IMPERIAL
LIBRARY

THE AVIFAUNA OF BRITISH INDIA

AND ITS DEPENDENCIES.

A SYSTEMATIC ACCOUNT,
WITH DESCRIPTIONS OF ALL THE KNOWN
SPECIES OF BIRDS INHABITING BRITISH INDIA,
OBSERVATIONS ON THEIR HABITS, NIDIFICATION, &c.,
TABLES OF THEIR GEOGRAPHICAL
DISTRIBUTION IN PERSIA, BELOOCHISTAN,
AFGHANISTAN, SIND, PUNJAB, N. W. PROVINCES,
AND THE PENINSULA OF INDIA GENERALLY,

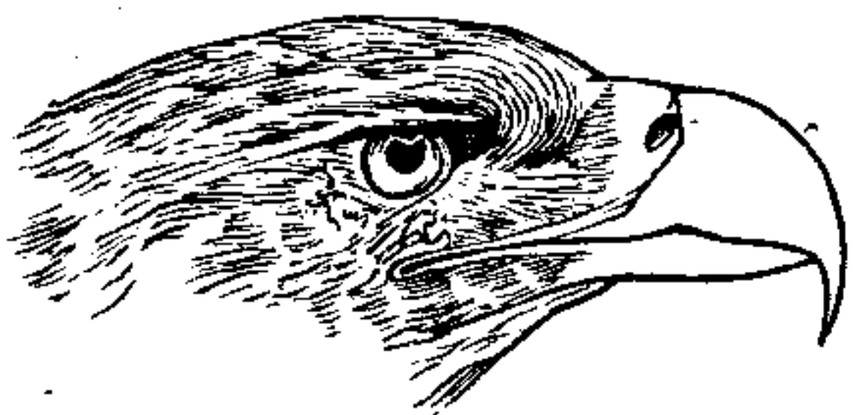
WITH

WOODCUTS, LITHOGRAPHS, AND COLOURED ILLUSTRATIONS.

BY

JAMES A. MURRAY, F.S.A.L.

MEM. NAT. HIST. SOC. AND OF THE ANTHROP. SOC., BOMBAY;
MANAGER, VICT. NAT. HIST. INSTITUTE; LATE CURATOR KURRACHEE MUNICIPAL
LIBRARY AND MUSEUM; AUTHOR OF "A HAND-BOOK TO THE GEOLOGY,
BOTANY, AND ZOOLOGY OF SIND;" "THE PLANTS AND DRUGS OF SIND;"
"KURRACHEE TO KANDAHAR;" "THE VERTEBRATE ZOOLOGY OF SIND;"
"THE REPTILES OF SIND;" "THE EDIBLE AND GAME BIRDS OF
BRITISH INDIA, WITH ITS DEPENDENCIES AND CEYLON," &C.



VOLUME II.-*pt. 2*

LONDON:—TRÜBNER & CO., LUDGATE HILL.
BOMBAY:—EDUCATION SOCIETY'S PRESS, BYCULLA.

1890.

IMPERIAL
LIBRARY

THE AVIFAUNA OF BRITISH INDIA

AND ITS DEPENDENCIES.

A SYSTEMATIC ACCOUNT,
WITH DESCRIPTIONS OF ALL THE KNOWN
SPECIES OF BIRDS INHABITING BRITISH INDIA,
OBSERVATIONS ON THEIR HABITS, NIDIFICATION, &c.,
TABLES OF THEIR GEOGRAPHICAL
DISTRIBUTION IN PERSIA, BELOOCHISTAN,
AFGHANISTAN, SIND, PUNJAB, N. W. PROVINCES,
AND THE PENINSULA OF INDIA GENERALLY,

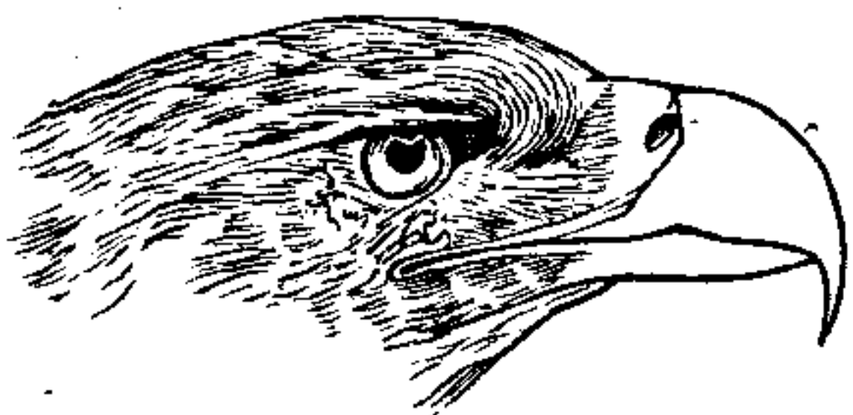
WITH

WOODCUTS, LITHOGRAPHS, AND COLOURED ILLUSTRATIONS.

