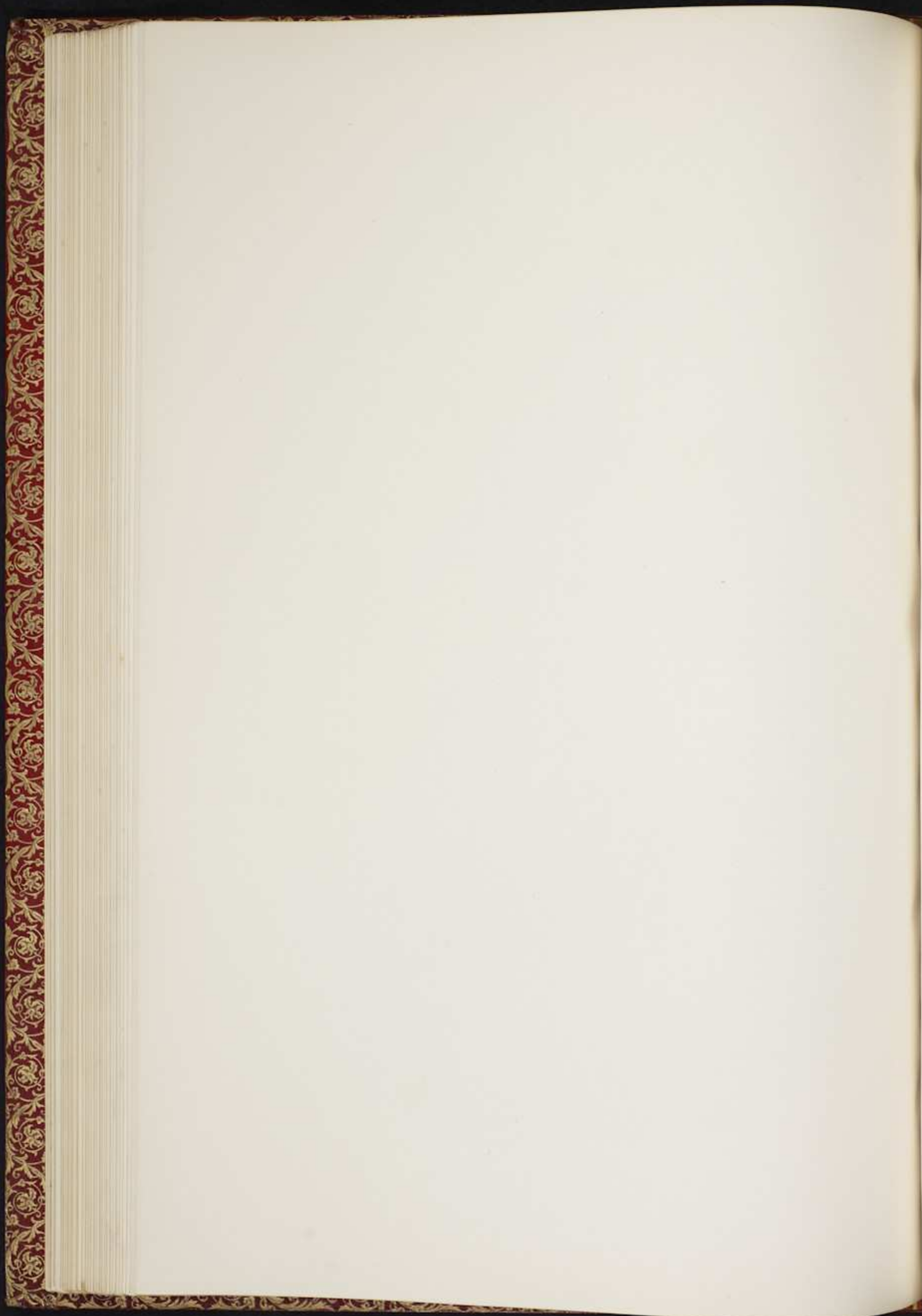
DIPHYLLODES SPECIOSA.

J. Gould & W. Hart del. et lith.

Walter imp.







DIPHYLLODES SPECIOSA.

Magnificent Bird of Paradise.

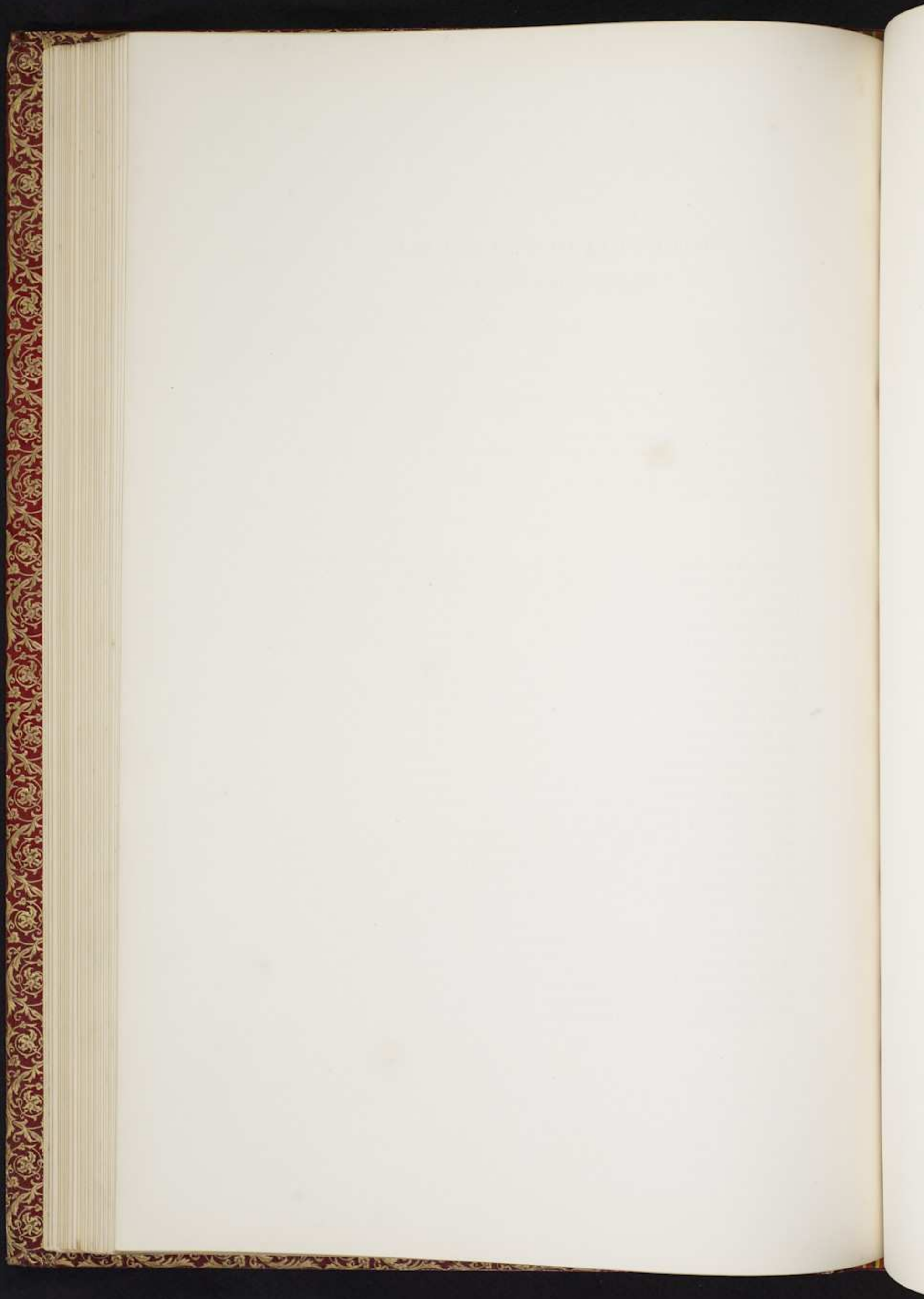
- Oiseau de Paradis de la Nouvelle Guinée, dit Le Magnifique*, Montb. Pl. Enl. p. 194, pl. 631.—Sonn. Voy. Nouv. Guin. p. 163, pl. 98.—Levaill. H. N. Ois. de Paradis, i. pls. 9, 10.
- Magnificent Paradise-bird*, Lath. Gen. Syn. ii. p. 477, pl. 19.
- Paradisca speciosa*, Bodd. Tabl. Pl. Enl. p. 38.—Gray, Gen. B. p. 323.—Schl. Mus. P. B. *Coraces*, p. 86.—Id. N. T. D. iv. p. 171.—Gray, Hand-l. B. ii. p. 16.
- *magnifica*, Gm. S. N. i. p. 401.—Shaw, Gen. Zool. vii. p. 492, pl. 62.—Audeb. & Vieill. Ois. Dor. p. 15, pl. 4.—Wagler, Syst. Av., *Paradisca*, sp. 4.—Less. Traité, p. 338.—Wall. P. Z. S. 1862, p. 160.
- *cirrhatta*, Lath. Ind. Orn. i. p. 195.
- Diphyllodes seleucides*, Less. Ois. Parad. Syn. p. 16, pls. 19, 20.
- *magnifica*, Gray, List Gen. B. 1841, p. 53.—Bp. Consp. i. p. 413.—Wall. Ibis, 1861, p. 287.—Rosenb. J. f. O. 1864, p. 130.
- *speciosa*, Wallace, Malay Archipelago, ii. p. 247.—Elliot, Monogr. Parad. pl. 12.—Scl. P. Z. S. 1873, p. 697.—Wagner, J. f. O. 1873, p. 11, pl. 1, map 5.

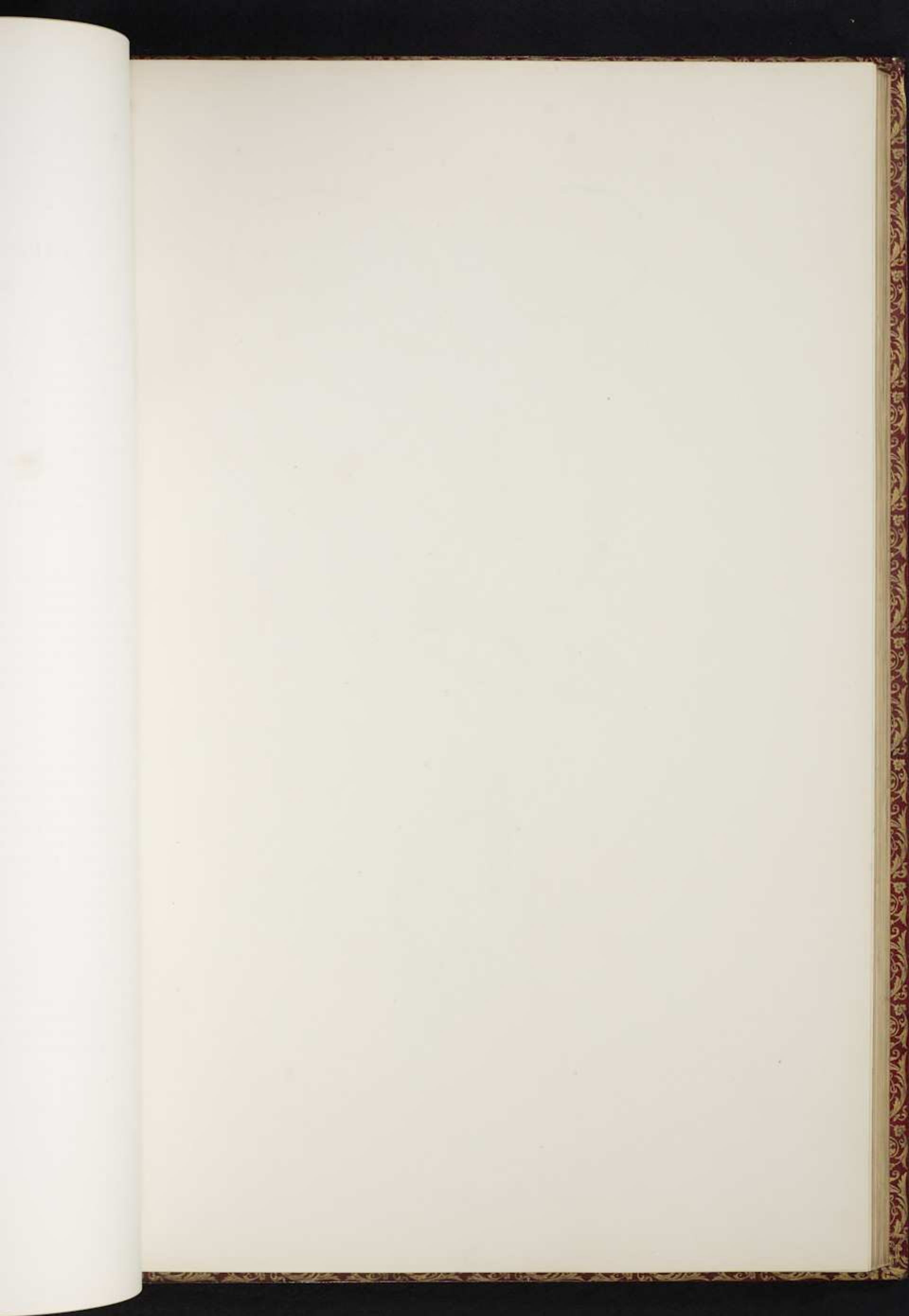
Who was the original discoverer of this Bird of Paradise, seems to be a difficult question to decide; but it was probably first introduced to the scientific world by Sonnerat, who figures it in his 'Voyage à la Nouvelle Guinée.' Although Sonnerat doubtless procured specimens during his journey, and was thus the first to bring them to Europe, Montbeillard's work, in which a figure is also given, bears date two years before the volume of the first-mentioned author. There can be no doubt, however, that of these two early figures, one is a direct copy of the other; and from internal evidence in other parts of the 'Planches Enluminées,' I have every reason to believe that it was by no means an unfrequent practice for the authors of this standard work to make up plates from the figures and engravings of other works and then to colour them from the descriptions. Thus it is possible that Montbeillard's plate was made up from Sonnerat's already published figure, and that the date on the volume is the year in which the work was finished, and not of the actual part in which the plate of "Le Magnifique" appeared. Certain it is, however, that the species was very little known to the older authors; for after the works above mentioned, all the writers for years copied Montbeillard's plate into their books; and it is equally certain that, until the last ten years, none but skins of native preparation existed in the museums of the world. Recently, owing to the enterprise of the Dutch naturalists, a good series of perfect skins have reached Europe, and good examples are to be found in the British Museum and in my own collection. In Salvatti, according to Baron von Rosenberg, it cannot be very rare, judging from the number of skins collected; and it is found in the mountains both of this portion of New Guinea and of Mysol. In the former place it is called by the natives *Sabelo*; and in Mysol its name is *Arung-arung*. The late Dr. Bernstein procured numerous examples at Sorong, on the coast of New Guinea, facing Salvatti; and Von Rosenberg likewise records that it is an inhabitant of the eastern coast of the great island, where it is found both near the coast and in the interior. D'Albertis met with it in Atam; and during his last voyage Von Rosenberg discovered it to be an inhabitant of the island of Jobi.

Nothing is known of the habits of this beautiful bird, as it was not met with in a state of nature by Mr. Wallace. In his work on the Malay Archipelago is to be found the following note, from which it will be seen how recent has been the acquisition of properly prepared specimens by European naturalists:—

"From what we know of the habits of allied species, we may be sure that the greatly developed plumage of this bird is erected and displayed in some remarkable manner. The mass of feathers on the under surface are probably expanded into a hemisphere, while the beautiful yellow is no doubt elevated so as to give the bird a very different appearance from that which it presents in the dried and flattened skins of the natives, through which alone it is at present known. The feet appear to be dark blue."

The Plate represents two males of the size of life. The female is a little less than life-size.







DIPHYLLODES CHRYSOPTERA, Gould.

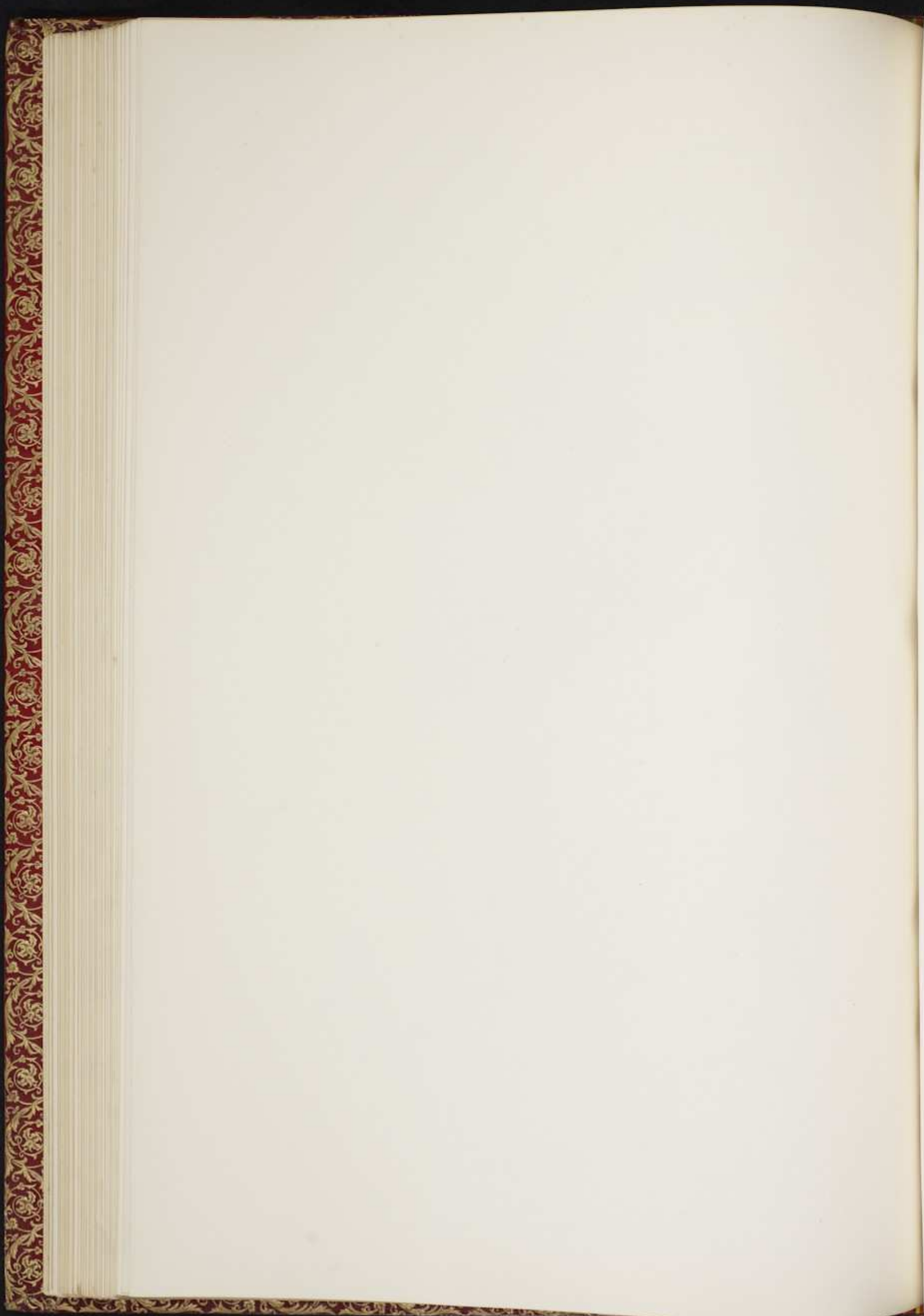
J. Gould & W. Hart del. et lith.



Walter imp.



ERA, Gould.



D

Diploma

I am, &
figuring
ordinary
"The
I have co
that there
distinct
variation
come in

I have
the birds
but a vast
other; a
been dis
the birds
and I am
The b

DIPHYLLODES CHRYSOPTERA, *Gould.*

Golden-winged Bird of Paradise.

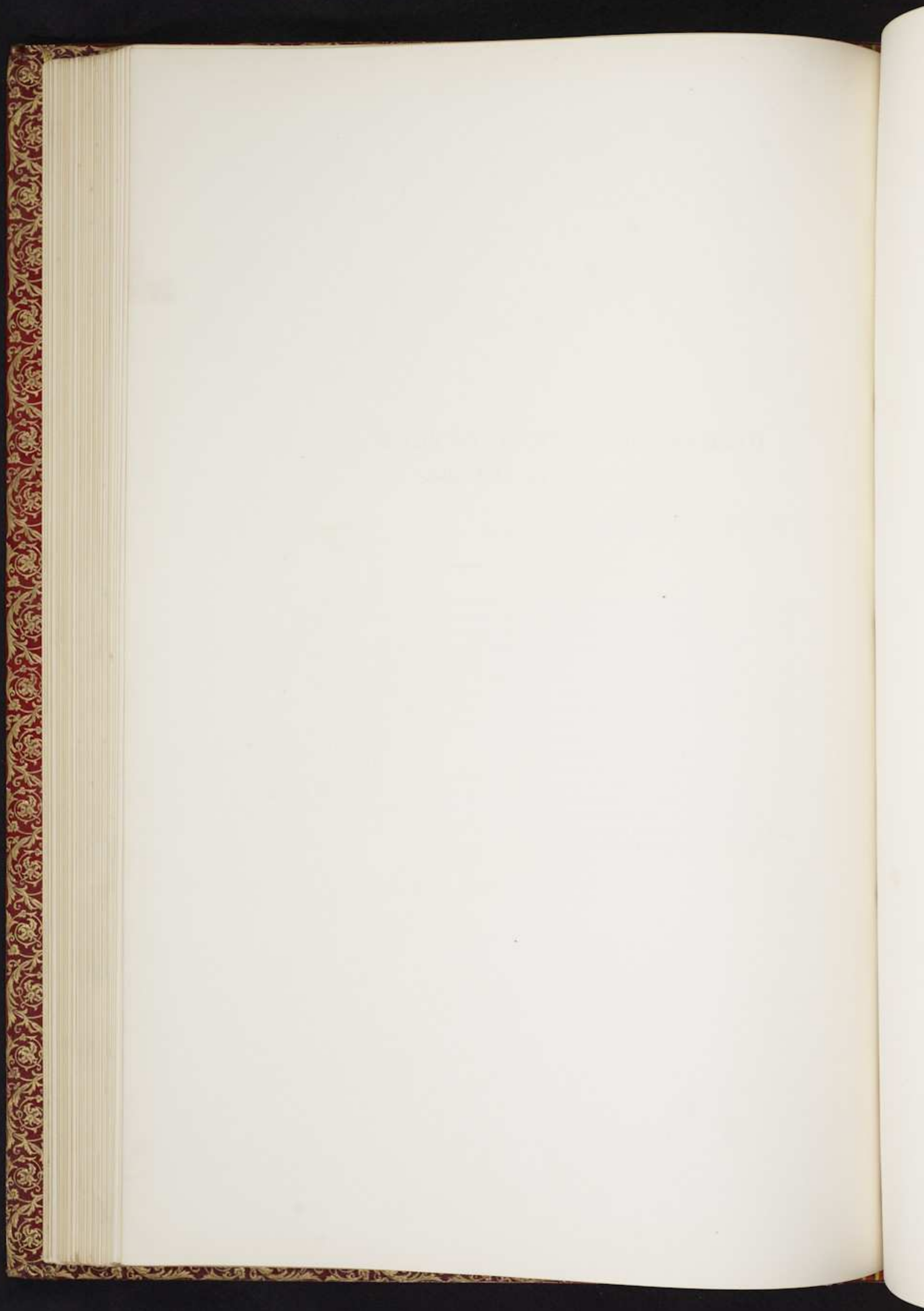
Diphyllodes chrysoptera, Gould, MS., *unde*
——— *speciosa*, var. *chrysoptera*, Elliot, Monogr. Parad. pl. 13.

I HAVE for a considerable time possessed specimens of the present bird, which I lent to Mr. Elliot for figuring in his monograph of the family. He does not, however, consider it more than a "variety" of the ordinary species, as will be seen from the account which I extract from his work :—

"The only difference perceptible between these specimens and those of the well-known species with which I have compared them is that the wings are of a golden colour. In size they are equal. I do not consider that there are sufficient grounds shown for naturalists to regard these birds as belonging to a species distinct from the *D. speciosa*; and I have given a representation of them merely to exhibit a form of variation to which perhaps *D. speciosa* is subject in certain localities. The exact place from which they come is not known. . . . The bird may be described as the same as *D. speciosa* with yellow secondaries."

I have reproduced Mr. Elliot's remarks because I wish my readers to know his exact opinion respecting the birds, especially as I am compelled to differ from him entirely in his belief that the present bird is nothing but a variety of *D. speciosa*. I possess two individuals of *D. chrysoptera*, both males, and agreeing with each other; and considering that only during the past year a new and beautiful species of this very genus has been discovered in the well-known island of Waigiou, I see nothing extraordinary in another island being the habitat of this, to me, very well-characterized bird. I consider it perfectly distinct from *D. speciosa*; and I am certain that before long its proper habitat will be brought to light.

The birds are represented of the natural size.







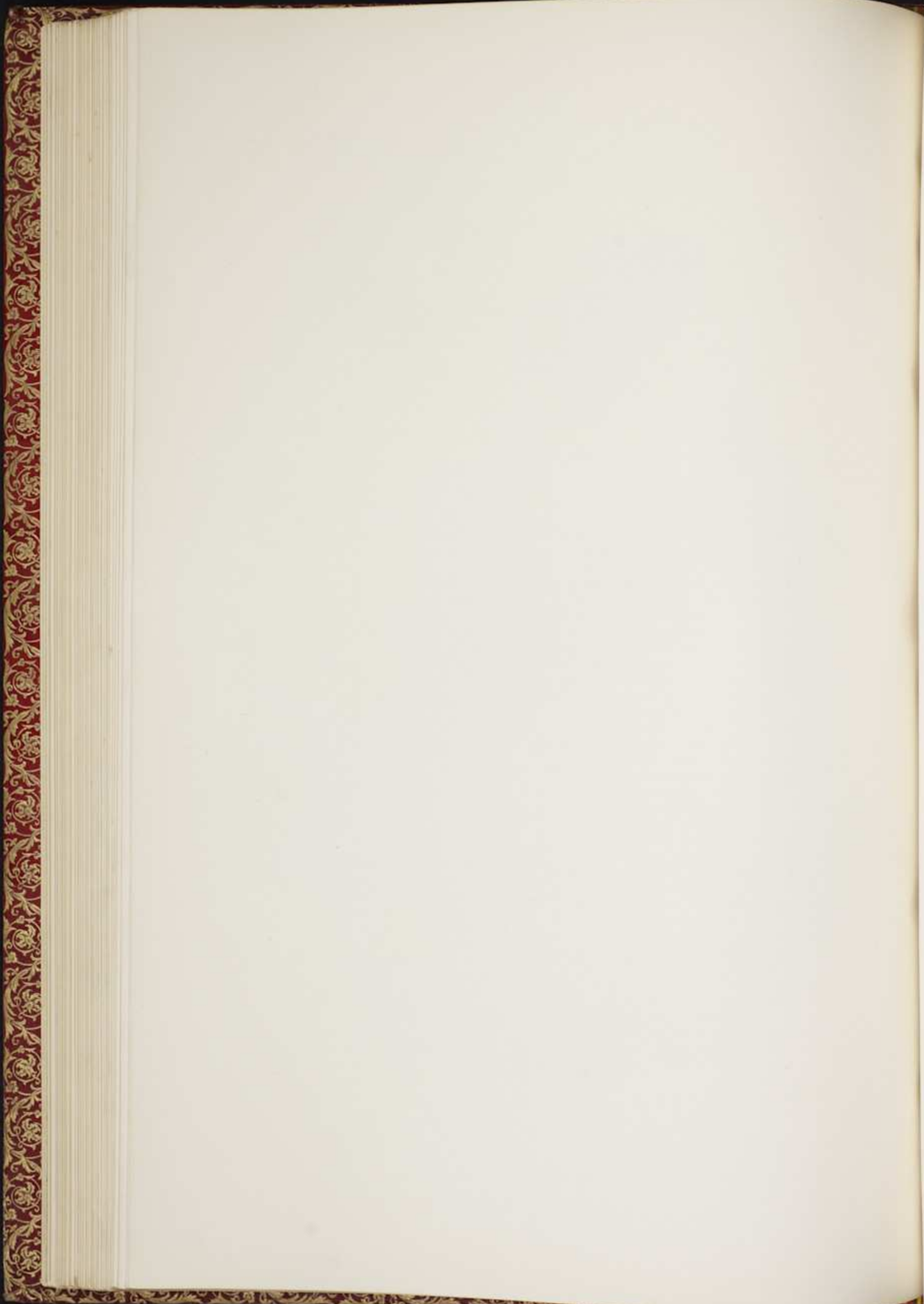
J. Gould & W. Hart del et lith.

CICINNURUS REGIUS.

Walter imp.







CICINNURUS REGIUS.

King Bird of Paradise.

- The supposed King of the greater Birds of Paradise*, Edwards, Birds, iii. pl. 3 (1750).
Le Petit Oiseau de Paradis, Briss. Orn. ii. p. 136 (1760).
Paradisea Regia, Linn. S. N. i. p. 166 (1766).—Shaw, Gen. Zool. vii. pt. ii. p. 497, pl. 67 (1809).—Less. Voy. Coq. i. p. 658, Atlas, pl. 26 (1826).—Wagler, Syst. Av. *Paradisea*, sp. 7 (1829).—Gray, Gen. B. ii. p. 323 (1847).—Schl. Hand-l. Dierk. i. p. 332, Atlas, pl. 4. fig. 46 (1857).—Gray, Hand-l. B. ii. p. 16 (1870).—Schl. M. P.-B. *Coraces*, p. 88 (1867).—Wall. Malay Arch. ii. p. 132 (1869).—Schl. N. T. D. iv. pp. 17, 49 (1873).—Wagner, Zool. Gart. 1873, p. 10.
Le Manucode, Buff. Hist. Nat. Ois. iii. p. 163, pl. 13.—Id. Pl. Enl. iii. pl. 496 (1774).—Vieill. Ois. Dor. (Oiseaux de Paradis) ii. p. 16, pl. 5 (1802).—Levaill. Ois. Parad. i. pls. 7, 8 (1806).
Le Roi des Oiseaux de Paradis, Sonn. Voy. N. Guin. i. p. 156, pl. 95 (1776).
King Paradise-bird, Lath. Gen. Syn. i. p. 475 (1782).
Cicinnurus regius, Vieill. Gal. Ois. i. p. 146, pl. 96 (1825).—Bp. Consp. i. p. 413 (1850).—Elliot, Monogr. Parad. pl. 16 (1873).—Salvad. & d'Albert. Ann. Mus. Civ. Genoa, 1875, p. 832.
Cicinnurus spiniturus, Less. Ois. Parad. Synopsis, p. 14 (1835).—Id. Hist. N. Ois. Parad. p. 182, pls. 16, 17, 18 (1835).

ALTHOUGH one of the smallest of the Paradise-birds, the present species yields to none in the beauty of its plumage or the elegance of its form; while its wire-like caudal plumes are just as remarkable in structure as any of the fantastic decorations which adorn the larger kinds. Its range is, for a Bird of Paradise, rather extended. It seems to be found all over New Guinea, as it has been met with in the Bays of Lobo and Triton and, more recently, in the south-eastern part of the island, at Mount Epa, by Signor d'Albertis. A large number of specimens were collected in Salwatti by the Dutch travellers Bernstein and Von Rosenberg, as well as on the opposite coast of New Guinea, at Sorong &c. Von Rosenberg procured it in the island of Jobie, and also in the islands of Woxam and Wonoumbai of the Aru group. It is from the last-named islands and from Mysol that the largest number of specimens have come to this country, from the collections of Mr. Wallace and, more recently, of Mr. Cockerell. Notwithstanding the fact that specimens from all the above localities have been pronounced identical, I am in possession of facts which induce me to believe in the existence of, at least, two species of King Birds of Paradise.

As regards the habits of the *Cicinnurus* in Aru, it is impossible to do better than to quote the admirable account given by Mr. Wallace in his 'Malay Archipelago.' He says, "The first two or three days of our stay here were very wet, and I obtained but few insects or birds; but at length, when I was beginning to despair, my boy Baderoon returned one day with a specimen which repaid me for months of delay and expectation. It was a small bird, a little less than the Thrush. Merely in arrangement of colours and texture of plumage, this little bird was a gem of the first water; yet these comprised only half its strange beauty. Springing from each side of the breast, and ordinarily lying concealed under the wings, were little tufts of greyish feathers about two inches long and each terminated by a broad band of intense emerald-green. These plumes can be raised at the will of the bird, and spread out into a pair of elegant fans when the wings are elevated. But this is not the only ornament. The two middle feathers of the tail are in the form of slender wires about five inches long and which diverge in a beautiful curve. Almost half an inch of the end of this wire is webbed on the outer side only, and coloured of a fine metallic green; and being curved spirally inwards, they form a pair of elegant glittering buttons, hanging five inches below the body, and at the same distance apart. These two ornaments, the breast-fans and the spiral-tipped tail-wires, are altogether unique, not occurring on any other species of the eight thousand different birds that are known to exist upon the earth, and, combined with the most exquisite beauty of plumage, render this one of the most perfectly lovely of the many lovely productions of nature. My transports of admiration and delight quite amused my Aru hosts, who saw nothing more in 'Burong raja' than we do in the Robin or Goldfinch. Thus one of my objects in coming to the far east was accomplished. I had obtained a specimen of the King Bird of Paradise, which had been described by Linnæus from skins preserved in a mutilated state by the natives. I knew how few Europeans had ever beheld the perfect little organism I now gazed upon, and how very imperfectly it was still known in Europe. The emotions excited in the mind of a naturalist who has long desired to see the actual thing which he has hitherto known only by description, drawing, or badly preserved external covering, especially when that thing is of surpassing rarity and beauty, require the poetic faculty fully to express them. After the first

King bird was obtained, I went with my men into the forest ; and we were not only rewarded with another in equally perfect plumage, but I was enabled to see a little of the habits of both it and the larger species. It frequents the lower trees of the less dense forests, and is very active, flying strongly with a whirring sound, and constantly hopping or flying from branch to branch. It eats hard stone-bearing fruits as large as a gooseberry, and often flutters its wings after the manner of the South-American Manakins, at which times it elevates and expands the beautiful fans with which its breast is adorned. The natives of Aru call it 'Goby-goby.'

The figures in the Plate represent a pair of male birds from Aru, of the size of life, with a reduced figure of the female. According to notes made by Dr. Bernstein from the living bird, the male in breeding-plumage has the bill of a pale reddish yellow ; feet clear cobalt blue ; iris brownish yellow, tinged with grey. The female has the bill brownish black, passing to clear greenish brown near the angle of the gape ; the gullet yellowish green, rather blackish ; iris brownish grey ; feet of a clear blue.

er
es.
ng
ge
ch
all

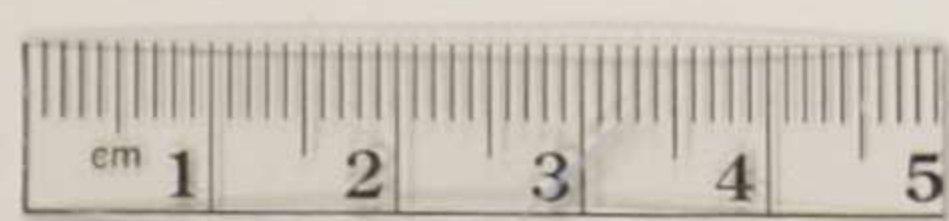
are
ng-
ith
pe ;



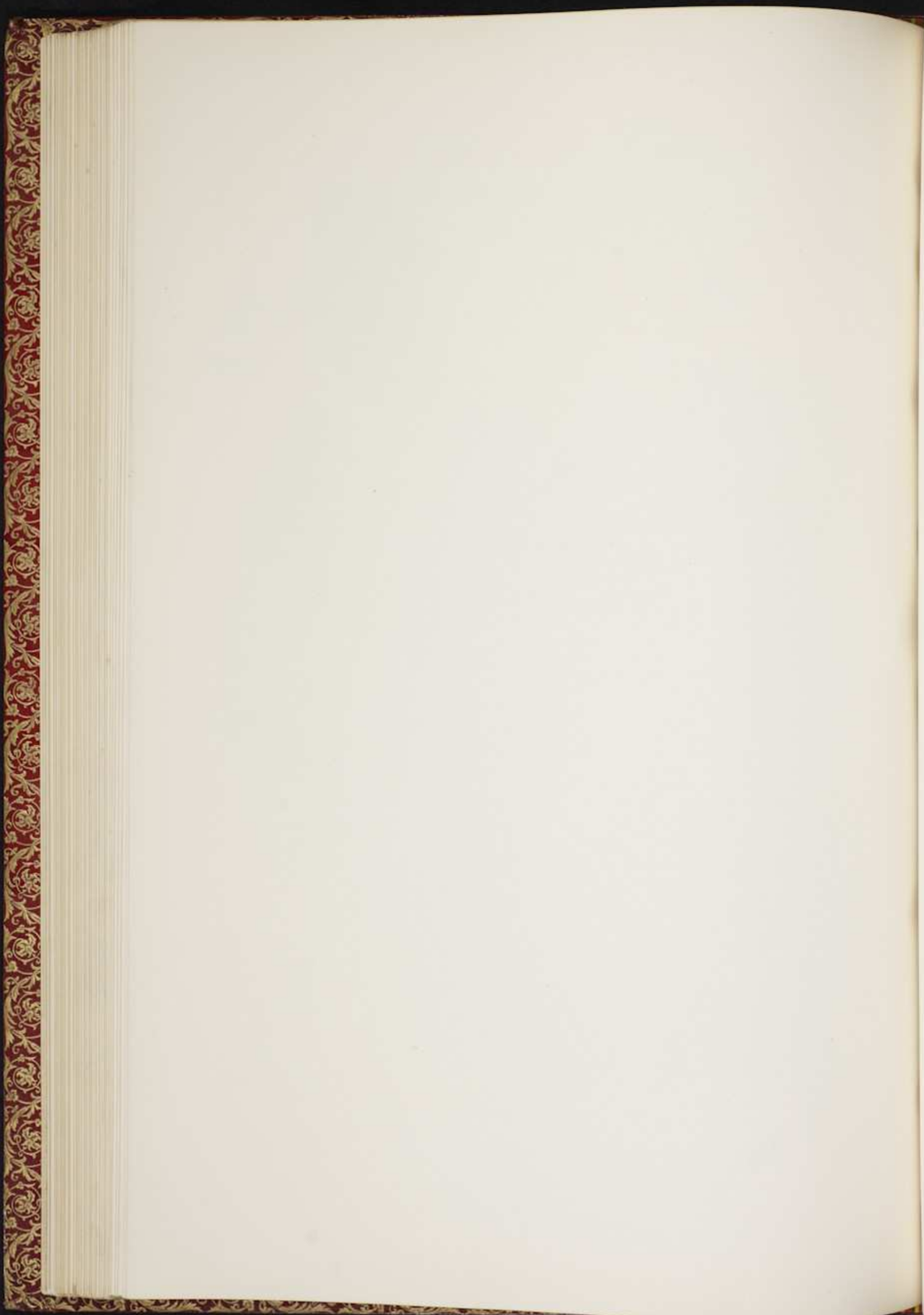
PAROTIA SEXPENNIS,

J. Gould & W. Hart, del. et lith.

Walter imp.







It is
[O]
[O]
[O]
[O]

It is
[O]
[O]
[O]
[O]

It is
[O]
[O]
[O]
[O]

It is
logical
in with
Monte
fact the
its exa
been a
specim
part. of
Dr. M
pair of
The
Pande
otian
is give
for over
Profes
kindly
feather
that the
don't
The
"Al
descri
these c
New G
level o
bird
much
various
other
accost
gtsa
out, ex
head,
its ex
with s
young
the for
eleven
open t
green
The

PAROTIA SEXPENNIS.

Six-plumed Bird of Paradise.

Le Sifilet de la Nouvelle Guinée, Montb. Pl. Enl. 111, pl. 633.

L'Oiseau de Paradis à gorge dorée, Sonnerat, Voy. N. Guin. p. 158, pl. 97.

Gold-breasted Paradise-bird, Lath. Gen. Syn. ii. p. 481.

Paradisea penicillata, Scop. Del. Faun. et Flor. Insubr. ii. p. 88 (ex Sonn.).

——— *aurea*, Gm. S. N. i. p. 402 (ex Lath.).

——— *sexsetacea*, Lath. Ind. Orn. i. p. 196.—Shaw, Gen. Zool. vii. pt. 2, p. 496, pl. 66.—Wagler, Syst. Av. *Paradisea*, sp. 6.

Le Sifilet, Levaill. H. N. Ois. Parad. i. pls. 12, 13.—Audeb. et Vieill. Ois. Dor., Parad. pl. 6.

Parotia sexsetacea, Vieill. Gal. des Ois. ii. p. 148, pl. 97.—Less. Ois. Parad. Syn. p. 10, pls. 11 bis, 12.

——— *aurea*, Gray, List Gen. B. p. 39 (1840).

Paradisea sexpennis, Gray, P. Z. S. 1861, p. 436.—Schl. Mus. P.-B. *Coraces*, p. 92.—Gray, Hand-l. B. ii. p. 16.—Schl. N. T. D. iv. p. 50.

Parotia sexpennis, Wall. Malay Archip. ii. p. 251.—Elliot, Monogr. Parad. pl. 10.

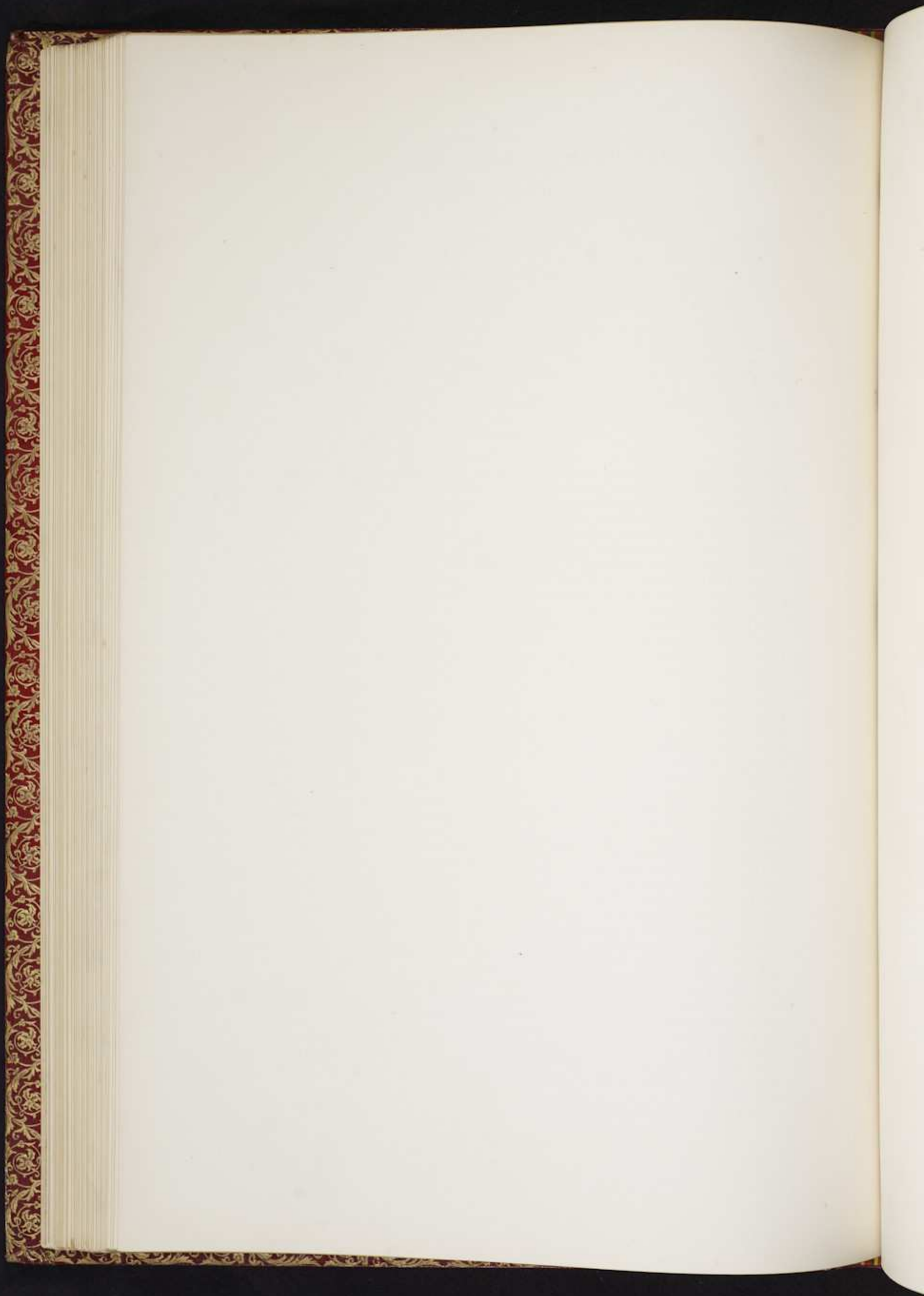
It is evident, from the recent researches of travellers, that we are at last beginning to solve the ornithological mysteries of New Guinea; and if no other proof existed, the history of the present bird would furnish us with one. It is now nearly one hundred years ago since the Six-plumed Bird of Paradise was figured by Montbeillard; and until about three or four years ago we knew of this beautiful species nothing but the fact that a few specimens, of native preparation, existed in some of the great collections of Europe. Even its exact *habitat* was unknown; but the correctness of the supposition that it came from New Guinea has been amply proved by the investigations of recent travellers. The first person who procured perfect specimens of the bird was Baron von Rosenberg. He discovered the species in the mountains of the northern part of New Guinea; and after him, Signor d'Albertis obtained it in the Arfak mountains, whence also Dr. Meyer brought to Europe numerous examples. I am enabled to give an illustration of the bird from a pair of his beautiful specimens, which are now in my collection.

The female was known to Lesson, by whom it was figured in his 'Histoire Naturelle des Oiseaux de Paradis' (pl. 12); and at the same time he gives a curious illustration of a male in imperfect plumage, retaining still some of the immature brown feathers on the breast. A better illustration of the female bird is given in Mr. Elliot's work. The latter gentleman has figured the male with the white feathers protruding far over the bill; and I recently saw a specimen with the feathers thus recurved, in the possession of Professor S. L. Steere, of Michigan University. On his way through London, back to America, he very kindly brought me the bird to examine; and although all the specimens which I have seen had these white feathers reflected backwards so as to form a broad frontal band as represented in my plate, it was evident that the position of the frontal plumes in Mr. Steere's specimen was quite natural; and there can be no doubt that when alive the bird raises and depresses these feathers at will.

The following remarks are from the pen of Signor d'Albertis:—

"Although this species has been known many years, it is not yet accurately understood, having only been described from birds in a mutilated condition. My observations have been made in the natural haunts of these elegant birds, from numerous specimens both living and dead. These birds are found in the north of New Guinea. I met with them about thirty miles from the coast, at an elevation of 3600 feet above the level of the sea, near Mount Arfak. I have never found the adult male in company with females or young birds, but always in the thickest parts of the forest; the females and young birds are generally found in a much lower zone. This Paradise-bird is very noisy, uttering a note like '*guaad-guaad*.' It feeds upon various kinds of fruits, more especially a species of fig which is very plentiful in the mountain-ranges; at other times I have observed it feeding on a small kind of nutmeg. To clean its rich plumage this bird is accustomed, when the ground is dry, to scrape (similarly to a gallinaceous bird) around places clear of all grass and leaves, and to roll over and over again in the dust produced by the clearing, at the same time crying out, extending and contracting its plumage, elevating the brilliant silvery crest on the upper part of its head, and also the six remarkable plumes from which it derives the specific name of *sexpennis*. On seeing its eccentric movements at this time, and hearing its cries, one would consider it to be engaged in a fight with some imaginary enemy. This bird is named 'Caran-a' by the natives. I have also a skeleton of a young male of this species, which, although not in a perfect state, may no doubt be interesting as showing the form of the cranium, on which there is an admirable muscular structure which enables the bird to elevate the feathers of the head. The feathers at the nape of the neck exhibit, when the rays of light strike upon them, a rich and brilliant metallic hue. The eyes are of a light blue, with a circle of a pale yellowish green colour."

The figures in the Plate are of the natural size.



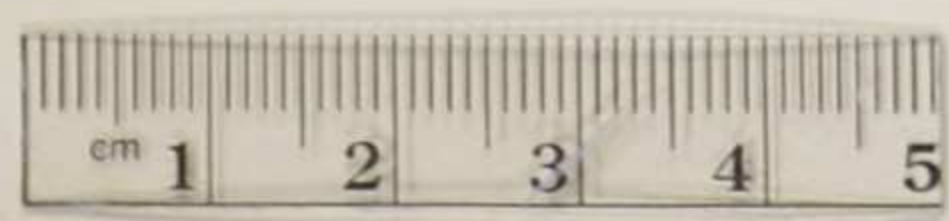




W. Hart del. et lith.

PAROTIA LAWESI, Ramsay.

Monterey, Brev. imp.





This species
the Astor
Mr. Har
the spec
As m
neverthe
P. torqu
specimen
being pu
slight gr
faintest p
lin-shape
black wi
dense pe
The fi
black lin
The y
The m
Male.
Female
The sp
Hovers

PAROTIA LAWESI, *Ramsay.*

Lawes's Bird of Paradise.

Parotia lawesi, Ramsay, Proc. Linn. Soc. N.S. Wales, x. p. 243 (1885).—Finsch u. Meyer, Zeitschr. ges. Orn. ii. p. 375, pl. xvi. (1885).

THIS species represents the Six-plumed Bird of Paradise (*P. searpennis*) of North-western New Guinea, in the Astrolabe Mountains, in the south-eastern portion of that great island. It was first met with by Mr. Hunstein in the Horseshoe range at a height of 7000 feet, and Mr. H. O. Forbes has also come across the species in the Sogeri district of the Astrolabe range.

As might be expected, the southern bird is closely allied to its north-western representative, but it is, nevertheless, quite a distinct species. The pectoral shield, when examined in the same light as that of *P. searpennis*, is much more fiery metallic-golden, and shows less of the green shade which is seen in all specimens of *P. searpennis*. The metallic band on the nape is also differently composed, the general effect being purplish or steel-blue, whereas the centre of this band in *P. searpennis* is green. It is true that a slight greenish tinge can be discovered at the base of the metallic plumes in *P. lawesi*, but it is of the faintest possible character. The silvery patch on the crown is differently disposed in the two species, being fan-shaped in *P. searpennis* and not descending to the base of the bill, all the frontal plumes being velvety black with a brownish gloss, exactly like the rest of the head. The white patch in *P. lawesi* comes to an obtuse point above the nostrils, and is differently shaped to that of *P. searpennis*.