BY

JAMES A. MURRAY, F.S.A.L.

MEM. NAT. HIST. SOC. AND OF THE ANTHROP. SOC., BOMBAY;
MANAGER, VICT. NAT. HIST. INSTITUTE; LATE CURATOR KURRACHEE MUNICIPAL
LIBRARY AND MUSEUM; AUTHOR OF "A HAND-BOOK TO THE GEOLOGY,
BOTANY, AND ZOOLOGY OF SIND;" "THE PLANTS AND DRUGS OF SIND;"
"KURRACHEE TO KANDAHAR;" "THE VERTEBRATE ZOOLOGY OF SIND;"
"THE REPTILES OF SIND;" "THE EDIBLE AND GAME BIRDS OF
BRITISH INDIA, WITH ITS DEPENDENCIES AND CEYLON," &C.



VOLUME II.-*pt. 2*

LONDON:—TRÜBNER & CO., LUDGATE HILL.
BOMBAY:—EDUCATION SOCIETY'S PRESS, BYCULLA.

1890.

CALCUTTA
HOME DEPT
LIBRARY

PREFACE.

IT is not without some degree of gratification that this work on the Avian inhabitants of British India and its Dependencies is now brought to a close. It has occupied fully three and a half years of incessant labour and research, which, considering that there were as many as 1,460 species to examine and describe, and that the literature of this number had to be referred to with regard to their habits, nesting, distribution, and synonomy, &c., is not long. It is however some satisfaction to find my subscribers and correspondents so impatient for its completion; a proof of its utility as a Thesaurus with special reference to the Ornis of the British Indian Empire. There has not been any unnecessary delay in issuing the several parts, but the difficulties to be contended with in treating the subject systematically as well as in some degree popularly, and the time which would be involved in obtaining specimens of certain doubtful species or sub-species from various correspondents in different parts of India was not calculated, nor was there, at the outset, the faintest thought, that during the publication, I would lose the valuable assistance of several contributors of note, as well as supporters of the work, who either died or left for England, but whose reputation in Ornithology have been long ago recorded in the annals of Natural History. By such loss, the distribution table, so far as Northern India is concerned, is not as complete as it should otherwise have been.

In the first volume, part of the first great division of the Avifauna of British India was treated of—*viz.*, the carnivorous and rapacious kinds, which by the aid of their piercing sight and some by their developed sense of smell discover their prey from immeasurable heights. Several groups of Passeriforme birds were also dealt with. In the present volume, which is more than double the size of the first, the remaining divisions are treated of, beginning with some of the Turdidæ and Timelidæ, or birds which though ordinarily less noticed, are nevertheless of much service in the economy of nature, in keeping down the myriads of insects which infest the earth and atmosphere. The total number of species as now ascertained and dealt with in this work is 1,460, or 452 in excess of the number described by the late Dr. Jerdon in his "Birds of India." The distribution in India of this number, so far as it has been possible to collate information, is shown in the following table :—

Sind	419	Guzerat	296
Punjab	476	Concan	323
N.-W. Provinces	623	Deccan	334
Bengal	541	South India	557
Oudh	401	British Burmah	754
Rajputana	286	Nepaul	541
Kutch	328	Beloochistan	299
Central India	348	Persia	263
Central Provinces	302	Afghanistan	275

It will be seen from the distribution table that it is chiefly the migrant forms which are more generally distributed, as the Motacillidæ, Emberizidæ and the waders and swimmers, and naturally, following in their wake, the rapacious species. Assimilation of climatic conditions as affecting this distribution may be easily judged from the number of species occurring in each of the countries above named, while the number

occurring in Beloochistan and Persia must only be calculated as being generally a diffusion of species along the coast line during winter. It is much to be regretted that statistics of the occurrence of species in Cashmere are wanting, and that Nepaul has been only partially worked up. In course of time, when the British Museum authorities have completed their catalogue of Mr. Allan Hume's valuable contribution to the National collection, we may learn more of the distribution of species in those regions, as well as of the distance of their migration.