The female of *P. lawesi* is also distinct from the female of *P. searpennis*, being rufous underneath with black bars, while the upper surface is also of a more chestnut tint.

The young male at first resembles the adult female.

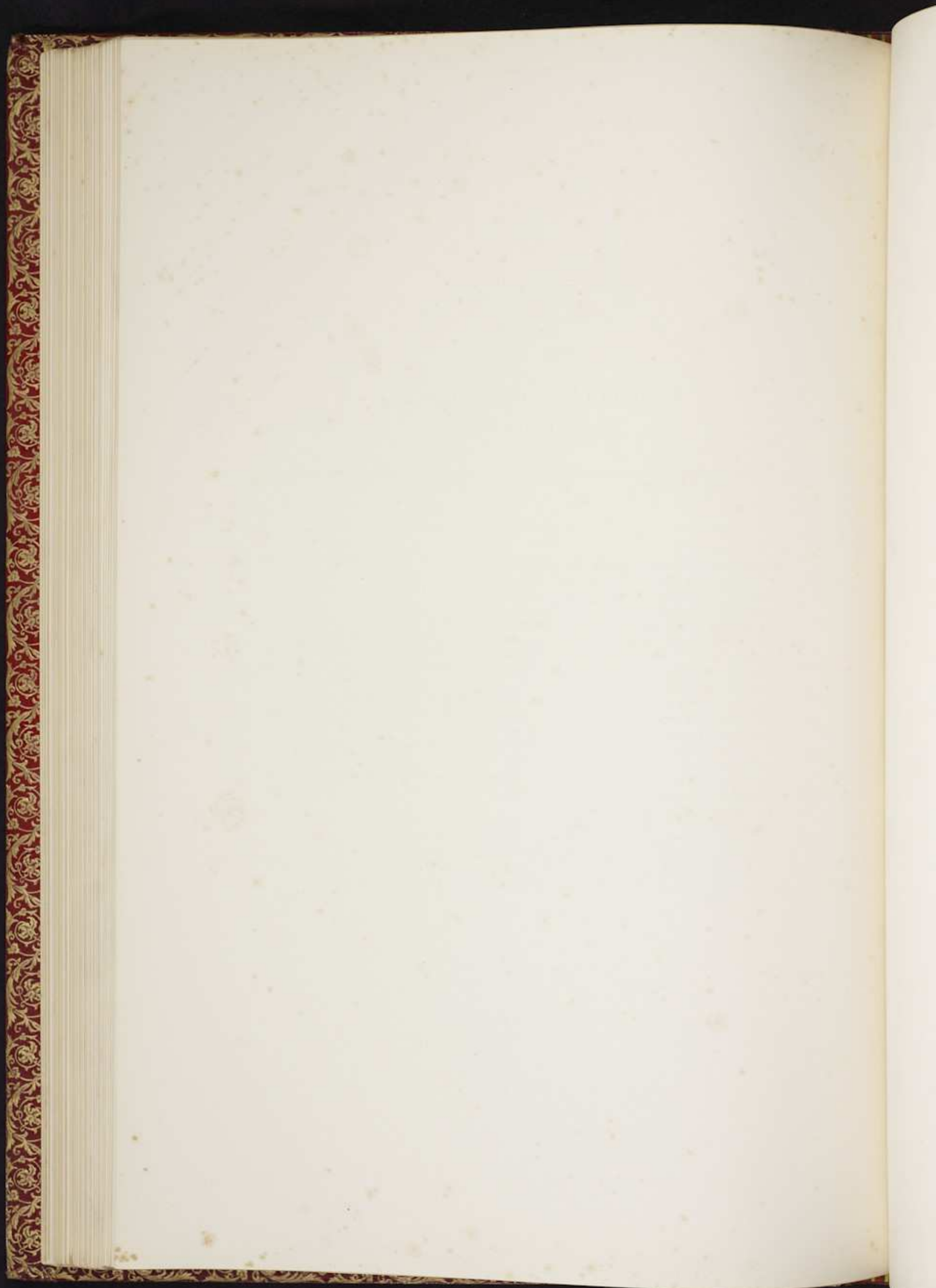
The measurements of the pair of *P. lawesi* in the British Museum are as follows:—

Male. Total length 13 inches, culmen 1·15, wing 6·15, tail 5·0, tarsus 2·15.

Female. „ „ 9·5 „ „ 1·10, „ 6·10, „ 4·1, „ 2·0.

The figures in the Plate have been drawn from a pair of birds in the British Museum, collected in the Horseshoe range by Mr. C. Hunstein. The adult male and female are represented of the full size.

[R. B. S.]



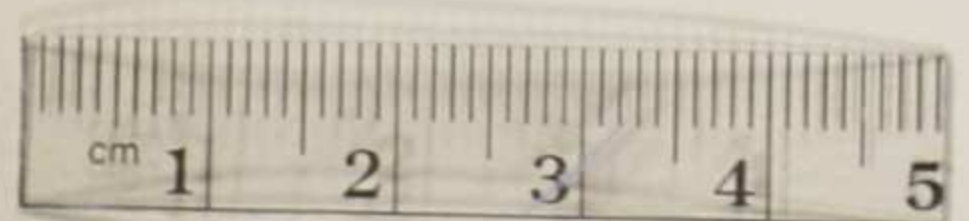




W. Hart del et lith.

PARADISEA DECORA, Salv. et Godm.

Mintern Bros. imp.





Paradise
Paradise

The discov-
eries the
Ferguson
by ex in the
We over

"The H
mountain.
lowest point
Over hear
and birds
calling were
tree for dan

"We ne
On slowing
they, in bot
but two or
the new bir

The new
differs in its
from it by

The de
a retire.

"Fergus
(the highes
islands, Go
of the group

"Paradi
of the previ
hills toward
P. angustatus
of *P. spodi*,
became more
extremity.

"The si
quite short,
feathers are
concentrated

"The bre
The throat is
a different n
except the n

"Mr. Gol
with the thro
best plumage
they project
(perhaps you
the length of
to form a van

"The mo
are the first
In some cases
others, again

The figure
shows from t

PARADISEA DECORA, *Salv. & Godm.*

Grey-chested Bird of Paradise.

Paradisea decora, Salvin and Godman, Ibis, 1883, pp. 131, 202, pl. viii.

Paradisea susanna, Ramsay, Proc. Linn. Soc. N. S. Wales, viii. p. 21 (1883).

THE discovery of a new Bird of Paradise must always be a matter of interest to naturalists, and especially when the species proves to be of so fine a character as the present bird. The home of *Paradisea decora* is Fergusson Island, in the D'Entrecasteaux group, whence comes the beautiful *Manucodia comrii*, also figured by us in the 'Birds of New Guinea.'

We owe the discovery of this beautiful bird to Mr. A. Goldie, to whose energies science has been indebted for many years. He has given the following account of its capture:—

"The Birds of Paradise were shot on Fergusson Island, one of the D'Entrecasteaux group, in the mountains, at a considerable elevation above the sea, the first specimen obtained having been secured at the lowest point. The plumed males and the younger individuals were generally seen three or four together. Once heard, their call was unmistakable, being very like that of *Paradisea raggiana*; but the plumed and wired birds, after giving that call a few times, added to it a peculiar shrill whistle. Their motions whilst calling were identical with those of *P. raggiana*; but, so far as we were able to observe, they had no particular tree for dancing in. The females were found alone.

"We neither saw nor heard *P. raggiana* on these islands; and the new bird is not found on the mainland. On showing it to the natives of Chad's Bay and China Straits along with a specimen of *Paradisea raggiana*, they, in both cases, made us to understand that the latter is found in their country, whilst the former is not; but two or three of them in China Straits who had traded to the D'Entrecasteaux Islands made signs that the new bird was to be found there."

The nearest ally of the present species is *P. raggiana*, and, like that bird, it has red flank-plumes; but it differs in its yellow back and grey chest, the latter extending up to the green throat, and not being separated from it by a yellow collar.

The description of the species, as given by Messrs. Salvin and Godman, is so complete that we transcribe it entire. We may add that the typical series, described by them, is now in the British Museum.

"Fergusson Island was so named by Capt. Moresby, who calculated that the mountain called Kilkerran (the highest near the northern coast) reaches an altitude of 6000 feet above the sea. Two other large islands, Goodenough Island and Normandy Island, lie close to Fergusson Island, and form the chief islands of the group.

"*Paradisea decora*, as we have proposed to call this Bird of Paradise, combines the characters of some of the previously known species. The side-plumes are like those of *P. sanguinea*, each feather having its barbs towards the end wide apart and destitute of barbules. These feathers are similarly formed in *P. sanguinea*; but in the present bird the barbs are even wider apart. The 'wires' of the tail are like those of *P. apoda*, *P. minor*, and *P. raggiana*, the feathers having a simple stem on which the atrophied barbs become more and more evanescent till they disappear at the middle of the feather to reappear again at its extremity. In *P. sanguinea* the stem is broad and flattened.

"The side-plumes of *P. decora* are very peculiar, inasmuch as a number of the anterior plumes are quite short, with the barbs of each feather much lengthened towards the end; the distal ends of these feathers are deep rich vinous red, and appear as if the pigment which colours the elongated plumes were concentrated in these shorter ones.

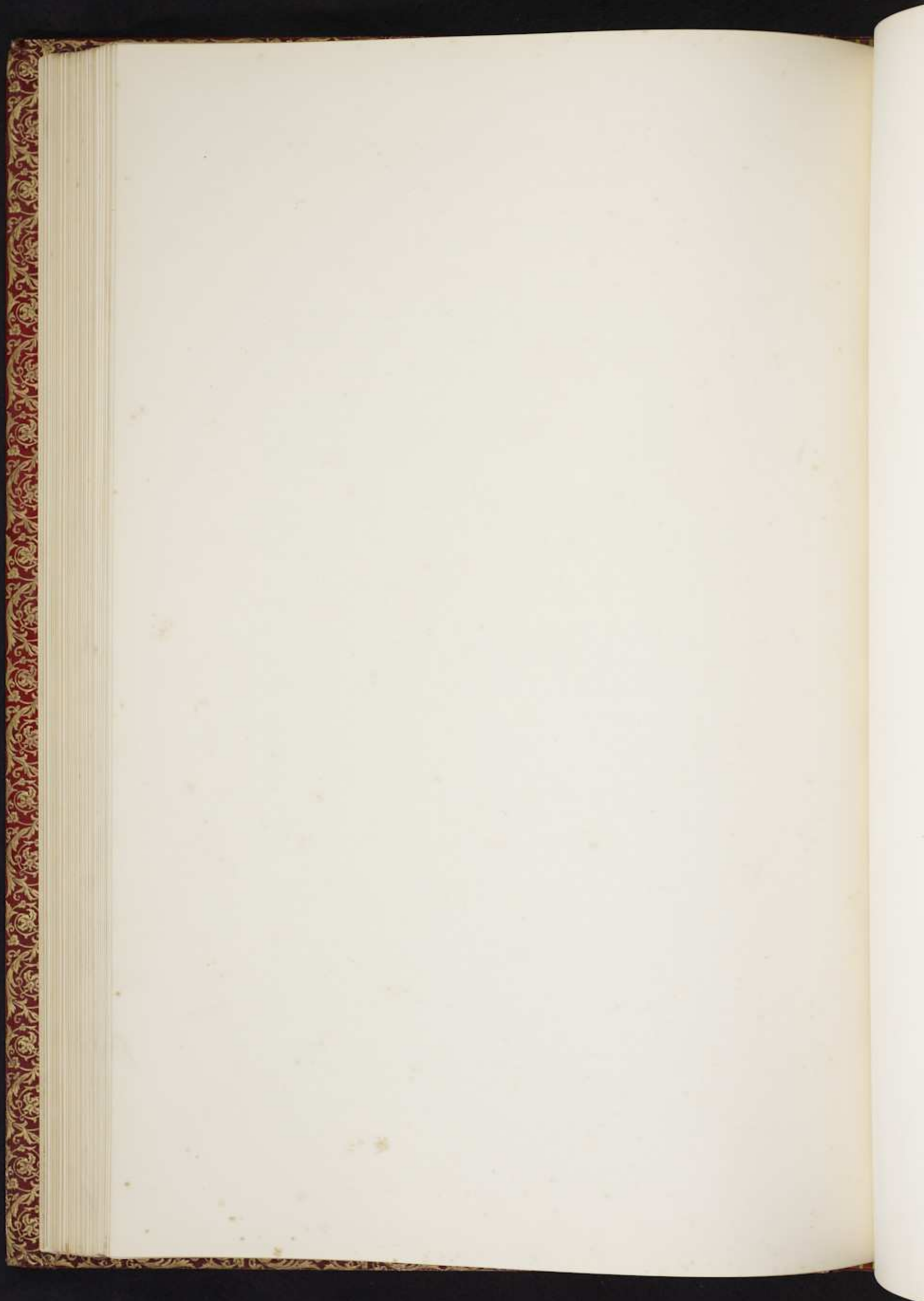
"The breast of *P. decora* is of a soft vinaceous lilac, and in this respect differs from that of all its congeners. The throat is velvet-green, showing two shades, owing to the feathers nearer the chin reflecting the light at a different angle. This darker-looking patch is larger in *P. decora* than in the other species. The back, except the narrow green forehead, is straw-coloured, like that of *P. minor*.

"Mr. Goldie's series contains males in all stages of development. The youngest are like the females, but with the throat green; the breast is of a ruddy tint, vermiculated with dusky marks on each feather. In the first plumage the two central rectrices are narrow and elongated, but with barbs &c. as in the perfect feather; they project beyond the rest of the tail-feathers, the length of the projection varying. In some males (perhaps young birds, perhaps birds out of nuptial plumage) these feathers are much more elongated and the length of the barbs of the middle of each feather is much reduced; but these lengthen again so as to form a small spatule.

"The moult to the nuptial plumage proceeds in various ways: sometimes the lilac feathers of the breast are the first to appear; in others the wiry rectrices are the first to take the place of their predecessors. In some cases these latter are fully grown before the ornamental side-plumes make their appearance. In others, again, they grow contemporaneously with these plumes."

The figures in the Plate represent the adult male and female of about the natural size, and have been drawn from the typical specimens in the British Museum.

[R. B. S.]







PARADISEA PAPUANA.

Walter Ince





Parus papua
Av.
Sch.
1892
Parus hartleyi

The specific name
adopting that of
I consider that
Wallace from
Ryol and other
that of *minor*
Costa Salvado
larger and more
males is darker
the neck.

The present
Gardens. The
these lived till
around couple
specimens with
through the
Zoological Society

Mr. Wallace
"When I return
and as they see
the very high
men. On my way
for my birds.

Oriental steamer
in hour every
a single meal.

when I left I took
Mediterranean

large cage could
open day and night
in Paris it was

Gardens for our
operators. It is
the best; and
around house in
live in this country

The following
for publication
of *Parus* from
five inches long
one below, their
how find they

PARADISEA PAPUANA.

Papuan Bird of Paradise.

Paradisea papuana, Bechst. Kurze Uebers. p. 131 (1811).—Gray, Gen. B. ii. p. 323 (1847).—Bonap. Consp. Gen. Av. i. p. 413 (1850).—Gray, P. Z. S. 1859, p. 157.—Wallace, Ibis, 1859, p. 111; 1861, p. 287.—Schl. J. f. O. 1861, p. 385.—Sclater, P. Z. S. 1862, p. 123.—Wall. tom. cit. p. 160.—Rosenb. J. f. O. 1864, p. 129.—Schl. Nederl. Tijdschr. Dierk. iv. pp. 17, 49.
Paradisea bartletti, Goodwin, P. Z. S. 1860, p. 244 (the young male).

THE specific name usually applied to this gorgeous bird is *minor*; I must therefore state my reasons for not adopting that title in the present instance. To call it *minor*, when it is the largest, is unphilosophical. I consider that there are two species or races confounded under one name; the examples brought home by Wallace from New Guinea, of which I have four or five, are by no means so fine or large as those from Mysol and other localities. I therefore propose to restrict the name *papuana* to the larger bird, and to adopt that of *minor* for the smaller. The term *papuana* is also applicable to the specimens sent from Jobi, as Count Salvadori states that the individuals from that island are larger, and the male birds have the plumes longer and much more finely developed, while the dull chestnut colour of the head in the females and young males is darker, occupying the whole of the head, and being abruptly separated from the yellow colour of the neck.

The present species has been on two occasions sent alive to this country, and has lived in the Zoological Gardens. The first specimens were brought by Mr. Wallace from Singapore in April 1862; and one of these lived till the 25th of December 1863, the other till the 28th of March 1864, in the Gardens. The second couple were obtained from the young French traveller, M. Léon Laglaize, who brought four living specimens with him on his return from his expedition to New Guinea. All these four specimens lived through the winter in the Jardin des Plantes at Paris; and two of them subsequently passed into the Zoological Society's collection in the Regent's Park, where one of them still survives.

Mr. Wallace gives the following account of his obtaining these specimens and their subsequent journey:—“When I returned home in 1862, I was so fortunate as to find two adult males of this species in Singapore; and as they seemed healthy and fed voraciously on rice, bananas, and cockroaches, I determined on giving the very high price asked for them (£100), and to bring them to England by the overland route under my own care. On my way home I stayed a week at Bombay, to break the journey and to lay in a fresh stock of bananas for my birds. I had great difficulty, however, in supplying them with insect food; for in the Peninsular and Oriental steamers cockroaches were scarce, and it was only by setting traps in the store-rooms, and by hunting an hour every night in the fore-castle, that I could secure a few dozen of these creatures, scarcely enough for a single meal. At Malta, where I stayed a fortnight, I got plenty of cockroaches from a bakehouse; and when I left I took with me several biscuit-tins full, as provision for the voyage home. We came through the Mediterranean in March with a very cold wind; and the only place on board the mail steamer where their large cage could be accommodated was exposed to a strong current of air down a hatchway, which stood open day and night; yet the birds never seemed to feel the cold. During the night-journey from Marseilles to Paris it was a sharp frost; yet they arrived in London in perfect health, and lived in the Zoological Gardens for one and two years respectively, often displaying their beautiful plumes to the admiration of the spectators. It is evident, therefore, that the Paradise-birds are very hardy, and require air and exercise rather than heat; and I feel sure that if a good-sized conservatory could be devoted to them, or if they could be turned loose in the tropical department of the Crystal Palace, or the Great Palm-house at Kew, they would live in this country for many years.”

The following account of these two birds when in the Gardens, was written by Mr. Bartlett for publication in my friend Mr. Elliot's ‘Monograph of the Paradiseidæ:’—“When the two birds of Paradise first arrived at the Gardens in April 1862, their plumes were quite short, only about five inches long. The birds had moulted; and the new feathers were growing in a thick bunch on each side below their wings. They appeared in good health, and were active and lively. I soon ascertained how fond they were of meal-worms and other insects; and they fed freely upon fruit, boiled rice, &c.;

a little cooked flesh was also acceptable to them. Their mode of hopping about from perch to perch and clinging to the bars or wires of the cage reminded one of a Jay or Jackdaw. They were fond of a bath, and were very careful in dressing and drying their fine plumes. These were about two months in growing to their full perfection; and it was a charming sight to see them when in full plumage. When uttering their loud call the body was bent forward, the wings spread open and raised up, frequently over their heads, meeting the plumes, which were spread in the most graceful manner, every feather vibrating in a way that almost dazzled the sight. During this display the bird would become greatly excited, and sometimes turn almost under the perch or branch, the head and neck being bent so low down. At this period we found that they would not agree, but attacked each other; and we were therefore obliged to keep them separated by a wire division. They hopped about like Jays or Jackdaws, never ran like Starlings or Magpies, and, when on the ground, raised the points of the plumes so that they should not touch the earth. They soon became very tame, and would take food from the hand; and the sight of a meal-worm would bring them down from their perch immediately. The moult was extremely rapid, the fine plumes being thrown off in a few days; and these appeared to grow all at the same time in a bunch. It is therefore certain that these birds, after they attain the adult plumage, lose it only during the annual moult, like the Peacock and many other richly ornamented birds."

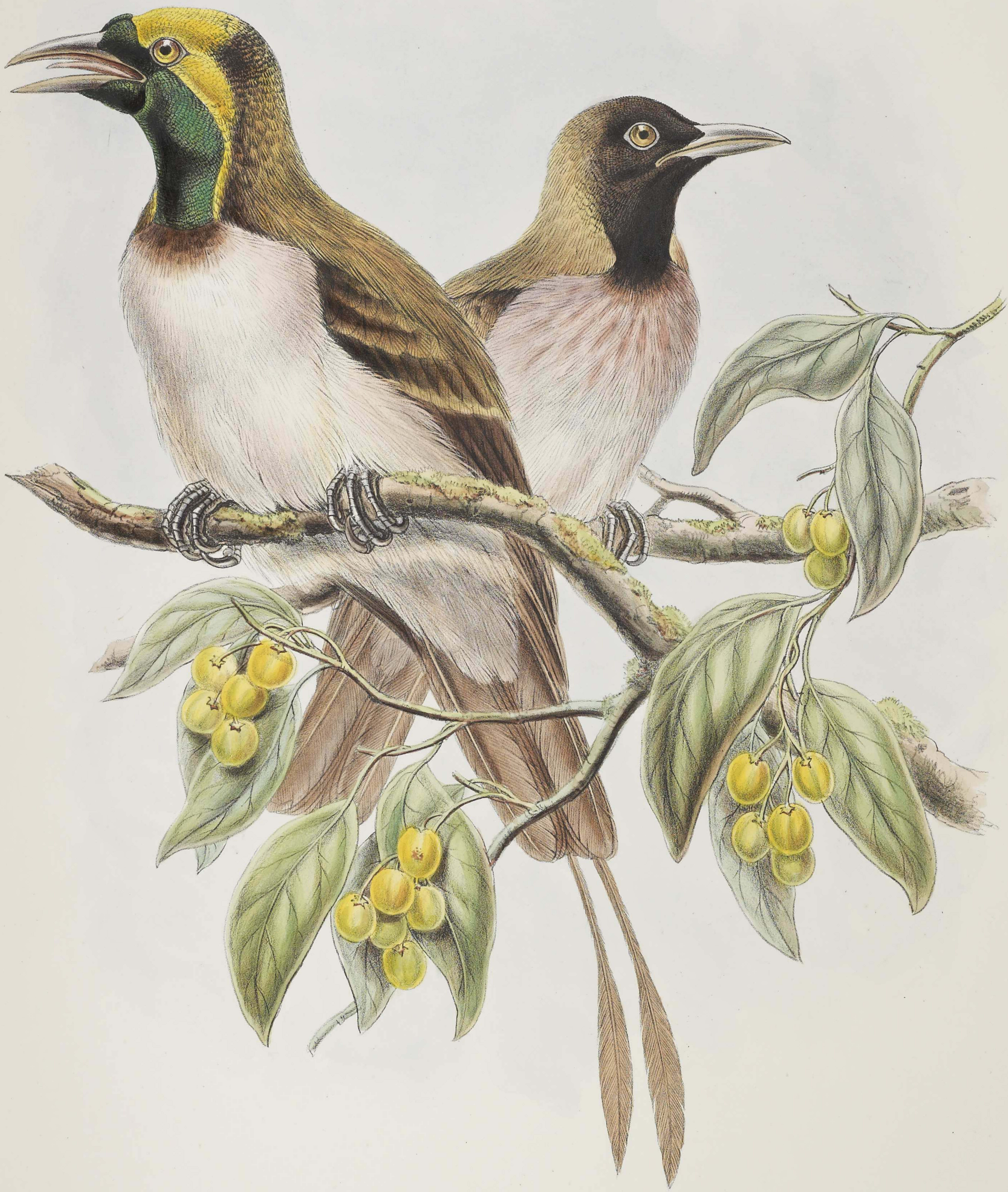
I have been constrained to give an additional Plate to exhibit the young male and the female of the natural size, which I could not do on the same Plate with the adult male in full display of the plumes.

The young male has been regarded as a different bird, and named *P. bartletti*, as will be seen on reference to the synonymy.

The accompanying illustrations represent an adult male in the nuptial plumage, and a young male and a female on the second Plate, all of the natural size.





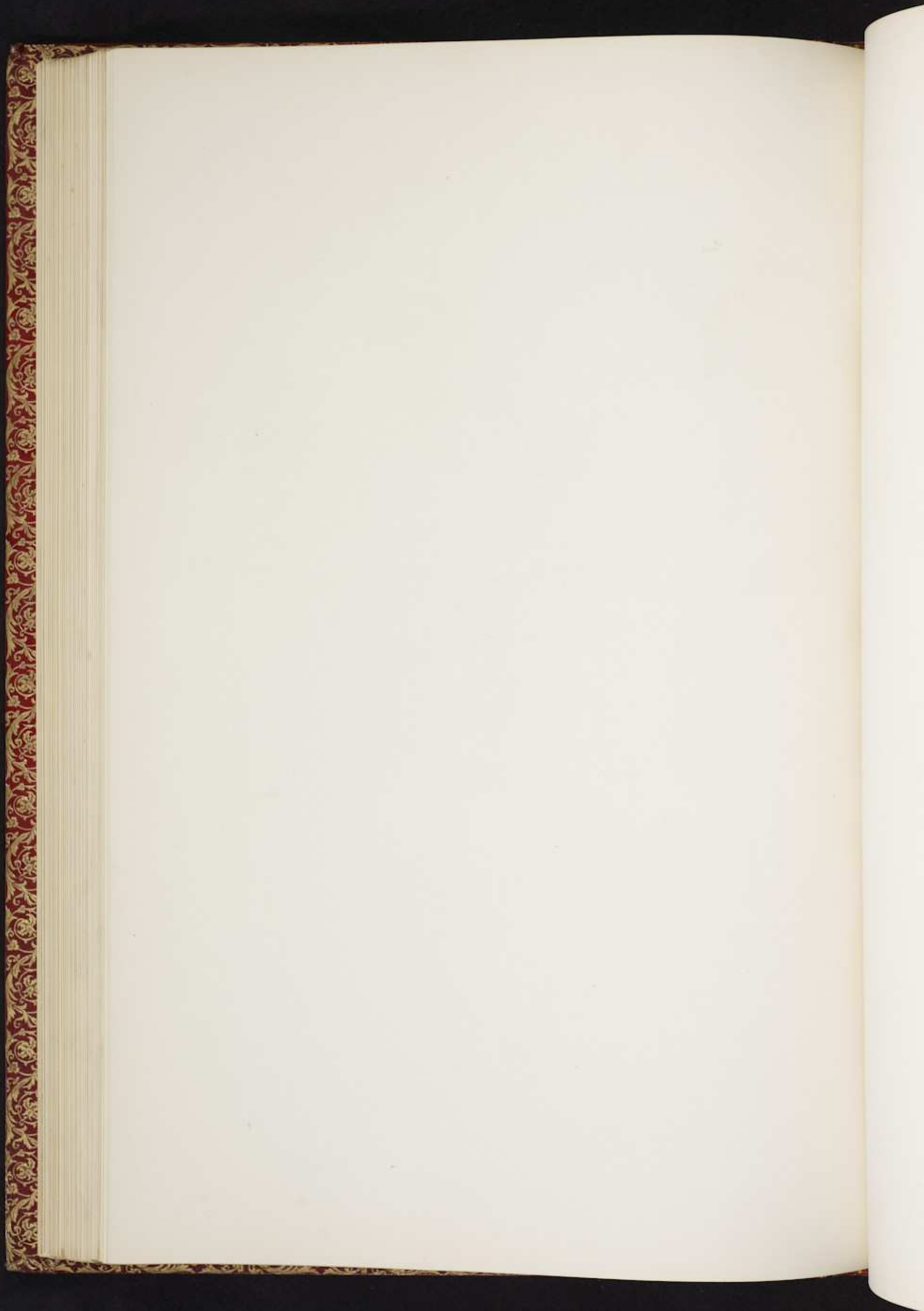


PARADISEA PAPUANA.
(Young Male and Female)

Walter, Imp.

J. Gould & W. Hart del et lith.









cm 1 2 3 4 5

Illustrated by W. Irwin, del. et lith.

PARADISEA APODA, Linn.

Walter Irwin



De Græcia Birg.
L'Océan de Por.
Pendula apola.
p. 412.
Bas. Co.
Parad.
Pendula major.
p. 135.
Pendula apola.

I saw in my collec-
tion it by Linnaeus
before the last two
paper appendages
which reached Eu-
rope and I well remem-
ber the examples, and the
first exhibited in the
collection, it is inter-
esting to its re-
sults Archipelago
previous species, the
abundance even of
"water" (or God's
own any thing with
Ducham, who was
given these names in
turning towards the
as, he adds, may be
occasionally seen in E-
urope and wrote an account
on ratings, which
dates in 1760, when
perfect specimens have
a hundred years. I
therefore the fact is that
I may remark that
older authors, such
as the and descriptive
upon — "It hath been
of Pys or Jays, of
not, that the vast num-
bers. He writes
the body up to the
as at the mouth.
and in the smoky
body is much reduced
of these native skins
made; and all gives

PARADISEA APODA, Linn.

The Greater Bird of Paradise.

The Greater Bird of Paradise, Edwards, Birds, iii. pl. 110.

L'Oiseau de Paradis, Brisson, Orn. ii. p. 130, pl. xiii.

Paradisea apoda, Linn. Syst. Nat. i. p. 166.—Wagler, Syst. Av., *Paradisea*, sp. 1.—Bonap. Consp. Gen. Av. i. p. 412.—Gray, P. Z. S. 1861, p. 436.—Wallace, Ibis, 1859, p. 111; 1861, p. 289.—Schlegel, Mus. Pays-Bas, Coraces, p. 78.—Wallace, Malay Archip. ii. p. 238.—Gray, Handl. B. ii. p. 16.—Elliot, Monogr. Parad. pl. i.—Salvad. Ann. Mus. Civic. Genov. ix. p. 191.—Sharpe, Cat. B. iii. p. 167.

Paradisea major, Shaw, Gen. Zool. vii. p. 480, pl. 58.—Less. Ois. de Paradis, Synopsis, p. 6.—Id. Hist. Nat. p. 155, pl. 6.

Paradisea apoda, var. *wallaciana*, Gray, P. Z. S. 1858, p. 181.

I HAVE in my collection some skins of this splendid bird which would justify the specific name of *apoda* bestowed upon it by Linnæus; and I suspect that nearly every one of the specimens in public collections mounted before the last twenty years would be found to have other birds' feet attached to them instead of their own proper appendages. The reason is that, until very recently, all the skins of the Great Bird of Paradise which reached Europe were in a mutilated condition—generally without feet, and often without wings; and I well remember the admiration which was roused by the arrival of Mr. Wallace's beautiful perfect examples, and the interest which the exhibition of Mr. Bartlett's mounted specimen excited, when it was first exhibited in the British Museum. Now that complete skins are the rule, and badly prepared ones the exception, it is interesting to glance at the past history of the species, and to peruse the accounts of the first describers of its remarkable plumage. "When the earliest European voyagers," writes Mr. Wallace, in his 'Malay Archipelago,' "reached the Moluccas in search of cloves and nutmegs, which were then rare and precious spices, they were presented with the dried skins of birds so strange and beautiful as to excite the admiration even of those wealth-seeking rovers. The Malay traders gave them the name of 'Manuk dewater' (or God's birds); and the Portuguese, finding that they had no feet or wings, and not being able to learn any thing authentic about them, called them 'Passaros de Sol' (or Birds of the Sun); while the learned Dutchmen, who wrote in Latin, called them 'Avis paradiseus' (or Paradise-bird). John van Linschoten gives these names in 1598, and tells us that no one has seen these birds alive; for they live in the air, always turning towards the sun, and never lighting on the earth till they die; for they have neither feet nor wings, as, he adds, may be seen by the birds carried to India, and sometimes to Holland; but being very costly they are rarely seen in Europe. More than a hundred years later Mr. William Funnell, who accompanied Dampier, and wrote an account of the voyage, saw specimens at Amboyna, and was told that they came to Banda to eat nutmegs, which intoxicated them, and made them fall down senseless, when they were killed by ants. Down to 1760, when Linnæus named the largest species *Paradisea apoda* (the footless Paradise-bird), no perfect specimen had been seen in Europe, and absolutely nothing was known about them. And even now, a hundred years later, most books state that they migrate annually to Ternate, Banda, and Amboyna, whereas the fact is that they are as completely unknown in these islands in a wild state as they are in England." I may remark that Edwards had probably a complete specimen in 1750, as he mentions the figures in the older authors, such as Willughby, and remarks, "As none of these were satisfactory to me, I have given this figure and description of a *perfect bird*, which may more than answer the purposes of so many;" and again:—"It hath legs and feet of a moderate proportion and strength for its bigness, shaped much like those of Pyles or Jays, of a dark brown colour, armed with claws of middling strength." The fact remains, however, that the vast majority of skins received in Europe before Mr. Wallace's expedition, were mutilated and footless. He writes:—"The native mode of preserving them is to cut off the wings and feet, and then skin the body up to the beak, taking out the skulls. A stout stick is then run up through the specimen, coming out at the mouth. Round this some leaves are stuffed, and the whole is wrapped up in a palm-spathe and dried in the smoky hut. By this plan the head, which is really large, is shrunk up almost to nothing, the body is much reduced and shortened, and the greatest prominence is given to the flowing plumage. Some of these native skins are very clean, and often have wings and feet left on; others are dreadfully stained with smoke; and all give a most erroneous idea of the proportions of the living bird." The following notes on

the habits are also given by Mr. Wallace:—"The Great Bird of Paradise is very active and vigorous, and seems to be in constant motion all day long. It is very abundant, small flocks of females and young males being constantly met with; and though the full-plumaged birds are less plentiful, their loud cries, which are heard daily, show that they also are very numerous. Their note is 'Wauk-wauk-wauk-wok-wok-wok,' and is so loud and shrill as to be heard a great distance, and to form the most prominent and characteristic animal-sound in the Aru Islands. The mode of nidification is unknown; but the natives told me that the nest was made of leaves placed on an ants' nest, or on some projecting limb of a very lofty tree, and believe that it contains only one young bird. The egg is quite unknown; and the natives declared they had never seen it; and a very high reward offered for one by a Dutch official did not meet with success. They moult about January or February; and in May, when they are in full plumage, the males assemble early in the morning to exhibit themselves. This habit enables the natives to obtain specimens with comparative ease. As soon as they find that the birds have fixed upon a tree on which to assemble, they build a little shelter of palm leaves in a convenient place among the branches; and the hunter ensconces himself in it before daylight, armed with his bow and a number of arrows terminating in a round knob. A boy waits at the foot of the tree; and when the birds come at sunrise, and a sufficient number have assembled, and have begun to dance, the hunter shoots with his blunt arrow so strongly as to stun the bird, which drops down, and is secured and killed by the boy without its plumage being injured by a drop of blood. The rest take no notice, and fall one after another till some of them take the alarm."

The *Paradisea apoda*, as far as we have any certain knowledge, is confined to the mainland of the Arru Islands, never being found in the smaller islands which surround the centre mass. It is certainly not found in any of the parts of New Guinea visited by the Malay and Bugis traders, nor in any of the other islands where Birds of Paradise are obtained. But this is by no means conclusive evidence; for it is only in certain localities that the natives prepare skins, and in other places the same birds may be abundant without ever becoming known. It is therefore quite possible that this species may inhabit the great southern mass of New Guinea, from which Arru has been separated; while its near ally (*P. papuana*) is confined to the north-western peninsula. I may remark that Mr. Wallace's prediction that this species would be found on the southern part of New Guinea has been verified by Signor D'Albertis, who recently showed me a fine skin obtained by himself on the Fly River far in the interior of S.E. New Guinea. This specimen was a trifle smaller, and brighter in colour, than Mr. Wallace's Arru specimens, of which I have a fine series.

The figures in the Plate, which I and Mr. Hart have drawn with extreme care, render any detailed description of the Great Bird of Paradise unnecessary. Like *P. papuana* it has the long flank-plumes yellow, and not red as in *P. raggiana* and *P. sanguinea*, and it also wants the yellow collar on the fore neck. The female of *P. papuana* is white on the breast, while in the same sex of *P. apoda* the breast is maroon brown like the back.

The Plate represents an adult male and female, of the size of life, drawn from Arru specimens in my own collection.





PARADISEA SANGUINEA, Shaw.





Parus sanguineus,
Parus ruber, Vieill.
 1835 (1839)
Red Bird of Paradise
L'Oiseau de Paradis
le Paradis Rouge, Vieill.
Parus sanguineus.

to I am unable to
 as well both by Mr.
 library of copying the
 "This beautiful bird
 across a decoration
 leaves. The list of
 and quoted by, many
 Walker visited one
 which I have so often
 getting the capture.

"When I first ar-
 there were plenty at
 people I had heard of
 their cry. However
 realized there were
 latter first shot a fe-
 male species, *Parus*
 does, running along
 the filaments in his
 gun, and was going
 to injure his plumage.
 Another day we saw
 though other birds.

we were never to go
 home, and many birds
 had been seen to so-
 across from branch
 sufficient aim to shoot
 into the forest. The
 were so rapid, and
 was only after several
 most magnificent p
 it, either owing to

We continued to be
 none; and as my o
 where there are a
 his journey, and le
 and for the men w
 my hatchets, beads
 would give for fresh
 one man ventured
 result of the first l
 After three days a

PARADISEA SANGUINEA, Shaw.

Red Bird of Paradise.

Paradisea sanguinea, Shaw, Gen. Zool. (1809), vol. vii. pt. 1, p. 487, pl. 59.

Paradisea rubra, Vieill. Gal. Ois. (1825), vol. i. p. 152, pl. 99.—Wall. Proc. Zool. Soc. (1862), p. 160.—Id.

Ibis (1859), p. 111 (1861), p. 287.—Malay Archip. vol. ii. pp. 214, 221, 243.

Red Bird of Paradise, Lath. Gen. Hist. of Birds (1822), vol. iii. p. 186, sp. 4.

L'Oiseau de Paradis Rouge, Levaill. Hist. Nat. des Ois. Parad. (1806), vol. i. pl. 6.

Le Paradis Rouge, Vieill. Ois. dor. (1802), vol. ii. p. 14, pl. 3.

Paradisea sanguinea, Elliot, Mon. Paradiseidæ, pl. 5.

As I am unable to add any thing concerning the history of *Paradisea sanguinea* to what has been said so well both by Mr. Wallace and also by Mr. Elliot, in his 'Monograph of the Paradiseidæ,' I take the liberty of copying the remarks of the latter, who says:—

"This beautiful bird, remarkable for the rich red plumes that spring from its sides and afford so conspicuous a decoration, is found upon the island of Waigiou and the neighbouring ones of Ghemien and Batanta. The list of synonyms given above will serve to show that for a long time it has been known to, and quoted by, many authors; yet we were practically ignorant of its nature and mode of life until Mr. Wallace visited one of the islands where it has its home, and published his account of it in the work to which I have so often had occasion to allude. I will let Mr. Wallace tell his story in his own words regarding the capture of this beautiful species.

"When I first arrived I was surprised at being told that there were no Paradise-birds at Muka, although there were plenty at Bessir, a place where the natives caught them and prepared the skins. I assured the people I had heard the cry of these birds close to the village; but they would not believe that I could know their cry. However, the very first time I went into the forest I not only heard but saw them, and was convinced there were plenty about; but they were very shy, and it was some time before we got any. My hunter first shot a female; and I one day got very close to a fine male. He was, as I expected, the rare red species, *Paradisea rubra*, which alone inhabits this island and is found nowhere else. He was quite low down, running along a bough searching for insects, almost like a Woodpecker; and the long black riband-like filaments in his tail hung down in the most graceful double curve imaginable. I covered him with my gun, and was going to use the barrel, which had a very small charge of powder and No. 8 shot, so as not to injure his plumage; but the gun missed fire, and he was off in an instant among the thickest jungle. Another day we saw no less than eight fine males at different times, and fired four times at them; but though other birds at the same distance almost always dropped, these all got away, and I began to think we were never to get this magnificent species. At length the fruit ripened on the fig-tree close to my house, and many birds came to feed on it; and one morning, as I was taking my coffee, a male Paradise-bird was seen to settle on its top. I seized my gun, ran under the tree, and, gazing up, could see it flying across from branch to branch, seizing a fruit here and another there; and then, before I could get a sufficient aim to shoot at such a height (for it was one of the loftiest trees of the tropics), it was away into the forest. They now visited the tree every morning; but they stayed so short a time, their motions were so rapid, and it was so difficult to see them, owing to the lower trees which impeded the view, that it was only after several days' watching, and one or two misses, that I brought down my bird—a male in the most magnificent plumage. . . . I had only shot two Paradiseas on my tree when they ceased visiting it, either owing to the fruit becoming scarce, or that they were wise enough to know there was danger. We continued to hear and see them in the forest, but after a month had not succeeded in shooting any more; and as my chief object in visiting Waigiou was to get these birds, I determined to go to Bessir, where there are a number of Papuans who catch and preserve them. I hired a small outrigger boat for this journey, and left one of my men to guard my house and goods. . . . My first business was to send for the men who were accustomed to catch the Birds of Paradise. Several came; and I showed them my hatchets, beads, knives, and handkerchiefs, and explained to them as well as I could by signs the price I would give for fresh-killed specimens. It is the universal custom to pay for every thing in advance; but only one man ventured to take goods to the value of two birds. The rest were suspicious, and wanted to see the result of the first bargain with the strange white man, the only one who had ever come to their island. After three days my man brought me the first bird—a very fine specimen, and alive, but tied up in a small

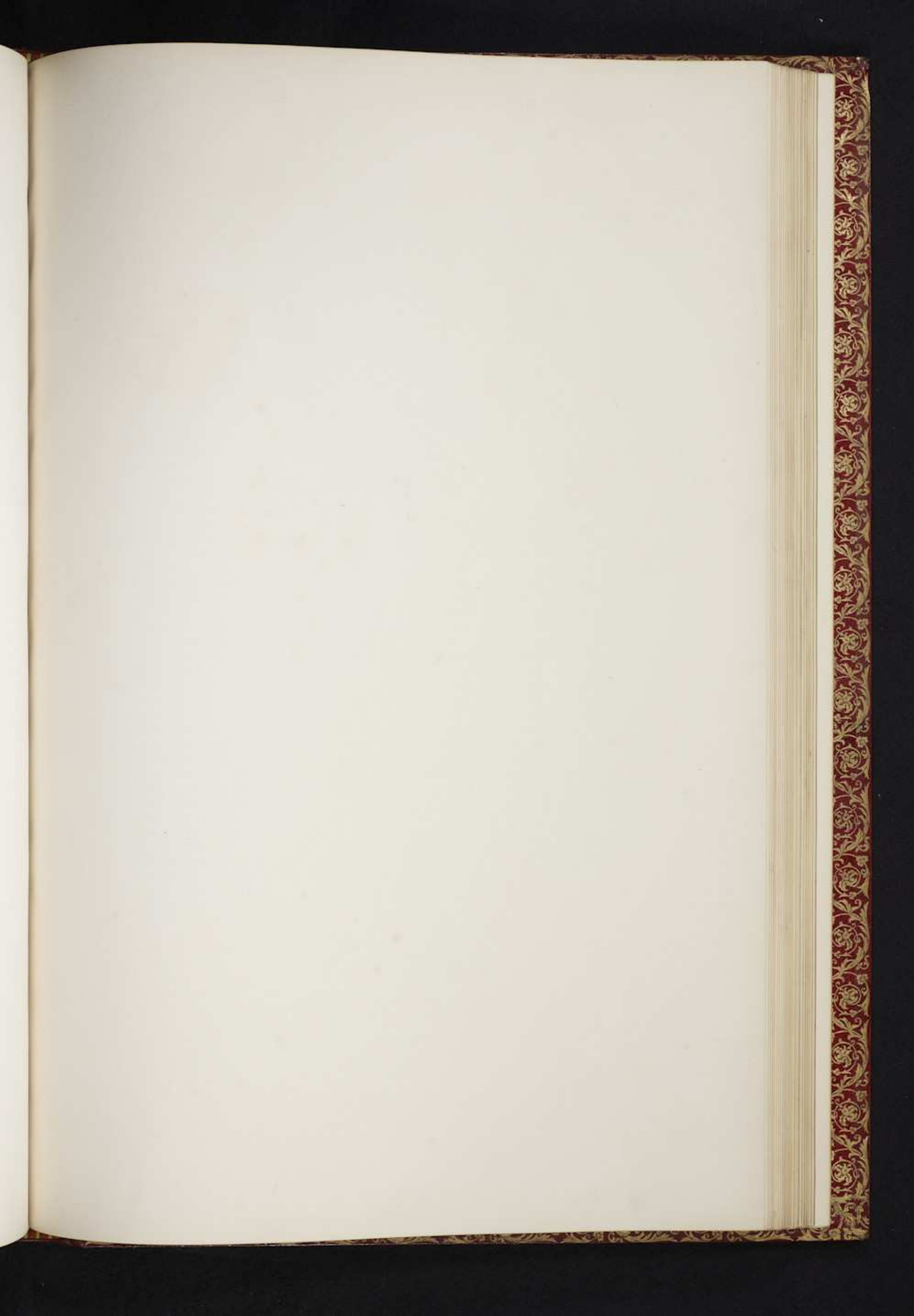
bag, and consequently its tail- and wing-feathers were very much crushed and injured. I tried to explain to him, and to others that came with him, that I wanted them as perfect as possible, and that they should either kill them or keep them on a perch with a string to their leg. As they were now apparently satisfied that all was fair, and that I had no ulterior designs upon them, six others took away goods, some for one bird, some for more, and one for as many as six. They said they had to go a long way for them, and that they would come back as soon as they caught any. At intervals of a few days or a week some of them would return, bringing me one or more birds; but though they did not bring any more in bags, there was not much improvement in their condition. As they caught them a long way off in the forest, they would scarcely ever come with one, but would tie it by the legs to a stick, and put it in their house till they caught another. The poor creature would make violent efforts to escape, would get among the ashes, or hang suspended by the leg till the limb was swollen or half-putrefied, and sometimes die of starvation and worry. One had its beautiful head all defiled by pitch from a dammar torch; another had been so long dead that its stomach was turning green. Luckily, however, the skin and plumage of these birds is so firm and strong that they bear washing and cleaning better than almost any other sort; and I was generally able to clean them so well that they did not perceptibly differ from those I had shot myself. Some few were brought me the same day they were caught; and I had an opportunity of examining them in all their beauty and vivacity. As soon as I found they were generally brought alive, I set one of my men to make a large bamboo cage, with troughs for food and water, hoping to be able to keep some of them. I got the natives to bring me branches of a fruit they were very fond of; and I was pleased to find they ate it greedily, and would also take any number of live grasshoppers I gave them, stripping off the legs and wings, and then swallowing them. They drank plenty of water, and were in constant motion, jumping about the cage from perch to perch, clinging to the top and sides, and rarely resting a moment the first day till night-fall. The second day they were always less active, although they would eat as freely as before; and on the morning of the third day they were almost always found dead at the bottom of the cage, without any apparent cause. Some of them ate boiled rice, as well as fruits and insects; but, after trying many in succession, not one out of ten lived more than three days. The second or third day they would be dull, and in several cases they were seized with convulsions and fell off the perch, dying a few hours afterwards. I tried immature as well as full-plumaged birds, but with no better success, and at length gave it up as a hopeless task, and confined my attention to preserving specimens in as good a condition as possible.

“The Red Birds of Paradise are not shot with blunt arrows, as in the Aru Islands and some parts of New Guinea, but are snared in a very ingenious manner. A large climbing Arum bears a red reticulated fruit, of which the birds are very fond. The hunters fasten this fruit on a stout forked stick, and provide themselves with a fine but strong cord. They then seek out some tree in the forest on which these birds are accustomed to perch, and, climbing up it, fasten the stick to a branch, and arrange the cord in a noose so ingeniously that, when the bird comes to eat the fruit, its legs are caught; and by pulling the end of the cord, which hangs down to the ground, it comes free from the branch and brings down the bird. Sometimes, when food is abundant elsewhere, the hunter sits from morning till night under his tree, with the cord in his hand, and even for two or three whole days in succession, without even getting a bite; while, on the other hand, if very lucky, he may get two or three birds in a day. There are only eight or ten men in Bessir who practise this art, which is unknown anywhere else in the island.”

Male.—Fore part of the head, chin, cheeks, and throat rich metallic grass-green, appearing black upon the chin. Over each eye the feathers are raised, forming two short tufts. Back of head orange-yellow. All the feathers of the head are short, velvety, and closely pressed together, and project over the bill, above and below, hiding the nostrils. Upper part of back, scapulars, shoulders, upper part of breast and rump orange-yellow. Wings, tail, back, and entire underparts dark chestnut-brown, darkest on the breast, where it is almost a blackish brown. From each side beneath the wings springs a mass of deep red plumes, which glisten like glass, as is seen in the upper part of the plumage of *Cicinnurus regius*, becoming white towards the ends on both webs and shafts, the former widely separated and hair-like. From the lower part of the back fall two very long and webless shafts, black and twisted, which descend on either side of the tail in graceful double curves, and, like the side plumes, constitute very conspicuous appendages.

Female.—Fore part of head, chin, cheeks, and throat very dark chestnut-brown. Back of head, and upper part of breast yellow. Upper part of back or mantle dark ochre-yellow. Entire rest of plumage, including wings and tail, dark brownish chestnut. Bill horn-colour. Feet and tarsi black.

Hab. Waigiou (*Wallace*); islands of Ghemien and Batanta (*Bernstein*).



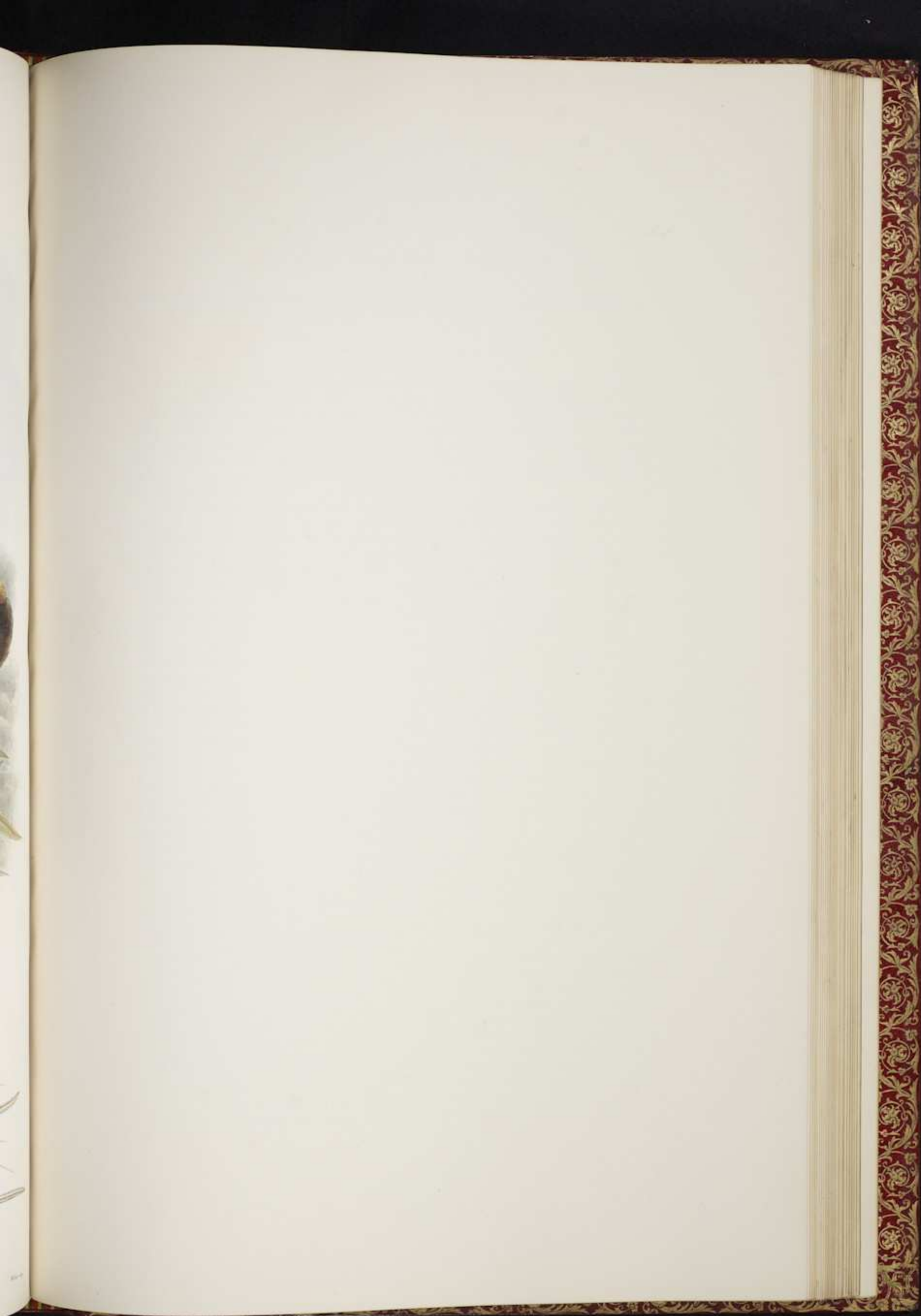


PARADISEA RAGGIANA, *Sclater*.



J. Gould & W. Hart del et lith.

Walter imp.



PARA

André Cayrol, Sclater.
Mrs. C. Genova

Take it all in all, I consider the startling and singularly unknown up to the probability that of the first spread also the birds were merely and only differs from that of *P. quidi* are examples.

that the *Paradisea raggae* is very evident. I was told by Signor d'Alberti that our collections will be in the hands of the Secretary of the Zoological Museum, and in his description of this bird he mentions that he maintains: for I found in many movements, and in the same way, and I could find no other first, and is generally the same as the neighbourhood of the sea, but less abundant, because the sex of *P. apoda* than the other is distinguishable by the breast-feathers.

The long flank-feet
is ~~in~~-even in a few
P. squam., and in no stage
long as *P. spodi.*, and a
square bird, and often
noises for some seconds
before cry, upon the so-
alms out, many others
and hedges. The adult
discrepancy, and as I al-
luded to information,
emerging traveller could
the eye, &c.

The following description is based on the holotype and allotype. Total length from snout to tip of caudal fin 10.5 cm; head length 3.5 cm; body depth 3.5 cm; caudal peduncle length 1.5 cm; caudal fin length 2.5 cm; eye diameter 1.5 mm; snout length 1.5 cm; mouth length 1.5 cm; operculum length 1.5 cm; pectoral fin length 1.5 cm; pelvic fin length 1.5 cm; anal fin length 1.5 cm; dorsal fin length 1.5 cm; ventral fin length 1.5 cm; caudal fin length 2.5 cm. The body is covered with small scales. The head is covered with small scales. The eyes are large. The mouth is small. The operculum is small. The pectoral fin is small. The pelvic fin is small. The anal fin is small. The dorsal fin is small. The ventral fin is small. The caudal fin is small. The body is covered with small scales. The head is covered with small scales. The eyes are large. The mouth is small. The operculum is small. The pectoral fin is small. The pelvic fin is small. The anal fin is small. The dorsal fin is small. The ventral fin is small. The caudal fin is small.

PARADISEA RAGGIANA, *Sclater*.

Marquis de Raggi's Bird of Paradise.

Paradisea raggiana, Sclater, P. Z. S. 1873, pp. 559, 697.—Elliot, Monogr. Paradis. pl. 3 (1873).—Salvad. Ann. Mus. Civ. Genova, vii. p. 829 (1875).—D'Albertis, P. Z. S. 1875, p. 532.

TAKING it all in all, I consider this the grandest Paradise-bird that has been discovered since Wallace sent home the startling and singular *Semioptera*. That so large and splendid a species should have remained totally unknown up to the period of Signor d'Albertis's visit to the southern parts of New Guinea serves to show the probability that other treasures remain for future explorers in this great unknown land. When the rumour first spread abroad that a second red-plumed Bird of Paradise existed, suspicions arose that these two birds were merely varieties of *P. rubra*, than which there could be nothing more fallacious, since it not only differs from that species, but belongs to another section of the *Paradiseidæ*, of which *P. papuana* and *P. apoda* are examples.

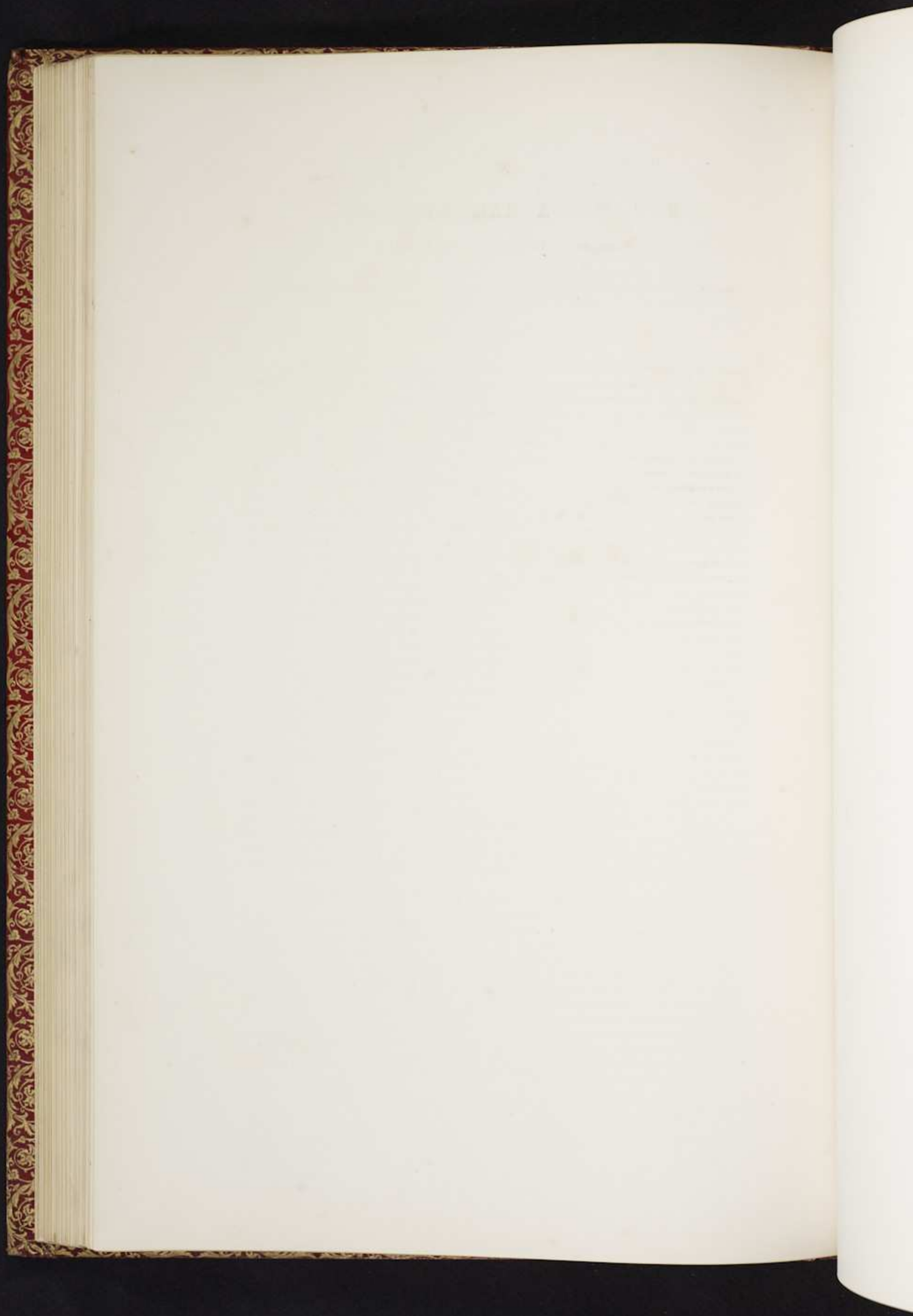
That the *Paradisea raggiana* holds a place in the south of New Guinea, as the *P. papuana* does in the north, is very evident. It is also quite certain that it is a bird equally common in all the parts yet visited by Signor d'Albertis, Captain Moresby, and other travellers; naturalists therefore need not fear that our collections will long remain without examples. In a note from Signor d'Albertis, addressed to the Secretary of the Zoological Society of London, published in the 'Proceedings' for 1875, is perhaps the best description of this bird yet received. He says:—"I was rather fortunate in my excursion into the mountains; for I found *Paradisea raggiana*, and obtained some beautiful specimens in full dress. In its voice, movements, and attitudes it perfectly resembles the other species of the genus. It feeds on fruit; and I could find no trace of insects in the seven individuals which I prepared. It inhabits the dense forest, and is generally found near the ravines—perhaps because the trees on the fruit of which it feeds prefer the neighbourhood of water. The female is always smaller in size than the male; and I find this sex less abundant, because, as I believe, it is the season of incubation. The female is more like the same sex of *P. apoda* than that of *P. papuana*. The young male is like the female, but often recognizable by having distinguishable traces of the yellow collar which in the old male divides the green of the throat from the breast-feathers. The irides are of a rather bright yellow, and the feet lead-colour with a reddish tinge. The long flank-feathers in individuals recently killed have a very bright tint, which they lose in a few days—even in a few hours. The two middle tail-feathers are filiform, as those of *P. apoda* and *P. papuana*, and in no stage of development resemble those of *P. rubra*. These two feathers are not so long as in *P. apoda*, and about equal to those of *P. papuana*. Like its sister species, *P. raggiana* is an inquisitive bird, and often approaches from branch to branch within a few yards of the hunter, and remains motionless for some seconds to observe its pursuer, stretching out its neck, flapping its wings, and emitting a peculiar cry, upon the sound of which other individuals come forward to join it. When one is wounded and cries out, many others come forward as if to protect it, and approach quite near, descending to the lowest boughs. The adult males frequent the tops of the highest trees, as Mr. Wallace observed in the other species, and as I also remarked in my former expedition. As regards the nidification I have as yet obtained no information." Specimens of all ages and both sexes were procured. Would that this enterprising traveller could set our minds at rest by letting us know something of the nidification, colouring of the eggs, &c.

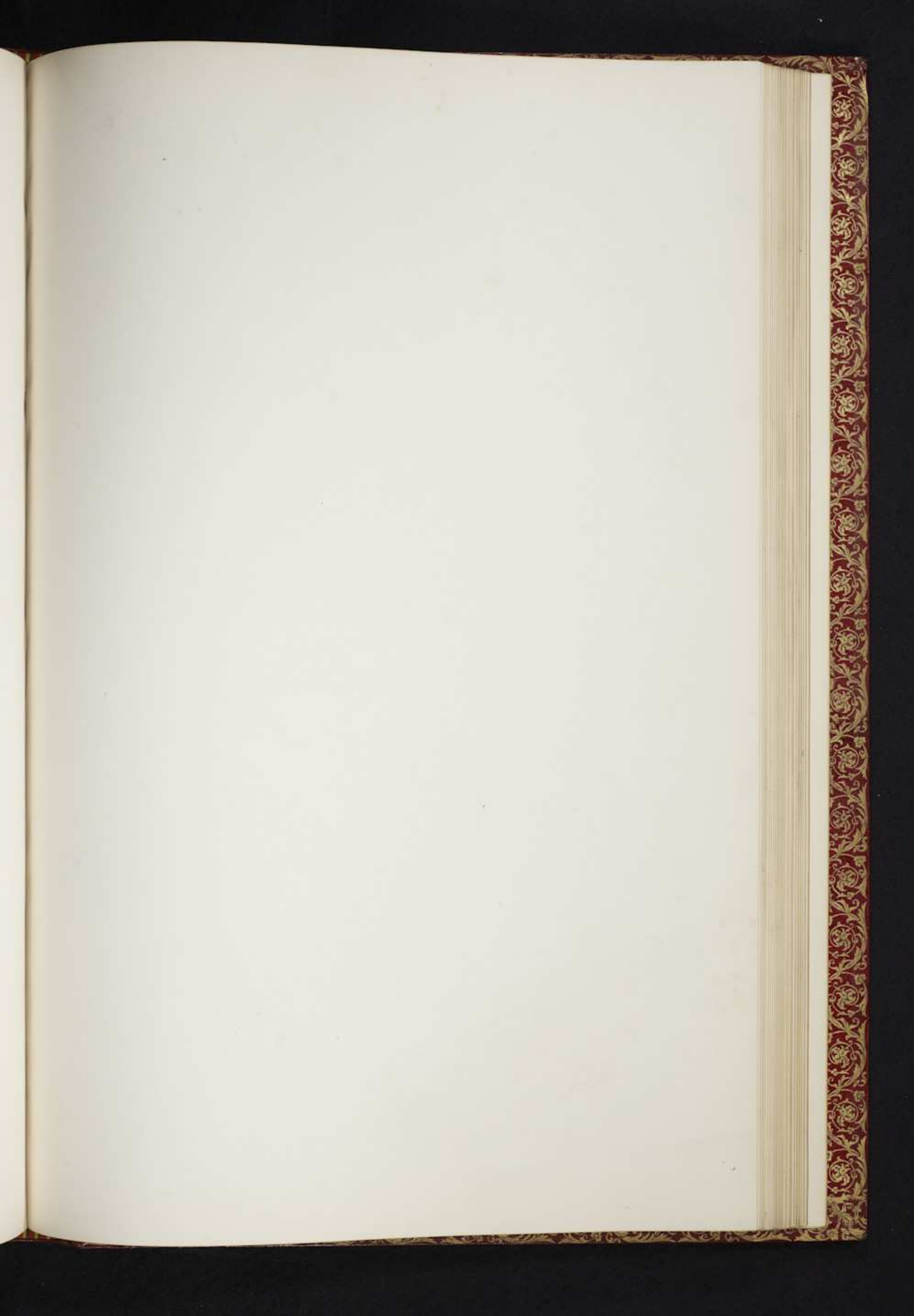
The following description is from a perfect specimen of a male in the possession of Mr. Stone:—

Total length from bill to tail 14 inches, wing 7, tail 6, tarsi 2½.

Bill pale blue; feet lead-colour with a pinky tint; forehead and throat beautiful green, almost metallic; crown, sides, and neck fine orange-yellow; this fine yellow also extends across the throat, separating the green from the rich maroon of the chest (which is very intense); all the upper and under surface reddish brown, with a distinct mark of yellow on the shoulders; long flank-feathers splendid blood-red, becoming brown towards the ends, the extremities of which are dirty white; the two long filamentous feathers narrow, and terminating in a spatula like that of *P. papuana* in form. Count Salvadori describes the female as being "smaller than the male; of a vinaceous chestnut-colour, paler below; the sinciput, sides of head, fore part of neck, and breast deep chestnut; occiput and hinder neck, as well as the sides of the latter, yellowish. The entire green colour of the forehead and throat is wanting, as well as the pale yellowish straw-coloured ring under the throat, the yellow band across the wing, and the ornaments of the tail and flanks.

The figures in the accompanying Plate are both males, that in the foreground being the size of life.



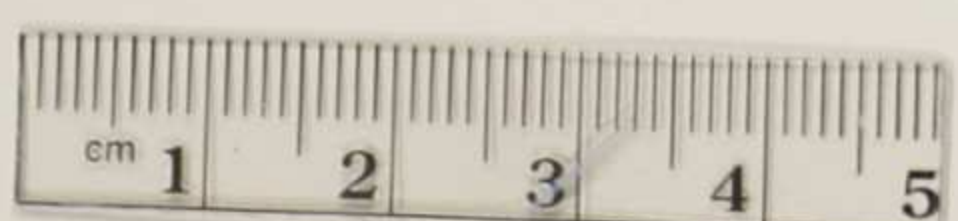




MANUCODIA COMRII, Slater.

J. Gould & W. Hart del. et lith.

Walter, Imp.





MANUCODIA COMRII, *Sclater*.

Curl-crested Manucode.

Manucodia comrii, Sclater, Proc. Zool. Soc. 1876, p. 459, pl. xlii., et P. Z. S. 1877, p. 43.

THE discovery of this interesting bird in the southern parts of New Guinea confirms the opinion so generally offered by naturalists, that this highly gifted country may yet have many stores left for our contemplation and study; indeed, as time runs on, it is constantly yielding fruits to those who may enter its precincts, let it be on the north or the south. Since the time of Wallace's visit the Dutch explorer Von Rosenberg, Dr. Meyer, Hr. Bruijn, and the Italians D'Albertis and Beccari have each immortalized their names by their discoveries in Papuan ornithology. But that of the fine bird under consideration is due to a medical officer of Her Majesty's Service; and the species itself may be regarded as one of the most valuable of the novelties lately transmitted to us, particularly so from its adding another member to the *Paradiseidæ*. We find in the 'Proceedings' of the Zoological Society, as above quoted, the following note by Dr. Sclater:—"Dr. Comrie has placed in my hands, for determination, some bird-skins collected by him while serving as medical officer in H.M.S. 'Basilisk' during its recent survey of the south-east coast of New Guinea under the command of Captain Moresby. The collection contains thirteen specimens, belonging to eleven species, of which one is quite new to science, and two others are only known from single specimens."

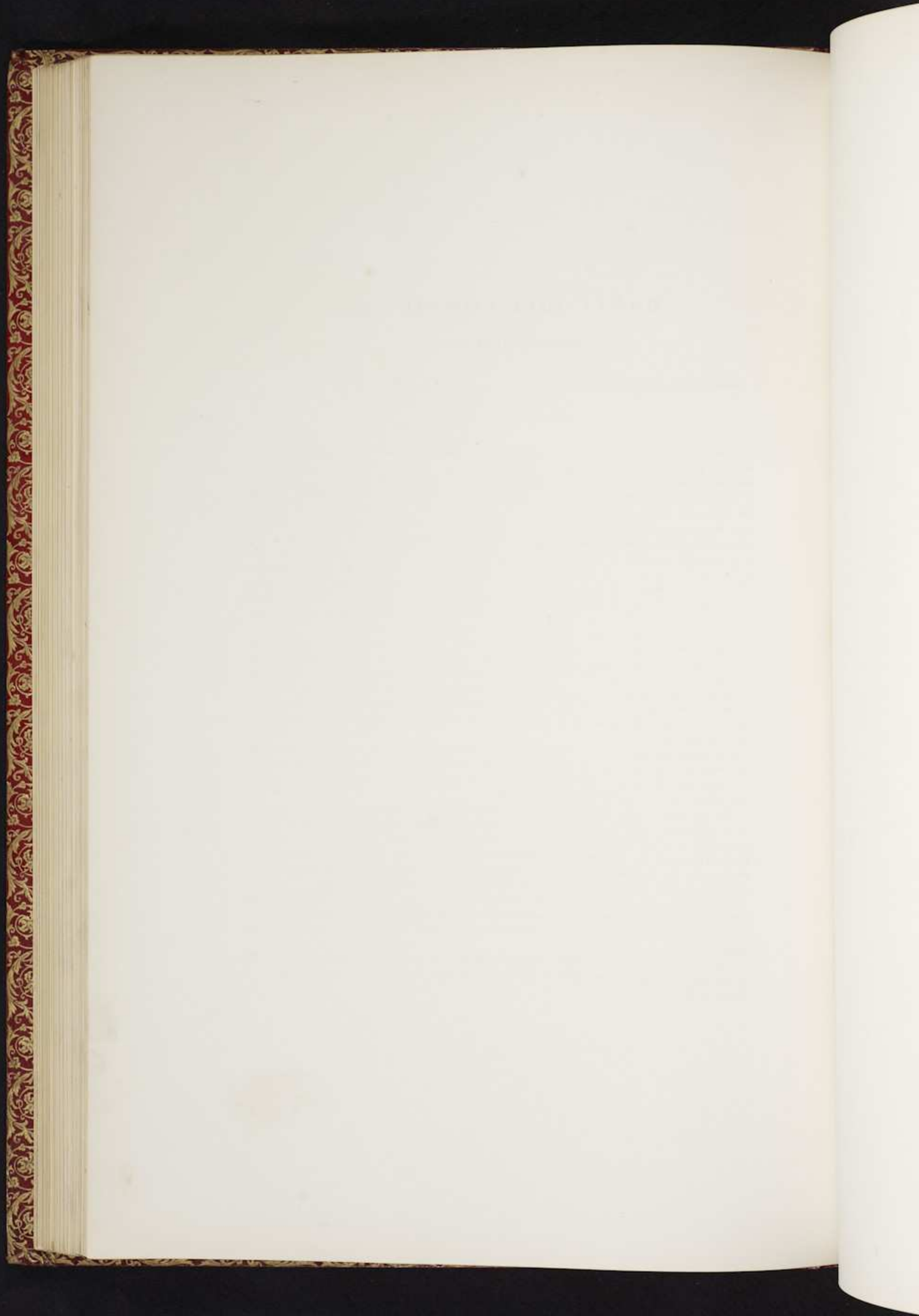
"This *Manucodia*," Dr. Sclater continues, "may be regarded as by far the finest and largest species of the genus yet discovered. It is immediately distinguishable from *M. chalybeia* and *M. atra* by its much larger size and longer bill, which is deeply sulcated at the nostrils. The characteristic curling of the feathers is extended to a greater degree, and pervades the whole of the head and neck; the feathers of the abdomen are black at the base, broadly margined with purple. Dr. Comrie obtained a single specimen of this fine bird in May 1874 in Huan Gulf. It was shot flying amongst the trees in the scrubby forest, about a quarter of a mile from the coast."

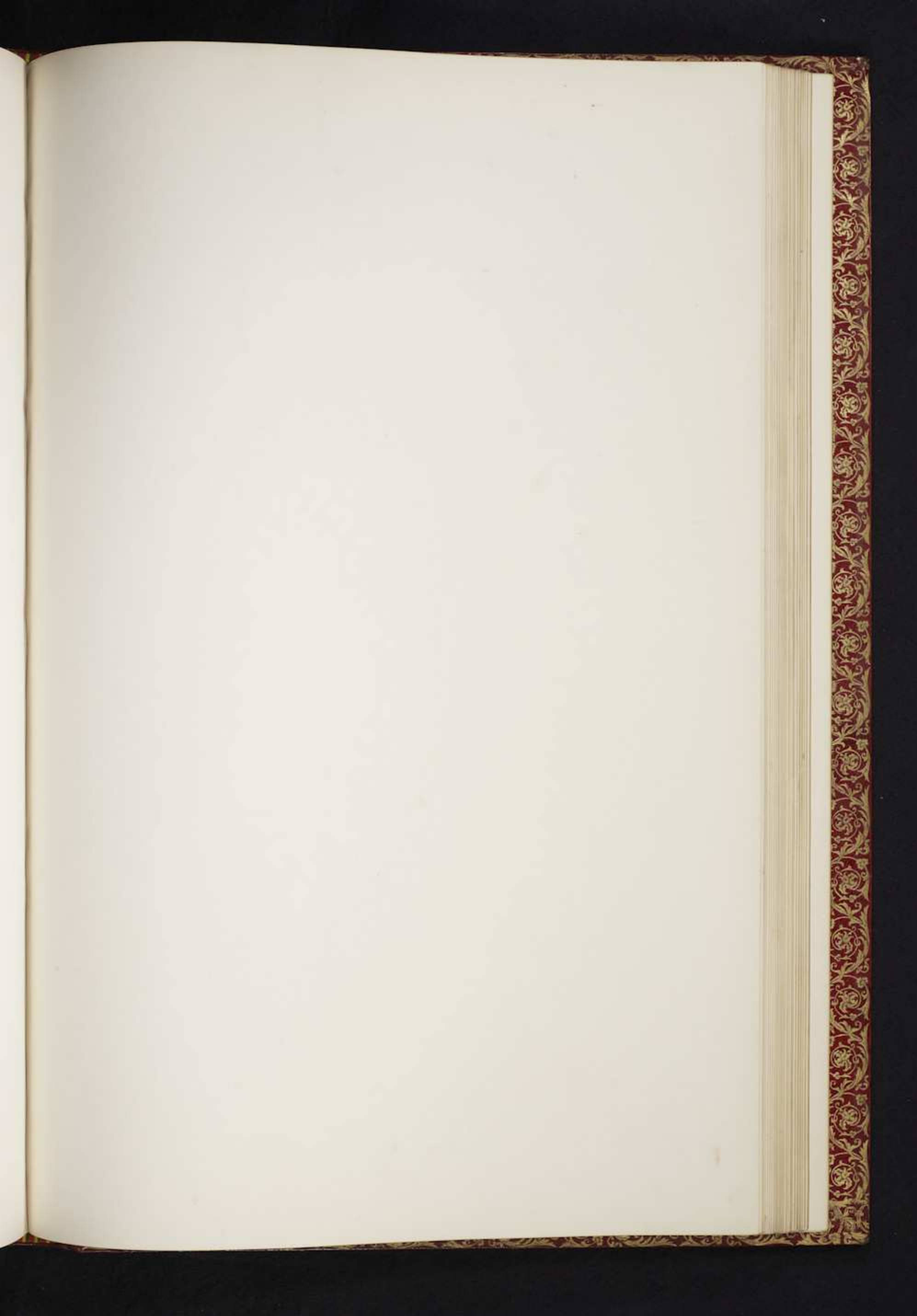
In a subsequent communication to the Society Mr. Sclater called attention to the original and unique specimen of his *Manucodia comrii* (P. Z. S. 1876, p. 459), now belonging to the collection of the Marquis of Tweeddale, the President of the Society, which since it was described and figured, had undergone a most efficient "remake" in Mr. Bartlett's able hands.

The curly feathers of the head were now much more apparent and better developed than shown even in the woodcut given with the original description, and formed standing ridges over each eye. The tail was not flat, as would appear from the figure (pl. xlii.), but "boat-shaped" as in some of the American Grakles (*Quiscalus*), *i. e.* with the median tail-feathers elevated above the lateral. The two middle tail-feathers were very peculiar in construction, being shorter by three quarters of an inch than the next pair, and having the inner webs twisted round over the outer, so as to show their under surfaces.

The highly singular characteristic of the turnover feathers is also seen in the Green Manucode (*M. chalybea*), where the frizzly plumes, particularly those of the face and neck, are even more singular. Such eccentricities are really not to be accounted for, as we cannot conceive they can be for any useful purpose.

I must not conclude this paper without returning my thanks to the Marquis of Tweeddale and Dr. Sclater for the loan of the specimen from which the accompanying drawing was taken. The principal figure is of the size of life.



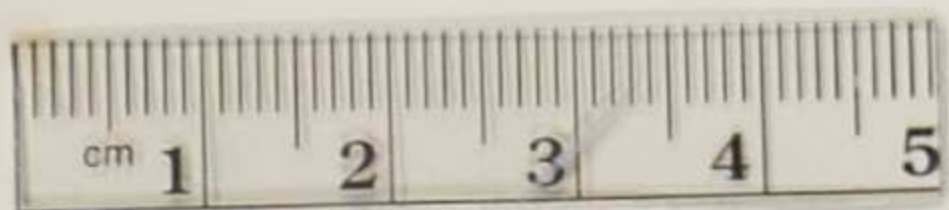




MANUCODIA CHALYBEA, Bodd.

J. Gould & W. Hart del et lith.

Walter, imp.





MANU

Myiophobus *Paradisus*-bird, Lath.
Myiophobus *claytoni*, Bodd. Tab.
 pl. vi. (1873).
Myiophobus *viridis*, Gmel. Syst. N.
Myiophobus *claytoni*, Lath. Ind. C.
 a. Oude, Vaill. Ois. Des. vo.
Myiophobus *claytoni*, Vaill. Nouv.
Myiophobus *claytoni*, Less. Tra.
Myiophobus *viridis*, Gray, Gen.
 Rensch. Journ. für O.
Myiophobus *viridis*, Gray, Proc.
Myiophobus *viridis*, Schleg. Tijdsch.

found at the above list. or
 only a hundred years. Form
 was high; latterly, however
 found. That this species is
 named to the contrary.
 hope that we may not long
 concerned by some peculiari
 The following is taken from
 "The form Mancode rese
 any all stages of plumage b
 noted, these peculiarly
 frequently possess variegat
 "Feathers of the head short
 but, with the tips a bright me
 the most appearing as the
 or show upon the secondary
 in. Tail purplish blue like t
 I will now perfect descript
 p. 192 is as follows:—
 "The Male.—Head purple
 crown, as also the hinder n
 also curved; wings and tail
 somewhat shaded with steel-bla
 very like those of the crown
 are crinkled and curled and o
 very tipped with this colour,
 above with a slight greenish
 below; bill and legs black
 "Habit, New Guinea. Regis
 The figure on the Plate is of

MANUCODIA CHALYBEA, *Bodd.*

Green Manucode.

Blue-green Paradise-bird, Lath. Gen. Syn. vol. ii. p. 482. sp. 7 (1782).

Manucodia chalybea, Bodd. Tabl. Plan. Enl. d'Hist. Nat. de Daubent. (1783).—Elliot, Mon. of the Paradiseidæ, pl. vi. (1873).

Paradisea viridis, Gmel. Syst. Nat. vol. i. pt. i. p. 402. sp. 8 (1788).

Paradisea chalybea, Lath. Ind. Ornith. vol. i. p. 197. sp. 10 (1790).

Le Chalibé, Vieill. Ois. Dor. vol. ii. p. 24, pl. 10 (1802).—Levaill. Ois. de Parad. p. 64, pl. 23 (1806).

Cracticus chalybeus, Vieill. Nouv. Dict. d'Hist. Nat. vol. v. p. 355 (1816).

Phonygama chalybæa, Less. Trait. Ornith. p. 344. sp. 1 (1831).

Phonygama viridis, Gray, Gen. Birds, vol. ii. p. 303. sp. 1 (1849).—Bon. Consp. Gen. Av. p. 368 (1850).—Rosenb. Journ. für Orn. 1864, p. 122.

Manucodia viridis, Gray, Proc. Zool. Soc. 1861, p. 436.

Chalybea viridis, Schleg. Tijdsch. Dierk. pt. v. p. 49.

A GLANCE at the above list of synonyms will show that this species has been known to naturalists for nearly a hundred years. Formerly all the skins arrived without either feet or wings, like many other New-Guinea birds; latterly, however, perfect specimens have come to hand, those appendages not having been removed. That this species is a true Bird of Paradise all must now admit, whatever opinions have been entertained to the contrary. We have now at least five species of the genus *Manucodia*, and are living in hope that we may not long be kept in the dark as to their habits and economy, which are likely to be characterized by some peculiarities.

The following is taken from Mr. Elliot's 'Monograph of the Paradiseidæ':—

"The Green Manucode resembles in some respects its relative the *M. atra*, but may be distinguished in nearly all stages of plumage by the frizzled state of the feathers upon the head and neck; in some specimens, indeed, these peculiarly formed feathers encroach upon the upper part of the back and breast; and they frequently possess variegated colours of different metallic hues.

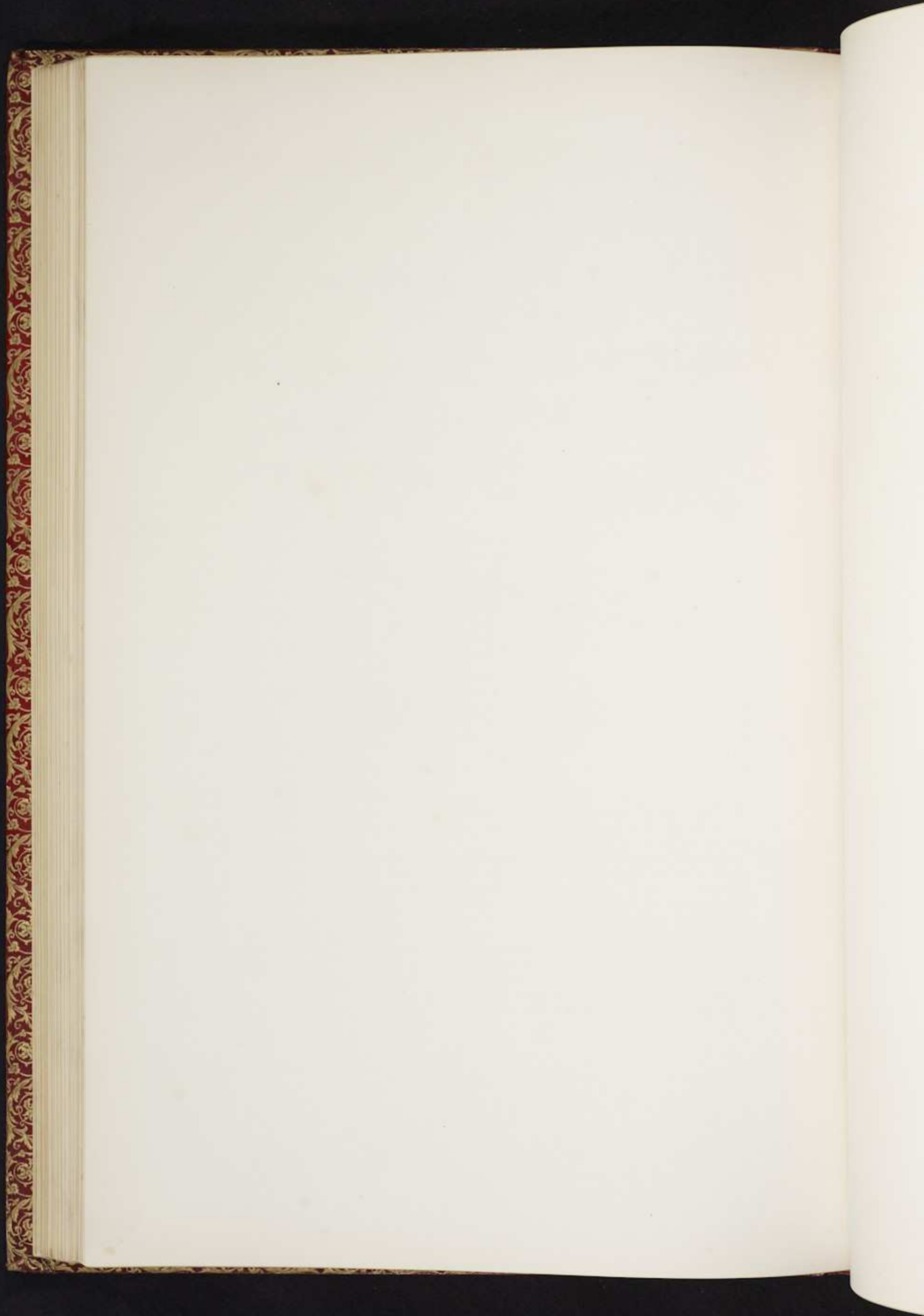
"Feathers of the head short, closely pressed together, elongated over the eyes into diminutive tufts, black, with the tips a bright metallic blue; throat, neck, and upper part of breast light green, the feathers on the breast appearing as though the tips were frizzled. Back and wings bright metallic purplish blue, very glossy upon the secondaries; primaries rich brown; underparts similar to the back, but the blue not so rich. Tail purplish blue like the wings. Bill black; feet black."

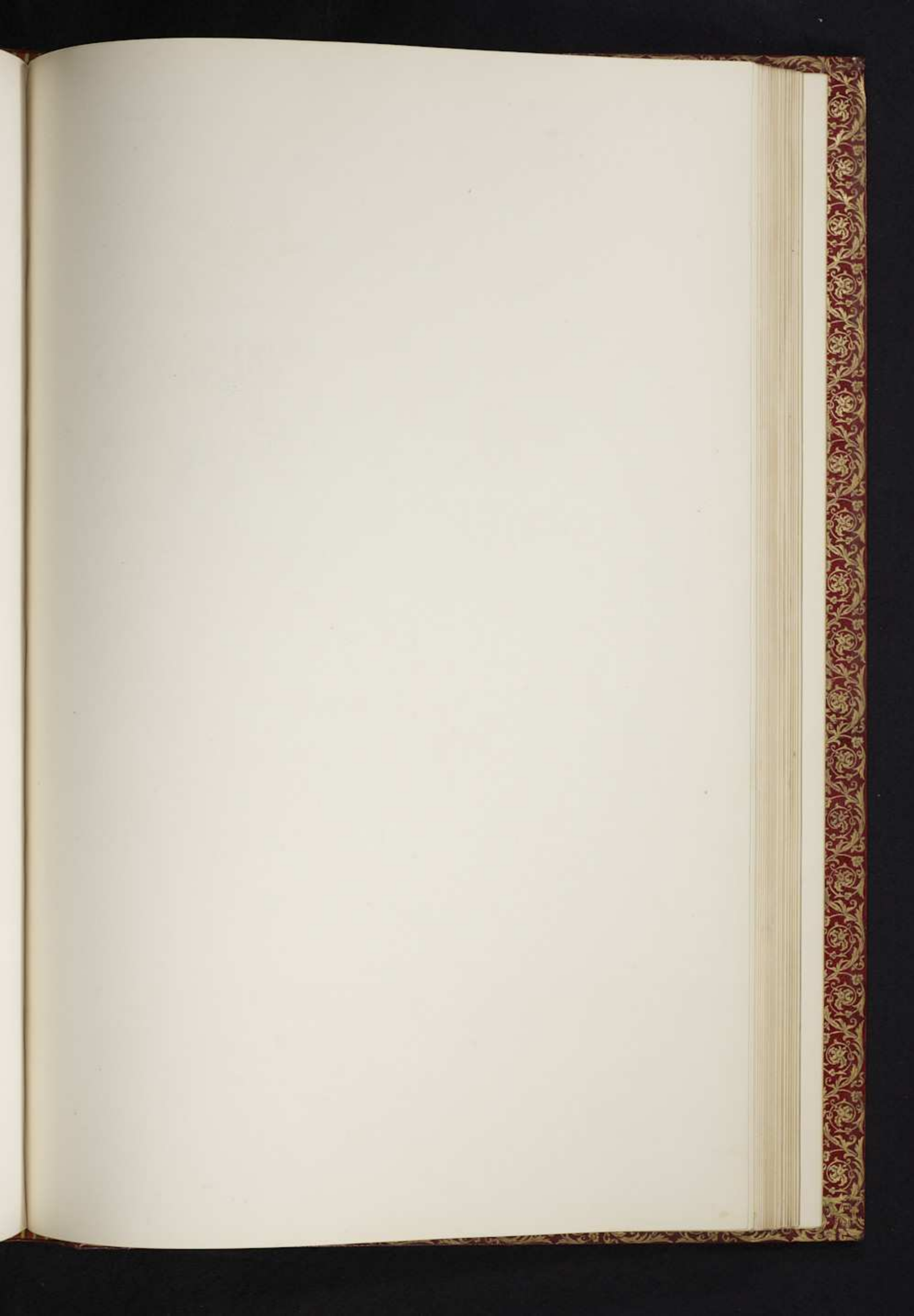
A still more perfect description taken from Mr. Sharpe's Catalogue of the Birds in the British Museum, iii. p. 182, is as follows:—

"*Adult Male*.—Head purple, the feathers compressed and close-set; the nape slightly washed with steel-greenish, as also the hinder neck and mantle; back rich purple, the feathers of the interscapular region rather recurved; wings and tail rich purple, the inner webs of the feathers blackish, the outer wing-coverts somewhat shaded with steel-black; sides of the face and neck deep green, the feathers compressed and velvety like those of the crown; those of the chin, throat, and fore neck extending onto the sides of the neck, crinkled and curled and of an oily-green colour; the rest of the under surface deep purple, the feathers being tipped with this colour, less broadly on the vent and under tail-coverts, a few of the abdominal plumes with a slight greenish reflection; under wing-coverts black, the outer edge of the wing washed with green; bill and legs black. Total length 14·5 inches, culmen 1·65, wing 6·85, tail 5·9, tarsus 1·55."

"*Hab.* New Guinea. Regions near the coasts and mountain-ranges of the interior (*Rosenberg*)."

The figure on the Plate is of the size of life.







PHONYGAMA PURPUREO-VIOLACEA, Meyer.

W. Hart del. et lith.

Minlorn Bros. imp.





PHONYGAMA

Phonygama purpurascens, Meyer

A species of *Phonygama* from
which the metallic colours are
present indistinctly under
certain, and we have ourselves
Phonygama and *P. jamaica*. W
Dr. H. O. Forbes in the
and in the Horseshoe range.
Phonygama is much larger
very glossy, and the colour
is. It will probably be found
at all of New Guinea itself.
It is from East Cape in So
it is quite possible that the
may be the species appear
it is a more and bleached in
It is before us at the
described by Dr. Meyer, and fi
it *P. jamaica*; but it is app
it from Alets, in South-ea
it the *P. purpurascens* is
it is a more and steel-green be
it is before us; and it sh
it is all broken of the wing are
it is, without asserting dogmat
it is in our own minds, th
it is into purple or purplish
It is in the Plate repre
it is in the Horseshoe

PHONYGAMA PURPUREOVIOLACEA, Meyer.

Purple-and-Violet Manucode.

Phonygama purpureoviolacea, Meyer, in Madarász, Zeitsch. ges. Orn. ii. p. 375, taf. xv. (1885).

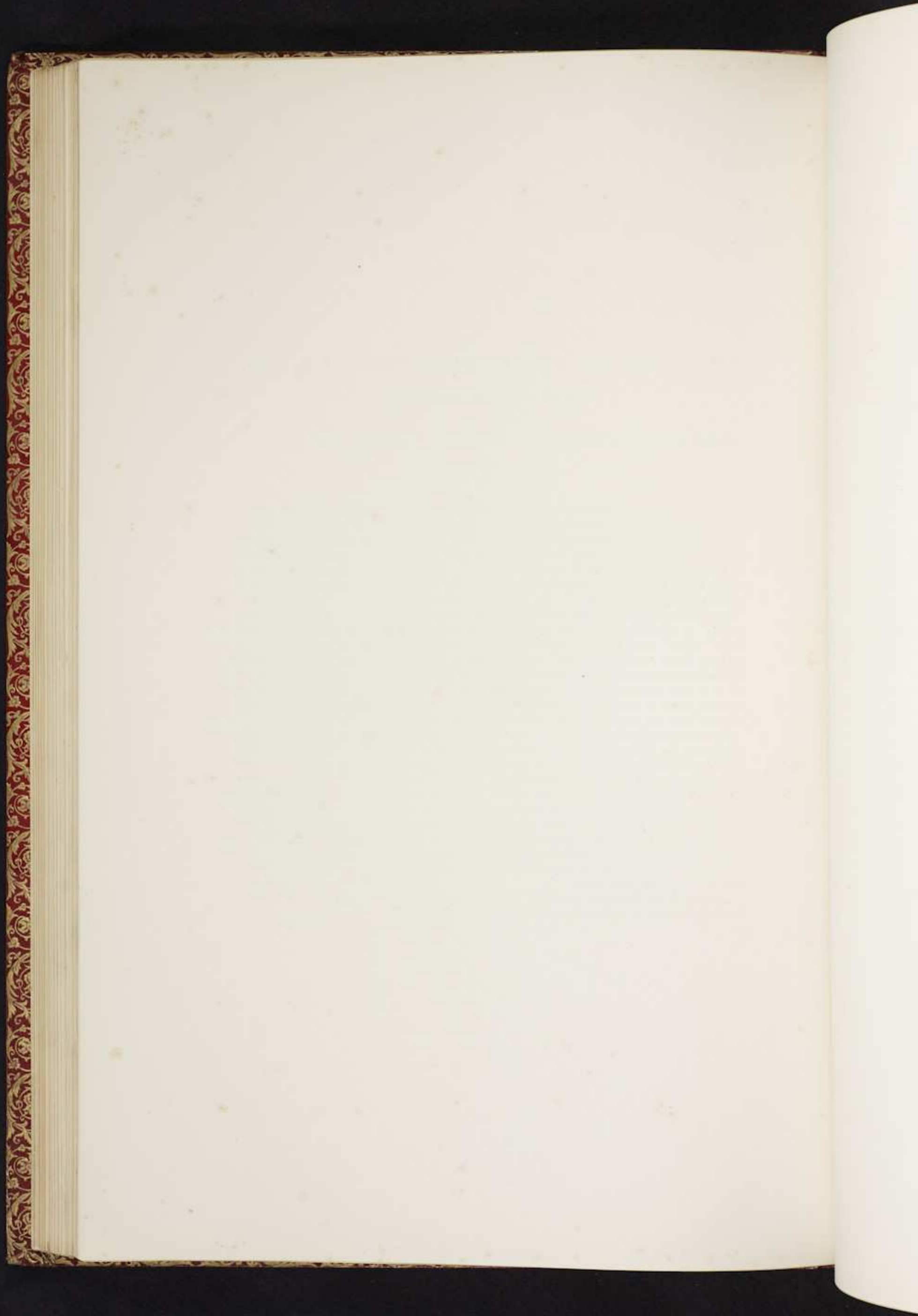
THE species of *Phonygama* from South-eastern New Guinea are difficult to determine, as the changes to which the metallic colours are subject under the influences of abrasion or wearing of the feathers are at present indistinctly understood. The species from North-western New Guinea is *Phonygama keraudreni*, and we have ourselves described from Southern New Guinea two species of the genus, *P. hunsteini* and *P. jamesii*. With these we have compared a series of *P. purpureoviolacea* procured by Mr. H. O. Forbes in the Astrolabe Mountains, as well as an example obtained by Mr. Hunstein himself in the Horseshoe range.

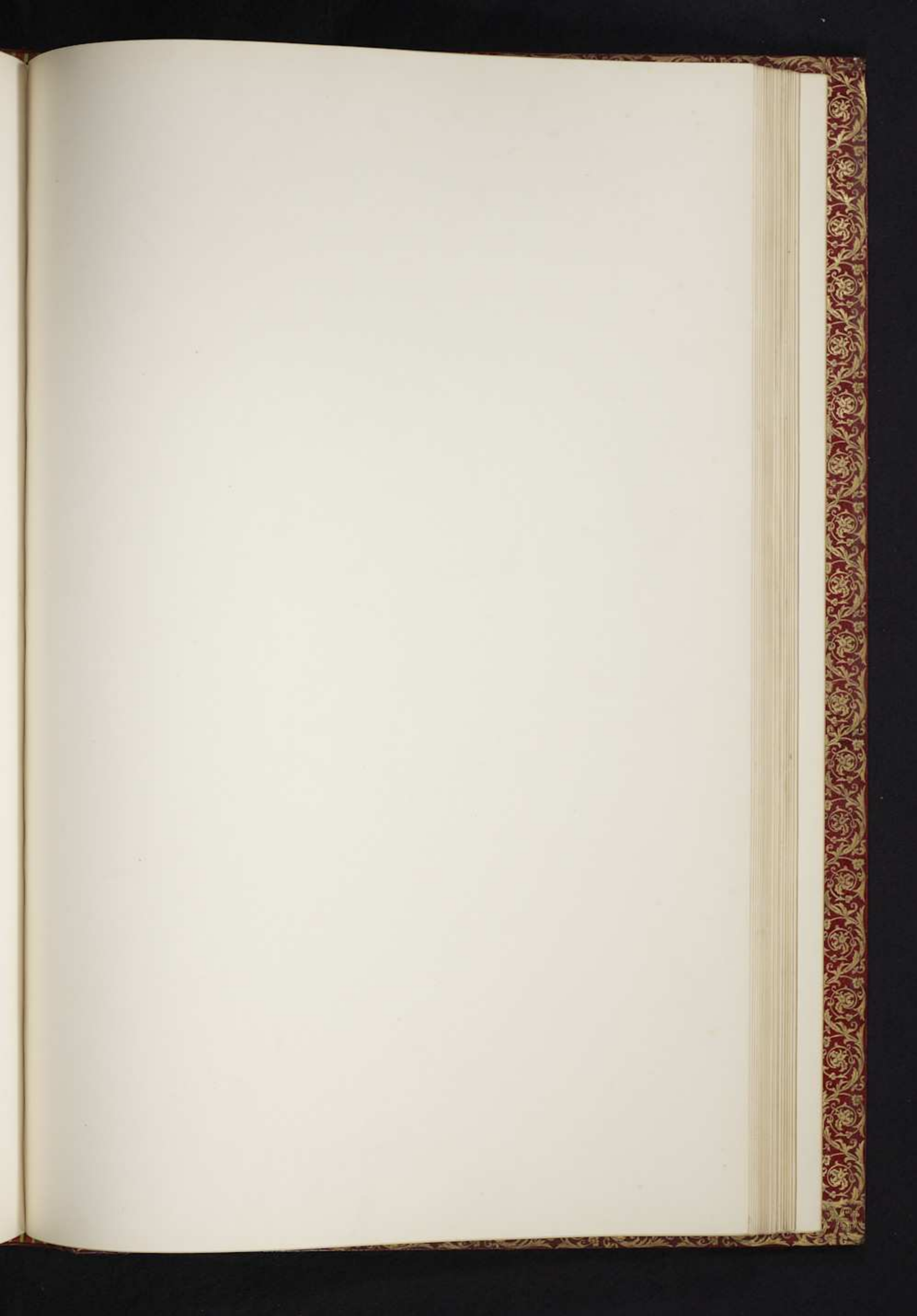
P. hunsteini is much larger than any of the Astrolabe specimens; its colour is a dull purple with scarcely any gloss, and the colour of the head and crest-feathers is metallic oily green, of diminished lustre. It will probably be found that *P. hunsteini* is an inhabitant of one of the islands off the coast, and not of New Guinea itself. No information, beyond that it had come, like other birds in the collection, from East Cape in South-eastern New Guinea, was given with the type specimen of *P. hunsteini*; but it is quite possible that the real habitat is Normanby Island, where Mr. Hunstein also collected. At any rate the species appears distinct from *P. jamesii* and *P. purpureoviolacea*, of which it could only be a worn and bleached individual, and even then the larger size is not accounted for.