In the Introduction (Vol. I.) mention has been made of the authors from whose works information has been collated, and in many instances original descriptions also. Here I must now refer to the illustrations. In the first place, for many reasons, they are not as numerous as was at first contemplated, but of the manner in which the majority have been done, I can speak with perfect satisfaction. Of the full page plates, some are original, and others have been taken from either the Zoological Society's Journal, The Ibis, Blanford's Zoology of Persia, my work on the Vertebrate Zoology of Sind, and from the British Museum Catalogues. The coloured plates have been done by Mintern Brothers, and the manner in which these have been finished reflects much credit on the firm.

It now remains for me to mention the names of those Naturalist-Collectors who have very kindly assisted me in making the work full of more recent information, especially in regard to the distribution of species and nidification. Mr. Mahon Daly of the Shevaroy Hills has been good enough to send information and specimens from the locality he worked in; Mr. P. W. MacKinnon of Mussoorie also, as well as Mr. Charles Wilkinson of Darjeeling, Mr. Beckwith in the Sikkim

Terai, and Messrs H. Parker and F. B. Armstrong of Ceylon. Mr. A. G. Cardew of Ootacamund also very kindly sent copious notes, also Mr. C. Wyeth of Tavoy. To this list must be added the name of Mr. J. A. Cave-Browne, of Rangomati, to whom both myself and all subscribers to this work are indebted for the English Index which was very kindly compiled by him. Mr. H. M. Phipson very kindly placed at my disposal such works of reference as he possessed, and for similar obligations I am indebted to Mr. Charles Taylor, to whom, as Superintendent of the Press, is also due the neatness and general out-turn of this work.

JAMES A. MURRAY.

Ripon Road, Byculla, Bombay,
1st February 1890.

LIST OF ILLUSTRATIONS.

		PAGE
Woodcut.	Saxicola œnanthe (*Head*)	2
Plate ...	Saxicola chrysopygia...	6
Woodcut.	Hemixus flavala (*Head*)	20
„	Iole viridescens (*do.*)	23
„	Micropus melanocephalus (*Head*)	26
„	Criniger barbatus (*do.*)	28
„	Alcurus striatus (*do.*)	32
Plate ...	Pycnonotus pusillus	43
Woodcut.	Copsychus saularis (*Head and leg*)	65
Plate ...	Trochalopteron Jerdoni	85
Woodcut.	Acanthoptila nipalensis (*Head*)	89
„	Ianthocincla ocellata (*Bill*)...	89
„	Gampsorynchus rufulus (*Bill*)	90
Plate ...	Ianthocincla ocellata (*Head, leg, bill and quills*)	90
„ ...	Myiophoneus Temmincki (*Head, leg and bill*), fig. 1. ...	120
„ ...	Actinodura nipalensis (*Head and leg*), fig. 2.	120
„ ...	Crateropus griseus (*Head and leg*), fig. 1.	122
„ ...	Cutia nipalensis (*do.*), fig. 2.	122
Woodcut.	Yuhina gularis (*Head*)	171
Plate ...	Accentor nipalensis (*Head and leg*)...	180
„ ...	Parus sultaneus (*do.*)...	180
„ ...	Liothrix lutea (*do.*)...	180
„ ...	Pellorneum ruficeps (*do.*)...	180
Plate ...	Arachnothera magna (*Head and leg*)	212
„ ...	Rimator malacoptilus (*do.*)	212
„ ...	Tichodroma muraria (*do.*)	212
„ ...	Salpornis spilonota (*do.*)	212
„ ...	Æthopyga seheriæ	222
„ ...	Æthopyga nipalensis	225
„ ...	Æthopyga sanguinipectus	225
„ ...	Cinnyris (Arachnechthra) brevirostris	228

			PAGE
Woodcut.	Sturnus vulgaris		363
,,	Pastor roseus		372.
,,	Coracias garrula		475
,,	Palumbus casiotis		506
,,	Columba livia		508
Plate ...	Pterocles coronatus	(*Head*)	520
,, ...	Pterocles senegallus	(*do.*)	
,, ...	Pterocles arenarius	(*do.*)	
,, ...	Pterocles exustus	(*do.*)	
,, ...	Pterocles alchata	(*do.*)	
,, ...	Pterocles Lichtensteinii	(*do.*)	
,, ...	Pterocles fasciatus	(*do.*)	
Woodcut.	Crossoptilon thibetanum	(*Head*)	533
,,	Ceriornis melanocephalus	(*do.*)...	535
,,	Ithaginis cruentus	(*do.*)...	537
,,	Pucrasia macrolopha	(*do.*)...	538
,,	Phasianus Hardwickii	(*do.*)...	539
,,	Lerwa nivicola (*Head*)	... ...	550
Plate ...	Francolinus vulgaris		551
,, ...	Coturnix communis		565
Woodcut.	Otis tarda		572
,,	Glareola pratincola		582
,,	Charadrius pluvialis		584
,,	Vanellus cristatus		589
,,	Œdicnemus crepitans		595
,,	Strepsilas interpres		597
,,	Grus cinerea...		601
,,	Scolopax rusticola		603
,,	Gallinago scolopacina		606
,,	Gallinago gallinula		608
,,	Phalaropus fulicarius...		618
,,	Limosa lapponica		627
,,	Numenius arquatus		630
,,	Porphyrio poliocephalus		635
,,	Fulica atra (*Head*)		636
,,	Gallinula chloropus		644