The series before us at the present moment leaves very little doubt that the *Phonygama* recently described by Dr. Meyer, and figured by us in the accompanying Plate, is distinct from *P. keraudreni* and *P. hunsteini*; but it is apparently the same as *Phonygama jamesii*, a species described by us in 1877 from Aleya, in South-eastern New Guinea. The chief difference between these two species is, that *P. purpureoviolacea* is more purple above and steel-blue below, and *P. jamesii* is metallic green above and steel-green below. But between these extremes of colour every transition is found in the series now before us; and it should be noted that the type specimen of *P. jamesii* is moulting, and that the old feathers of the wing are very dull purple, while the new ones are bright purplish blue externally. In fine, without asserting dogmatically that *P. jamesii* and *P. purpureoviolacea* are the same, we have very little doubt in our own minds that they are, and that the steel-blue and green shades become gradually faded into purple or purplish blue.

The figures in the Plate represent an adult bird in two positions, drawn from a specimen procured by Mr. Hunstein in the Horseshoe range, and now in the British Museum.

[R. B. S.]



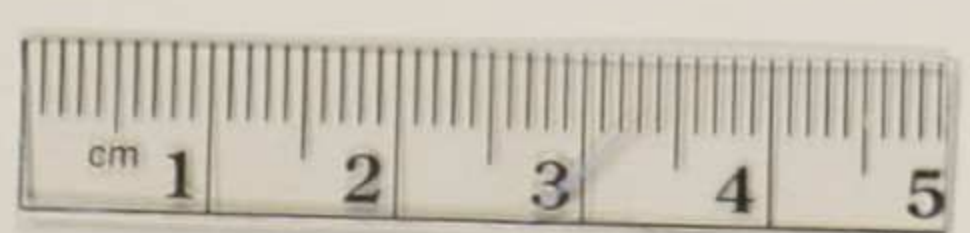


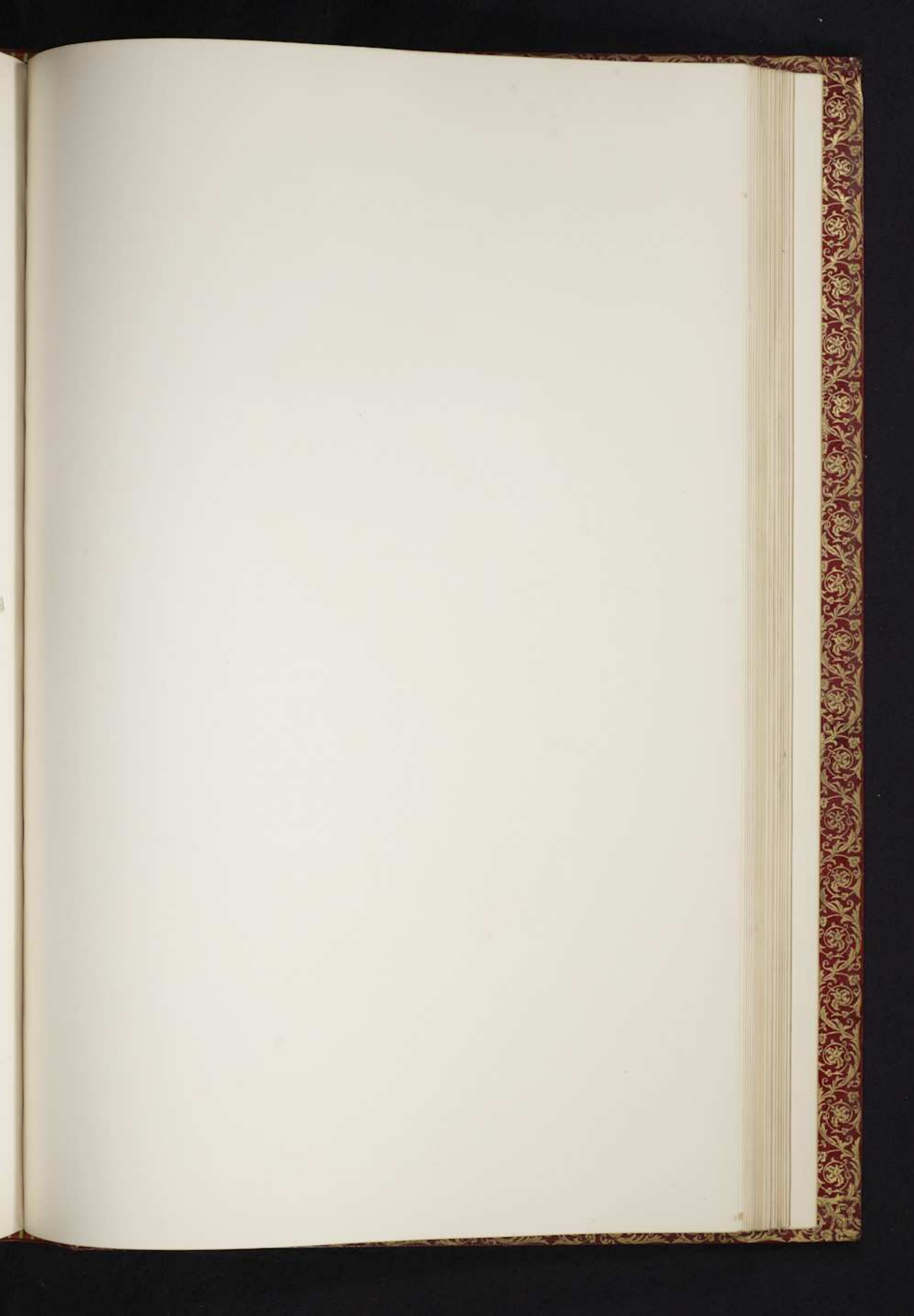


LYCOCORAX OBIENSIS, Bernst.

W. Hart del. et lith.

Mintern Bros. imp.





LYCOO

Lycoo Bonn. Journ.
 vi. p. 172 (1860).—
 ix. 1202 (1870).—Sharp
 ix. p. 239 (1880).—L.
 No. 1880, p. 372.

In this species the color
 of the *prothorax* of *Lycoo*
 is similar to both by the
Lycoo. Count Salva
 in the character of *L.* more
 than specimens of the *pro*
 the primaries. The exception
 is that the primaries had
 been seen, the discovery
 of *L. notata*, it is a diffic
 to be seen as "wink."
 In the description of
 it is taken from a specimen
 "ground color above and
 light colored with green on
 the sides of the scapulars, the
 sides of the primaries much paler
 than the rest."

Dr. Gullenard says that the
 in the Plate rep
 only let to us by Dr. Gull

LYCOCORAX OBIENSIS, *Bernst.*

Obi Paradise-Crow.

Lycocorax obiensis, Bernst. Journ. für Orn. 1864, p. 410.—Id. Nederl. Tijdschr. Dierk. ii. p. 350 (1865).—Schl. op. cit. iii. p. 192 (1866).—Id. Mus. Pays-Bas, Coraces, p. 132 (1867).—Gray, Hand-list of Birds, ii. p. 17, no. 6263 (1870).—Sharpe, Cat. Birds in Brit. Mus. iii. p. 185 (1877).—Salvad. Ann. Mus. Civic. Genov. xvi. p. 199 (1880).—Id. Orn. Papuasie e delle Molucche, ii. p. 495 (1881).—Guillemard, Proc. Zool. Soc. 1885, p. 573.

THIS species appears to be confined to the Obi group of islands in the Moluccas, where it replaces *Lycocorax pyrrhopterus* of Batchian and Gilolo, and *L. morotensis* of Morotai or Morty Island. It is distinguished from both by the greenish wash on the upper parts, and it has the quills blacker than in *L. pyrrhopterus*. Count Salvadori and ourselves both regarded the white on the base of the quills as a distinctive character of *L. morotensis*, but Dr. Guillemard, who has recently visited the Obi Islands and obtained five specimens of the present species, states that all his series, excepting one bird, had a white mark on the primaries. The exception was in the case of a female bird, which was duller in colour than the males and had the primaries buff.

Dr. Bernstein, the discoverer of the species, procured it in Obi Major and Obi Lattoo, but he states that, like *L. morotensis*, it is a difficult bird to procure, as it frequents the thick forest. Its note is described by Dr. Bernstein as "whunk."

The following description of an adult bird is copied from the British Museum 'Catalogue of Birds,' and is taken from a specimen in that institution:—

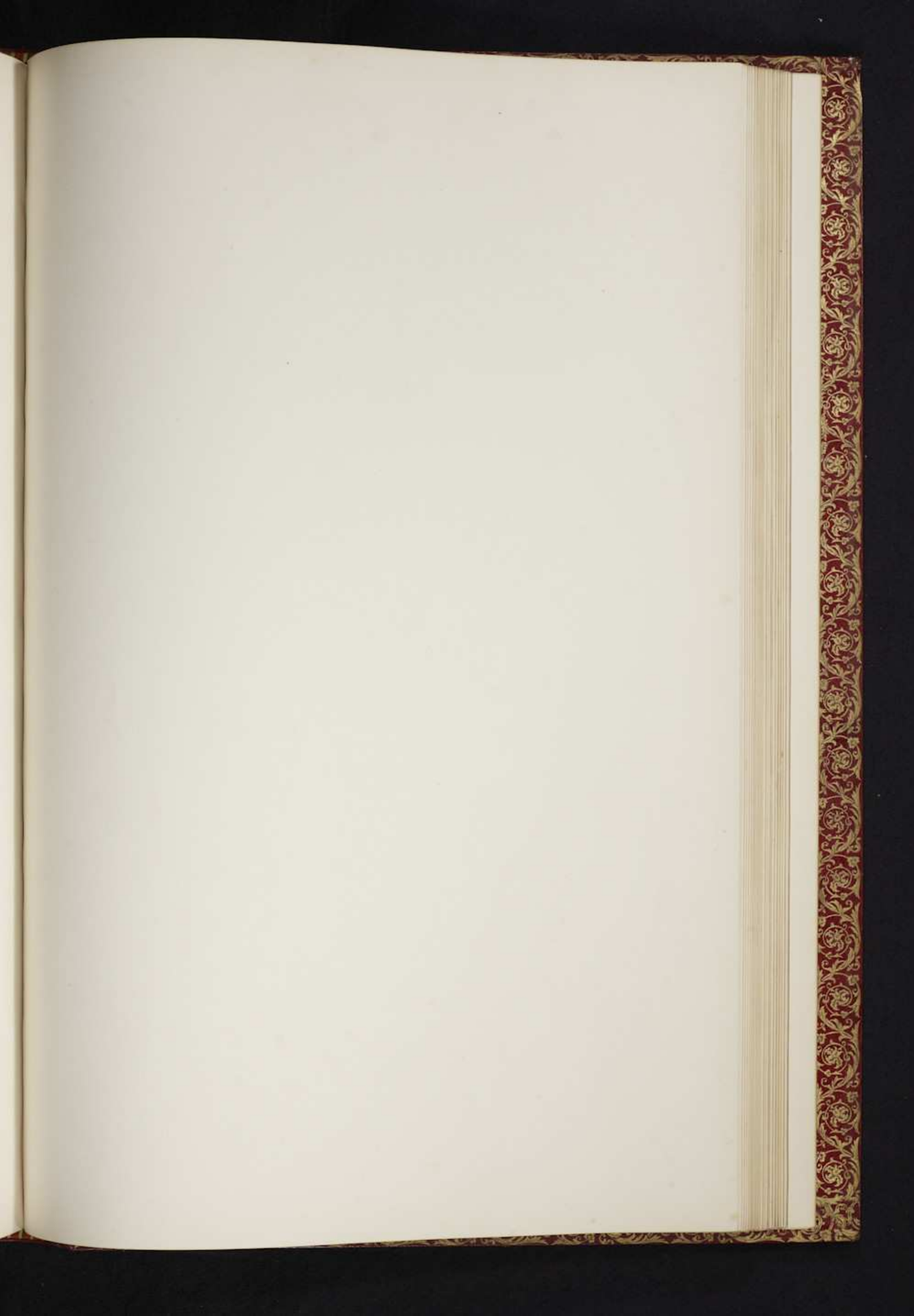
"General colour above and below of a dull rifle-green, somewhat glistening; tail black, the feathers slightly washed with green on the outer web; quills blackish brown, the least wing-coverts edged with dull green like the scapulars, the rest of the coverts and secondaries slightly washed with green on the outer web, the primaries much paler brown; bill and feet black. Total length 13·5 inches, culmen 1·95, wing 7·75, tail 6·75, tarsus 1·9."

Dr. Guillemard says that the iris is crimson, but that in the female bird referred to above it was brown.

The figure in the Plate represents an adult bird of about the size of life, and is drawn from a specimen kindly lent to us by Dr. Guillemard.

[R. B. S.]





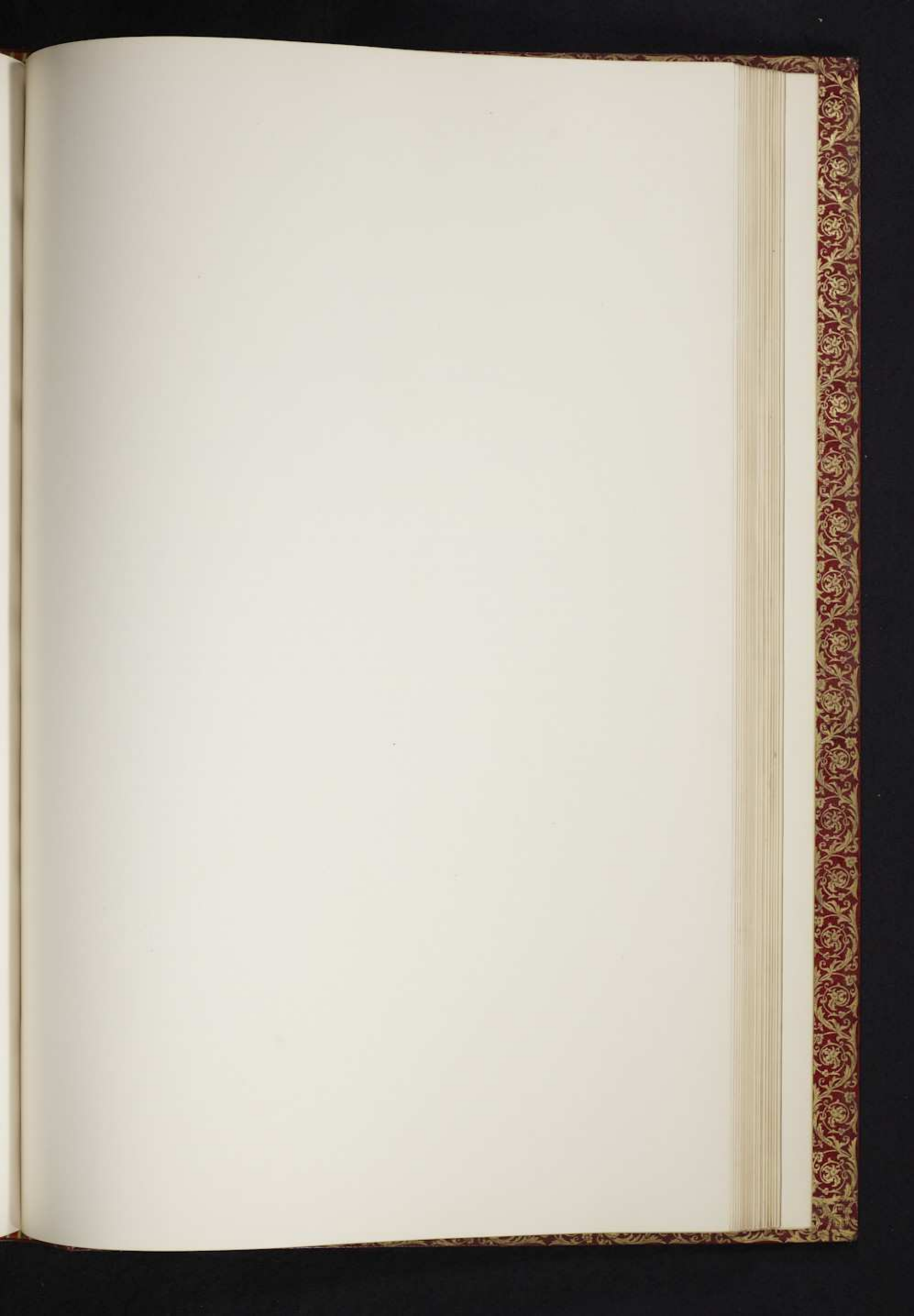


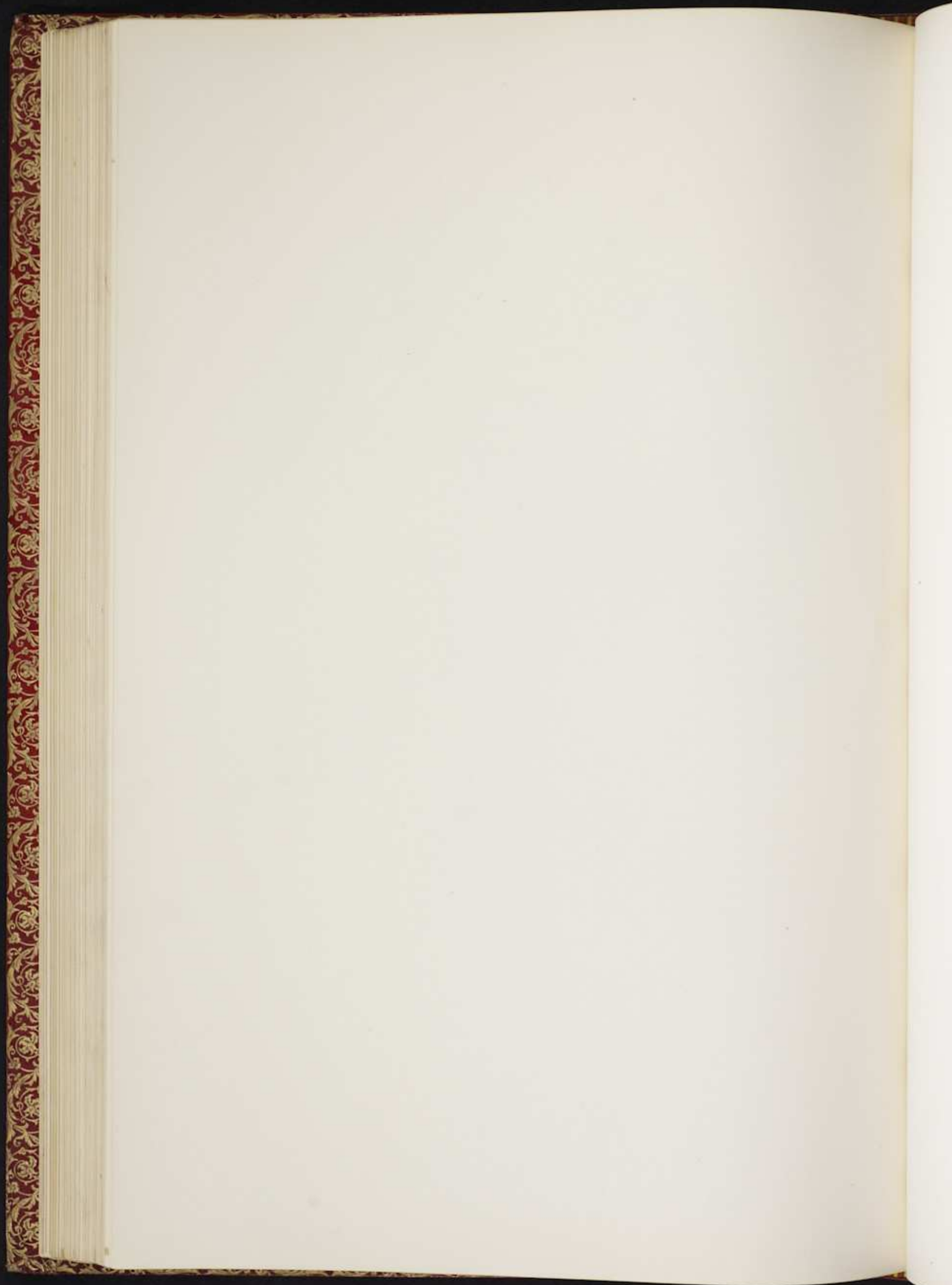
ÆLURCEDUS STONII, Sharpe.

J. Gould & W. Hart, del et lith.

Walter, Imp.







ÆLURÆDUS STONII, *Sharpe*.

Stone's Cat Bird.

Ælurædus stonii, Sharpe, Nature, Aug. 17, 1876, p. 339.—Salvad. Ann. Mus. Civic. Genova, ix. p. 193 (1876).
—Sharpe, Proc. Linn. Soc. xiii. p. 495 (1877).—Ramsay, Proc. Linn. Soc. New S. Wales, iii. p. 268 (1879); iv. p. 97 (1879).—Salvad. Orn. della Papuasie &c. p. 678 (1881).

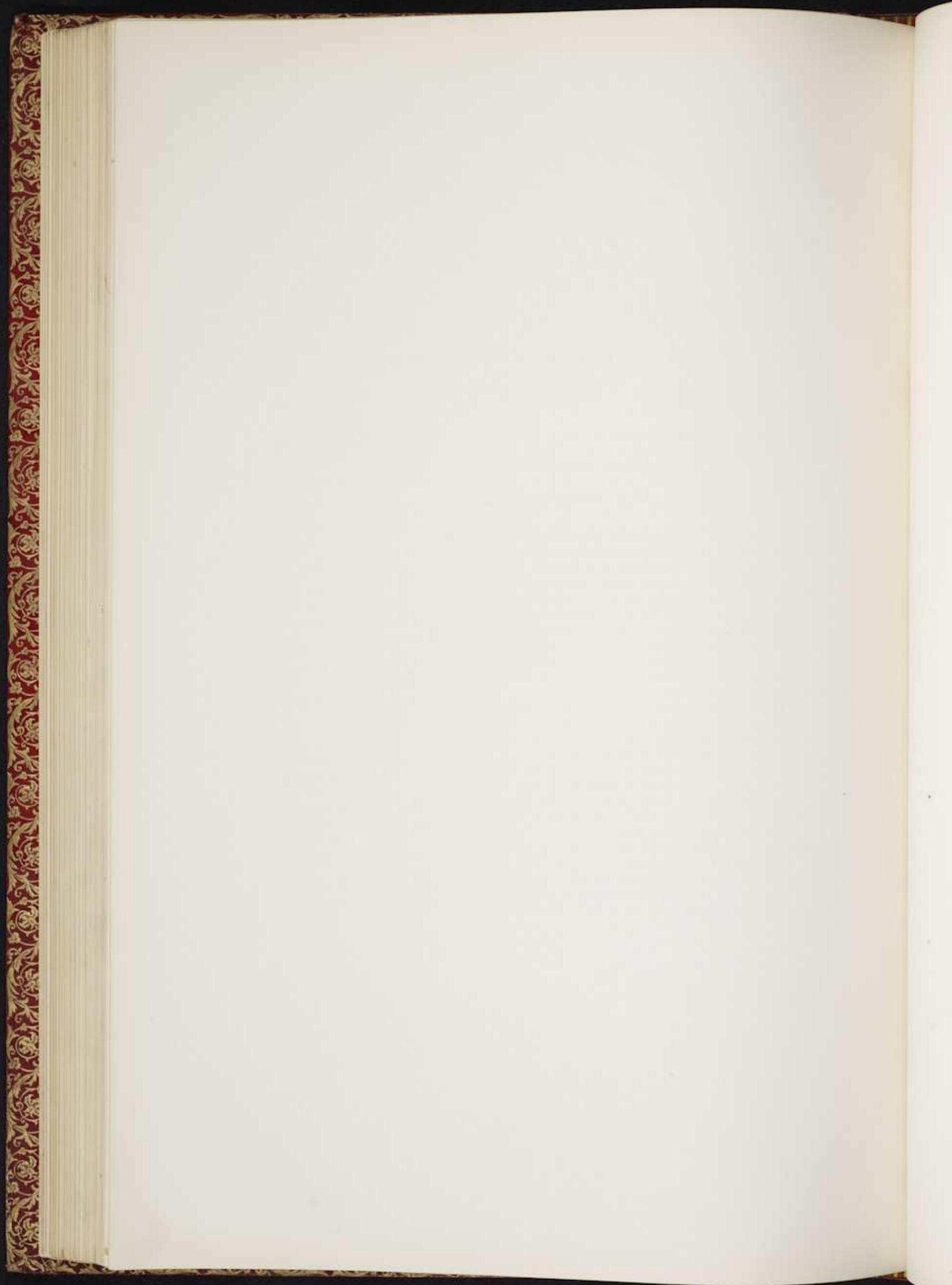
COUNT SALVADORI, in his great work on the birds of New Guinea, mentions his having examined the type of this species in the British Museum; but he considers that it is by no means a very well-marked form, and may yet prove to be identical with *Æ. buccoides*. This was at first my own idea; and although I had the drawing prepared some years ago, I never ventured to publish it, but relied on the arrival of more specimens to decide the validity of the species. I have since seen several examples from South-eastern New Guinea, and I have found all the characters noted by Mr. Sharpe to be fully borne out in all the birds examined by me; so that now I have no alternative but to recognize Stone's Cat Bird as a well-founded species of the genus *Ælurædus*. It is closely allied to *Æ. buccoides* of North-western New Guinea (which bird, by the way, has been said by Count Salvadori to have been obtained on the Fly river also), but is distinguished by the small spots on the under surface and the darker head. It represents *Æ. buccoides* in South-eastern New Guinea.

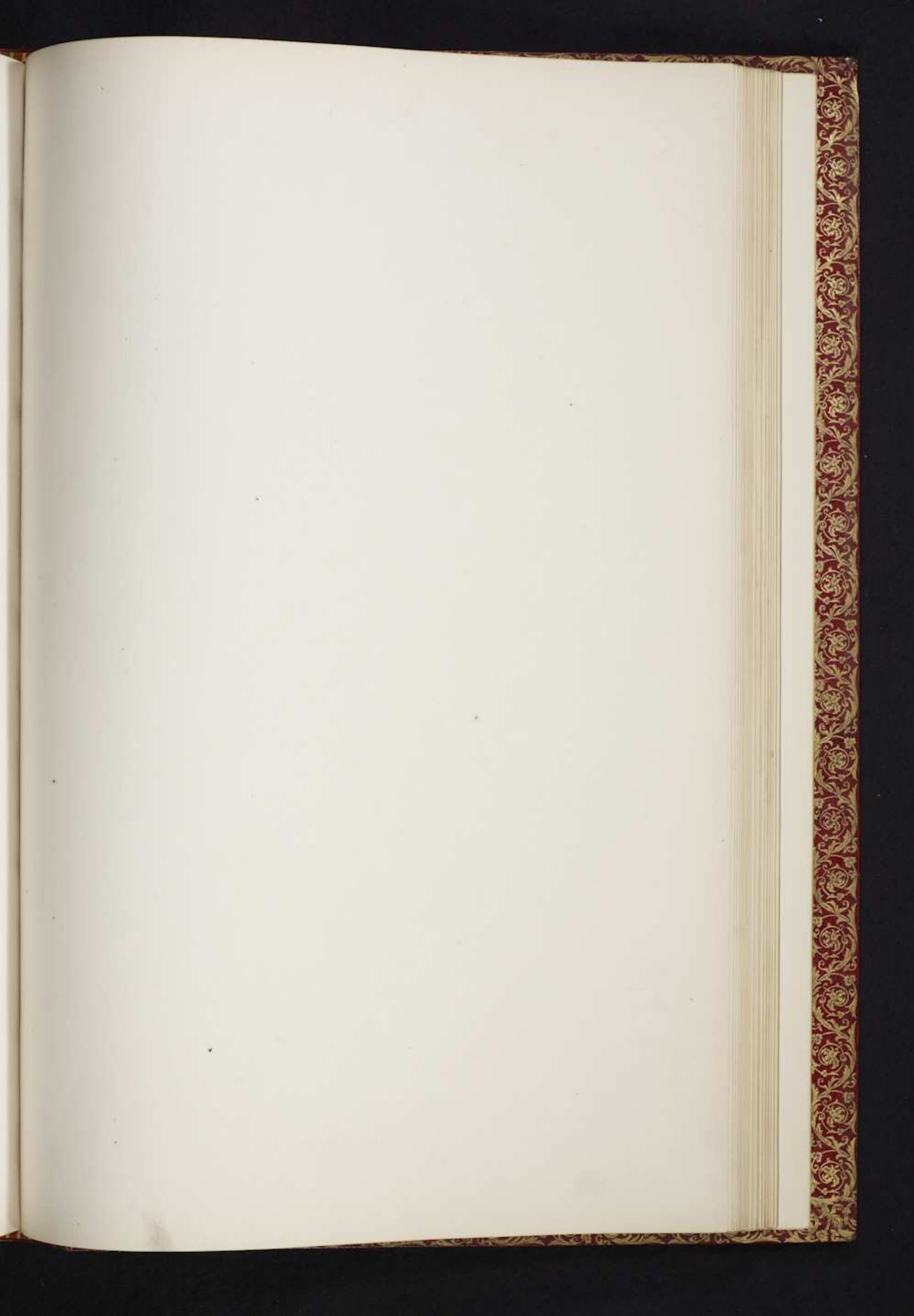
Mr. E. P. Ramsay records the capture of a few specimens by Mr. A. Goldie, about fifteen miles inland from Port Moresby. They were found in dense scrubs, feeding on fruit and berries.

The following description has been copied from Mr. Sharpe's original account of the species:—

Adult.—General colour above bright green, some of the feathers tinged with blue; wings green, like the back, the inner webs dusky brown, the primaries externally washed with yellow, the secondaries tipped with the latter colour; tail green, blackish on the inner webs of the outermost rectrices, which are tipped with white; head dark brown, slightly washed with olive; hind neck yellowish buff, mottled with black centres to the feathers, those adjoining the mantle spotted with green; sides of face and throat pure white, with a few tiny spots of black on the ear-coverts, larger on the sides of the neck; rest of under surface of body ochraceous buff, the fore neck and chest minutely spotted with green, the flanks also with a few tiny spots of the latter colour; under wing-coverts yellowish buff, the edge of the wing washed with green. Total length 9·3 inches, culmen 1·15, wing 5·05, tail 3·5, tarsus 1·55.

The figure in the Plate, which represents the species of about the natural size, has been drawn from the typical specimen kindly lent to me by Mr. Bowdler Sharpe.



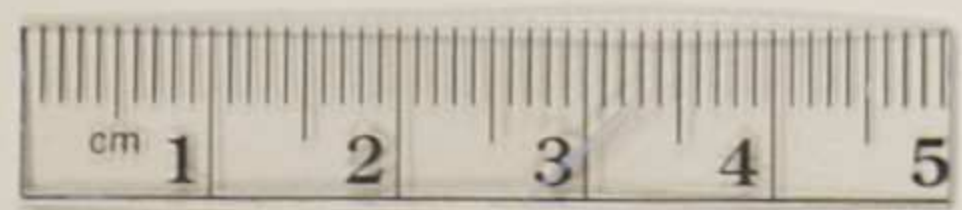


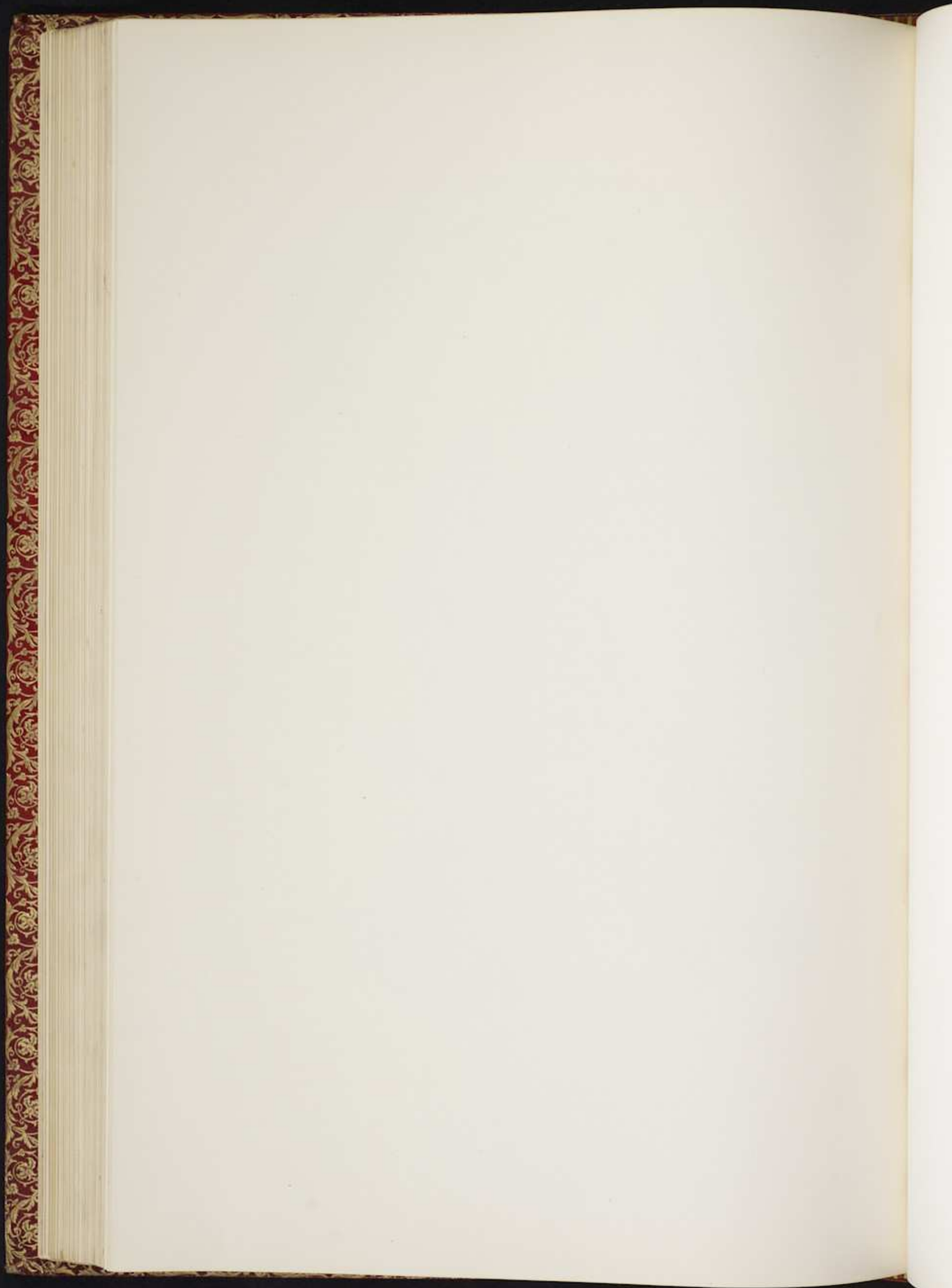


AILURCEDUS MACULOSUS, Ramsay.

J. Gould & W. Hart, del. et lith.

Walter imp





AILURÆDUS MACULOSUS, *Ramsay.*

Queensland Cat-bird.

Ælurædus maculosus, Ramsay, P. Z. S. 1874, p. 601.

THIS addition to the group of Cat-birds (*Ailurædus*) is of very great interest to me, as I have for years suspected that more species of the genus would be discovered, and the affinities of Mr. Ramsay's bird afford further evidence of the close zoological relations existing between the avifauna of Australia and that of New Guinea and the Aru Islands. Instead of being related to the ordinary species (*Ailurædus Smithii* vel *crassirostris*), the Queensland species comes nearer to the black-eared Cat-bird of the Aru Islands (*Ailurædus melanotis*), from which it is distinguished by its smaller size, dark-green coloration, and thickly mottled under surface. From the common Cat-bird it is at once to be told by its black ear-coverts and by other characters which are well set forth by Mr. Ramsay in the description quoted below. Although our knowledge of its habits is at present meagre, more details than usual in the case of novelties are given by the above-named naturalist. It will probably be found that, like *A. Smithii*, the present species does not build a bower as do *Ptilonorhynchus* and *Chlamydera*.

The following is Mr. Ramsay's description :—

“The whole of the head, including the chin, feathers at the base of the lower mandible, and ear-coverts, black, having a spot of white tinged with olive-green at the end of each feather; the spots on the back of the head and neck become more distinctly tinged with olive-green as they approach the shoulders, where they are lost in the brown-green margin of the feathers, which on their under surface are of a bluish green tint.

“A narrow line down the centre of each feather on the top of the head and neck black; line over the eye and just in front of it white tinged with olive-green; lower part of the ear-coverts black; upper part immediately behind the eye centred with white and tinged slightly with olive-green; sides of the lower part of the neck olive-green, each feather indistinctly marked with a whity-brown spot.

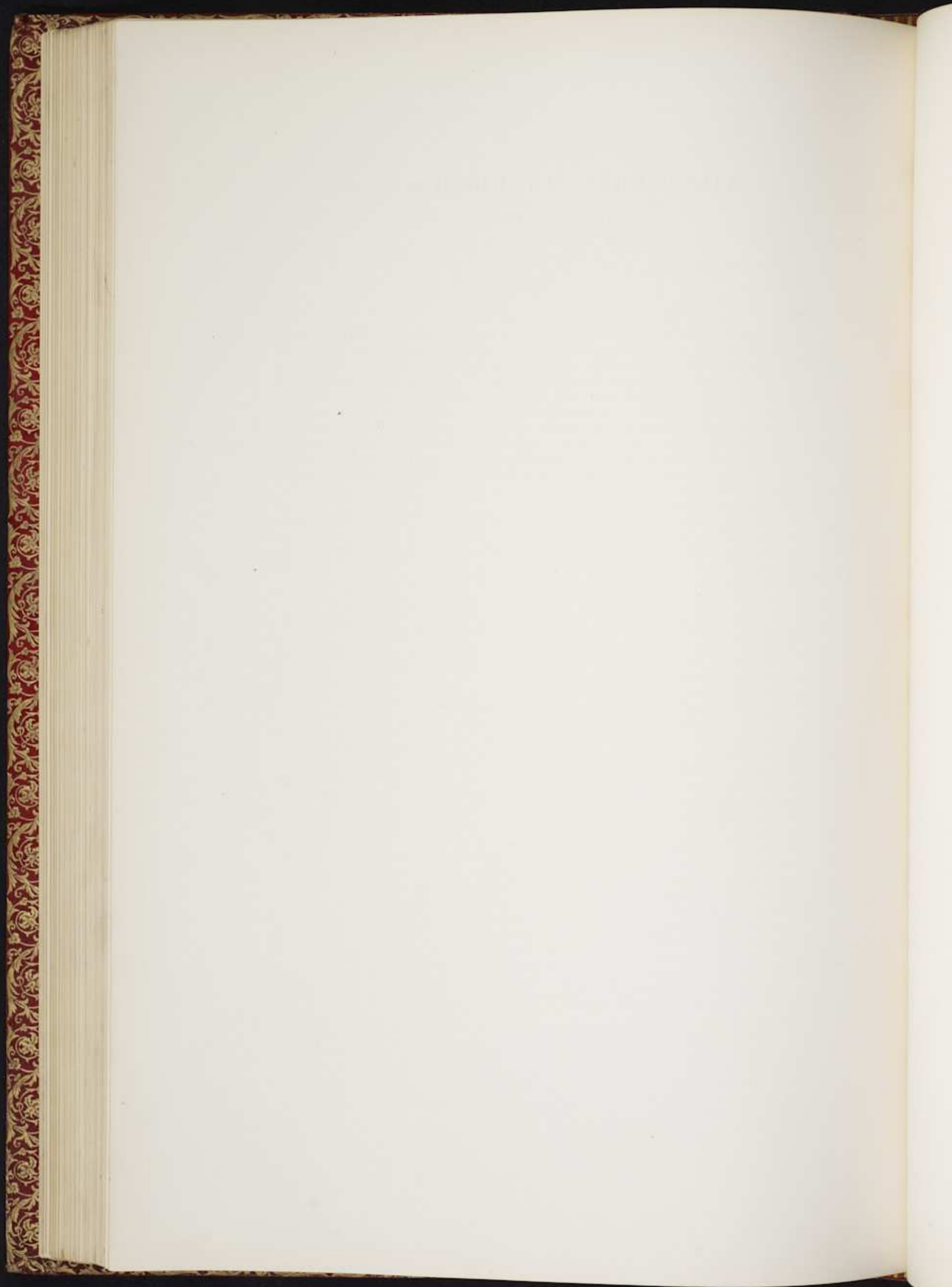
“Whole of the under surface olive-green, being brightest on the flanks, each feather on the chest centred with a conspicuous and somewhat heart-shaped blotch of white, which on the abdomen and flanks becomes lanceolate in form, more acute on those feathers between the flanks and round the vent, which are nearly white, having a brownish crescentic mark near the margin; the spots on the abdomen are almost obsolete. Under tail-coverts olive-green, centred and broadly margined with white tinged with olive-green; the basal portion of all the feathers brown; under surface of the tail brown, with a tinge of bluish green in certain lights; all but the two centre tail-feathers tipped with white on both surfaces; the under surface of the wings, inner webs of primaries, and secondaries dark brown, becoming almost white on the margins of the inner webs. The inner webs of primaries and secondaries, and the basal part of the inner webs of the tertiaries, blackish brown on the upper surface; the margin of the wings and under wing-coverts white, with a somewhat crescent-shaped mark of dark brown, margined with green, in the centre; the basal portion of the feathers dark brown. The narrow outer web of the primaries above bluish green; all the upper surface from the back of neck and mantle bright grass-green; on the tertiaries to approximate secondaries a small spot of white at the tips of the outer webs only; some of the lesser wing-coverts have also a similar spot in certain specimens; and a few of the feathers between the shoulders have a bluish green tinge; two centre tail-feathers and the outer webs of all except the first feather on either side bright grass-green above; the lower portion of the outer web of the first tail-feather on either side tinged with green; the inner webs of all the tail-feathers except the two centre ones blackish brown above, tinged with green near the shafts of the feathers, but becoming blackish brown near the tips, which end in a white marginal spot more largely developed on the inner webs and of greater extent on the outer feathers, diminishing into a narrow white line on those next the centre tail-feathers. Bill light horn-colour.

“Total length 10 to 11 inches; bill from forehead 1, from eye 1·9 to 2, from nostril 0·6, from angle of the mouth 1·45, width at base 0·5; wing from flexure 5·5; tail 4·3; tarsus 1·6 to 1·8, of a dark bluish horn-colour. Claws light brown.

“This new species is at least one quarter less in size than the New-South-Wales bird, *A. Smithii*, and is only found on the East-Coast ranges, about Cardwell, at Rockingham Bay. Several specimens were obtained, but unfortunately so late in the season that the plumage was much worn and discoloured.

“Its note resembles that of *A. Smithii*, but is not so distinct a cry, and less bat-like, clearer and more of a whistle. They assemble in small flocks from ten to twenty in number, and frequent the palms and native fruit-trees in company with *Ptilonopus superbus* and *Carpophaga assimilis*.”

The figure is of the natural size.



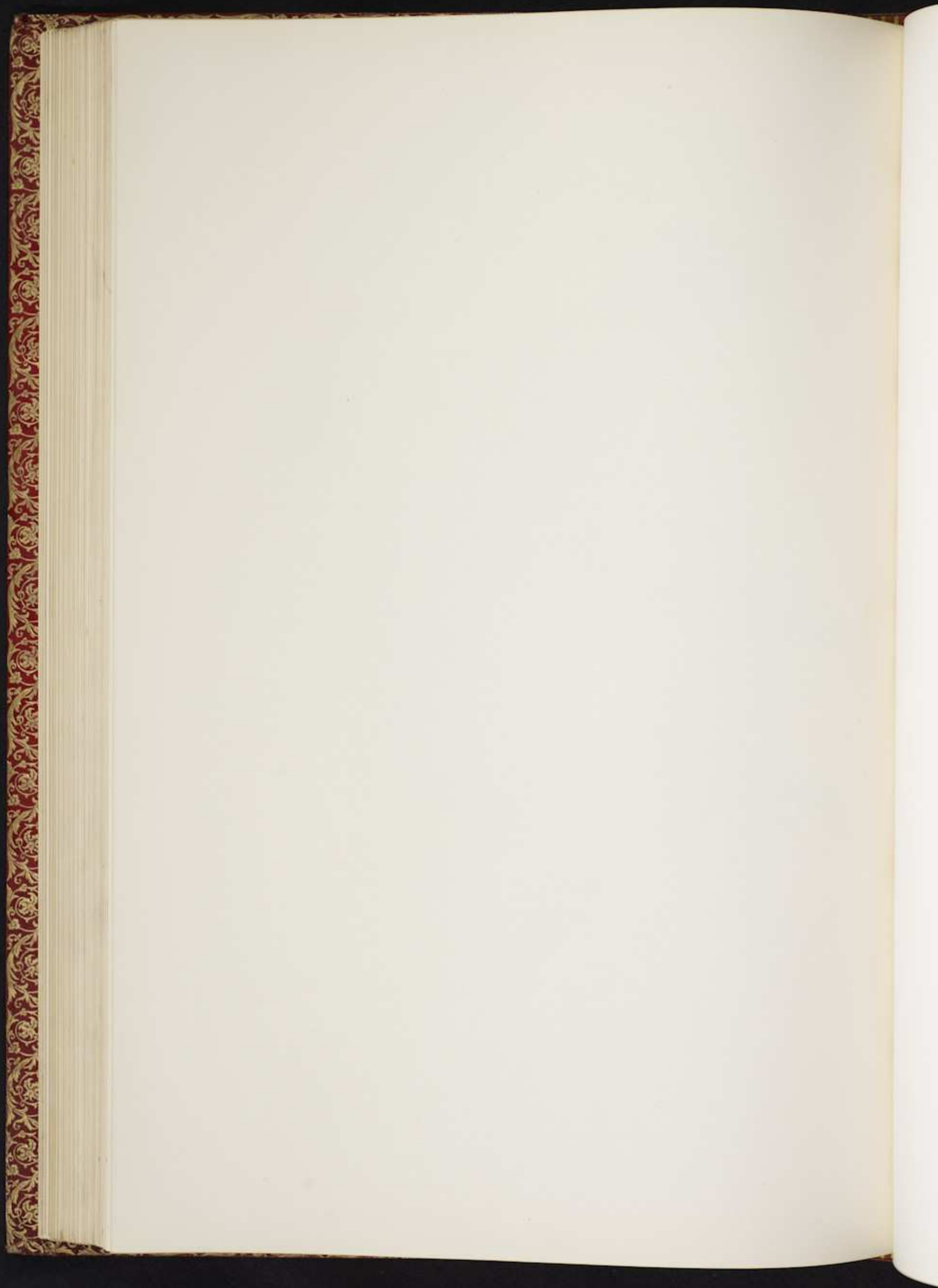


AILURCEDUS MELANOTIS.

J. Gould & Whart del. et lith.

Walter imp.





AILURÆDUS MELANOTIS.

Black-cheeked Cat-bird.

Ptilonorhynchus melanotis, Gray, P. Z. S. 1858, p. 181.—Id. Cat. Mamm. & Birds N. Guin. p. 37.—Von Rosenb. J. f. O. 1864, p. 122.—Schl. Mus. P. B. Coraces, p. 118.—Gray, Handl. B. i. p. 294.—Schl. N. T. D. iv. p. 51.

Ælurædus melanotis, Elliot, Monogr. Paradiseidæ, pl. 35.

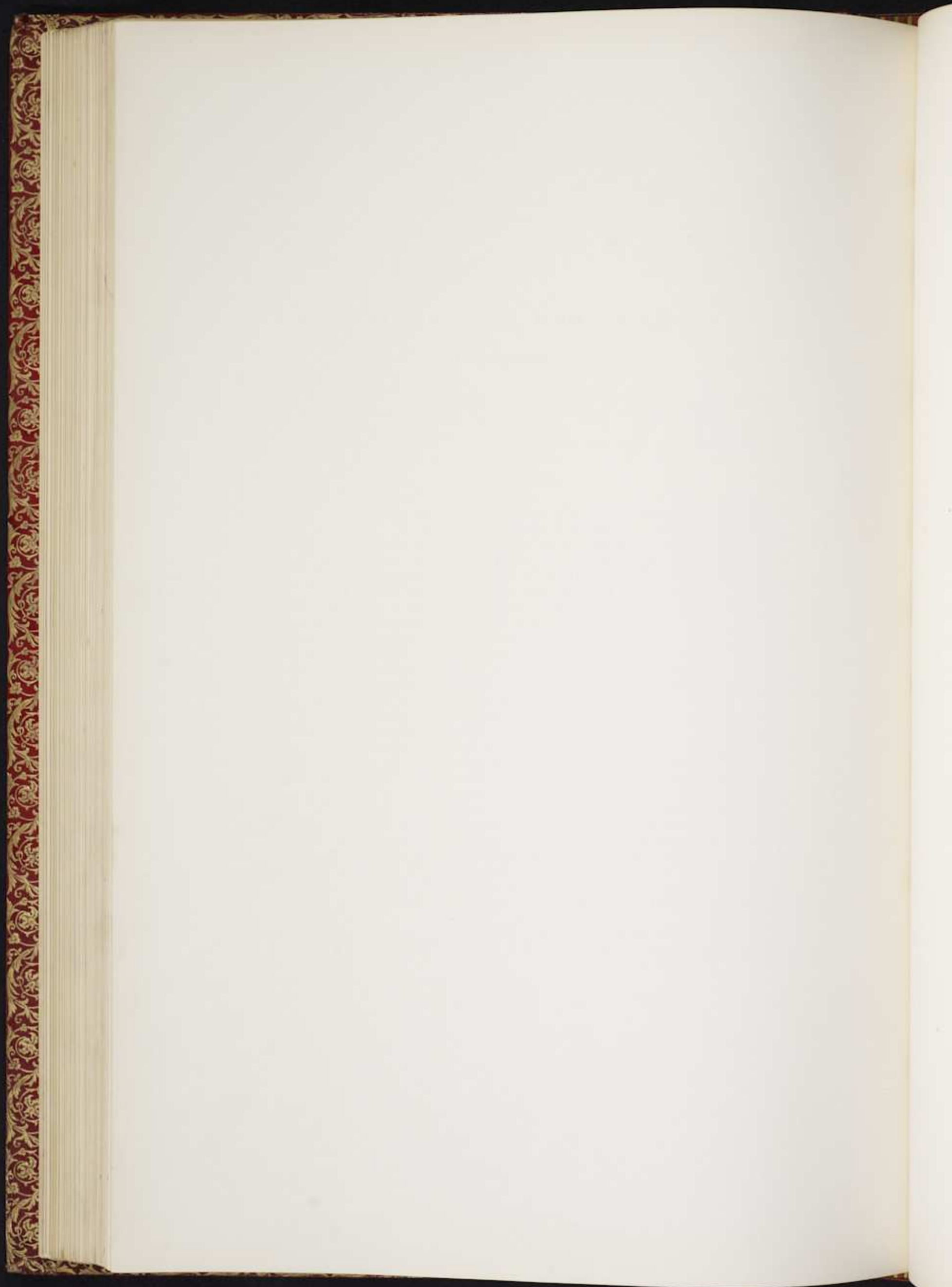
THE discovery of this genuine and unmistakable Cat-bird in the Papuan Islands, forms part of the evidence that the latter are Australian, and not Indian, in their geographical affinity.