		PAGE
Woodcut.	Ardea cinerea...	652
„	Falcinellus igneus	668
„	Cygnus olor	671
„	Anser albifrons	674
„	Tadorna cornuta	681
„	Spatula clypeata	682
„	Anas boscas	683
„	Chaulelasmus streperus	686
„	Dafila acuta	689
„	Mareca penelope	691
„	Querquedula circia	693
„	Querquedula formosa	694
„	Fuligula cristata	698
„	Fuligula marila	699
„	Fuligula ferina	700
„	Clangula glaucion	702
„	Mergus merganser	706
„	Plotus melanogaster	741

Plate 1.



Fig 1. æthopyga nipalensis.
„ 2 & 3. „ seheriæ.



Cinnyris Minimus.

Since the publication of the 2nd part of the 1st Voume of this work, the following species of *Digenea* has been described by Mr. Sharpe of the British Museum :—

269a. Digenea leucops, *P. Z. S.* 1888, pt. ii., p. 246 :—

General colour above light olive brown, with somewhat of an ashy tinge; wing coverts like the back, the greater series somewhat more ruddy brown externally; bastard wing, primary coverts and quills dusky brown, externally ruddy olive; upper tail coverts rather more reddish brown than the back; tail feathers dusky brown, externally reddish brown; crown of the head like the back; a white line across the base of the forehead widening into a large supra-loral spot; feathers about the eye washed with ashy grey; lores ashy, as also the feathers round the eye; ear coverts and cheek ashy washed with olive; throat white; the chin and a broad band on each side of the throat black, continued downwards, and forming a collar on the foreneck; chest and breast pale ashy, with a slight tinge of olive brown; abdomen white; sides of body and flanks olive brown; thighs olive brown; under tail coverts white, also the under wing coverts and axillaries. "Bill slaty brown; feet white tinged fleshy; iris bright dark brown." (*R. G. Wardlaw-Ramsay.*)

Length.—4·3 inches; wing 2·5; tail 1·75; tarsus 0·8; culmen 0·45.

Hab.—Shillong and Karenne, B. B.

An allied species (*D. malayana*) is also described from Perak.

Vol. I., p. 231.

CONTENTS OF VOLUME II.

ORDER—PASSERIFORMES.

SUB-ORDER—PASSERES.

GROUP—CICHLOMORPHÆ.

Family—TURDIDÆ.

Sub-Family—TURDINÆ.

	PAGE
124. **Myrmecocichla,** *Cab.*	1
405. fusca, *Blyth.*	1
125. **Saxicola,** *Bechst.*	2
406. albonigra, *Hume.*	2
407. picata, *Blyth.*	2
408. capistrata, *Gould.*	3
409. monacha, *Rupp.*	3
410. morio, *Hemp. et Ehrenb.*	4
411. opistholeuca, *Strickl.*	4
412. deserti, *Tem.*	5
413. chrysopygia, *De Filliji.*	5
414. isabellina, *Cretsschm.*	6

Family—TIMELIIDÆ.

Sub-Family—BRACHYPODINÆ.

126. **Ægithina,** *Vieill.*	7
415. viridissima, *Bp.*	8
416. tiphia, *Linn.*	9
417. nigrolutea, *G. F. L. Marshall.*	10
127. **Æthorhynchus,** *Sundev.*	11
418. lafresnayi, *Hartl.*	11
128. **Chloropsis,** *Jard and Selby.*	12
419. Hardwicki, *Jard and Selby.*	12
420. aurifrons, *Tem.*	13
421. malabarica, *Gmel.*	14
422. zosterops, *Vigors.*	15
423. Jerdoni, *Blyth.*	15
424. chlorocephala, *Wald.*	16
425. cyanopogon, *Tem.*	17

Sub-Family—PYCNONOTINÆ.