The *Ailurædus melanotis* of the Aru Islands is the largest of the five species of this genus now known to us: the nearest ally is the *A. arfakianus* of the mainland of New Guinea, and by some may be considered the same species; Mr. Meyer, however, has separated them; and I have followed him and given figures of both. Whatever they may ultimately prove to be, it will be seen that the mainland bird differs materially both in the colour and form of its markings. The newly discovered species at Rockingham Bay, in Queensland, is also nearly allied, but is at once separated by its much smaller size, and less developed markings on the tips of the secondaries, a feature so prominent in the Aru bird as to remind us very forcibly of the round marks so abundantly dispersed over the whole upper surface in *Chlamydodera maculata*. These marks, both in form and colour, are not the usual tippings of such feathers, but are rounder and more sharply defined; in colour they will be found deeply tinted with yellowish grey, affording a strong contrast to the pure white ends of the tail-feathers. These facts in my mind tend to confirm the alliance between the members of the genus *Ailurædus* and *Chlamydodera*, while the length and greater development of the mantle in most of the species shows an alliance to many of the Birds of Paradise. Mr. Wallace did not fail to obtain specimens of the present bird during his visit to the Aru Islands; neither was Mr. Cockerell less active in this respect: from these two sources our cabinets are now well supplied. The Dutch travellers, Baron von Rosenberg and Mr. Hoedt, have also forwarded a large series to the Leiden Museum, from the islands of Wokan, Trangan, and Maykor, all belonging to the Aru group. Nothing whatever has been written about its habits.

Male.—Bill fleshy white; crown of the head, nape, and mantle black, with longitudinal spots of buffy brown occupying the centre of each feather; lores grey; ears black, separated from the back of the head by a narrow line of buffy white; throat greyish white, mottled with dark brown; all the undersurface dull greenish yellow, each feather having darker tips and a hair-like stripe of white down the centre; the breast generally darker than the belly and flanks, the latter being strongly suffused with green; all the upper surface lively grass-green; the tips of all the secondaries greyish white, all the tail-feathers tipped with pure white, the outermost ones largely, while in the two centre ones the white marks are almost obsolete; legs and toes bluish black.

Total length $12\frac{1}{2}$ inches, bill $1\frac{3}{8}$, wing $6\frac{1}{2}$, tail $4\frac{3}{4}$, tarsus 2.

The sexes are much alike in colour; but the female is decidedly the smallest.

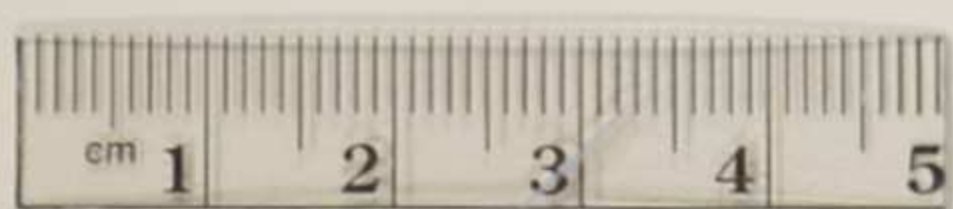


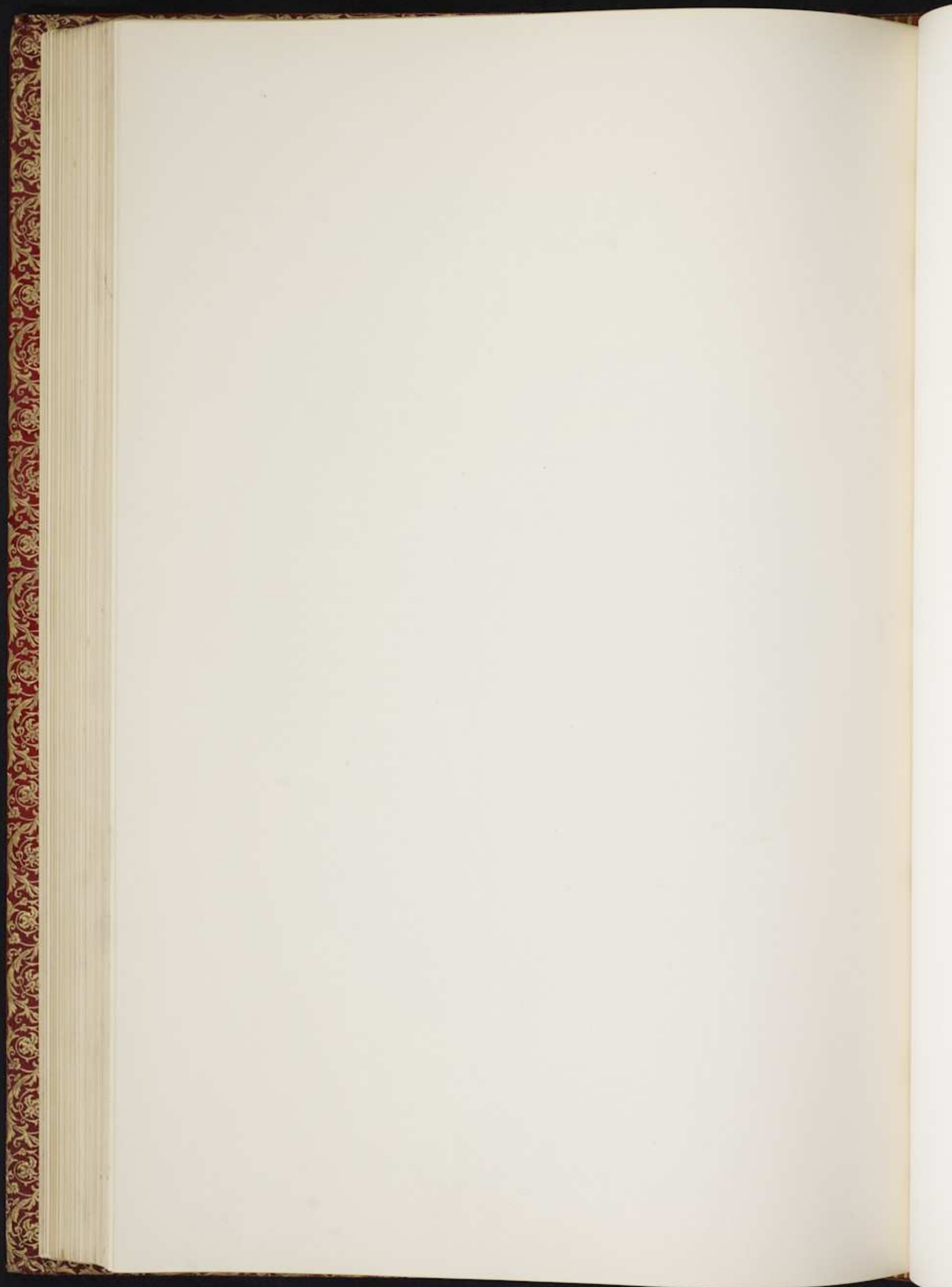


AILURCEDUS ARFAKIANUS, Meyer.

J. Gould & W. Hart, del. et lith.

Walter imp.





AILURÆDUS ARFAKIANUS.

Arfak Cat-bird.

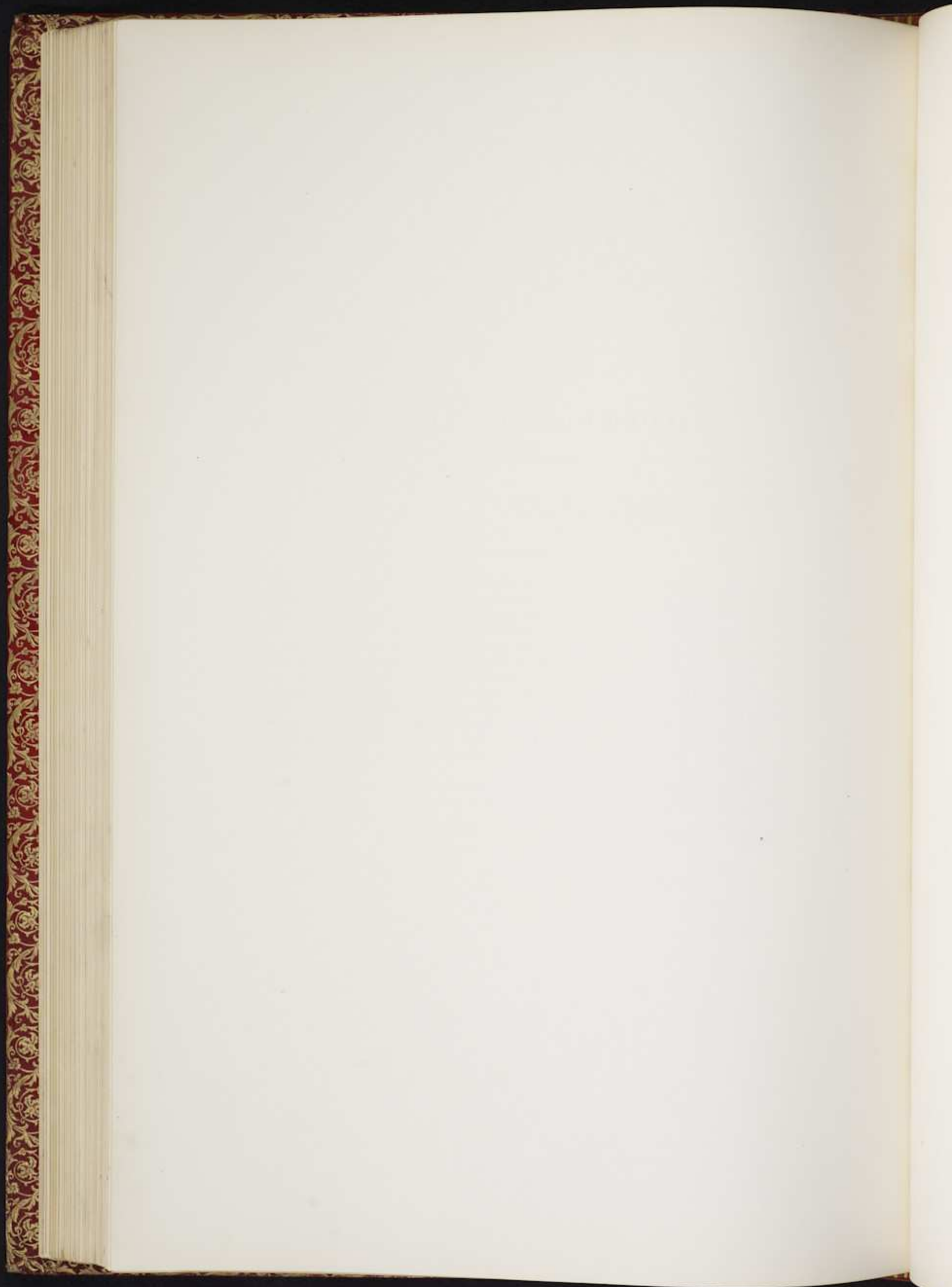
Ælurædus melanotis, Sclater, P. Z. S. 1873, p. 697 (nec Gray).

——— *arfakianus*, Meyer, Sitz. Akad. Wien, lxi. p. 82.

It will be seen, on reference to the synonymy, that Dr. Sclater considered the Cat-bird collected by Signor d'Albertis in the Arfak mountains to be the same as *Ælurædus melanotis* of the Arru Islands; consequently in his list of New-Guinea birds, published in the 'Proceedings,' it is given under that name. Dr. Meyer, on the other hand, has separated them; but, although I have followed Meyer rather than Sclater, I am not altogether satisfied as to the correctness of this view, and fear it must remain for future observers to determine this point. I may, however, state that the Arfak bird is much more strongly coloured, the spots being blacker and more sparkling; to which it must be added that it is of smaller size. I regret that nothing is known of the habits of the bird, or even of its distribution in New Guinea. It will not be long, however, before the ornithological secrets of this *terra incognita* will be laid bare; and we may expect that, when the interior of this great island is explored, not only will the ranges of many well-known species be extended, but new forms even of Bower-birds will be discovered. Each new traveller adds some striking novelty or other to the ornithological series; and there is probably no country in the world which will yield such a rich harvest of unknown species as New Guinea.

I must refer my readers to the accompanying Plate for a correct idea of the present species, as Signor d'Albertis's hurried departure for Italy with his collections gave me no time to describe the bird in detail.

The figure is of the natural size.

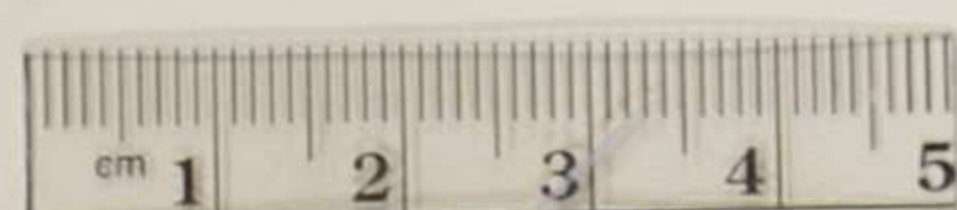


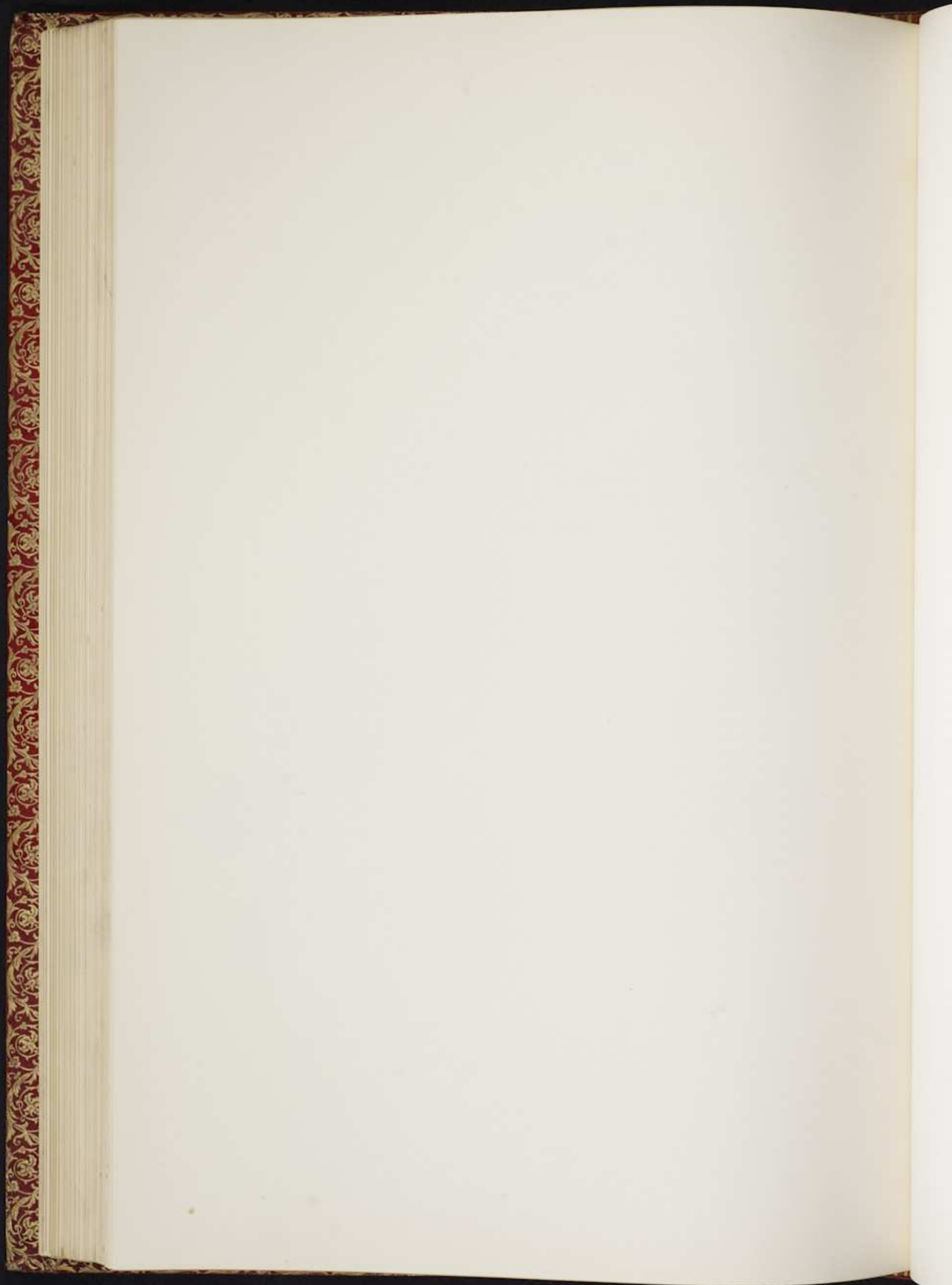


AILURCEDUS BUCCOIDES,

J. Gould & W. Hart, del. et lith.

Weller imp.





AILURÆDUS BUCCOIDES.

Barbet-like Cat-bird.

Kitta buccoides, Temm. Pl. Col. 575.—Von Rosenb. J. f. O. 1864, p. 122.

Cissa buccoides, Gray, Gen. B. iii., App. p. 14.

Ptilonorhynchus buccoides, Gray, P. Z. S. 1858, p. 194.—Id. Cat. Mamm. & B. N. Guin. p. 37.—Schl. Mus. P. B., Coraces, p. 118.—Gray, Hand-l. B. i. p. 294.—Schl. N. T. D. iv. p. 49.

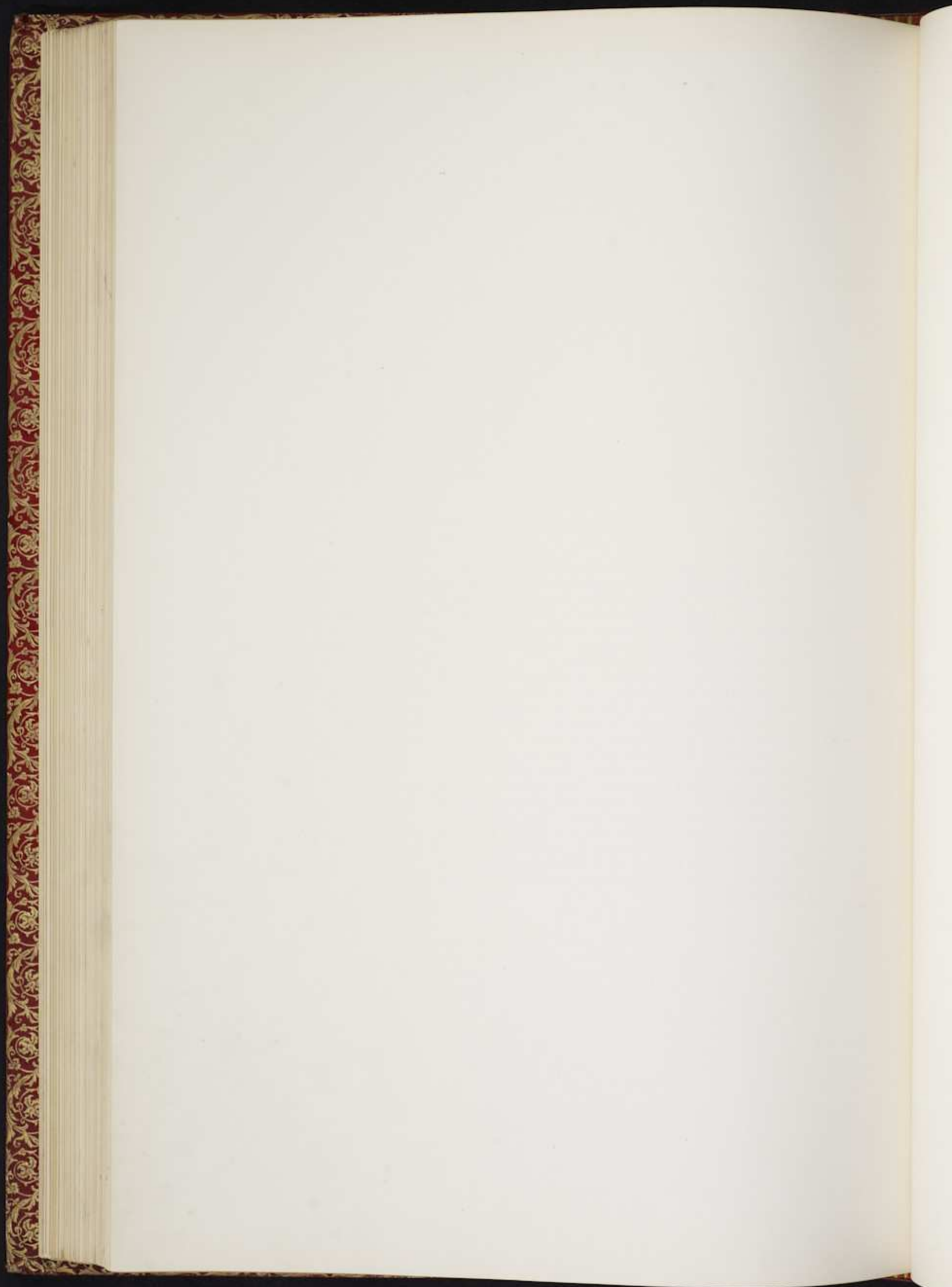
Ælurædus buccoides, Elliot, Monogr. Parad. pl. 36.—Sclater, P. Z. S. 1873, p. 697.

ALTHOUGH this bird, aptly named *buccoides* by Temminck on account of its resemblance to the Barbets of the genus *Megalæma*, has been known for so many years, and specimens not unfrequently turn up in collections from New Guinea, there is nothing recorded of its habits or economy. It is confined to the islands of New Guinea and Waigiu, the Leiden Museum possessing a considerable number of specimens collected in these localities by the late Dr. Bernstein. The original specimen was procured at Triton Bay, on the west coast of New Guinea; and other localities mentioned by Professor Schlegel are Sorong, the north coast of Salwatti, and the island of Batanta.

In its general green coloration this bird resembles the other species of the genus; but it may be readily distinguished by the more decided spotting of the breast and by the very distinct whitish streaks which are seen on the nape of the neck; besides which it is by far the smallest species of the whole genus, a group of birds intimately allied to the Bower-birds (*Chlamydodera* and *Ptilonorhynchus*); but up to the present moment we have no information as to whether the members of the genus *Ælurædus* ever construct a bower.

Upper surface of body, the wings included, grass-green, the secondaries slightly tipped with yellow; head olive-brown washed with green; all the feathers of the neck pale yellow, with large terminal spots of black, giving a streaked appearance to this part; a great many of the interscapular plumes barred with yellow, some spotted with black; tail green; sides of face and throat buffy white, the former thickly spotted with black; rest of under surface ochraceous buff washed with green, with a black spot to each of the feathers, disappearing on the under tail-coverts; the spots greenish on the lower abdomen; under wing-coverts salmon-buff, the outermost with brown-mottled bases; bill yellowish white; tarsi and feet lead-colour. Total length 10 inches; culmen 1·0, wing 4·9, tail 3·6, tarsus 1·4.

Apparently there is no difference in the sexes; and the figures in the accompanying Plate are as nearly life-size as possible.



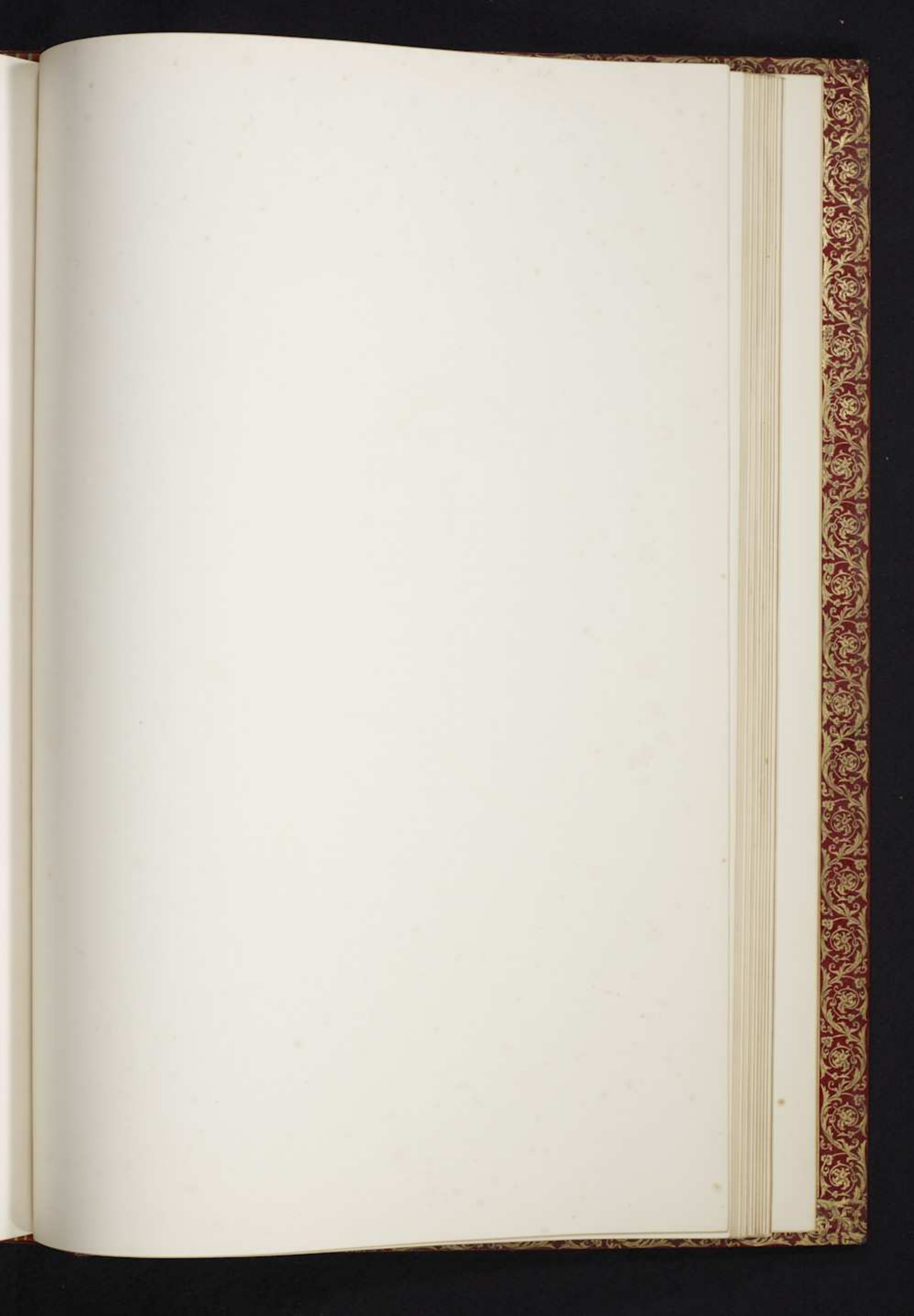


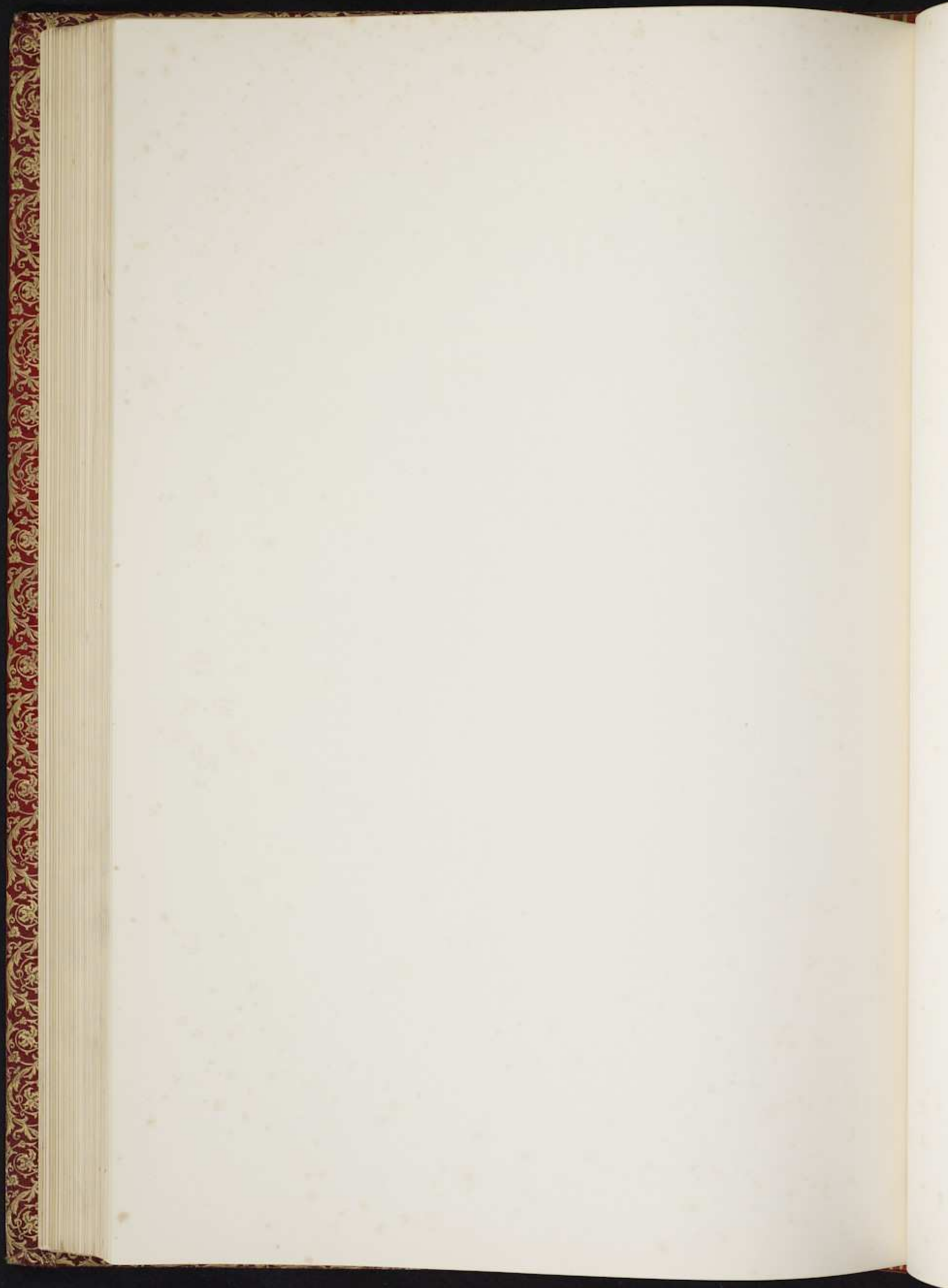
AILURCEDUS MELANOCEPHALUS, Ramsqy.

W. Hart del. et lith.

Mintern Bros. imp.







ÆLURÆDUS MELANOCEPHALUS, *Ramsay.*

Black-naped Cat-bird.

Ælurædus melanocephalus, Ramsay, Proc. Linn. Soc. N. S. Wales, viii. p. 25 (1883).—Finsch u. Meyer, Zeitschr. ges. Orn. ii. p. 394 (1885).

WE have already alluded in the present work to the differences between *Ælurædus melanotis*, from the Aru Islands, and *Æ. arfakianus*, from Mount Arfak; but at the time when we wrote we were unable to convince ourselves that those two species were specifically distinct. We now consider that we were in error, since we have seen additional examples of both, and now we have a third representative species in *Æ. melanocephalus* from South-eastern New Guinea. Of this latter bird we have seen several specimens collected by Mr. Goldie and Mr. H. O. Forbes in the Astrolabe Mountains, and by Mr. Hunstein in the Horseshoe range of the Owen Stanley Mountains.

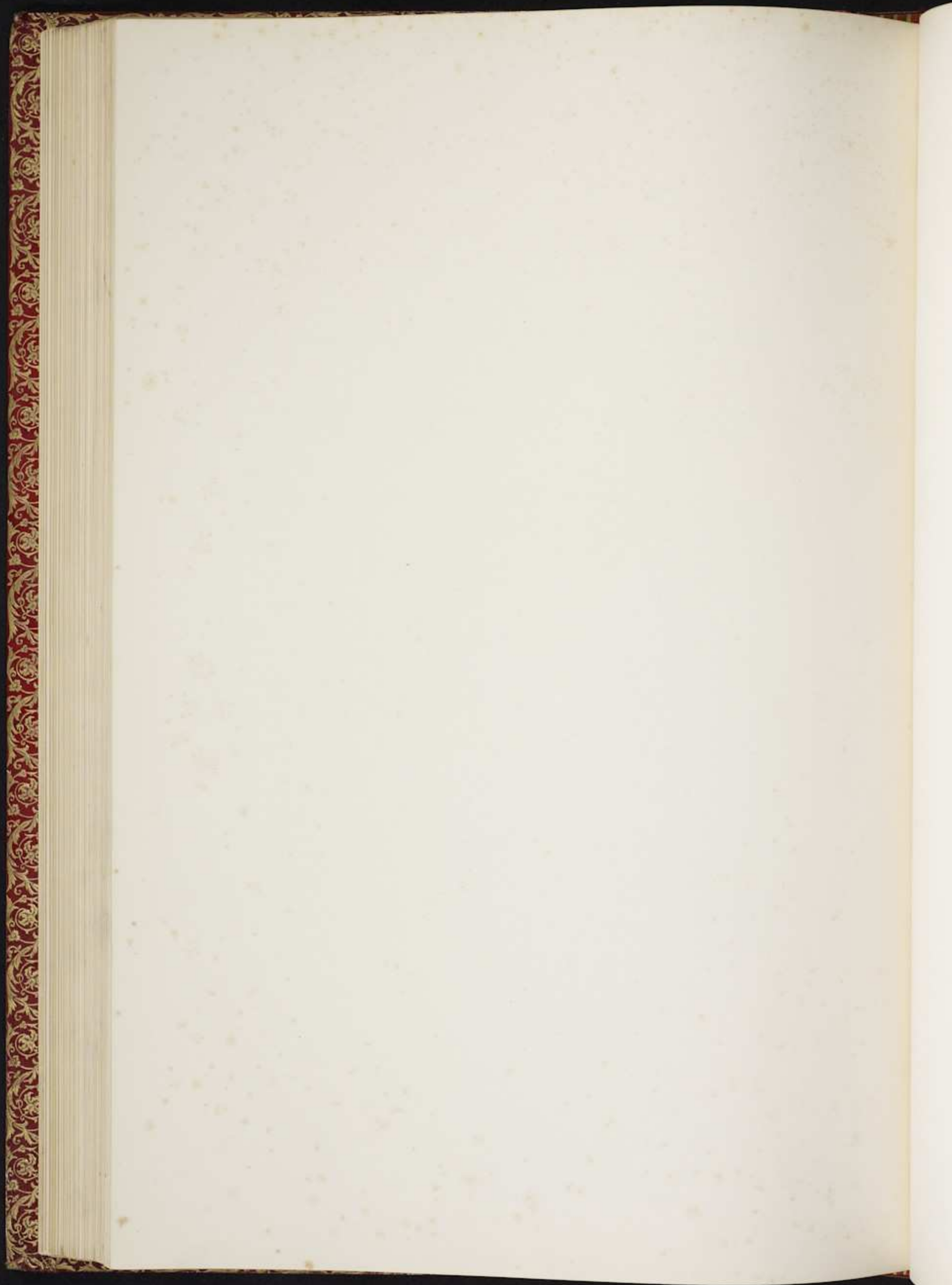
The present species differs from *Æ. arfakianus* by its black lores and chin and in the uniform character of the breast and abdomen.

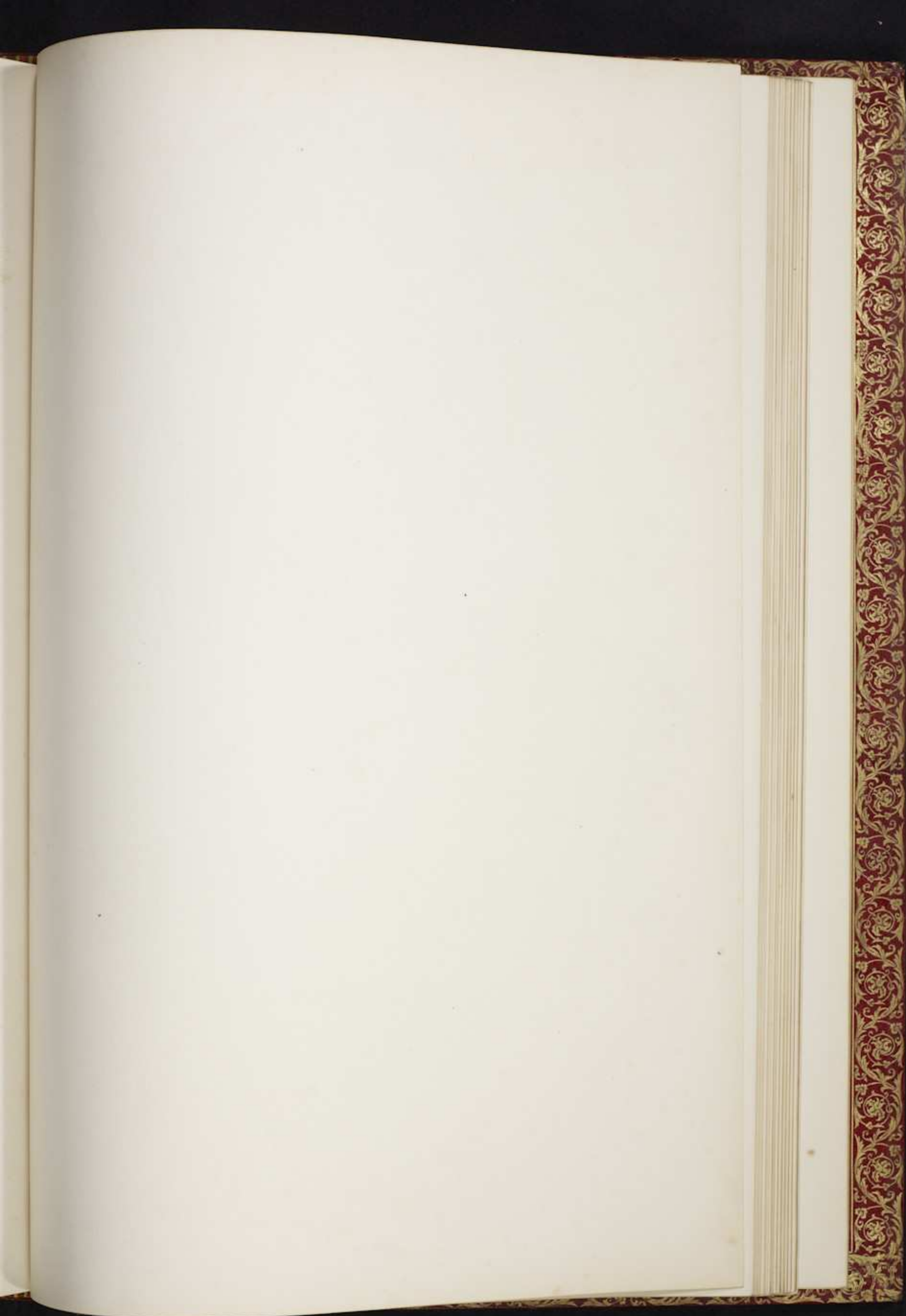
We subjoin a description of an adult male collected by Mr. Hunstein on the Owen Stanley Mountains:—

Adult male. General colour above grass-green, the upper tail-coverts slightly washed with lighter green; the upper mantle varied with ovate spots of ochreous buff in the centre of the feathers; wing-coverts like the back, the median and greater coverts and the bastard-wing faintly tipped with ashy ochreous buff; primary-coverts and quills externally green like the back, the primaries washed with bluish on the outer web, the secondaries tipped with ochreous white, less distinct on the primaries; tail-feathers dark green on the outer web, black internally, all the feathers tipped with white, increasing in extent towards the outer ones; crown of head black, with ovate spots of ochreous buff, smaller on the forehead and nape, the latter being almost entirely black; hind neck ochreous buff, the feathers margined with black; lores black, surmounted by a line of ochreous-buff-spotted feathers; feathers round eye and ear-coverts black, with a line of buff-spotted feathers below the eye; behind the ear-coverts a line of whitish down the sides of the neck; fore part of cheeks black, as well as the chin; throat and sides of neck ochreous buff, mottled with black edges to the feathers; fore neck and remainder of under surface of body rufescent ochre, with greenish edges on the feathers of the chest, the breast and abdomen more uniform; all the feathers with more or less distinct white shaft-lines; sides of body and flanks like the breast, and washed with greenish; thighs dull greenish; under tail-coverts like the abdomen, with white shaft-lines; under wing-coverts and axillaries ashy, tipped with whitish; quills below dusky, ashy along the inner edge. Total length 11·5 inches, culmen 1·3, wing 5·7, tail 4·6, tarsus 1·7.

The figure in the Plate represents an adult male of the natural size, drawn from a specimen collected by Mr. H. O. Forbes.

[R. B. S.]



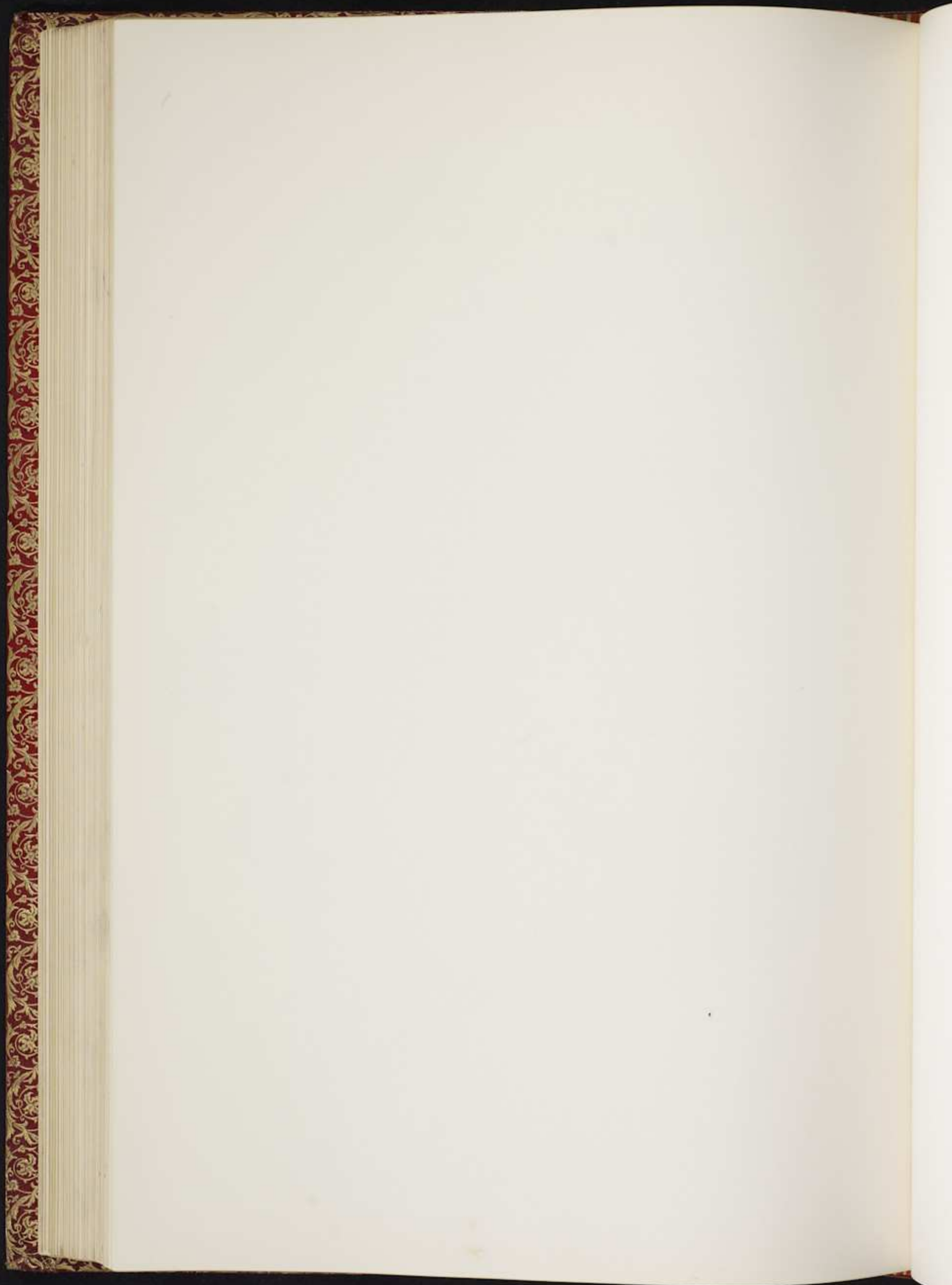




SCENOPEUS DENTIROSTRIS, Ramsay.

Walter Imp





SCENOPŒUS DENTIROSTRIS, Ramsay.

Toothed-billed Bower-bird.

Scenopœus dentirostris, Ramsay, P. Z. S. 1875, p. 591.—Id. Proc. Linn. Soc. New South Wales, ii. p. 188 (1878).

ONLY the naturalist who has devoted his life to the pursuit of a particular study, and has spent long years in the determination to render his writings on the various interesting subjects he has so long been treating as complete as lies in his power, can imagine the feelings of satisfaction with which I contemplate my work on the Birds of Australia. The time which I spent in working out the birds of that country is one of the most pleasing recollections of a life spent in the pursuit of natural history; and I cannot but congratulate myself on the fact that the additions to the avifauna of that continent have not been very numerous since I published my last volume on its ornithology. At the same time it would be vain to suppose that the field is exhausted, when such extraordinary new forms as that which is figured on the opposite Plate continue to be discovered, constituting, as it does, the type, not only of a new species, but of an entirely new genus. No one who looks for one moment at the extraordinary doubly toothed bill of the present bird can doubt the propriety of Mr. Ramsay's instituting a separate genus for so anomalous a bird.

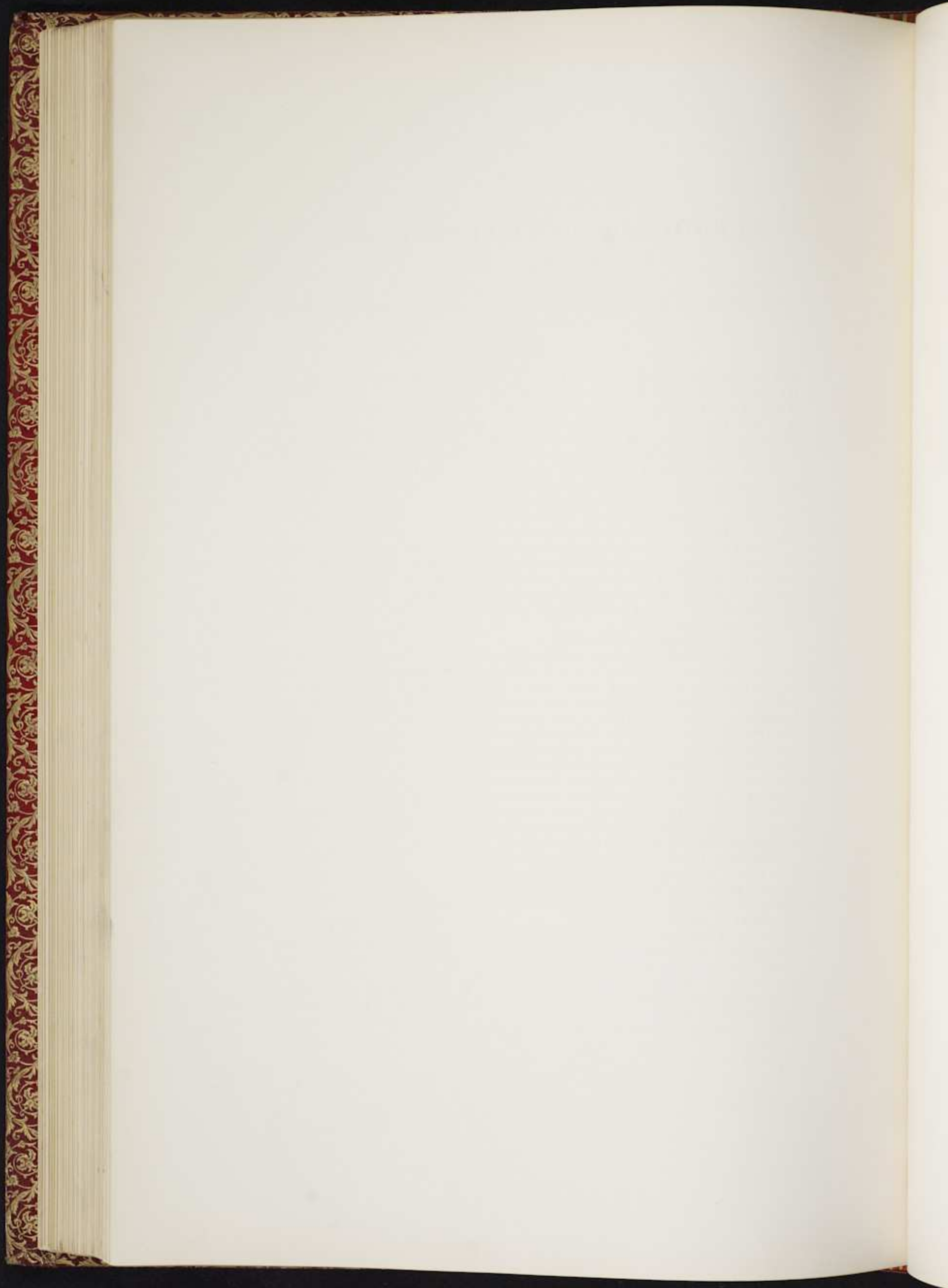
Nothing is at present known of the habits of this species, or if it really builds a bower; but Mr. Ramsay observes that, like the Catbirds, it clears a large space under the brushwood some nine or ten feet in diameter, and ornaments the cleared parts with tufts of gaily tinted leaves and young shoots. The only specimens yet procured were shot with a rifle by Inspector Johnstone of Cardwell; and the habitat is given as the Bellenden-Ker range and the dense brushes clothing the steep sides of "Sea-view range," on the north-east coast of Queensland.

The following is the description by Mr. Ramsay:—

"The whole of the upper surface, wings, and tail rich olive-brown, the inner webs of the primaries and secondaries blackish brown, their margins near the base buffy white; under surface of the shoulders yellowish buff, with remains of broken bars of blackish brown on the smaller feathers; the under wing-coverts yellowish buff, with cross bars of dull brown; under primary-coverts buff, crossed more distinctly with dull brown; under surface of primaries and secondaries dark ashy brown, the basal half of the inner margin buff tinged with a faint wash of light rufous; flanks olive-buff; abdomen buff; under tail-coverts olive-buff, each feather barred with two or more lanceolate marks of dull olive-brown, under surface of the tail dull brown; throat, neck below, chest, and the rest of the under surface buffy white, each feather margined with olive-brown, which becomes lighter and less distinct on the lower parts, and almost obsolete on the flanks and abdomen; on the throat and chest the margins are almost black, and tinged with yellowish olive on the sides of the neck and chest, and the buff central portion of a deeper tint; the under surface has the appearance of being broadly streaked with lanceolate marks of buff, which become more and more indistinct as they approach the under tail-coverts, becoming obsolete on the abdomen.

"Total length 11 inches; wing 5·7; tail 4; tibia 2·2; tarsus 1·2; hind toe 0·6, its claw 0·4, its width 0·25; inner toe 0·65, its claw 0·3; middle toe 0·9, its claw 0·35; outer toe 0·7, its claw 0·3; width of the sole of the foot 0·35; bill from gape 1·2, from forehead 1·1, from the nostril 0·6, height at nostril 0·6, width at nostril 0·5, culmen 1·1; upper mandible black, lighter at the tip; lower mandible blackish brown; gape yellow; legs and feet black, claws brown."

It is now five years since I received information of the discovery of this bird from Mr. Coxen, then Honorary Curator of the Museum at Brisbane, with a promise that he would get the loan of the mutilated skin and forward the same to me for the purpose of figuring in the 'Birds of New Guinea.' Almost immediately after the receipt of Mr. Coxen's letter, I read the sad news of his nearly sudden decease, a source of the deepest regret both to myself as a relative, and all persons who had the pleasure of knowing him. Besides the skin, the head of a second example was forwarded, which greatly added to the interest of the subject. We now anxiously await more examples.

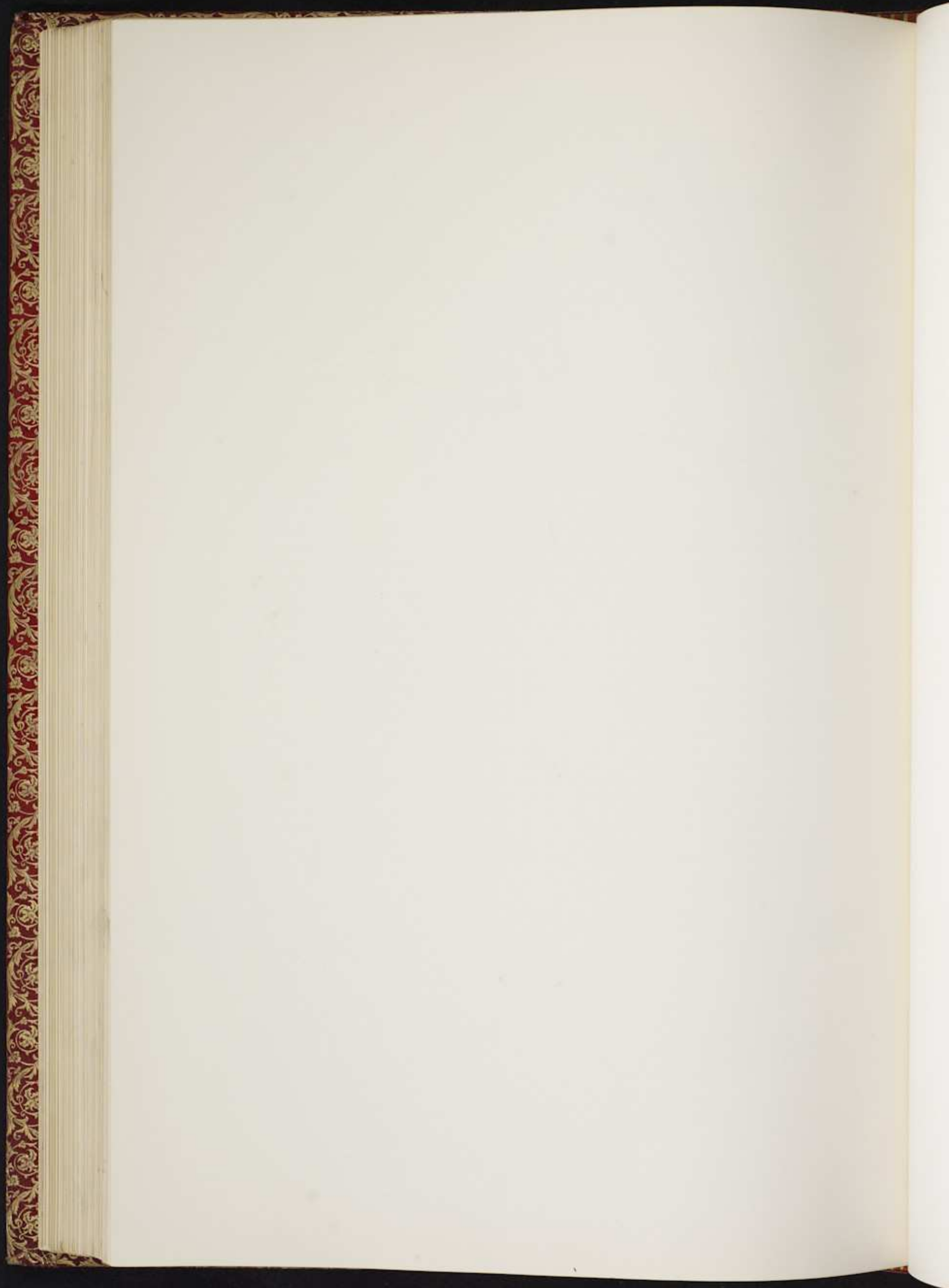






CHLAMYDODERA ORIENTALIS. Gould.





CHLAMYDODERA ORIENTALIS, Gould.

Queensland Bower-bird.

Chlamydodera nuchalis (part.), Ramsay, Proc. Zool. Soc. 1868, p. 385.—Id. Proc. Linnean Soc. of New S. Wales, ii. p. 188.

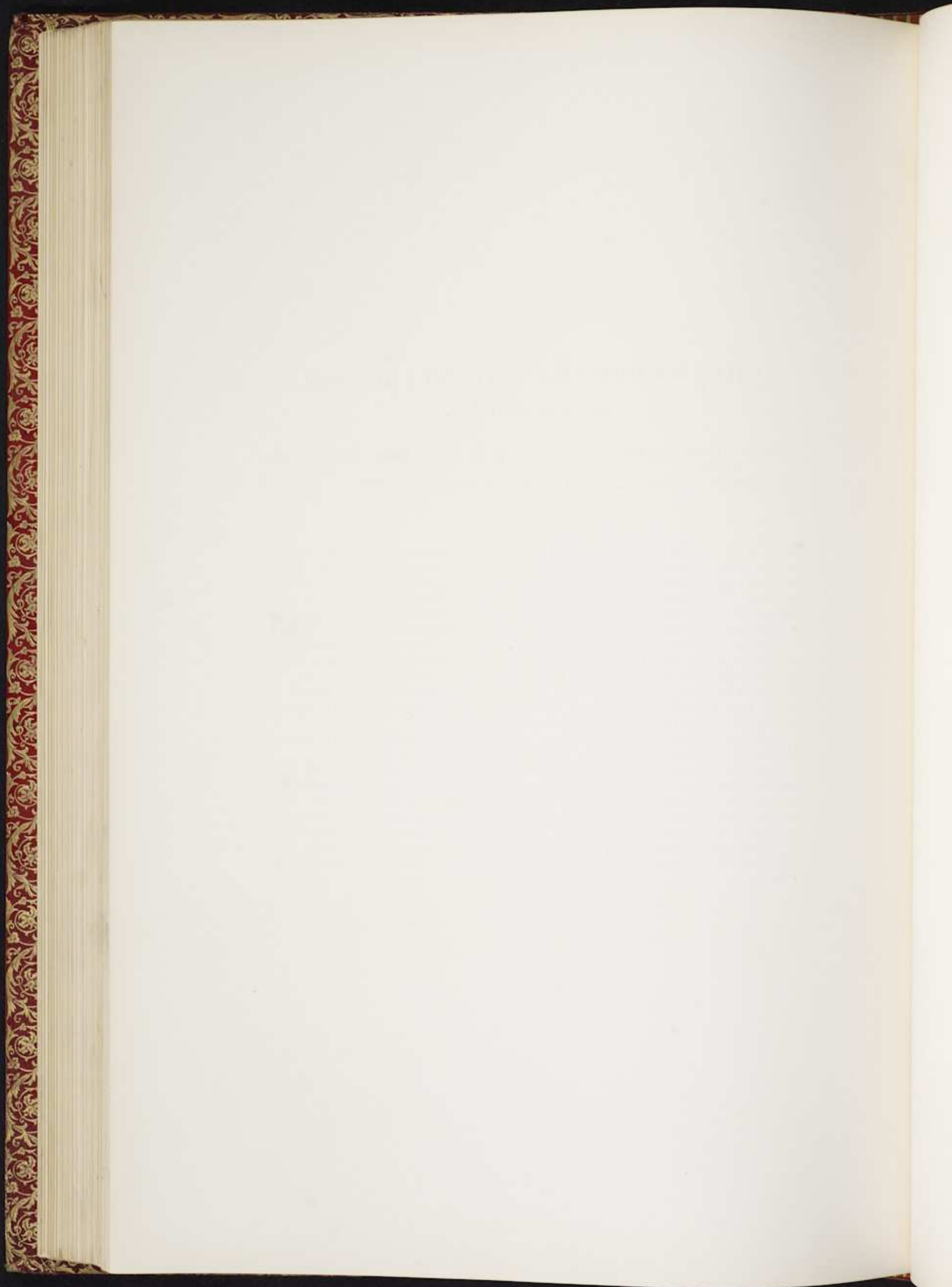
Chlamydodera orientalis, Gould, Ann. & Mag. of Nat. Hist. ser. 5, vol. iv. p. 74.

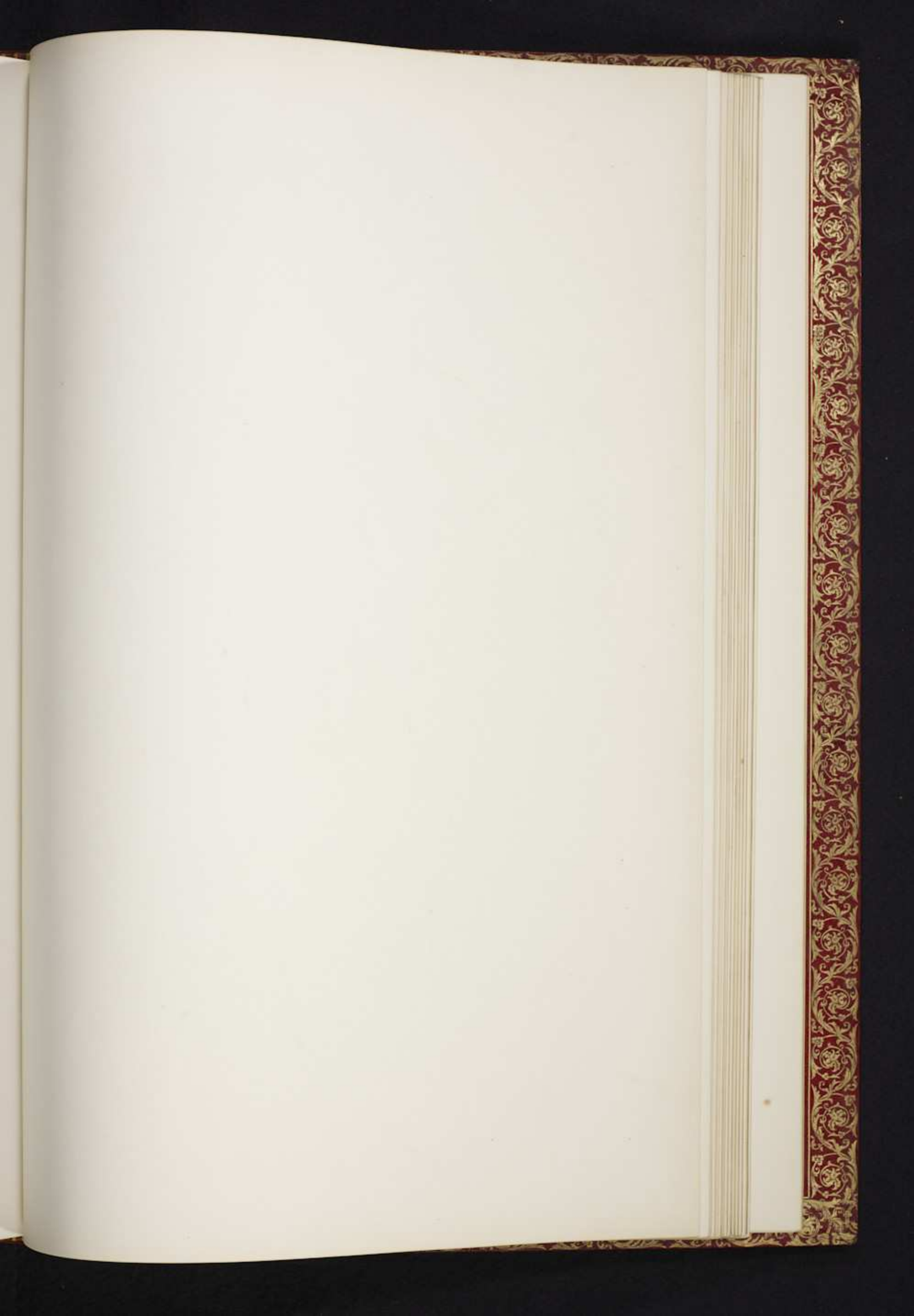
IN the 'Annals of Natural History' for July 1879 I described a new species of Bower-bird, and made some remarks on the *Chlamydodera*, proposing the name of *Chlamydodera orientalis* for the new species. I have now the pleasure of giving figures which will enable the reader to distinguish the western Bower-bird from the eastern. Putting aside the very distinct Cat bird (*Ælurædus*), Regent bird (*Sericulus*), the Satin Bower-bird (*Ptilonorhynchus*), each of which is easily recognizable by structural characters as well as a particular style of plumage, we come to the members of the genus *Chlamydodera*, containing the "spotted" Bower-birds, the most characteristic species of which are *C. maculata*, *C. guttata*, and *C. occipitalis*; these have each the plumage on the upper surface thickly ocellated, as well as beautiful lilac frills on the back of the neck. *Chlamydodera cerviniventris* has not the beautiful frilled nape of the above-named species. In *C. orientalis* the tendency to a spotted plumage becomes less marked, and still less so in the larger *C. nuchalis*, in this respect leading off, as it were, towards the uniformly coloured species of New Guinea (the *Amblyornis inornatus*, or Garden Bower-bird, figured in the present work).

Mr. Ramsay has recorded a large Bower-bird from Queensland, but considered it similar to the great bird from Western Australia, *C. nuchalis*, which has been for many years called by that name.

In size the present bird is somewhat less than *C. nuchalis*, and differs from that species in the light edgings to the feathers of the head and upper surface, and especially on the wings, all these parts having somewhat of a banded appearance, which is not so visible as in the species from Western Australia. This species was lately brought to England by Mr. Waller, and is now, as well as its bower, in the fine collection at Liverpool. Both species are represented in the British Museum, as well as in my own collection, where the specimens can be consulted by any student who wishes to verify the differences between them.

The figure in the accompanying Plate is about the size of life, and is drawn from a specimen in my collection.







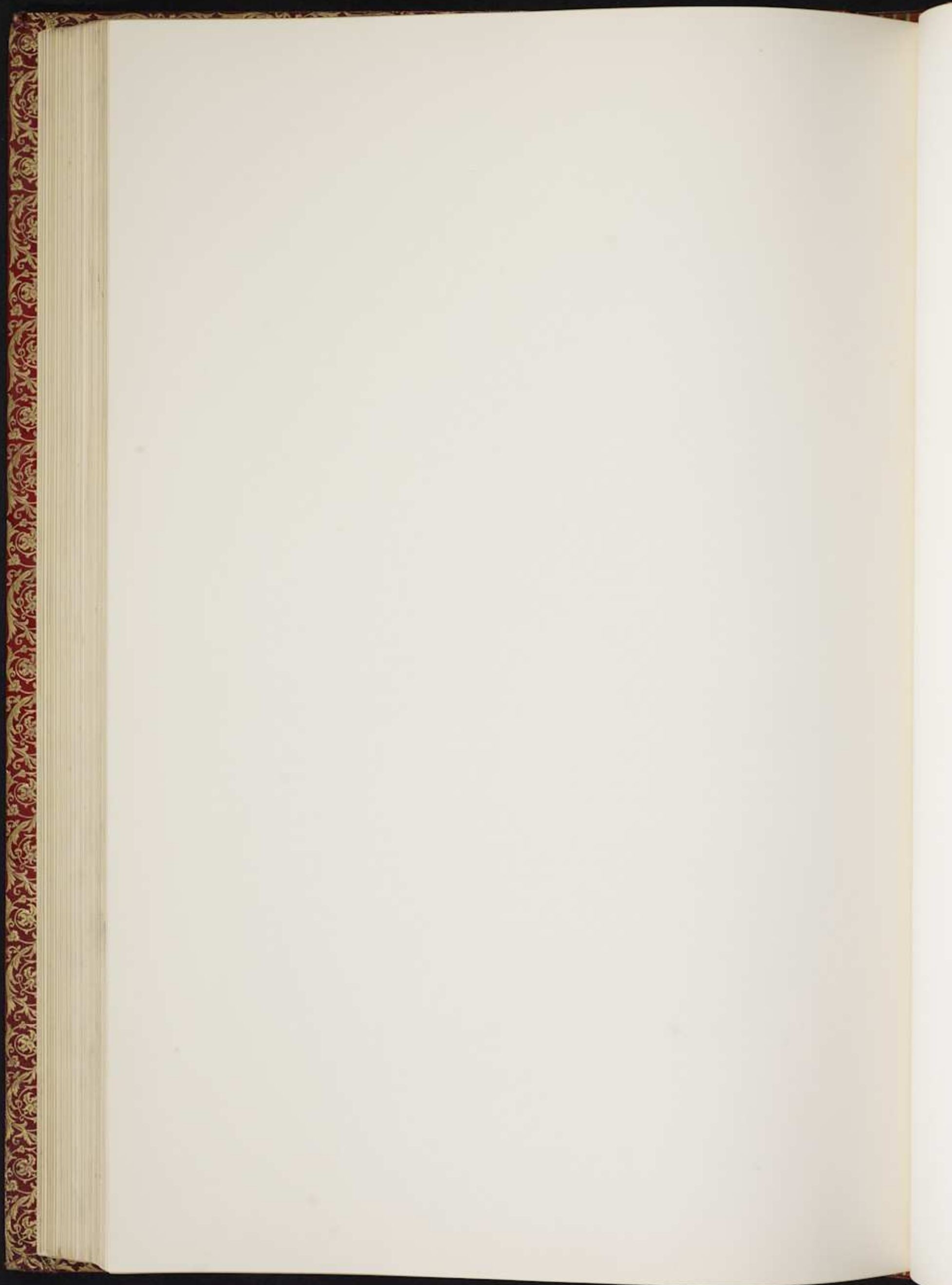
CHLAMYDERA OCCIPITALIS, Gould.

J. Gould & W. Hart, del. & lith.

Walter Inup.







CHLAMYDODERA OCCIPITALIS, Gould.

Large-frilled Bower-bird.

Chlamydodera occipitalis, Gould, Annals and Mag. Nat. Hist. 4th series, vol. xvi. p. 429 (1875).

IN describing the present species in 1875, I wrote as follows:—"Of all the acts performed by birds, that of building themselves beautiful bowers, variously decorated with shells, bleached bones, glittering stones, and gaudily coloured feathers, must ever be ranked amongst the most interesting traits in connexion with ornithology. At present the only known country in which these playing-places or halls of assembly are constructed is Australia. Whoever may have the good fortune to lift up the curtain which separates New Guinea from other countries, may probably find others." Not four years have yet elapsed since those words were penned; and they already appear to have been prophetic. In that short space of time how much has been done to unravel the mysteries of the avifauna of New Guinea, resulting in no small addition to our knowledge of the Bower-birds! The south-eastern part of that great island has been ransacked by English, Italians, and Dutch; and these collectors have made us acquainted with the birds which are met with in that newly explored country. Then, again, in the north-western portion of the island, we owe to the energies of the distinguished Italian traveller, Dr. Beccari, the discovery of *Amblyornis inornata*, whose capabilities in bower-building and decoration seem to eclipse those of any of the other species.

The male of the present bird (*Chlamydodera occipitalis*) is one of the novelties I have but lately received. It is true I had in my collection a female from some unknown locality, which always seemed to me to differ from those of all the other species I had seen; but I hesitated to describe it, and it was not till a year or so previous to 1875 that the receipt of the fine male bird which is figured in the accompanying Plate enabled me to publish its specific characters. That its true habitat was Northern Queensland I was pretty certain; and in confirmation of this opinion, Mr. Janson, a highly respectable person and dealer in natural-history specimens, from whom I purchased the skin, kindly writes to me as follows:—

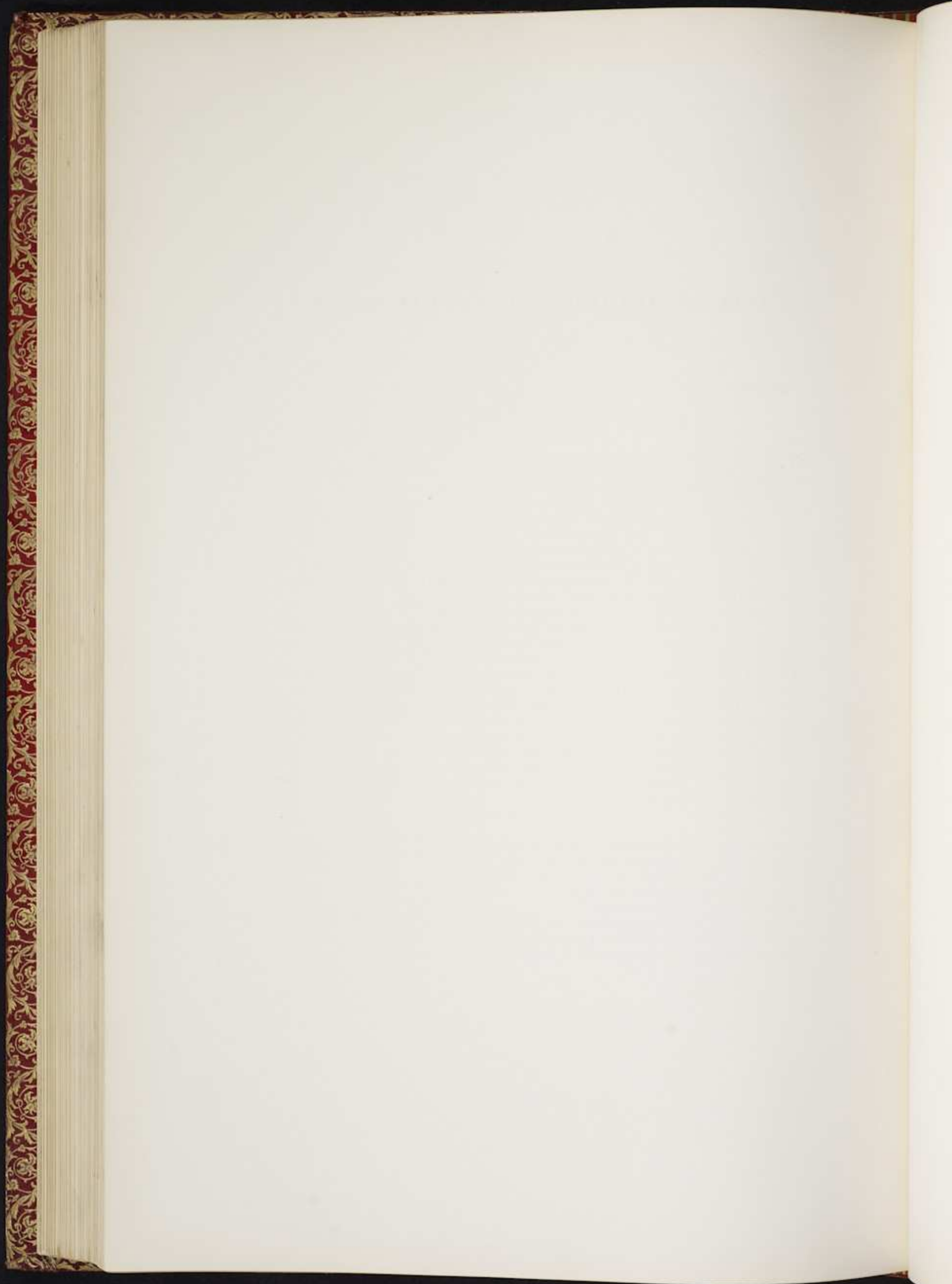
"DEAR SIR,—On reference to my books I find that you purchased the Bower-bird of me on the 20th of January, 1872; and, referring to my old letters, I see that it formed part of a collection made by Mr. Jardine at Port Albany, North Australia.

"Yours truly and respectfully,

"EDWARD W. JANSON."

If it should be proved that the Cape-York district is its true locality, it will then be the representative of *C. guttata* of the north-west, and *C. maculata* of the south. The principal distinguishing characteristic, in addition to its somewhat larger size, consists in the extreme beauty of its occipital patch, which is nearly twice as large as in the species mentioned, and is even of a more brilliant lilac colour, particularly if the frill be turned up and seen from beneath.

I have drawn in the accompanying Plate a male, about the size of life. The decorative bower forming part of the illustration is taken from a photograph of some unknown species sent to me by the late Mr. Coxen, of Brisbane; it may, or may not, be that of the present bird.



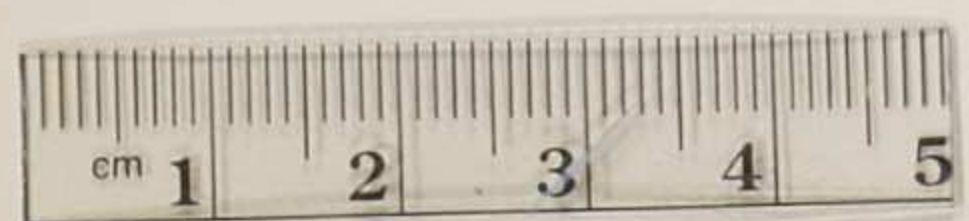


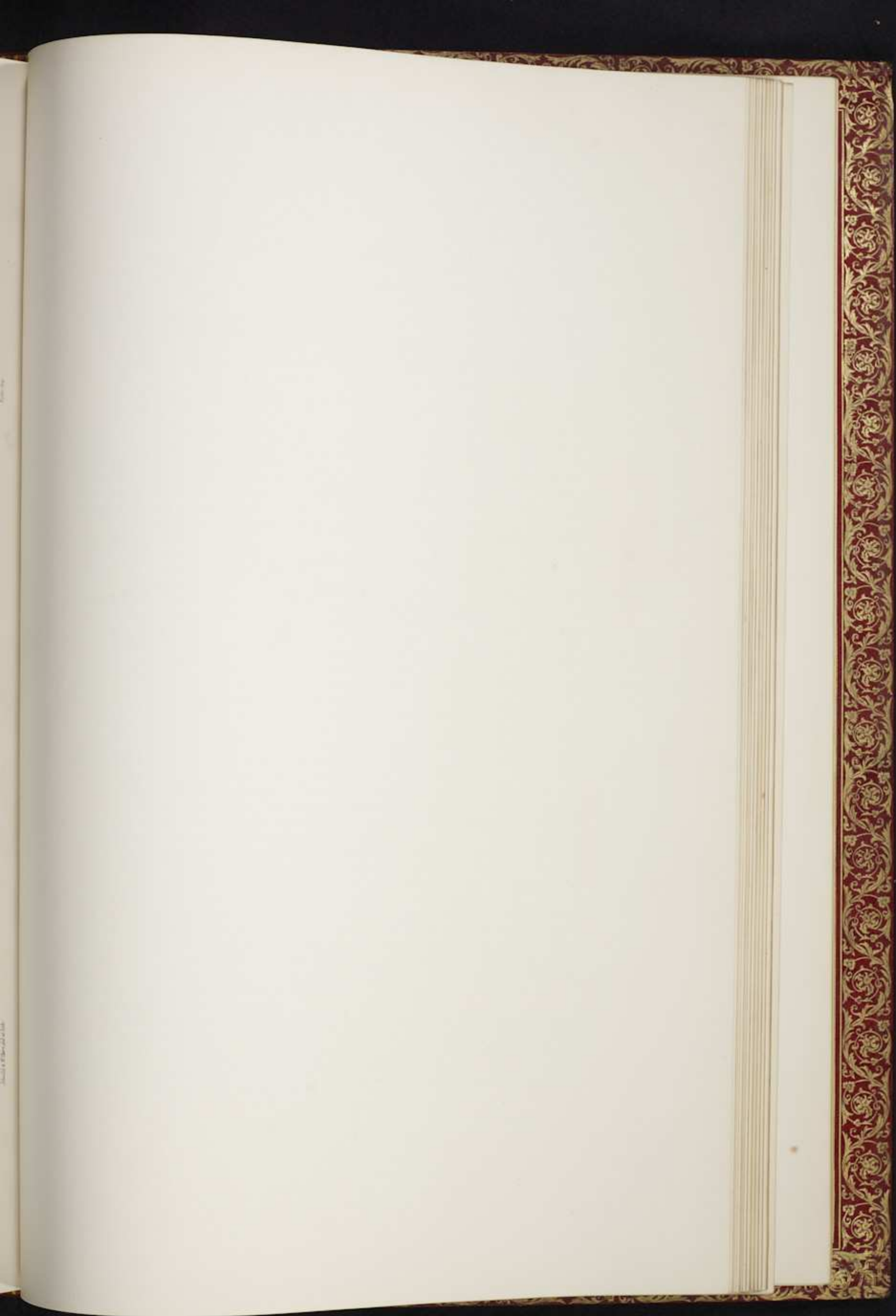


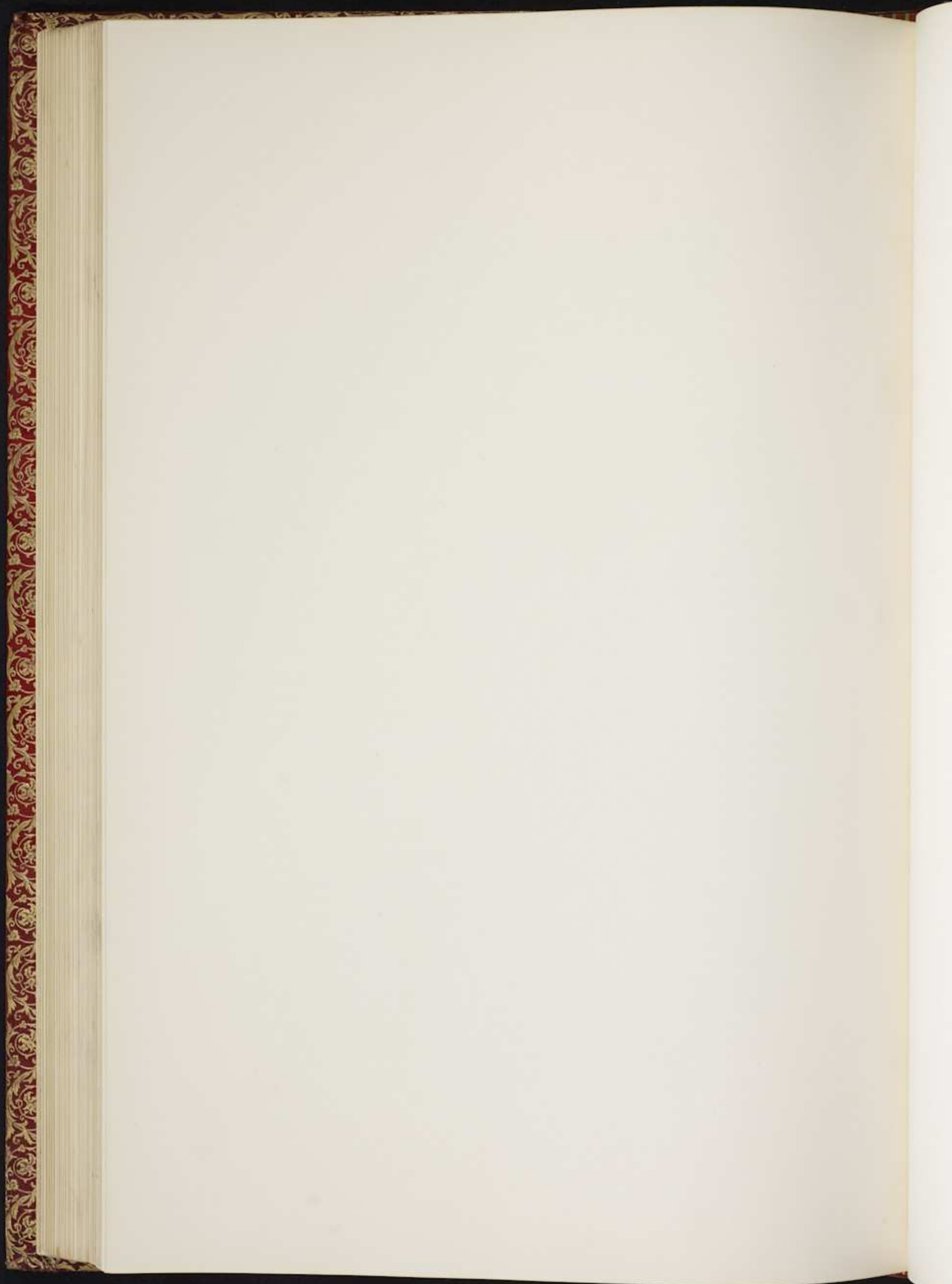
AMBLYORNIS INORNATA.

Illustr. & W. Hart, del. et lith.

Water. Imp.







AMBLYORNIS INORNATA.

Gardener Bower-bird.

Ptilorhynchus inornatus, Schleg. Tijdsch. Dierk. vol. iv. p. 51 (1871).

Amblyornis inornata, Elliot, Ibis, 1872, p. 114.—Id. Monogr. Paradis. pl. xxxviii. (1873).—Sclater, P. Z. S. 1873, p. 697.—Salvad. Ann. Mus. Civ. Genov. vii. p. 780 (1875).—Id. op. cit. ix. p. 193 (1876-77).—Beccari, tom. cit. p. 352, tav. viii.—Salvad. op. cit. x. p. 151 (1877).

It was not until Baron Von Rosenberg penetrated into the interior of North-western New Guinea that the present species became known to science. It was first described by Professor Schlegel, who received specimens direct from the Baron, under the name of *Ptilorhynchus inornatus*. Shortly afterwards Mr. Elliot, when preparing his Monograph of the Paradiseidae, pointed out that, in addition to the similarity of the sexes, the plumes which hide the nostril in *Ptilorhynchus* were wanting in the new species; and he therefore separated it under the name of *Amblyornis*.

The Malays call the bird "Gardener," from the floral decorations he gives to his bower and the lawn before it.

The following abstract of the article published by Dr. Beccari appeared in the 'Gardeners' Chronicle' for March 16th, 1878, from which I transcribe it:—

"The *Amblyornis inornata*, or, as I propose to name it, the Bird gardener, is a Bird of Paradise of the dimensions of a Turtledove. The specific name '*inornata*' well suggests its very simple dress. It has none of the ornaments common to the members of its family, its feathers being of several shades of brown, and showing no sexual differences.

"It was shot some years ago by the hunters of Mynheer von Rosenberg. The first descriptions of its powers of building (the constructions were called 'nests') were given by the hunters of Mynheer Bruijn. They endeavoured to bring one of the nests to Ternate; but it was found impossible to do this, both by reason of its great size and the difficulty of transporting it.

"I have fortunately been able to examine these constructions at the remote places where they are erected. On June 20, 1875, I left Andai for Hatam, on Mount Arfak. I had been forced to stay a day at Warmendi to give rest to my porters. At this time only five men were with me; some were suffering from fever, and the remaining porters declined to proceed. We had been on our way since early morning; and at 1 o'clock we intended to proceed to the village of Hatam, the end of our journey.

"We were on a projecting spur of Mount Arfak. The virgin forest was very beautiful. Scarcely a ray of sunshine penetrated the branches. The ground was almost destitute of vegetation. A little track way proved that the inhabitants were at no great distance. A limpid fountain had evidently been frequented. I found here a new *Balanophora*, like a small orange or a small fungus. I was distracted by the songs and the screams of new birds; and every turn in the path showed me something new and surprising. I had just killed a small new marsupial (*Phascogale dorsalis*, Pet. and Doria) that balanced itself on the stem of a great tree like a squirrel; and turning round, I suddenly stood before the most remarkable specimen of the industry of an animal. It was a hut or bower close to a small meadow enamelled with flowers. The whole was on a diminutive scale. I immediately recognized the famous nests described by the hunters of Bruijn. I did not suspect, however, then that they had any thing to do with the constructions of the *Chlamydoræ*. After well observing the whole, I gave strict orders to my hunters not to destroy the little building. That, however, was an unnecessary caution, since the Papuans take great care never to disturb these nests or bowers, even if they are in their way. The birds had evidently enjoyed the greatest quiet until we happened, unfortunately for them, to come near them. We had reached the height of about 4800 feet; and after half an hour's walk we were at our journey's end.

"*The Nest*.—I had now full employment in the preparation of my treasure; and I gave orders to my people not to shoot many of the birds. The nest I had seen first was the nearest one to my halting-place. One morning I took colours, brushes, pencils, and gun, and went to the spot. I there made the sketch which I now publish (fig. 56, p. 333). While I was there neither host nor hostess were at home. I could not wait for them. My hunters saw them entering and going out, when they watched their movements to shoot

them. I could not ascertain whether this bower was occupied by one pair or by several pairs of birds, or whether the sexes were in equal or unequal numbers—whether the male alone was the builder, or whether the wife assisted in the construction. I believe, however, that such a nest lasts for several seasons.

“The *Amblyornis* selects a flat even place around the trunk of a small tree that is as thick and as high as a walking-stick of middle size. It begins by constructing at the base of the tree a kind of cone, chiefly of moss, of the size of a man's hand. The trunk of the tree becomes the central pillar; and the whole building is supported by it. On the top of the central pillar twigs are then methodically placed in a radiating manner, resting on the ground, leaving an aperture for the entrance. Thus is obtained a conical and very regular hut. When the work is complete many other branches are placed transversely in various ways, to make the whole quite firm and impermeable. A circular gallery is left between the walls and the central cone. The whole is nearly 3 feet in diameter. All the stems used by the *Amblyornis* are the thin stems of an orchid (*Dendrobium*), an epiphyte forming large tufts on the mossy branches of great trees, easily bent like straw, and generally about 20 inches long. The stalks had the leaves, which are small and straight, still fresh and living on them—which leads me to conclude that this plant was selected by the bird to prevent rotting and mould in the building, since it keeps alive for a long time, as is so often the case with epiphytical orchids.

“The refined sense of the bird is not satisfied with building a hut. It is wonderful to find that the bird has the same ideas as a man; that is to say, what pleases the one gratifies the other. The passion for flowers and gardens is a sign of good taste and refinement. I discovered, however, that the inhabitants of Arfak did not follow the example of the *Amblyornis*. Their houses are quite inaccessible from dirt.

“*The Garden*.—Now let me describe the garden of the *Amblyornis*. Before the cottage there is a meadow of moss. This is brought to the spot and kept free from grass, stones, or any thing which would offend the eye. On this green turf flowers and fruits of pretty colour are placed so as to form an elegant little garden. The greater part of the decoration is collected round the entrance to the nest; and it would appear that the husband offers there his daily gifts to his wife. The objects are very various, but always of vivid colour. There were some fruits of a *Garcinia* like a small-sized apple. Others were the fruits of *Gardenias* of a deep yellow colour in the interior. I saw also small rosy fruits, probably of a *Scitamineous* plant, and beautiful rosy flowers of a splendid new *Vaccinium* (*Agapetes amblyornithis*). There were also fungi and mottled insects placed on the turf. As soon as the objects are faded they are moved to the back of the hut.

“The good taste of the *Amblyornis* is not only proved by the nice home it builds. It is a clever bird, called by the inhabitants ‘Buruk Gurea’ (master bird), since it imitates the songs and screamings of numerous birds so well that it brought my hunters to despair, who were but too often misled by the bird. Another name of the bird is ‘Tukan Robon,’ which means a gardener.”

The general colour of the present species is dark brown, rather more rufous on the head and upper back; the wings also rufous brown, the primaries darker brown; tail dark brown; entire under surface dark buff. The sexes, according to Professor Schlegel, are alike in plumage.

The figures in the Plate represent a pair of birds of the present species, the larger one being a little under life-size. They are drawn from specimens in my own collection. The representation of the garden and cabin is adapted from the woodcut given in the ‘Gardeners’ Chronicle,’ which is, in turn, derived from Dr. Beccari's original illustration.

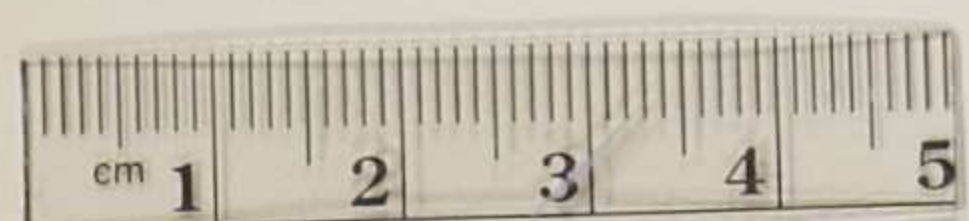


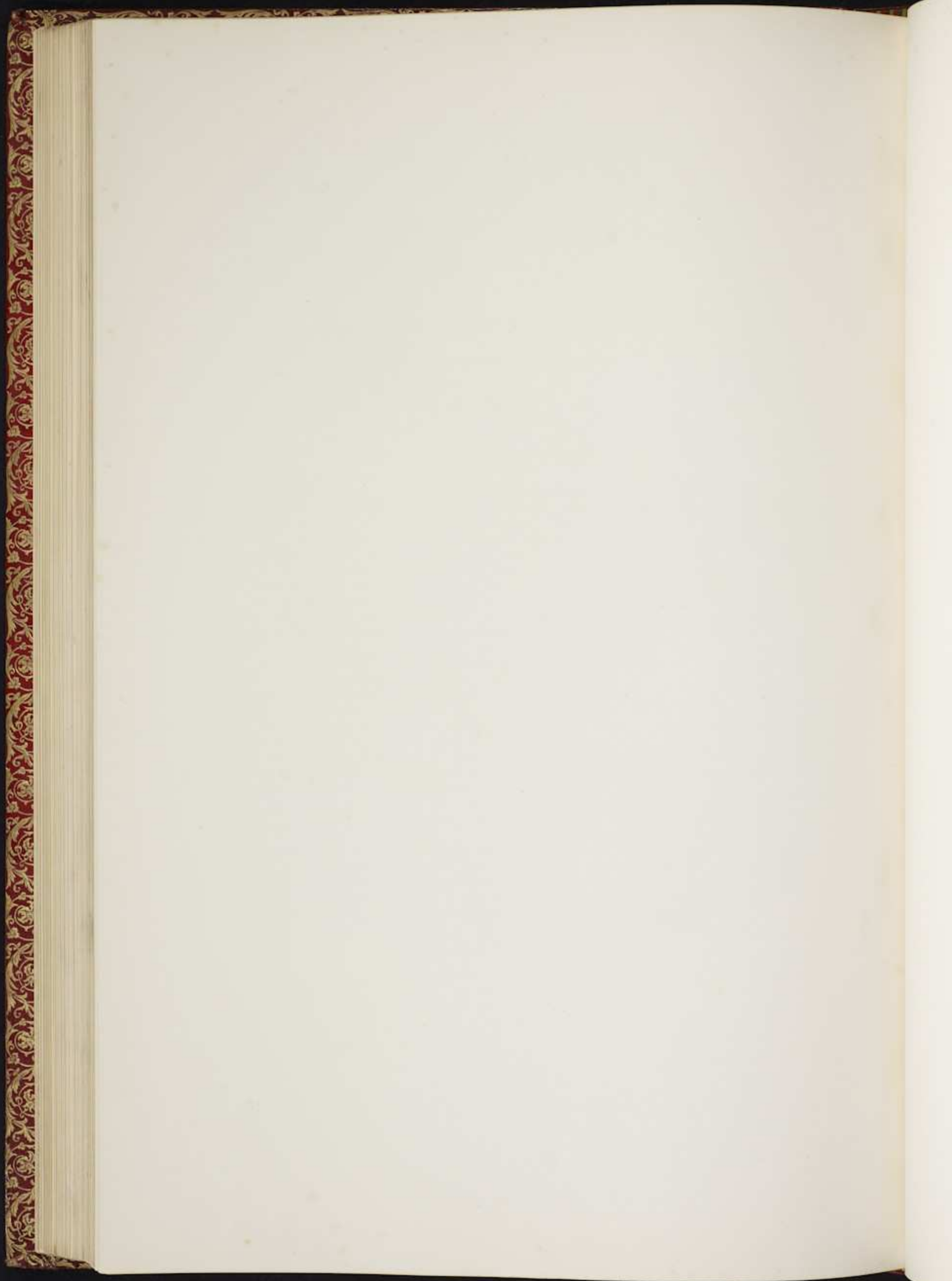


W. Hart del. et lith.

AMBLYORNIS SUBALARIS, Sharpe.

Minlertn Bros. imp.





AMBLYORNIS SUBALARIS, Sharpe.

Orange-crested Bower-bird.

Amblyornis subalaris, Sharpe, Journ. Linn. Soc., Zool. xvii. p. 408 (1884).—Finsch u. Meyer, Zeitschr. ges. Orn. ii. p. 390, pl. xxii. (1885).

MR. GOLDIE first discovered this species in the Astrolabe Mountains, in South-eastern New Guinea, and his specimen remained with us for a long time in the British Museum before we ventured to describe it as new. It was, however, so evidently distinct from the *Amblyornis inornata* of North-western New Guinea that we described it at last, and events have proved that we were correct in judging from the female bird alone.

The male, which is recognized at a glance by its splendid orange crest, was first found by Mr. C. Hunstein in the Horseshoe range of the Owen Stanley Mountains, and a capital figure of it is given by Dr. von Madarász in the 'Zeitschrift' (*l. c.*). We were somewhat surprised to find that the male of this dull-looking species turned out to be such a fine bird, and it seems reasonable to doubt whether we really yet know the full-plumaged male of *A. inornata*. It is true that the nest and breeding-habits of the latter species have been described by Dr. Beccari, and the sexes are supposed to be alike in colour; but it is just possible that a crest is donned during the nesting-season by the male.