129. **Hypsipetes,** *Vigors.*	18
426. psaroides, *Vigors.*	18
427. concolor, *Blyth.*	19
428. ganeesa, *Sykes.*	19
130. **Hemixus,** *Hodgs.*	20
429. flavala, *Hodgs.*	20
430. hildebrandti, *Hume.*	21
431. davisoni, *Hume.*	22
432. malaccensis, *Blyth.*	22
131. **Iole,** *Blyth.*	23
433. viridescens, *Blyth.*	23
434. Macclellandi, *Horsf.*	24
435. tickelli, *Blyth.*	25
132. **Pinarocichla,** *Sharpe.*	25
436. euptilosa, *Jard and Selby.*	25
133. **Micropus,** *Swains.*	26
437. melanocephalus, *Gmel.*	26
438. fusciflavescens, *Hume.*	27
439. cinereiventris, *Blyth.*	27
440. phæocephalus, *Jerd.*	28
134. **Criniger,** *Tem.*	28
441. phæocephalus, *Hartl.*	29
442. flaveolus, *Gould.*	29
443. griseiceps, *Hume.*	30
444. gutturalis, *Bonap.*	30
135. **Tricholestes,** *Salvad.*	31
445. criniger, *Blyth.*	31
136. **Alcurus,** *Hodgs.*	32
446. striatus, *Blyth.*	32
137. **Trachycomus,** *Cab.*	33
447. ochrocephalus, *Gmel.*	33
138. **Xenocichla,** *Hartl.*	33
448. icterica, *Strickl.*	33
139. **Pycnonotus,** *Boie.*	34
449. hæmorrhous, *Blyth.*	34
450. burmanicus, *Sharpe.*	35
451. nigripileus, *Blyth.*	36
452. atricapillus, *Vieill.*	36
453. pygæus, *Hodgs.*	37
454. leucotis, *Gould.*	38
455. analis, *Horsf.*	38
456. flavescens, *Blyth.*	39
457. luteolus, *Less.*	39
458. Finlaysoni, *Strickl.*	40
459. davisoni. *Hume.*	40
460. xantholæmus, *Jerd.*	41
461. blanfordi, *Jerd.*	41
462. plumosus, *Blyth.*	42
463. simplex, *Less.*	43
464. salvadorii, *Sharpe.*	43

	PAGE
140. **Otocompsa**, *Cab.*	44
465. jocosa, *Linn.*	44
466. emeria, *Linn.*	44
467. leucogenys, *Gray and Hardw.*	45
468. flaviventris, *Tickell.*	46
141. **Rubigula**, *Blyth.*	47
469. gularis, *Gould.*	47
470. cyaniventris, *Blyth.*	47
142. **Spizixus**, *Blyth.*	48
471. canifrons, *Blyth.*	48
Sub-Family—TROGLODYTINÆ.	
143. **Urocichla**, *Sharpe.*	49
472. longicaudata, *Moore.*	49
144. **Anorthura**, *Rennie.*	49
473. nipalensis, *Blyth.*	49
474. formosa, *Wald.*	50
145. **Sphenocichla**, *Godw.-Austen.*	50
475. humii, *Mandelli.*	50
146. **Pnoepyga**, *Hodgs.*	52
476. albiventris, *Hodgs.*	52
477. pusilla, *Hodgs.*	52
478. caudata, *Blyth.*	53
147. **Cinclus**, *Bechst.*	53
479. cashmeriensis, *Gould.*	54
480. asiaticus, *Swains.*	54
148. **Myiophoneus**, *Tem.*	54
481. Temmincki, *Vigors.*	55
482. Eugenii, *Hume.*	56
483. Horsfieldi, *Vigors.*	57
149. **Callene**, *Blyth.*	57
484. frontalis, *Blyth.*	58
485. albiventris, *Blanf.*	58
486. rufiventris, *Jerd.*	59
150. **Notodela**, *Less.*	59
487. leucura, *Blyth.*	59
151. **Brachypteryx**, *Horsf.*	60
488. cruralis, *Hodgs.*	60
489. hyperythra, *Jerd and Blyth.*	61
490. nipalensis, *Moore.*	61
491. stellata, *Gould.*	62
152. **Chimarrhornis**, *Hodgs.*	63
492. leucocephalus, *Vigors.*	63
153. **Thamnobia**, *Swains.*	63
493. fulicata, *Linn.*	64
494. cambaiensis, *Lath.*	64
154. **Copsychus**, *Wagler*,	65
495. saularis *Linn.*	65
155. **Lioptila**, *Blyth.*	66
496. annectens, *Blyth.*	67
156. **Hodgsonius**, *Bp.*	67
497. phœnicuroides, *Hodgs.*	67
157. **Cittocincla**, *Sclater.*	68
498. tricolor, *Vieill.*	68
499. albiventris, *Blyth.*	69
Group—HENICURI.	
158. **Henicurus**, *Tem.*	69
500. Leschenaulti, *Vieill.*	70
501 immaculatus, *Hodgs.*	70
502. schistaceus, *Hodgs.*	71
503. guttatus, *Gould.*	72
504. maculatus, *Vig.*	73
159. **Hydrocichla**, *Sharpe*	73
505. ruficapilla, *Tem.*	73
506. frontalis, *Blyth.*	74
160. **Microcichla**, *Sharpe*	74
507. scouleri, *Vigors.*	74
Order—CRATEROPODES.	
161. **Trochalopterum**, *Blyth*	76
508. affine, *Blyth.*	76
509. variegatum, *Vigors.*	76
510. erythrocephalum, *Vigors.*	77
511. chrysopterum, *Gould.*	78
512. ruficapillum, *Blyth.*	79
513. erythrolæma, *Hume*	79
514. melanostigma, *Blyth.*	80
515. rufigulare, *Gould.*	80
516. cineraceum, *Godw- Aust.*	81
517. squamatum, *Gould*	82
518. sub-unicolor, *Blyth.*	82
519. Austeni, *Jerd.*	83
520. phœniceum, *Gould.*	83
521. cachinnans, *Jerd.*	84
522. Jerdoni, *Blyth.*	85
523. Fairbanki, *Blanf.*	85
524. meridionale, *Blanf.*	86
525. lineatum, *Vigors.*	86
526. imbricatum, *Blyth.*	87
527. virgatum, *Godw.-Aust.*	88
162. **Acanthoptila**, *Blyth.*	88
528. nipalensis, *Hodgs.*	89
163. **Ianthocincla**, *Gould.*	89
529 ocellata, *Vigors.*	90
164. **Gampsorhynchus**, *Blyth.*	90
530. rufulus, *Blyth.*	91
531. torquatus, *Hume*	91
165. **Argya**, *Less.*	92
532. subrufa, *Jerd.*	92

PAGE

533. hyperythra, *Sharpe* 92
534. Earlii, *Blyth.* 92
535. caudata, *Drap.* 93
536. eclipes, *Hume* 94
537. gularis, *Blyth.* 94
538. malcolmi, *Sykes* 95
166. **Sibia**, *Hodgs.* 95
539. picoides, *Hodgs.* 95
167. **Malacias**, *Cab.* 96
540. capistrata, *Vigors* 96
541. melanoleuca, *Tickell* 97
542. gracilis, *McClell* 97
543. pulchella, *Godw.-Aust.* 98
168. **Pomatorhinus**, *Horsf.* 98
544. schisticeps, *Hodgs.* 99
545. Pinwilli, *Sharpe* 100
546. Horsfieldi, *Sykes* 100
547. ochraiceps, *Wald.* 101
548. Austeni, *Hume* 101
549. ferruginosus, *Hodgs.* 102
550. Phayrii, *Blyth.* 102
551. albigularis, *Blyth.* 103
552. stenorhynchus, *Godw.-Aust.* ... 103
553. ruficollis, *Hodgs.* 104
554. hypoleucus, *Blyth.* 104
555. Tickelli, *Blyth.* 105
556. erythrogenys, *Vigors* 105
557. Macclellandi, *Jerd.* 106
169. **Xiphoramphus**, *Blyth.* 106
558. superciliaris, *Blyth.* 106
170. **Garrulax**, *Less.* 107
559. leucolophus, *Hardw.* 107
560. Belangeri, *Less.* 108
561. Diardi, *Less.* 109
562. albigularis, *Gould* 109
563. pectoralis, *Gould* 110
564. monilger, *Hodgs.* 111
565. galbanus, *Godw.-Aust.* 112
566. gularis, *McLell.* 112
567. delesserti, *Jerd.* 112
171. **Stactocichla**, *Sharpe* 113
568. merulina, *Blyth.* 113
172. **Grammatoptila**, *Reich.* 113
569. striata, *Vigors.* 114
173. **Dryonastes**, *Sharpe* 114
570. ruficollis, *Jard. and Selby* 114
571. chinensis, *Scop.* 115
572. nuchalis, *Godw-Aust.* 116
573. strepitans, *Tickell* 116
574. sannio, *Swinh.* 117