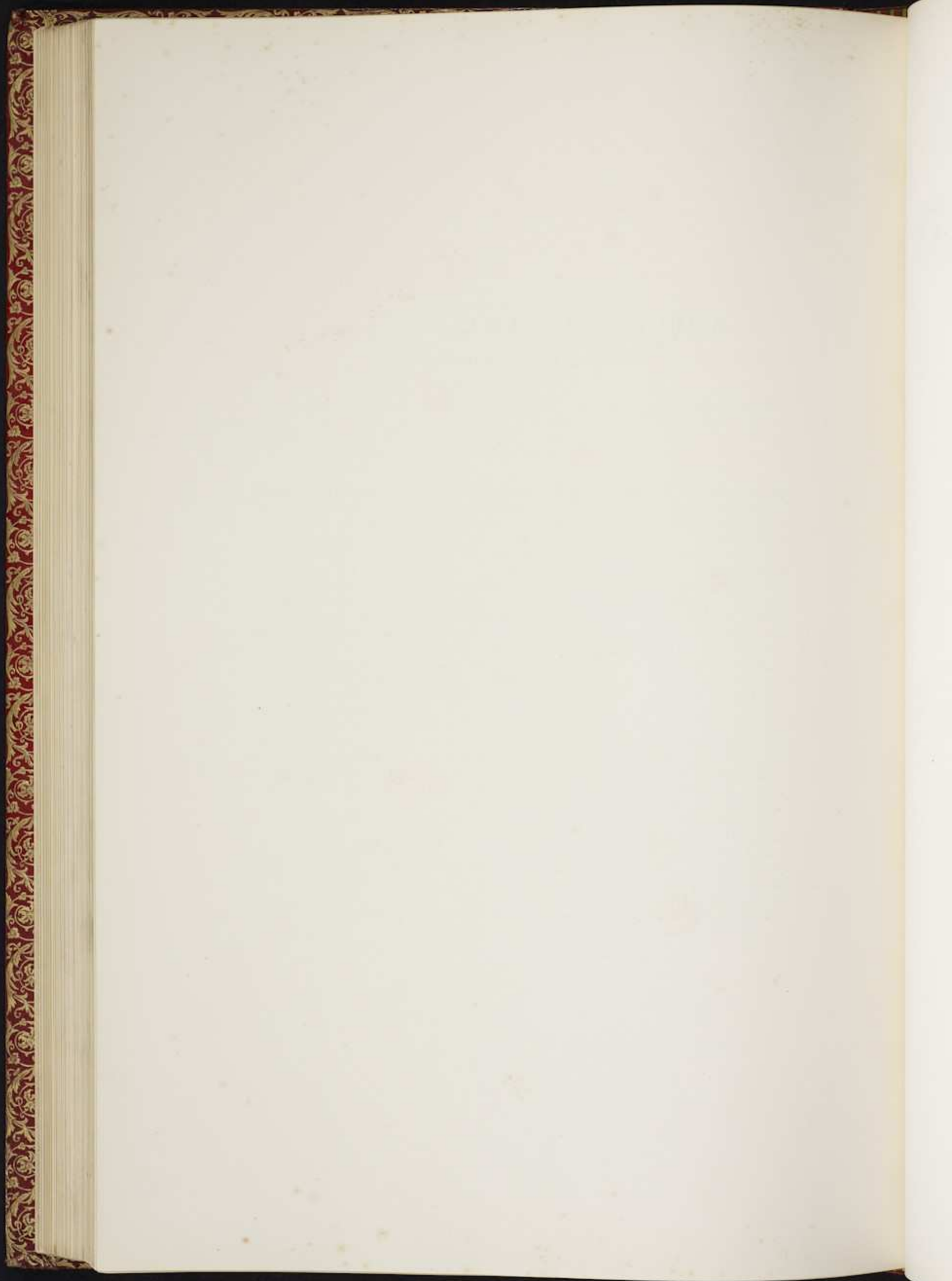
Adult male. General colour above uniform dark olive-brown, rather more olive on the back, rump, and upper tail-coverts; wing-coverts like the back, bastard-wing, primary-coverts, and quills olive-brown externally, internally dark brown; tail-feathers dark brown, washed with olive-brown externally; crown of head with an immense crest of orange, the lateral and frontal feathers edged and tipped with blackish brown; base of forehead dusky olive-brown; hind neck lighter olive-brown; lores ashy, sides of face, eyebrow, and ear-coverts dark olive-brown; cheeks and entire under surface of body light olive-brown, streaked down the centre of the feathers with ochreous buff, the sides of body and flanks rather browner; thighs dusky brown; under tail-coverts fulvous, with ochreous-buff centres to the feathers, the long ones edged with dark brown; under wing-coverts and axillaries orange-buff or tawny; quills below dusky, ochreous along the inner edge. Total length 8·3 inches, culmen 1·0, wing 5·0, tail 3·4, tarsus 1·3.

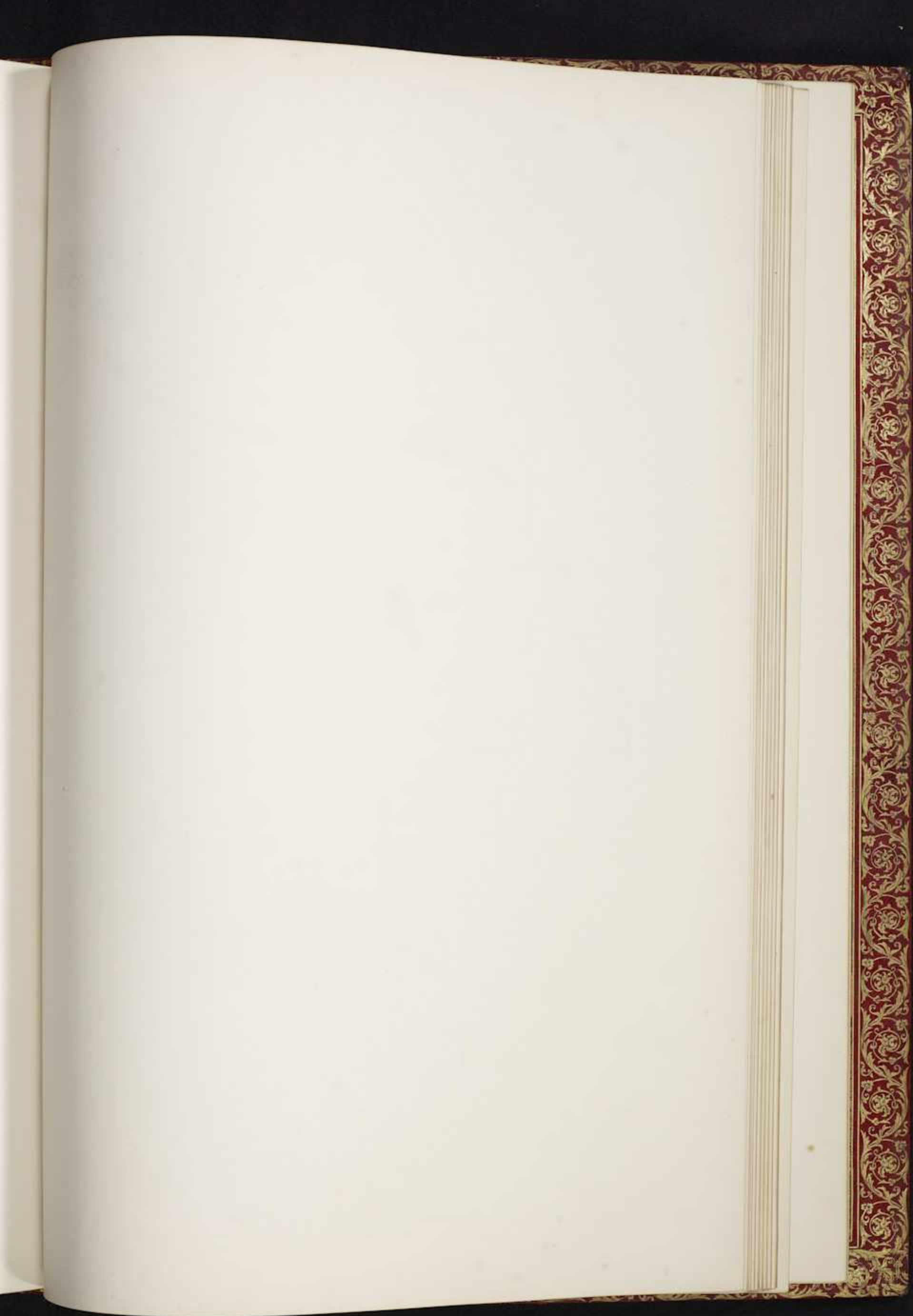
Adult female. Differs from the male in having no orange crest, the head being like the back. Total length 8·3 inches, culmen 0·9, wing 4·8, tail 3·3, tarsus 1·4.

Mr. Forbes has sent specimens of both sexes, killed in the rainy season. The whole of the colours are paler and more olive, and the ochreous tints of the under surface are much paler, especially on the under wing-coverts. The male is only distinguished from the female at this season of the year by the greater amount of clear ochreous on the underparts.

The figures in the Plate represent an adult male and female, drawn from a pair procured by Mr. Hunstein in the Horseshoe range.

[R. B. S.]







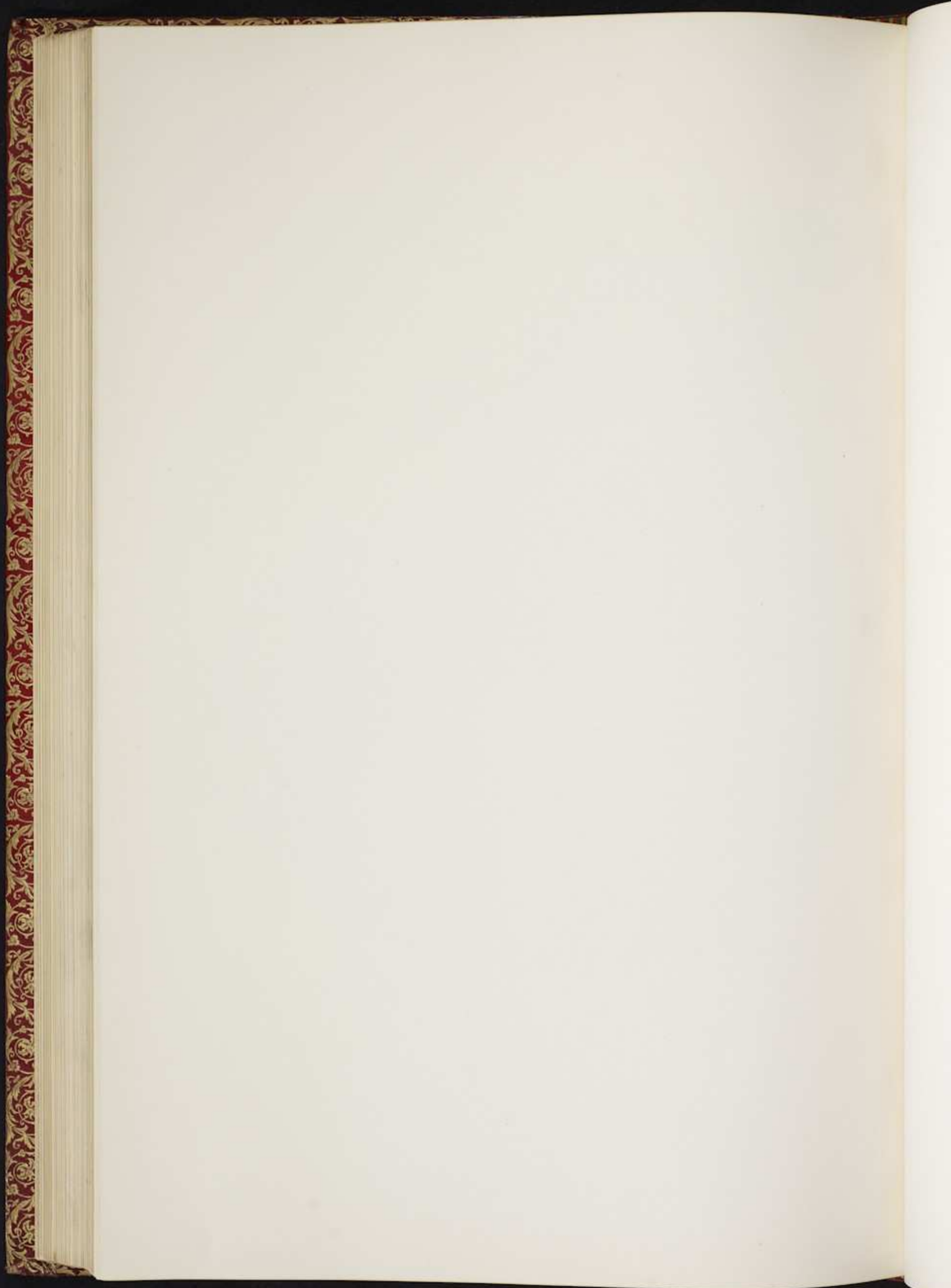
XANTHOMELUS AUREUS.

Should & W. Hart, del. et lith.

Walton, imp.







XANTHOMELUS AUREUS.

Golden Bird of Paradise.

- Golden Bird of Paradise*, Edwards, Nat. Hist. Birds, iii. p. 112 (1750).
Oriolus aureus, Linn. Syst. Nat. i. p. 163 (1766).—Gray, Gen. of B. i. p. 232 (1845).—Id. Hand-list B. i. p. 293 (1869).
Paradisaea aurea, Lath. Ind. Orn. ii. p. 195 (1790).
Le Paradis orangé, Audeb. et Vieill. Ois. Dor. ii. p. 26, pls. 11, 12 (1802).
Le Lorient de Paradis, Levaill. Hist. Nat. Ois. Parad. i. pls. 18, 19 (1806).
Paradisaea aurantia, Shaw, Gen. Zool. vii. p. 499, pl. 68 (1809).
Lophorhina aurantia, Stephens, Gen. Zool. xiv. p. 76 (1826).
Sericulus aurantiacus, Less. Traité, p. 339 (1831).—Id. Ois. Parad. Syn. p. 20 (1835).—Id. H. N. Ois. Parad. p. 201, pls. 25, 25 bis, 25 ter (1835).
Sericulus aureus, Bonap. Consp. Gen. Av. i. p. 349 (1850).—Gray, P. Z. S. 1861, p. 435.—Wall. Ibis, 1861, p. 287.—Id. P. Z. S. 1862, p. 160.—Id. Malay Arch. ii. p. 257 (1869).—Schl. Mus. P.-B. Coraces, p. 98 (1867).—Sclater, Ibis, 1876, p. 248.
Xanthomelus aureus, Bonap. Comptes Rendus, xxxviii. p. 538 (1854).—Elliot, Ibis, 1872, p. 112.—Id. Monogr. Parad. pl. 15 (1873).—Salvad. Ann. Mus. Civic. Genov. vii. p. 783 (1875).—Id. *op. cit.* ix. p. 192 (1876).—Sharpe, Cat. Birds, iii. p. 186 (1877).—Salvad. Ann. Mus. Civic. Genov. x. p. 152 (1877).
Sericulus xanthogaster, Schlegel, Nederl. Tijdsch. Dierk. v. p. 50 (1871).—Salvad. Ibis, 1876, p. 267.—Id. Atti R. Accad. Torino, xi. p. 688 (1876).
Chlamydodera xanthogastra, Elliot, Ibis, 1872, p. 113.—Id. Monogr. Parad. pl. xxxiii. (1873).—Sclater, P. Z. S. 1873, p. 697.

It will be seen that this remarkable Bird of Paradise was described and figured by Edwards more than one hundred and twenty years ago; and yet it is only within the last five years that we have been able to get perfect examples for our European collections. It may readily be imagined that the dried skins prepared by the natives afforded us but a very faint idea of its beauty; and therefore it gives me great pleasure to acknowledge my obligation to my friend Count Salvadori, who, during his visit to this country, was so kind as to bring with him some lovely specimens for my use in the present work; and I must record *en passant* my appreciation of the zeal shown by his countrymen in the scientific explorations recently made by Italian naturalists in New Guinea. It must be remembered that the present species was one of the few Birds of Paradise which Mr. Wallace was unable to obtain in a perfect state; and it had also baffled the endeavours of the Dutch naturalists to obtain the bird in the adult plumage.

The Golden Bird of Paradise is an interesting species in every way. Ornithologists who have studied Mr. Elliot's 'Monograph of the Paradisiidæ' will remember that he has included in that family the Bower-birds, and on one of his plates he figured a species as belonging to the latter group under the name of *Chlamydodera xanthogastra*. This bird had been previously described as a *Sericulus* by Prof. Schlegel, from specimens sent to the Leiden Museum from North-western New Guinea by Baron von Rosenberg; so that Mr. Elliot was but following Dr. Schlegel in assigning it a place among the Bower-birds; and there was nothing in the habitat of the species to render it unlikely that it would prove to be a *Chlamydodera*, as the latter genus is found all over many parts of Australia, and one species at least, *C. cerviniventris*, is very common in South-eastern New Guinea. It was therefore with considerable surprise that ornithologists must have regarded a communication from Count Salvadori to 'The Ibis,' stating that he had come to the conclusion that *Sericulus xanthogaster* of Schlegel was nothing more than the young of *Xanthomelus aureus*. Having looked carefully into the matter myself, I have not the least doubt that Count Salvadori is perfectly right in his conclusions.

In his third volume of the 'Catalogue of Birds' Mr. Bowdler Sharpe has not admitted the Bower-birds into the family Paradisiidæ, in that respect differing from Mr. Elliot; but he places *Xanthomelus* among the true Paradise-birds, leading from them to the Orioles. A further knowledge of the habits of the species is very desirable and can alone determine whether it should be placed among the Bower-birds.

In the interesting letter of Dr. Beccari, translated in 'The Ibis' for 1876 (p. 248), we find the only published account of the habits of the Golden Bird of Paradise. He writes:—" *Sericulus aureus* I killed on the same fig-tree, near Atam, where D'Albertis obtained the greater part of his birds. It has much the same habits as a Bird of Paradise, lives on fruits, especially on figs; one does not find more than two or three individuals together, usually only one male and one female; the younger males and females are very different; the iris is clear straw-colour. It is a very lively and shy bird; when the male is killed the female and another, perhaps a young male, return again to their food on the same tree, and then are seen no more. Although it is found at an elevation of 3000 feet or more, it seems more abundant in the hills near the sea, but is always most difficult to find, because in each of the localities which it frequents there are only a few pairs. Its song, according to my hunters, has much resemblance to the 'zigolio' of the *Nectariniæ*, but rather more strong and sonorous. Only the crest of feathers on the head is erectile. The Arfaks call it *Komeida*."

During his stay in Atam Signor D'Albertis obtained three specimens of this species, one adult and two young birds. He gives the colour of the soft parts as follows:—"Bill black; feet lead-colour; iris chestnut-brown." These indications are probably those of the young birds, as the iris in the adult is said by Beccari to be 'straw-colour.'"

The accompanying Plate represents two males of the natural size, with a reduced figure of a female.



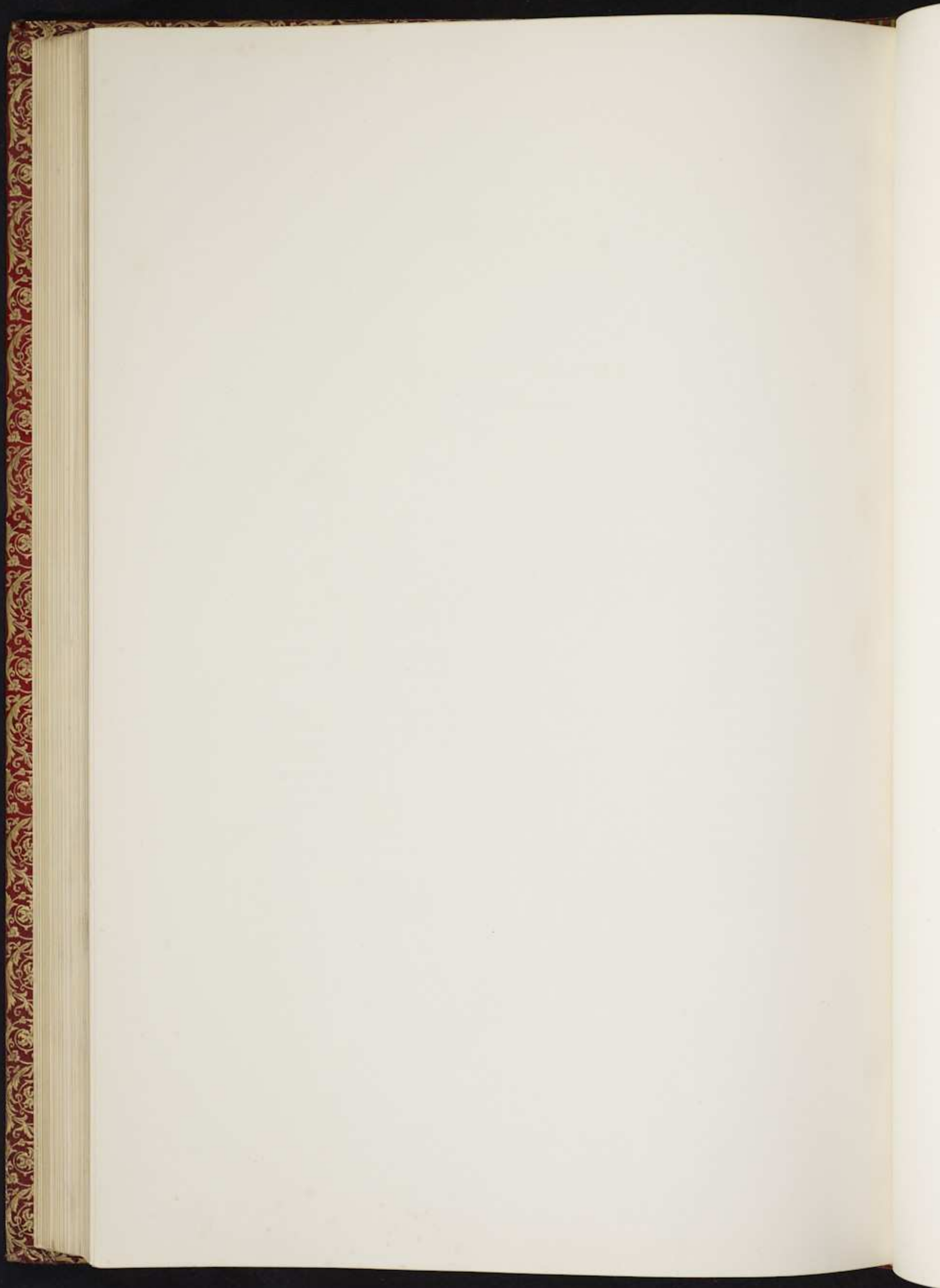


ORIOULUS DECIPIENS.

W. Hart del. et lith.

Waller. Imp.





ORIOIUS DECIPIENS.

Deceptive Oriole.

Mimeta decipiens, Sclater, Proc. Zool. Soc. 1883, p. 199.

THE present species illustrates an example of mimicry in the class of Birds which it would be difficult to surpass for interest. Although amongst insects cases of mimicry are not unfrequent, they are comparatively rare amongst birds, and the Moluccan Orioles are known as perhaps the best illustration of this peculiar phenomenon in ornithology. In the island of Bourou there is a well-known Honey-eater (*Philemon moluccensis*) the plumage of which is almost exactly reproduced by the Oriole of the island (*Oriolus bourouensis*); and now in the Tenimber Islands we find the same thing taking place, the Honey-eater (*Philemon plumigenis*) being mimicked by the Oriole (*Oriolus decipiens*). By many ornithologists these Orioles are separated under the generic heading of *Mimeta*; but structurally they cannot be separated from the genus *Oriolus*, from which they differ only in their dull-coloured plumage.

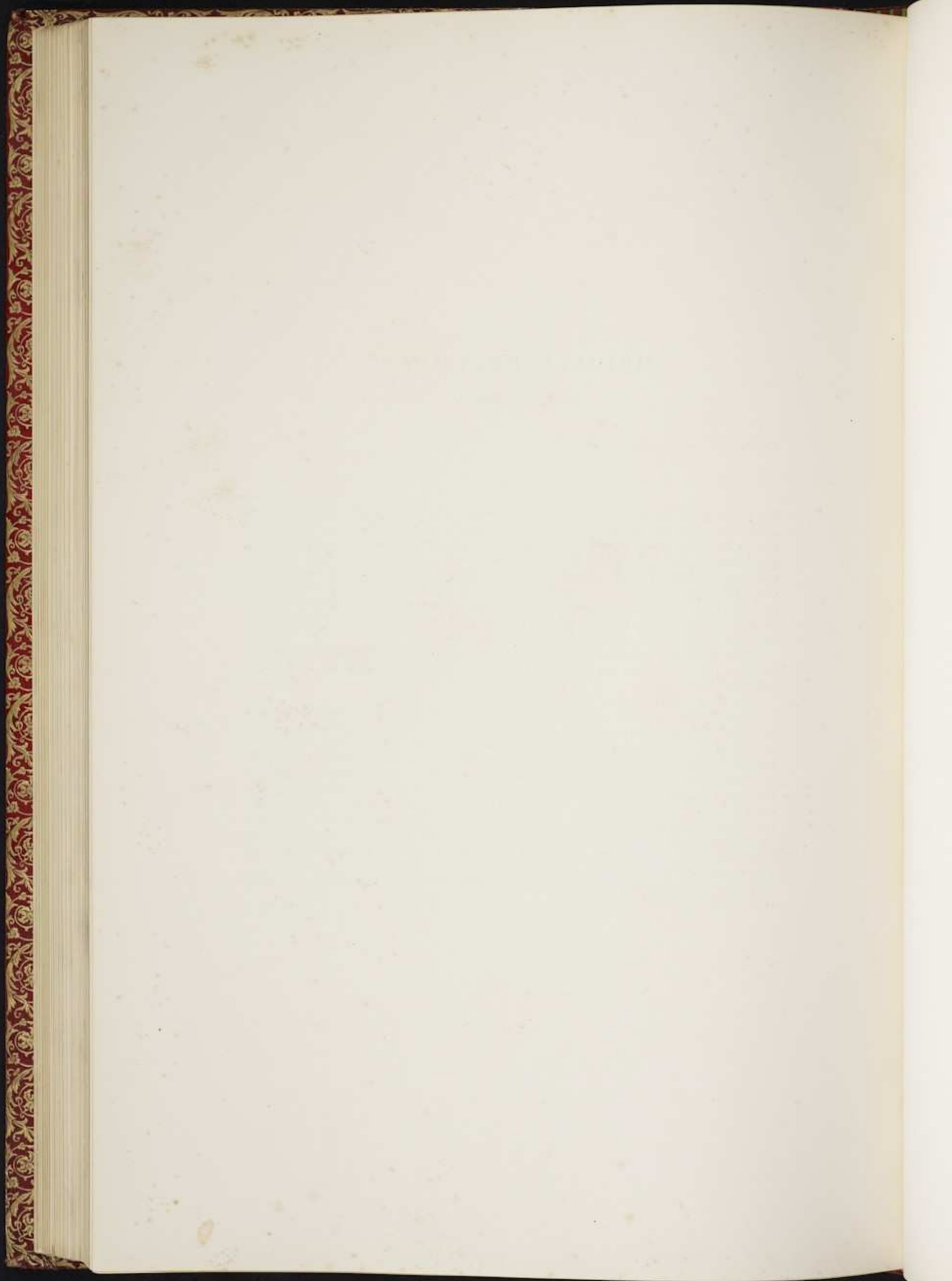
The Deceptive Oriole is very closely allied to the species from Bourou, *O. bourouensis*; but the latter has the throat pale brown without any dusky spots; the rufous edgings to the wing-coverts are also more pronounced.

The following description is taken from the type specimen:—

Adult female. General colour above brown, lighter on the head and mantle, darker and more ashy brown on the lower back, rump, and upper tail-coverts; the head distinctly streaked with dark brown; the sides of the neck and hinder neck mottled with ashy grey, the feathers having narrow ashy grey edges; wing-coverts and quills deep brown, more ashy on the primaries, many of the coverts and quills slightly washed with pale rufous externally; tail-feathers light brown, with paler tips; an indistinct eyebrow of white, spotted with dark brown; ear-coverts uniform dark brown; cheeks whitish, spotted with dark brown, rather more marked on the malar line; centre of throat white, with a few dusky spots; remainder of under surface from the fore neck downwards ruddy ashy brown, a little darker and more ashy on the thighs and under tail-coverts; the chest slightly mottled with dark brown shaft-streaks; under wing-coverts, axillaries, and quill-lining rufous; “bill, legs, and feet black; iris dark brown” (*W. O. Forbes*). Total length 12 inches, culmen 1·45, wing 6·1, tail 5·0, tarsus 1·25.

The Plate represents this species of the full size, the figures being drawn from the typical examples collected by Mr. Forbes.

[R. B. S.]



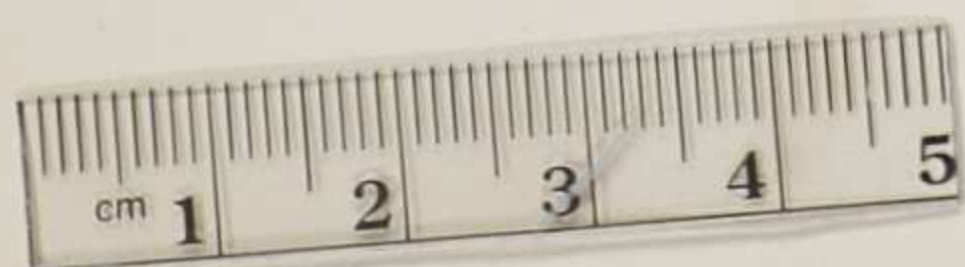




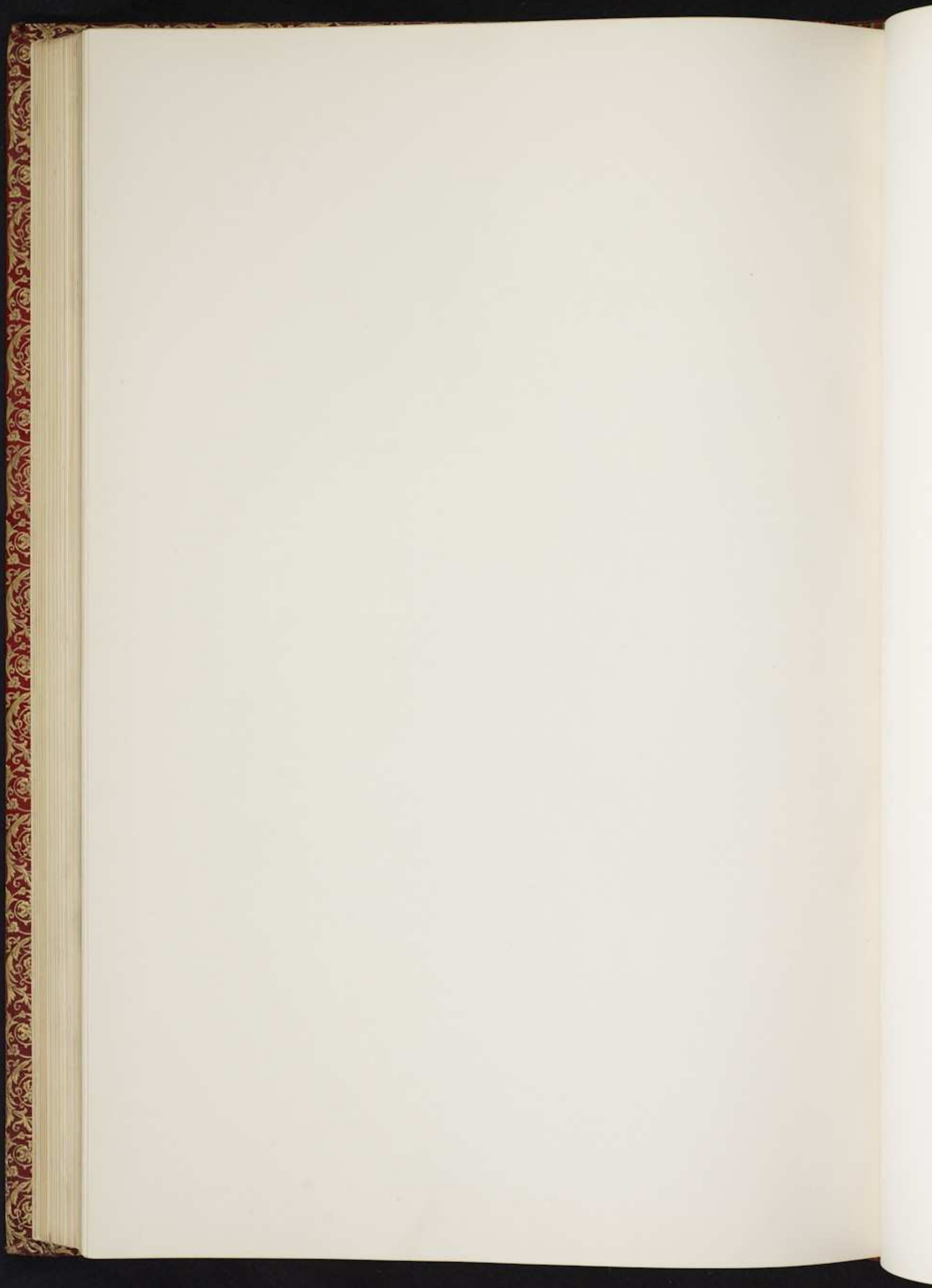
CHÆTORHYNCHUS PAPUENSIS, Meyer.

J. Gould & W. Hart, del. et lith.

Walter, Imp.







CHÆTORHYNCHUS PAPUENSIS, Meyer.

Arfak Drongo.

Chætorhynchus papuensis, Meyer, Sitz. Akad. Wiss. Wien, lxi. p. 493 (1874).—Sharpe, Cat. B. Brit. Mus. iii. p. 242, pl. xiii. (1877).

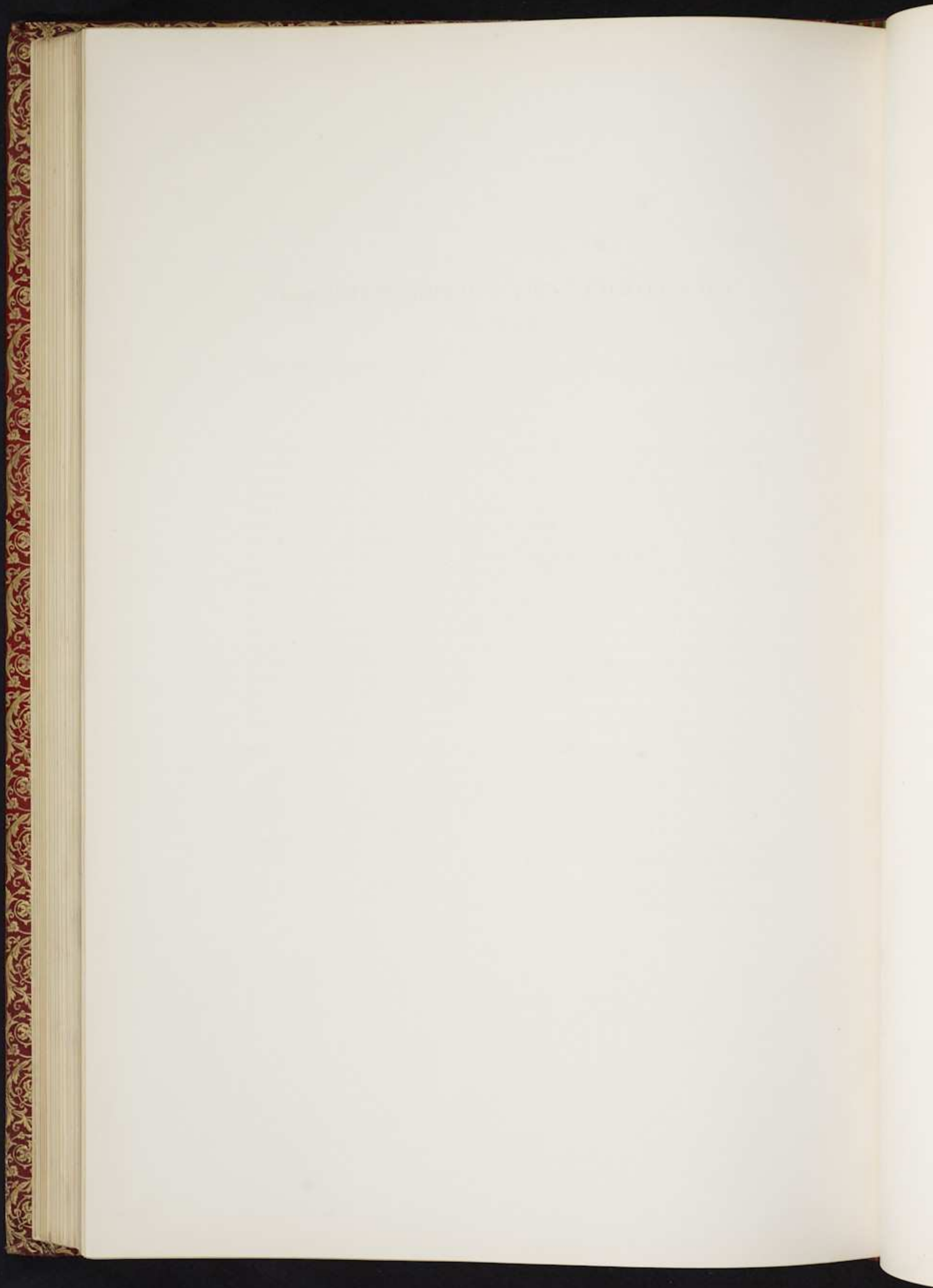
THIS little species of King Crow or Drongo Shrike was discovered by Dr. Meyer during his visit to New Guinea, and, although not a showy bird, is one of great interest to the naturalist, who is ever on the watch for forms which evince unexpected affinities to others of a distant habitat. In the present instance we find, in the Arfak Mountains of North-western New Guinea, a genus of Drongo which, in size, general form, and especially in the scaly nature of its plumage, reminds us forcibly of the small genus *Chaptia* of India and Malayana. In one respect, however, *Chætorhynchus* differs not only from *Chaptia*, but from all other genera of the *Dicruridæ*; and that is, in the shoulder-spot of white which adorns the New-Guinea bird. The general coloration of the Drongos is black, relieved by a certain gloss or metallic spangles. An intermixture of white is of rare occurrence in the family; it occurs, however, in some of the Indian species of *Buchanga* (which have a little white on the lower parts), and is most conspicuous in *Dicrurus mirabilis* of the Philippines (which has a pure white breast and abdomen).

The Arfak Drongo has a white spot on the shoulders; but this is by no means a conspicuous feature, as may be gathered from the fact that when Dr. Meyer described the species he did not notice it, nor did Mr. Bowdler Sharpe, in his 'Catalogue of Birds,' nor did Mr. Keulemans when he drew the figure for the latter work. Indeed it was only when Dr. Meyer came to have one of the typical specimens mounted for the Dresden Museum that the shoulder-spot became suddenly visible; and its first discovery is due to him. I have therefore much pleasure in giving the first accurate figure of *Chætorhynchus*. I find that the white spot varies much in size, and is almost absent in some specimens. I have examined the typical examples obtained by Dr. Meyer, as well as others procured by M. Laglaize, one of which is in the collection of the British Museum.

The following description is given by Mr. Sharpe in the work above alluded to, and is taken from one of the original types:—

General colour black, with a steely gloss, the head more brightly glossed with steel-green, the feathers rounded and somewhat scale-like in appearance; least wing-coverts steel-black, the median, greater, and primary-coverts black, narrowly edged with steel-green; quills black, the secondaries margined with steel-green, the innermost glossed with the latter colour; tail black, slightly glossed with steel-green on the edges of the feathers; sides of face and under surface of body black, the breast glossed with steel reflections; under wing-coverts greyish black; bill and feet black. Total length 7 inches, culmen 0·7, wing 4·2, tail 3·5, tarsus 0·7.

The figures in the Plate represent the species of the natural size; they are drawn from the type specimens, lent to me by Dr. Meyer.







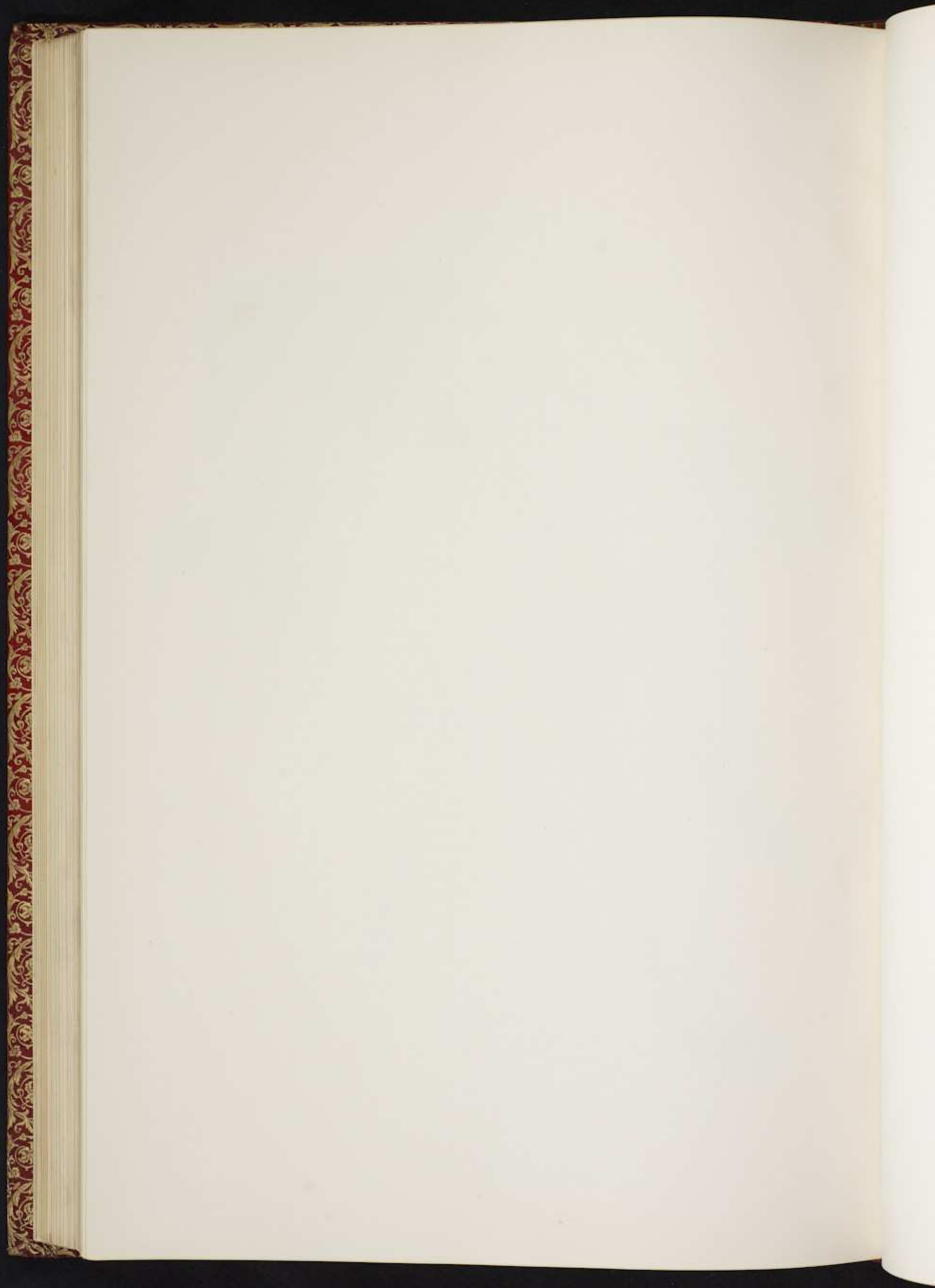
DICRANOSTREPTUS MEGARHYNCHUS.

J. Gould & W. Hart, del. et lith.

Walter, Imp.







DICRANOSTREPTUS MEGARHYNCHUS.

New-Ireland Drongo.

Edolius megarhynchus, Quoy et Gaimard, Voyage de l'Astrolabe, Zool. vol. i. p. 184. pl. 6.

Edolius intermedius, Lesson, Traité d'Orn. p. 380.

Dicrurus megarhynchus, Gray, Gen. B. i. p. 286.—Bonap. Consp. Gen. Av. i. p. 352.—Gray, Cat. Birds of New Guinea &c., p. 33.—Id. P. Z. S. 1861, p. 435.—Finsch, Neu-Guinea, p. 171.—Gray, Handl. B. i. p. 287.—Sclater, P. Z. S. 1869, p. 119.

Dicranostreptus mezorhynchus, Jerdon, Birds of India i. p. 430, note.

Dicranostreptus megarhynchus, Reichenb. Syst. Taf. lxxxviii. fig. 12.—Sclater, P. Z. S. 1877.—Sharpe, Catalogue of Birds, iii. p. 256.

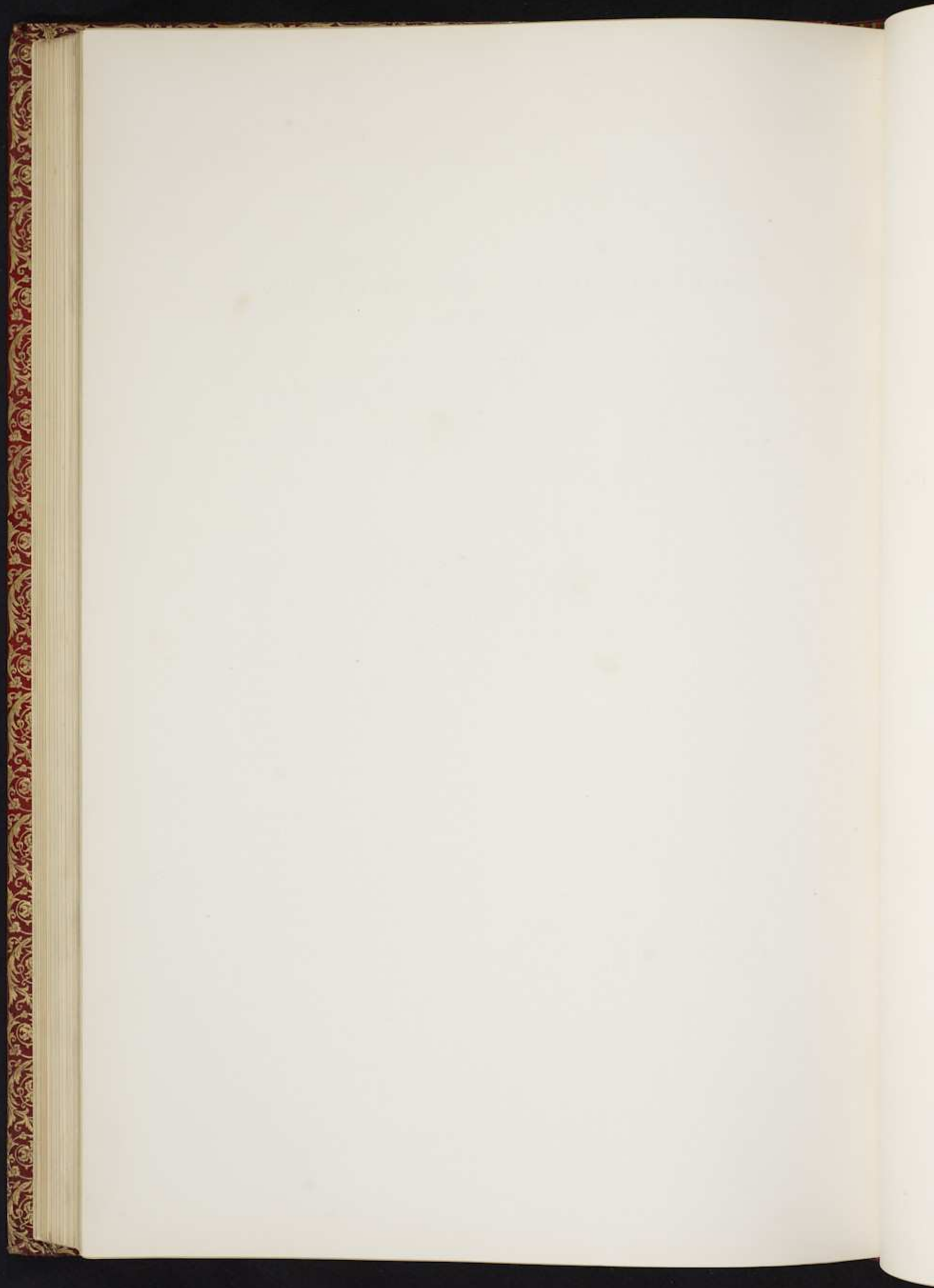
Dissemurus megarhynchus, Tweeddale, Ibis, 1878, p. 79.

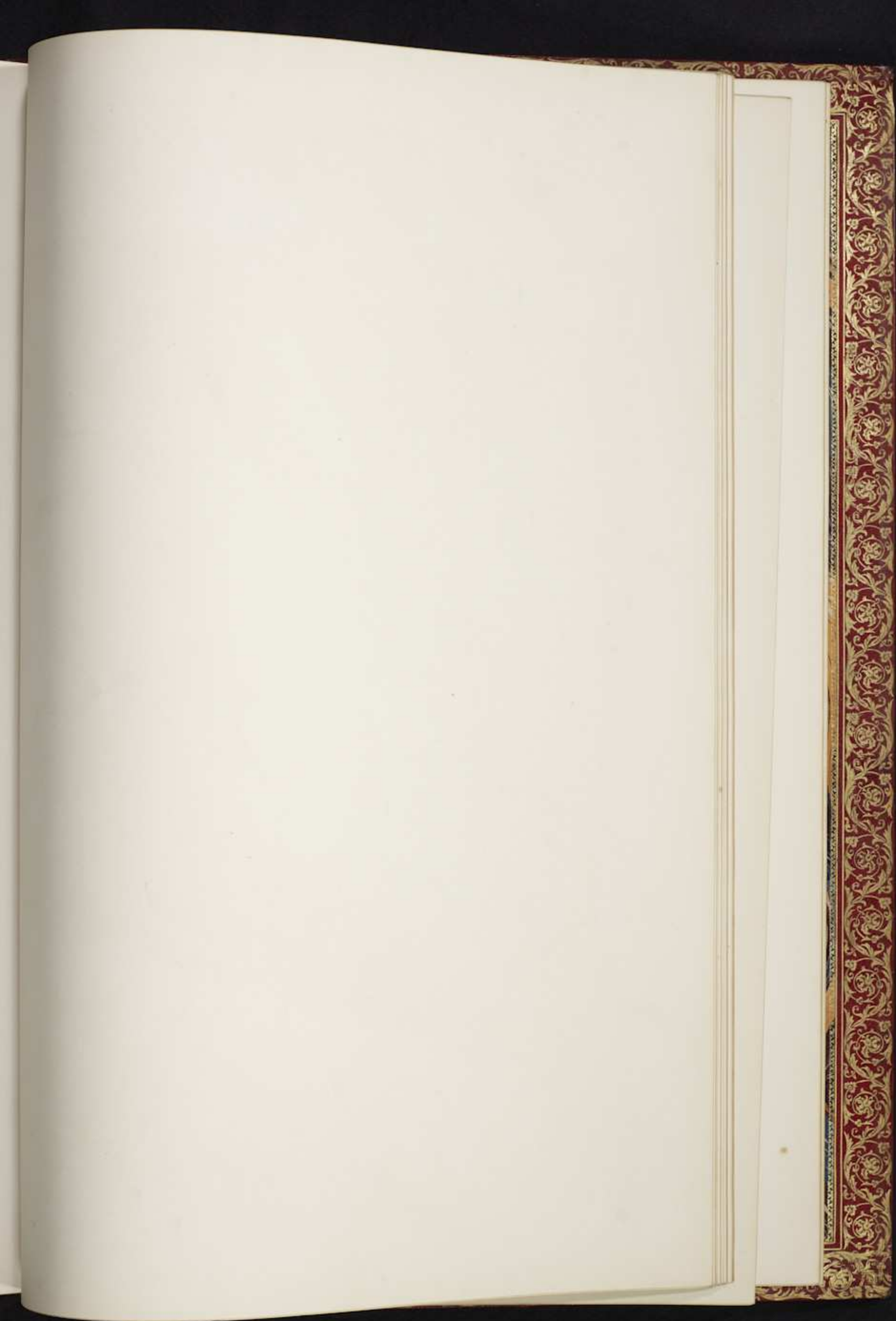
THIS large species of Drongo was described in 1830, by MM. Quoy and Gaimard, in their account of the Zoology of the Voyage of the 'Astrolabe.' Unfortunately, the habitat of the species was given as Dorey, New Guinea, a mistake which led to its being included in more than one list of New-Guinea birds. It has also been recorded from the Ké Islands by Mr. Gray; but this is doubtless owing to a misprint (as the Marquis of Tweeddale suggests), the locality being intended to apply to *Dicrurus megalornis*, which is confined to the last-named group of islands, and the locality of which is omitted in the proper column of places tabulated by Mr. Gray. In 1869, Dr. Sclater recorded it from the Solomon Islands; and more recently it has occurred in the collections made by Mr. George Brown in New Ireland. Specimens are also contained in the British Museum, which were presented by Captain Lambrick, R.N., who obtained them at Carteret Harbour, New Ireland; and the species will probably be found to be an inhabitant of that island, and of the Solomon group. Lord Tweeddale considers that it is a member of the genus *Dissemurus*, to which the Indian and Indo-Malayan Racket-tailed Drongos belong; and if this is the case, its appearance in a truly Papuan habitat is interesting and at the same time remarkable. The extraordinary length of the tail and the absence of a true racket, which is one of the characters of *Dissemurus*, taken in connexion with the locality inhabited by the species, induce me to consider it generically distinct, and I therefore follow Dr. Sclater and Mr. Sharpe in its nomenclature.