PAGE

575. cærulatus, *Hodgs.* 117
576. subcærulatus, *Hume* 118
174. **Actinodura**, *Gould.* 118
577. Egertoni, *Gould.* 118
578. Ramsayi, *Walden* 119
579. Waldeni, *Godw.-Aust.* 119
580. nipalensis, *Hodgson.* 120
581. Daflaensis, *Godw.-Aust.* 120
582. Ogleii, *Godw.-Aust.* 121
175. **Crateropus**, *Swains.* 122
583. canorus, *Linn.* 122
584. griseus, *Gmel.* 122
585. Somervillei, *Sykes* 123
176. **Conostoma**, *Hodgs.* 123
586. æmodium, *Hodgs.* 123
177. **Suthora**, *Hodgs.* 124
587. Humii, *Sharpe* 124
588. poliotis, *Blyth.* 125
589. nipalensis, *Hodgs.* 125
590. ruficeps, *Blyth.* 125
591. gularis, *Gray* 126
592. unicolor, *Hodgs.* 126
178. **Chleuasicus**, *Blyth.* 127
593. ruficeps, *Blyth.* 127
594. fulvifrons, *Hodgs.* 127
179. **Paradoxornis**, *Gould.* 128
595. flavirostris, *Gould* 128
596. guttaticollis, *A. David.* 128

Group—TIMELIÆ.

180. **Timelia**, *Horsf.* 129
597. pileata, *Horsf.* 129
598. longirostris, *Moore.* 130
181. **Pyctorhis**, *Hodgs.* 130
599. sinensis, *Gm.* 130
600. altirostris, *Jerd.* 131
182 **Dumetia**, *Blyth.* 132
601. albigularis, *Blyth.* 132
602. hyperythra, *Frankl.* 133
183. **Pellorneum**, *Swains.* 134
603. nipalense, *Hodgs.* 134
604. intermedium, *Sharpe* 135
605. ruficeps, *Swains* 136
606. subochraceum, *Swinh.* 137
607. palustre, *Gould.* 138
184. **Stachyris**, *Hodgs.* 138
608. nigriceps, *Hodgs.* 138
609. guttata, *Blyth.* 139
185. **Turdinus**, *Blyth.* 140
610. Abbotti, *Blyth.* 140
611. magnirostris, *Moore* 141

PAGE

186. **Erythrocichla**, *Sharpe* 142
612. bicolor, *Less*..... 142
187. **Drymocataphus**, *Blyth*..... 142
613. nigricapitatus, *Eyton*. 143
614. ignotus, *Hume*..... 143
615. Assamensis. *Sharpe* 144
616. Tickelli, *Blyth*. 144
617. rubiginosus, *Walden* 145
188. **Gypsophila**, *Oates* 145
618. crispifrons, *Blyth*. 146
189. **Trichastoma**, *Blyth*. 146
619. rostratum, *Blyth*. 146
190. **Malacopterum**, *Eyton*. 147
620. magnum, *Eyton*. 147
191. **Mixornis**, *Hodgs*. 148
621. gularis, *Raffles*. 148
622. rubricapilla, *Tickell* 148
623. erythroptera, *Blyth*. 149
192. **Corythocichla**, *Sharpe*..... 150
624. brevicaudata, *Blyth*. 150
625. striata, *Walden* 151
193. **Turdinulus**, *Hume* 151
626. murinus, *Blyth*. 152
194. **Rimator**, *Blyth*. 152
627. malacoptilus, *Blyth*. 153

Group—LIOTRICHES.

195. **Stachyridopsis**, *Sharpe* 153
628. ruficeps, *Blyth*. 153
629. rufifrons, *Hume* 154
630. pyrrhops, *Hodgs*. 154
631. chrysæa, *Hodgs*. 155
632. assimilis, *Wald*. 155
196. **Oligura**, *Hodgs*. 156
633. castaneocoronata, *Burton*..... 156
634. cyaniventris, *Hodgs*. 157
197. **Minla**, *Hodgs*. 157
635. igneotincta, *Hodgs*. 158
636. castaneiceps, *Hodgs*. 158
637. brunneicauda, *Sharpe*..... 159
638. cinerea, *Blyth*. 160
639. rufigularis, *Mandelli* 160
640. Mandelli, *Godw.-Aust*. 161
641. dubia, *Hume* 161
198. **Ixulus**, *Hodgs*. 162
642. flavicollis, *Hodgs*. 162
643. occipitalis, *Blyth*. 163
644. humilis, *Hume* 164
199. **Staphidia**, *Swinhoe* 164
645. castaneiceps, *Moore*..... 164