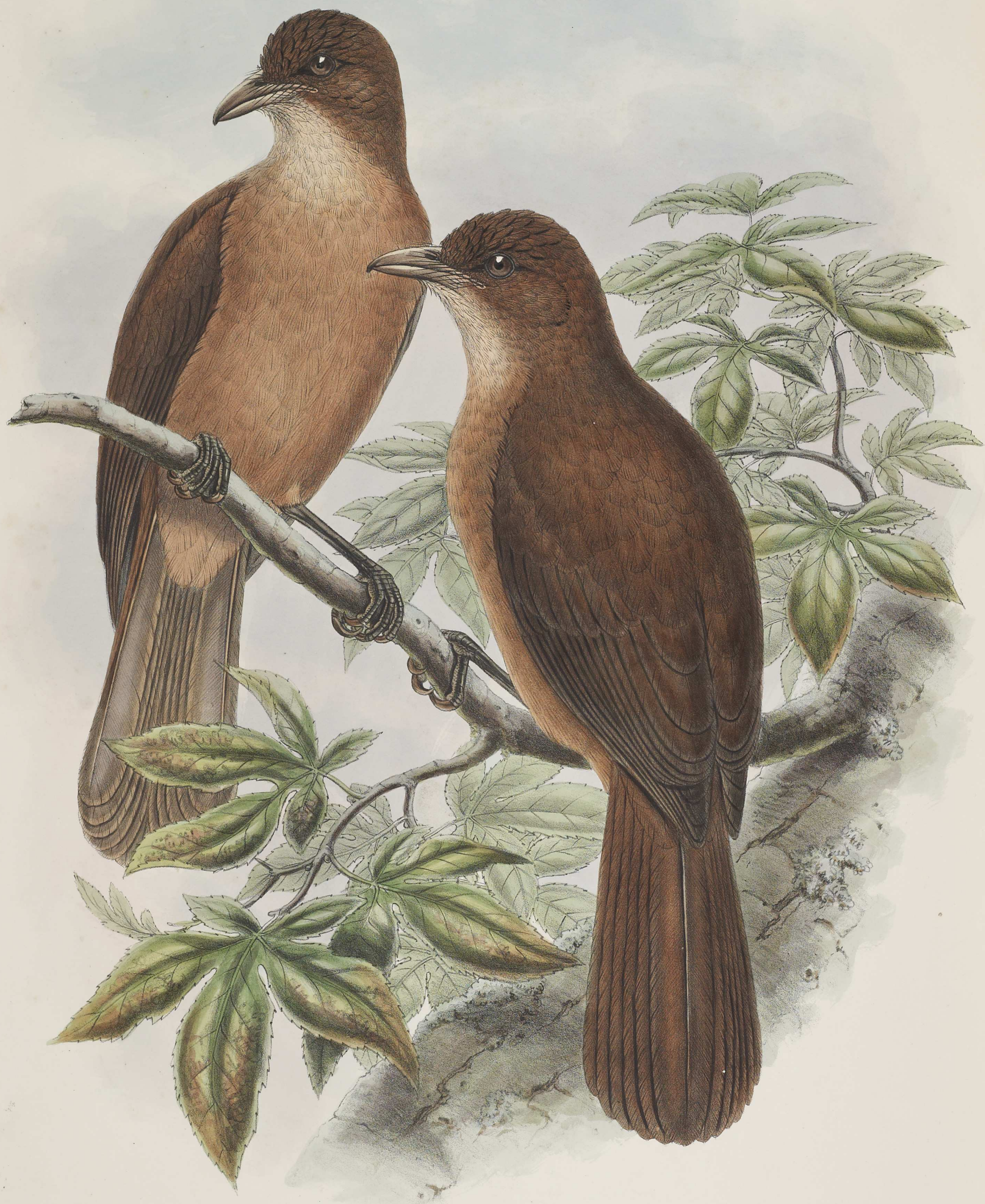
The following description is taken from the 'Catalogue of Birds' of the latter author:—

Above blue-black, with a very slight steel gloss on the back, rump, and upper tail-coverts; head and sides of neck metallic steel-purple, the feathers on the latter elongated and somewhat lanceolate; frontal plumes, lores, and sides of face dull purplish black; under surface of body dusky purplish black, with faintly indicated tips of glossy green on some of the feathers of the throat and chest; under wing-coverts purplish black like the breast; wings above dull glossy steel-green; quills purplish black, the secondaries externally dull steel-green, not so metallic as the coverts; tail-feathers purplish black, glossed with metallic steel-green on the outer edge of both webs, more distinctly and broadly on the centre ones, the outermost feather elongated and twisted in an inward curl at the tip; bill and feet black. Total length 20·5 inches, culmen 1·5, wing 7, tail 6, tarsus 1·05.

The specimen figured (of the natural size) in the Plate was sent by Mr. George Brown from New Ireland, and was kindly lent to me by Dr. Sclater.



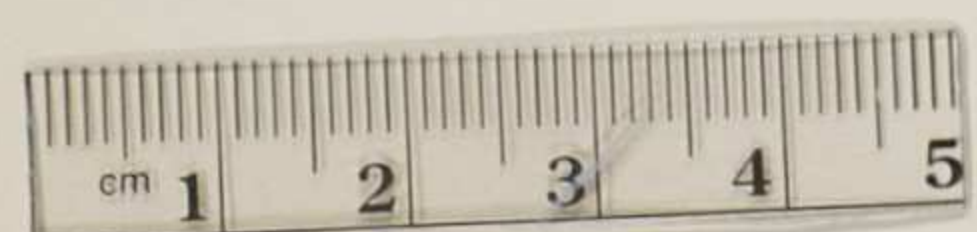


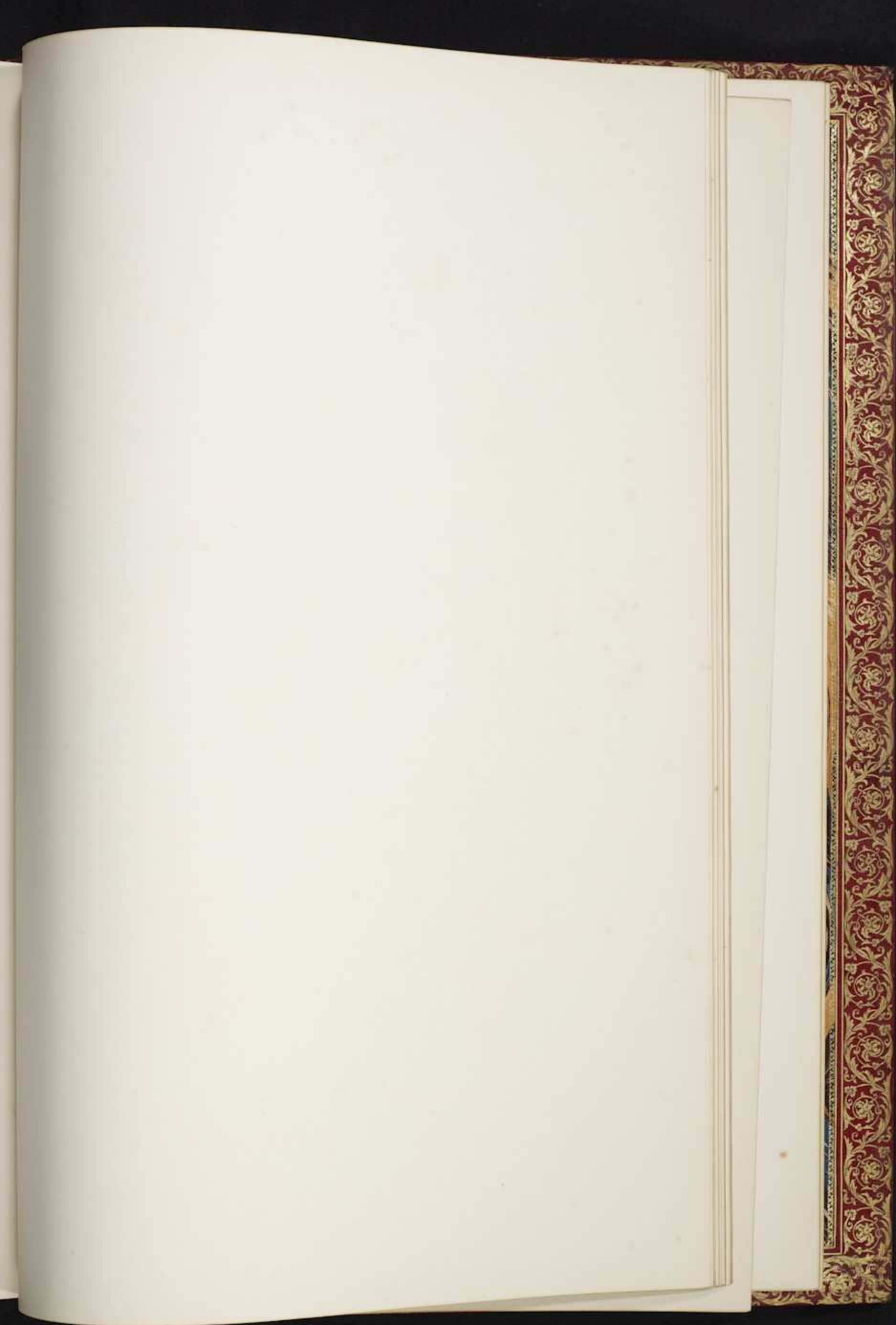


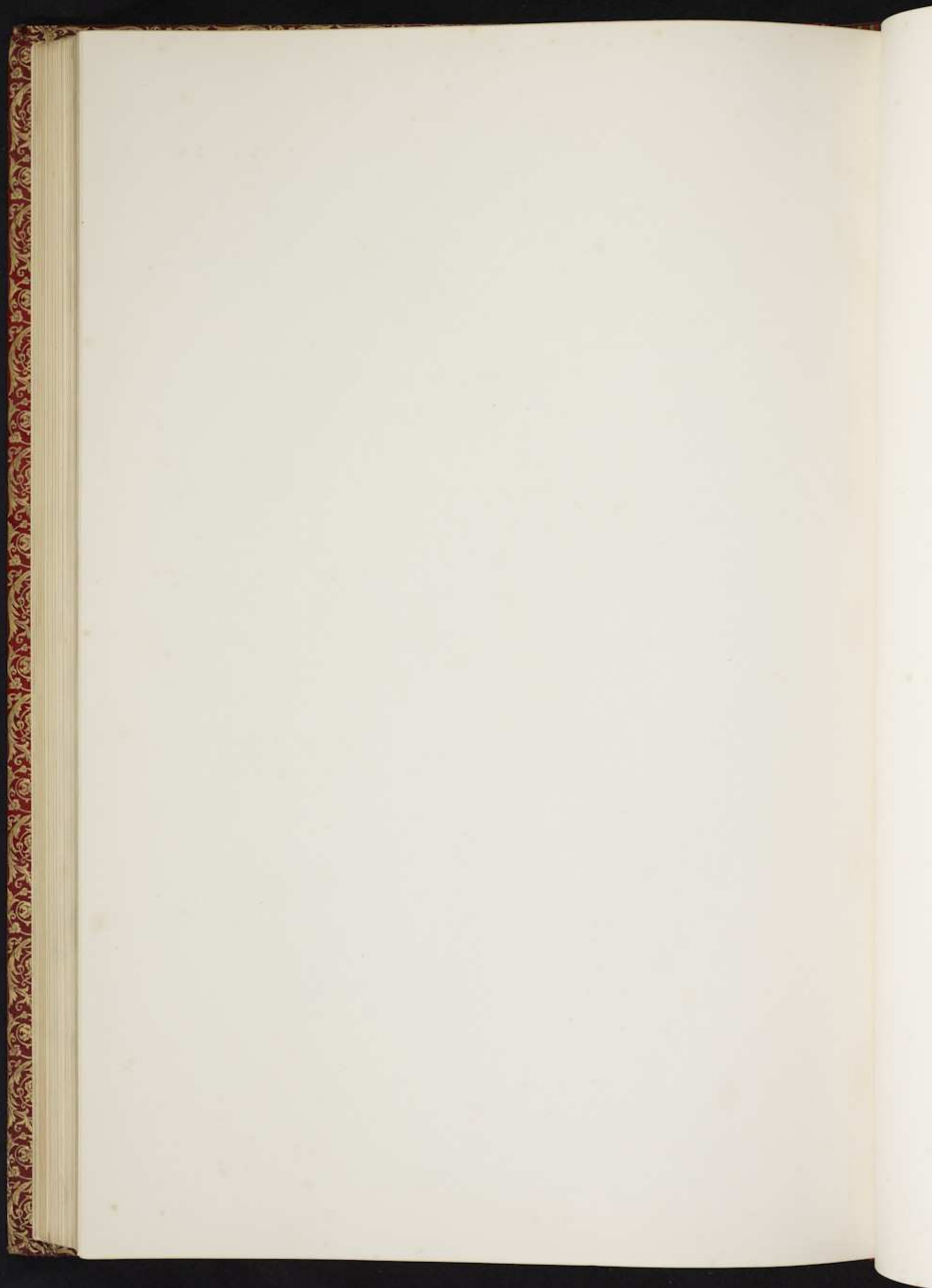
RECTES LEUCORHYNCHUS, Gray.

W. Hart del et lith.

Mintern Bros. imp.







RECTES LEUCORHYNCHUS, *Gray.*

White-billed Wood-Shrike.

Rectes leucorhynchus, Gray, Proc. Zool. Soc. 1861, p. 430.—Finsch, Neu-Guinea, p. 170 (1865).—Meyer, Sitz. k. Akad. Wissensch. Wien, lxi. p. 206 (1874).—Rosenb. Malay. Arch. p. 395 (1879).
Colluricincla leucorhyncha, Gray, Hand-list B. i. p. 386, no. 5838 (1869).
Pseudorectes leucorhynchus, Sharpe, Cat. Birds in Brit. Mus. iii. p. 288 (1877).
Rhectes leucorhynchus, Salvad. Ann. Mus. Civic. Genov. xv. p. 43 (1879).—Id. Orn. Papuasias e delle Molucche, ii. p. 206 (1881).

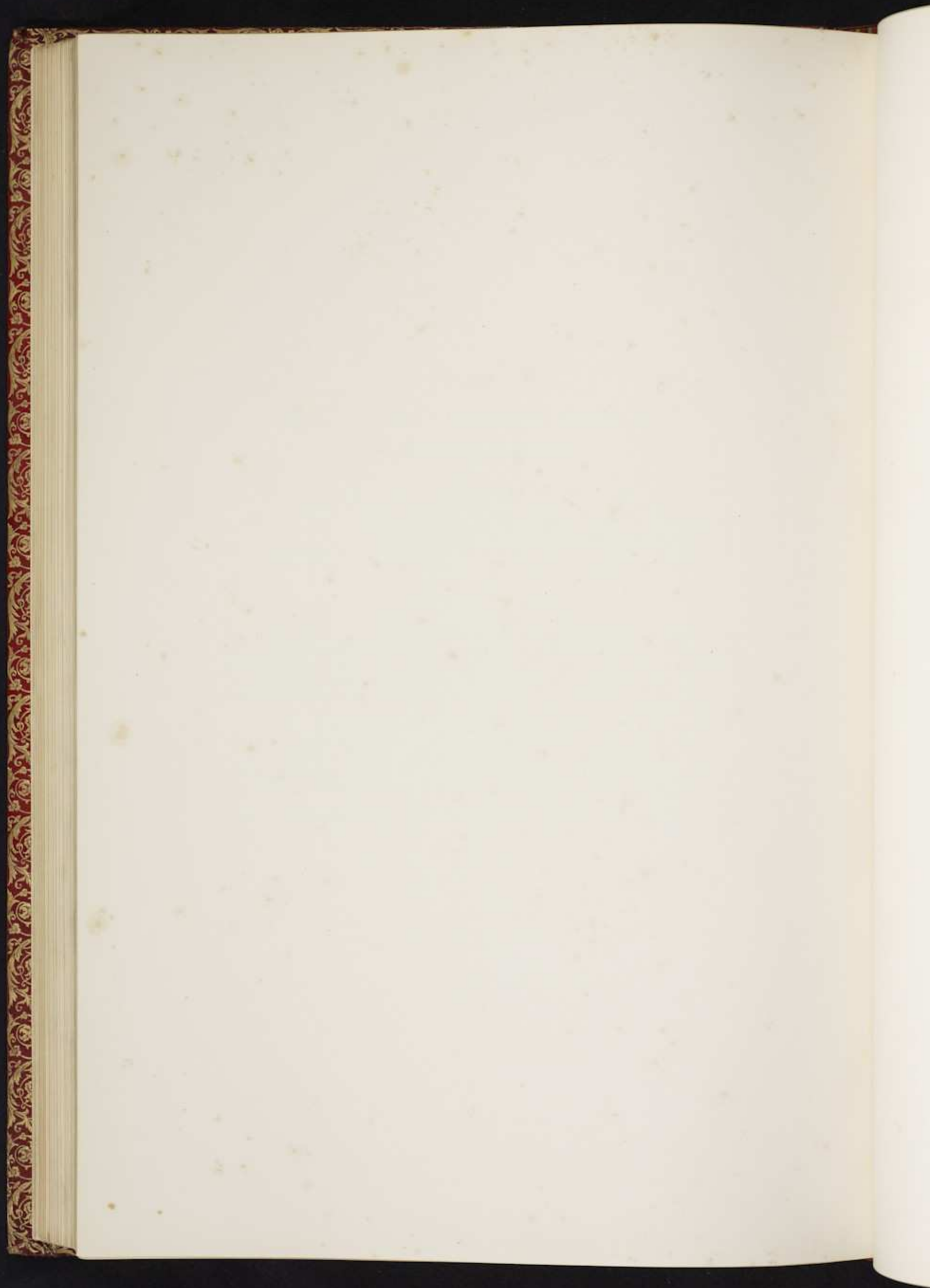
THIS Wood-Shrike is easily distinguished from all the other Papuan members of the group by its white bill and sombre coloration. It was originally described by the late Mr. George Gray, from Gagie Island, in the Moluccas; but the original specimens, now in the British Museum, were obtained by Mr. Wallace in Waigiou, and we do not understand Mr. Gray's authority for the occurrence of the species in Gagie. It has since been obtained by Dr. Beccari both in Waigiou and in Batanta. Nothing has yet been recorded concerning its habits.

The following description is copied from the British Museum 'Catalogue of Birds':—

"*Adult male.* Above rufous brown, the rump and the tail a little brighter, the crown and sides of the head slightly darker; wing-coverts like the back, but a little darker brown; quills dark brown, externally dark rufous brown; under surface of body deep rufous fawn-colour, the throat paler; under wing- and tail-coverts uniform with the breast; bill yellowish white. Total length 12 inches, culmen 1·15, wing 5·7, tail 5·2, tarsus 1·5."

The Plate represents two specimens of this bird, of the natural size, and is drawn from individuals in the British Museum.

[R. B. S.]



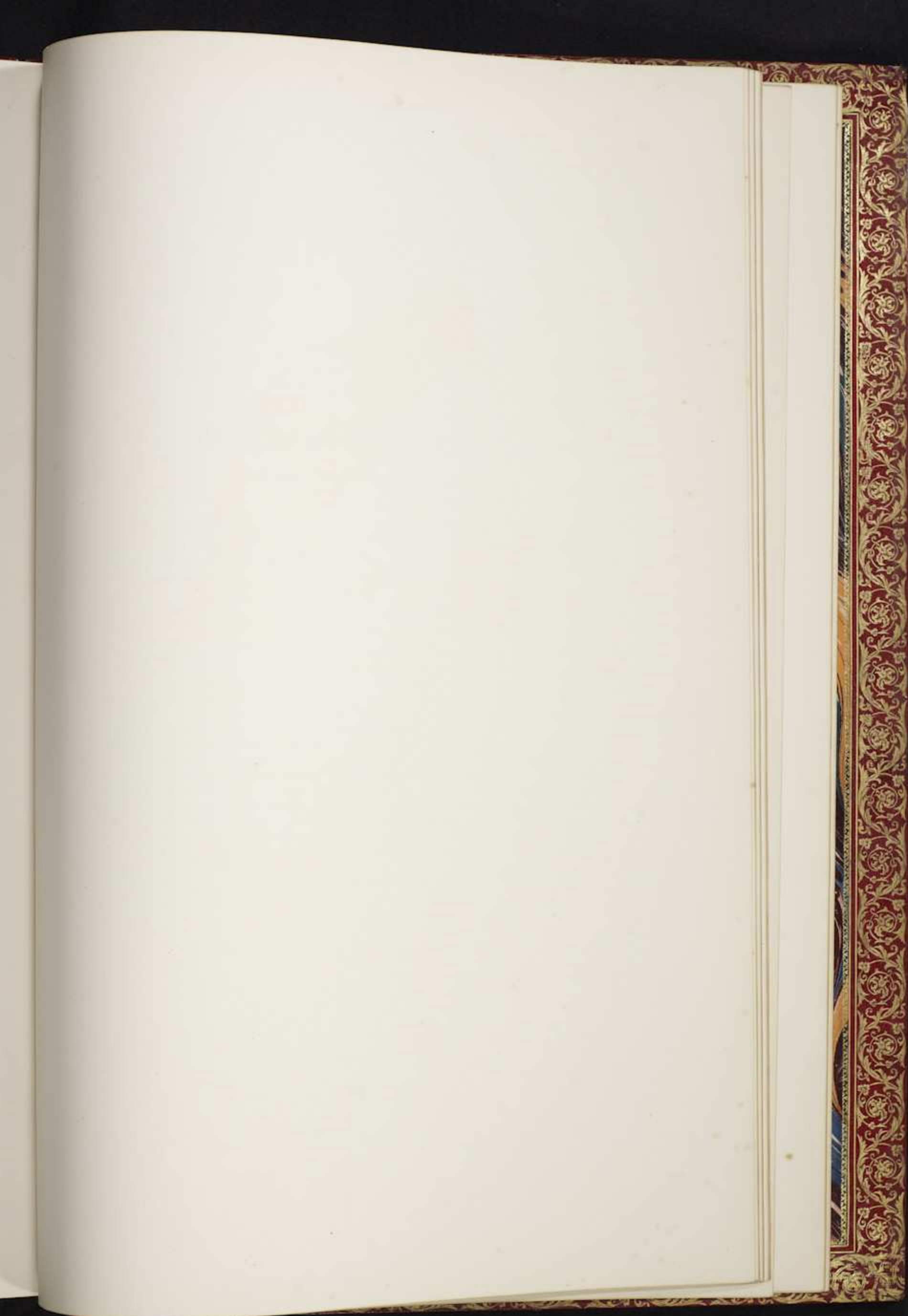


RECTES CERVINIVENTRIS, Gray.

W. Hart del. et lith.

Mintern. Bros. imp.







RECTES CERVINIVENTRIS, *Gray.*

Fawn-breasted Wood-Shrike.

Rectes cerviniventris, Gray, Proc. Zool. Soc. 1861, p. 430.—Finsch, Neu-Guinea, p. 176 (1865).—Meyer, Sitz. k. Akad. Wissensch. Wien, lxi. p. 208 (1874).—Sharpe, Cat. Birds in Brit. Mus. iii. p. 286 (1877).—Rosenb. Malay. Arch. p. 395 (1879).
Rhectes cerviniventris, Salvad. Ann. Mus. Civic. Genov. xv. p. 44 (1879).—Id. Orn. Papuasie e delle Molucche, ii. p. 200 (1881).

As with *R. leucorhynchus*, so with the present bird, we cannot find Mr. Gray's authority for stating that it is found in the island of Gage, as no specimen from this island exists in the British Museum, where the type specimens are deposited. The original specimen came from Waigiou, where Mr. Wallace discovered the species, and where it has since been met with by Mr. Bruijn, who has also found it in Batanta. The late Dr. Bernstein likewise procured it in the island of Ghemien. The habitat Gage must therefore be entirely erroneous, though how the mistake arose we are unable to conjecture.

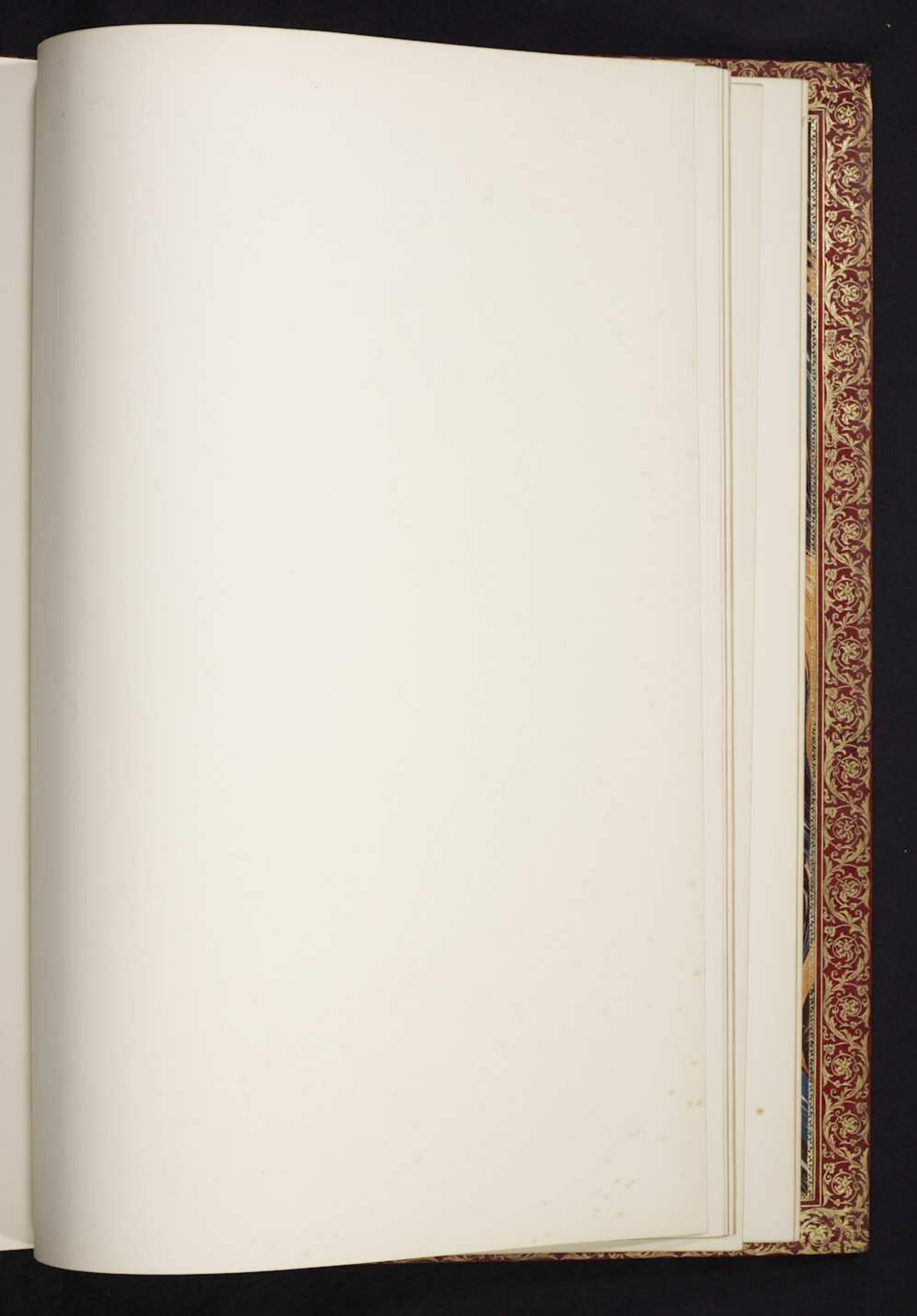
The following description is copied from the British Museum 'Catalogue of Birds':—

"*Adult male.* General colour above ashy olive, inclining to olive on the rump and upper tail-coverts; the head crested, ashy grey, this colour pervading the mantle and back; sides of face and sides of neck rather darker ashy; wings olive-brown, the inner webs of the feathers darker brown, the outer webs washed with reddish olive; tail-feathers brown, washed with olive on the edges of the feathers, the outer ones reddish brown, edged with deep fawn-colour on the outer web; throat and fore neck ashy, washed with ochre; rest of under surface of body chestnut fawn-colour, including the thighs, under wing- and tail-coverts; under surface of body dark ashy brown, the inner webs rufous fawn-colour. Total length 8·6 inches, culmen 1·05, wing 3·75, tail 3·5, tarsus 1·25."

The Plate represents an adult bird in two positions, of the size of life, the figures being drawn from a specimen in the British Museum.

[R. B. S.]







RECTES UROPYGIALIS, Gray.

J. Gould & W. Hart, del et lith.

Walter, Imp.







RECTES UROPYGIALIS, Gray.

Rufous-and-Black Wood-Shrike.

- Rectes uropygialis*, G. R. Gray, Proc. Zool. Soc. 1861, pp. 430, 435.—Finsch, New Guinea, p. 170 (1865).—Meyer, Sitz. k. Akad. Wissensch. Wien, lxix. p. 208 (1874).—Sharpe, Cat. Birds Brit. Mus. iii. p. 285 (1877).—Rosenb. Malay Arch. p. 395 (1879).
Colluricincla uropygialis, Gray, Handl. B. i. p. 385, no. 5, 836 (1869).
Rectes uropygialis ceramensis, Meyer, Sitz. k. Akad. Wissensch. Wien, lxix. p. 208 (1874).—Salvad. Proc. Zool. Soc. 1878, p. 96 (note).
Rectes tibialis, Sharpe, Cat. Birds Brit. Mus. iii. p. 285 (1877).
Rhectes uropygialis, Salvad. Ann. Mus. Civ. Genova, xv. p. 42 (1879).—Id. Orn. della Papuasias, &c. p. 193 (1881).

THERE are three species of the genus *Rectes* which are very closely allied to each other, and which are remarkable for their red and black plumage. These are *R. uropygialis*, from North-western New Guinea and Mysol, *R. dichrous*, spread over the greater part of New Guinea, and *R. aruensis* from the Aru Islands. Of these three species the present is perhaps the finest, being slightly the largest in size. It differs from *R. dichrous* in having the whole of the rump and upper tail-coverts black, whereas in the last-named bird these parts are chestnut like the rest of the back. *R. aruensis* resembles the present bird in having the rump and upper tail-coverts black; but, besides being rather smaller, it has the breast slightly paler and washed with black.

Nothing has been recorded concerning the habits of this species, or of those of any member of the genus *Rectes*; but we can easily suppose that they are not greatly different from those of the Australian *Colluricincla*. Whereas *R. dichrous* appears to be spread over the greater part of the island of New Guinea, *R. uropygialis* takes its place in the western and north-western part of the island, and extends into Mysol. Mr. Sharpe was inclined at one time to separate the New-Guinea bird as *Rectes tibialis*; but he informs me that he is now quite convinced of its identity with the Mysol bird.

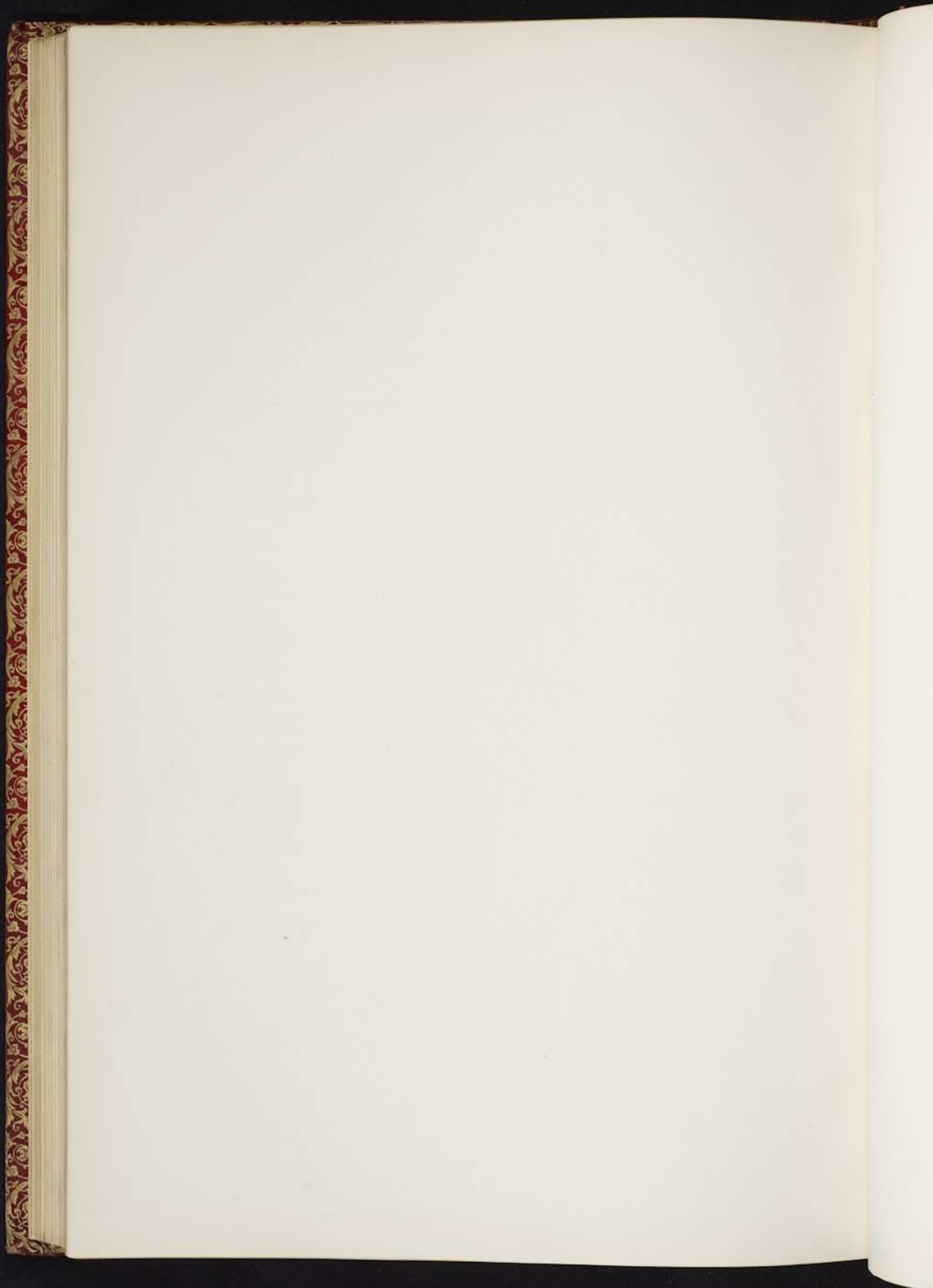
The following description is taken from Mr. Sharpe's Catalogue of Birds in the British Museum :—

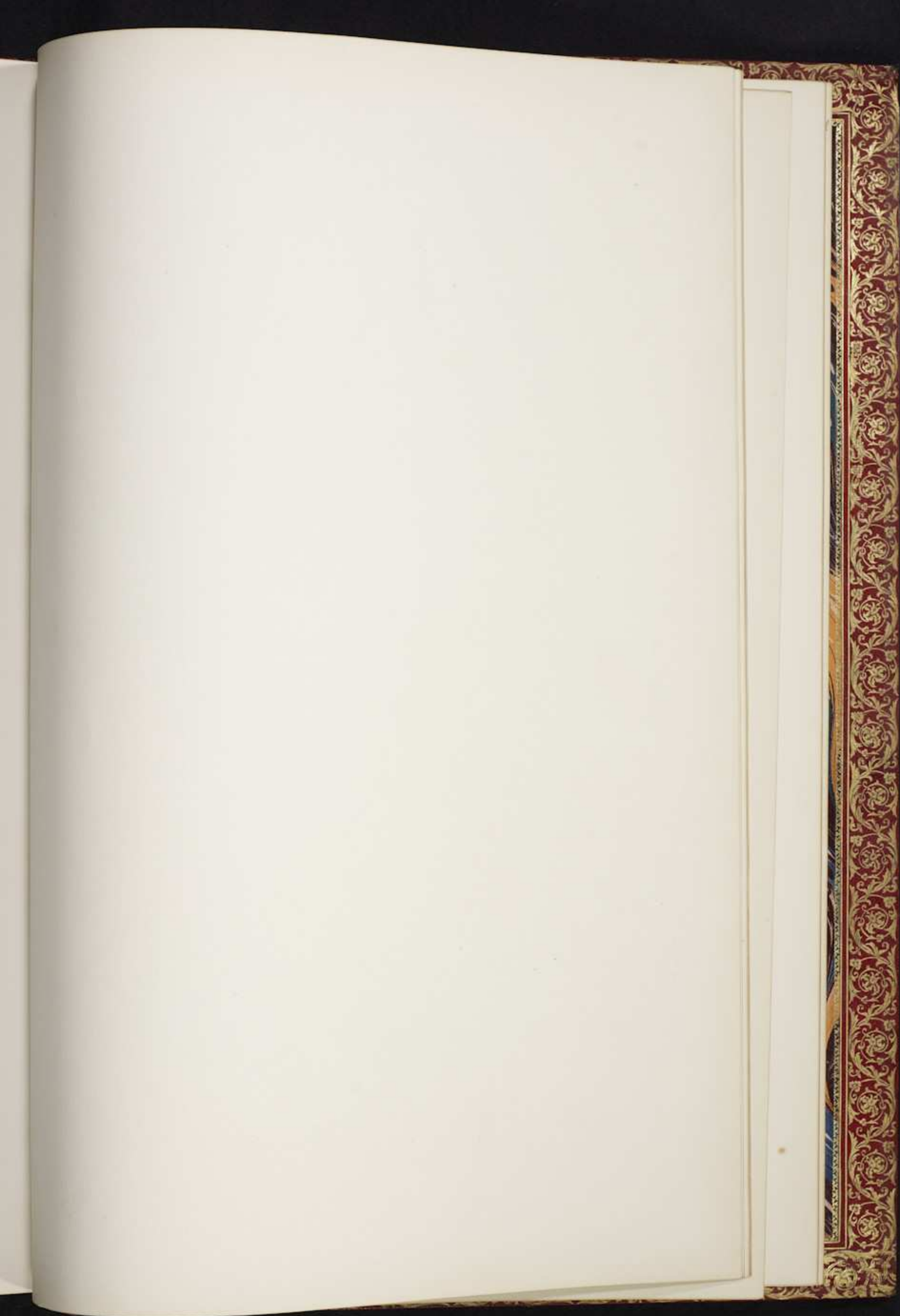
Adult male. Head, which is strongly crested, and nape black, as also the entire sides of the face, sides of neck, throat, fore neck, and chest; hind neck, mantle, and upper back rich maroon-chestnut, rather more orange on the hind neck; lower back, rump, and upper tail-coverts black; wings and tail black; remainder of under surface of body, from the chest downwards, including the thighs, under wing- and tail-coverts, rich maroon-chestnut; bill and legs black.

Total length 11 inches, culmen 1·1, wing 4·7, tail 4·55, tarsus 1·36.

Adult female. Similar to the adult male, and quite as richly coloured. Total length 11 inches, culmen 1·25, wing 4·95, tail 4·75, tarsus 1·35.

The figures in the Plate represent an adult bird in two positions, of about the natural size, and are drawn from an example in my own collection.







RECTES JOBIENSIS, Meyer.

J. Gould & W. Hart, del. et lith.

Walter, Imp.







RECTES JOBIENSIS, Meyer.

Jobi-Island Wood-Shrike.

Rectes jobiensis, Meyer, Sitz. k. Akad. der Wiss. zu Wien, lxi. p. 205 (1874).—Slater, Ibis 1874, p. 417.—
Salvad. Ann. Mus. Civ. Genova, vii. p. 173 (1875), viii. p. 40 (1876).—Sharpe, Cat. B. Brit. Mus.
iii. p. 287 (1877).—Gieb. Thes. Orn. iii. p. 412 (1877).
Rhectes jobiensis, Salvad. Ann. Mus. Civ. Genova, xv. p. 43 no. 12 (1879).—Id. Orn. Papuasie, &c. ii. p. 201
(1881).

THE Shrike-like genus *Rectes* consists of a small number of birds found in New Guinea and in the neighbouring islands. It is divided into two sections, consisting of those species which have a distinct cap of darker colour on the head, and those species which have no cap whatever; and the present bird will be seen at once to belong to the second section. Its nearest allies therefore are *Rectes cervineiventris* from Waigiou, and *R. cristatus* of New Guinea; but it is very distinct from both of these by reason of its foxy red colour both above and below.

The present bird was discovered by Dr. A. B. Meyer in the island of Jobi, which is situated in the Bay of Geelvink, in North-western New Guinea. He preserved several specimens of it; and it has also been met with there by Dr. Beccari and in the neighbouring little islet of Krudu.

Dr. Meyer says that the note of this bird is a "chrrr;" and its habits are doubtless the same as those of the rest of the genus, of which at present we unfortunately know but little.

The following description of the species I take from Mr. Bowdler Sharpe's Catalogue of Birds:—

Adult male. General colour above bright foxy red, paler on the head; wing-coverts like the back; quills dark brown, externally rufous, the inner secondaries entirely rufous; tail-feathers chestnut, the shafts rufous; lores, sides of face, and under surface of body deep rich tawny buff, darker on the throat and fore neck, and inclining to chestnut on the lower flanks and under tail-coverts; under wing-coverts bright tawny, like the breast; quills dusky brown below, rufous on the outer web and along the inner web; bill light yellowish horn-colour; feet blackish, claws pale. Total length 9·2 inches, culmen 11·5, wing 4·65, tail 4·35, tarsus 1·35.

Adult female. Similar in colouring to the male.

Total length 10·5 inches, wing 4·6, tail 4·3, tarsus 1·25.

Young male. Similar in colour to the adult, but rather duller; the bill shorter and duller brown.

The above descriptions were taken from the typical specimens lent to Mr. Sharpe by Dr. Meyer; and from one of these I have drawn the accompanying figure, which is of about the natural size.







RECTES ARUENSIS. Sharpe.

W. Hart del. et lith.

Museum. Pres. imp.





RECTES ARUENSIS, Sharpe.

Aru-Island Wood-Shrike.

- Rectes dichrous*, pt. (nec Bp.), Gray, Proc. Zool. Soc. 1858, pp. 173, 193.—Id. List Mamm. &c. New Guinea, pp. 33, 58 (1859).—Id. Proc. Zool. Soc. 1861, p. 435.
Rectes aruensis, Sharpe, Cat. Birds in Brit. Mus. iii. p. 285 (1877).—Salvad. Proc. Zool. Soc. 1878, p. 96.
Rhectes aruensis, Salvad. Ann. Mus. Civic. Genov. xv. p. 42 (1879).—Id. Rep. Voy. 'Challenger,' p. 79 (1881).
—Id. Ucc. Papuasie e delle Molucche, ii. p. 194 (1881).—Meyer, Zeitschr. ges. Orn. i. p. 284 (1884).
Rhectes analogus, Meyer, Zeitschr. ges. Orn. i. p. 284 (1884).

THE present species belongs to the capped section of the genus *Rectes*, and its nearest ally is *Rectes uropygialis* from New Guinea and Mysol. It is, however, a much smaller bird than the latter, which it represents in the Aru Islands, and is further distinguished by the black of the upper tail-coverts not extending over the rump, while on the under surface of the body the black descends down the centre of the breast and abdomen instead of ending abruptly on the breast.

The birds which we have described as the young have recently been considered by Dr. A. B. Meyer to belong to a distinct species, which he has named *Rectes analogus*. With all due respect to Dr. Meyer, who is a recognized authority on all matters relating to the zoology of Papuasie, we still think that there is only one species inhabiting the Aru Islands, and we consider *Rectes analogus* to be the same species as *R. aruensis*. The whole subject, however, of the colour of the sexes and young birds in this genus is so imperfectly understood, in our opinion, that we are free to admit that Dr. Meyer's second species from the Aru Islands possesses quite as good claims to specific distinction as some of those allowed by naturalists to inhabit New Guinea.

The following are the descriptions of specimens in the British Museum, published by us in the 'Catalogue of Birds' (l. c.):—

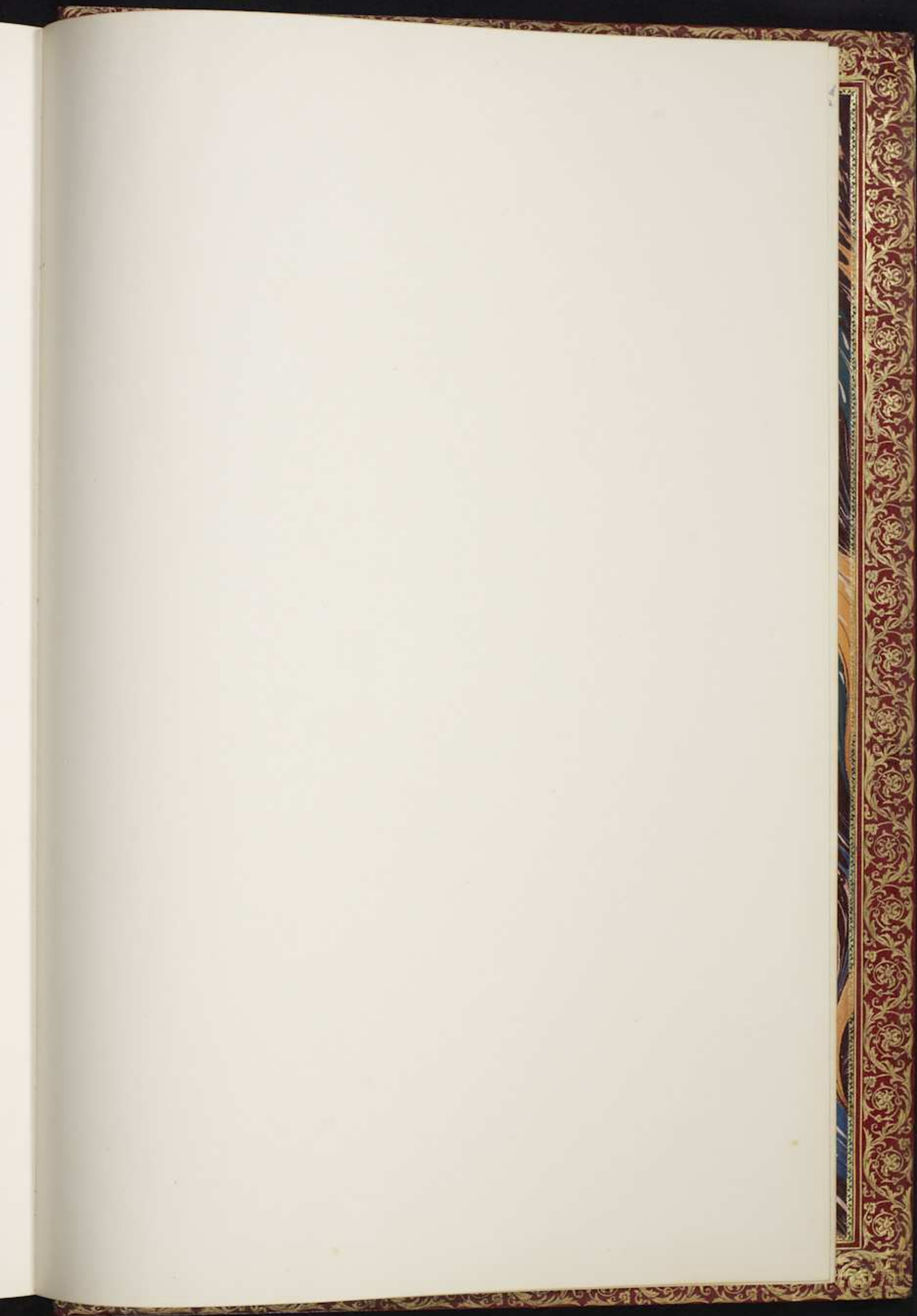
Adult male. Above very bright chestnut, the upper tail-coverts black; head crested, black all round, with the sides of face, fore neck, and chest also entirely black; rest of under surface of body deep tawny buff, the whole of the breast shaded with black; under wing-coverts deep ochreous, those near the edge of the wings black; wings and tail deep black; bill and legs black. Total length 10 inches, culmen 1·2, wing 4·3, tail 4·1, tarsus 1·35.

Young. Paler ochre-rufous below, not mixed with black on the breast; the cap and black throat almost as strongly defined as in the adult, but both are much washed with brown; rump dingy ochreous brown, washed with chestnut, the tail-coverts inclining to blackish; quills and tail blackish, the outer webs of the quills dingy ochreous brown; tail-feathers brown, slightly washed with rufous, and inclining to black near the base and upwards along the centre of the feathers. Total length 10 inches, culmen 1·2, wing 4·45, tail 4·3, tarsus 1·3.

The figures in the Plate represent the type of *Rectes aruensis* and the type of *R. analogus*, the latter having been kindly lent to us by Dr. Meyer.

[R. B. S.]







f 105
Described & collected
1000 Miles from 12, 1962





THE MAHARAJAH
JAM SAHIB OF NAWANAGAR
JAMNAGAR

BIRDS
OF
NEW
GUINEA

GOULD

I.

LONDON
1875-1888