PAGE

646 rufigenis, *Hume* 165
647. striata, *Blyth*. 165
200. **Alcippe**, *Blyth*. 166
648. vinipectus, *Hodgs*. 166
649. nipalensis, *Hodgs*. 167
650. phæocephala, *Jerd*..... 167
651. Phayrii, *Blyth*. 168
652. atriceps, *Jerd*. 169
653. Bourdilloni, *Hume* 169
654. chrysæa, *Hodgs*. 170
201. **Yuhina**, *Hodgs*. 171
655. gularis, *Hodgs*. 171
656. occipitalis, *Hodgs*. 172
657. nigrimentum, *Hodgs*. 172
202. **Myzornis**, *Hodgs*. 173
658. pyrrhura, *Hodgs*. 173
203. **Herpornis**, *Hodgs*. 174
659. xantholeuca, *Hodgs*. 174
204. **Siva**, *Hodgs*. 175
660. strigula, *Hodgs*. 175
661. castaneicauda, *Hume* 175
662. cyanuroptera, *Hodgs*. 176
663. sordida, *Hume* 177
205. **Mesia**, *Hodgs*. 178
664. argentauris, *Hodgs*. 178
206. **Liothrix**, *Swainson* 179
665. lutea, *Scop*. 179
207. **Cutia**, *Hodgs*. 180
666. nipalensis, *Hodgs*. 180

Family—PARIDÆ

Sub-Family—PARINÆ.

208. **Parus**, *Linn*..... 181
667. sultaneus, *Hodgs*. 182
668. cinereus, *Bonn. et. Vieill*. ... 182
669. monticolus, *Vigors*. 183
670. xanthogenys. *Vigors*. 184
671. haplonotus, *Blyth* 185
672. spilonotus, *Blyth*. 185
673 melanolophus, *Vigors*. 186
674. rufonuchalis, *Blyth*. 186
675. rubidiventer, *Blyth*. 187
676. dichrous, *Hodgs*. 188
677. modestus, *Burton* 188
678. nuchalis, *Jerd*. 188
679. æmodius, *Hodgs*. 189

Group—ACCENTORES.

209. **Accentor**, *Hodgs*. 190
680. immaculatus, *Hodgs*. 190
681. atrigularis, *Brandt*. 190

PAGE

682. rubeculoides, *Moore* 191
683. strophiatus, *Hodgs.* 191
684. Jerdoni, *Brooks* 192
685. altaicus, *Brandt.* 193
686. nipalensis, *Hodgs.* 193
210. **Acredula**, *Koch.* 194
687. erythrocephala, *Vigors.* 194
688. Jouschistos, *Hodgs.* 195
689. niveogularis, *Moore* 196
211. **Ægithalus**, *Boie.* 196
690. flammiceps, *Burton* 196
212. **Regulus**, *Koch.* 197
691. cristatus, *Koch.* 197

Family—LANIIDÆ.

Sub-Family—MALACONOTINÆ.

213. **Pterorythrius**, *Strickl.* 198
692. erythropterus, *Vigors.* 198
693. æralatus, *Tickell* 199
694. rufiventer, *Blyth.* 200
695. intermedius, *Hume* 200
696. melanotis, *Hodgs.* 200
697. xanthochloris, *Hodgs.* 201

Sub-Family—LANIINÆ.

214. **Lanius**, *Linn.* 202
698. fallax, *Finsch.* 202
699. assimilis, *Brehm.* 203
700. lahtora, *Sykes* 203
701. tephronotus, *Vigors* 204
702. erythronotus, *Vigors.* 205
703. nigriceps, *Frankl.* 206
704. cristatus, *Linn.* 207
705. lucionensis, *Linn.* 207
706. isabellinus, *Ehrenbr.* 208
707. phœnicuroides, *Severtz.* 209
708. vittatus, *Valenc.* 210
709. collyrioides, *Less.* 210

Group—CERTHIOMORPHÆ.

Family—CERTHIIDÆ.

Sub-Family—CERTHIINÆ.

215. **Certhia**, *Linn.* 211
710 himalayana, *Vig.* 212
711. discolor, *Blyth.* 212
712. nipalensis, *Hodgs.* 212
216. **Salpornis**, *Gray* 213
713. spilonotus, *Frankl.* 213
217. **Tichodroma**, *Illiger* 213
714. muraria, *Linn.* 213

PAGE

Sub-Family—SITTINÆ.

218. **Sitta**, *Linn.* 215
715. nagaensis, *Godw.-Aust.* 215
716. magna, *Wardlaw-Ramsay.* ... 215
717. himalayensis, *Jard. and Selb.* . 215
718. neglecta, *Wald.* 216
719. castaneoventris, *Frankl.* 217
720. cinnamomeiventris, *Blyth.* ... 217
721. leucopsis, *Gould.* 217
722. formosa, *Blyth.* 218
723. frontalis, *Swains.* 218

Group—CINNYRIMORPHÆ.

Family—NECTARINIIDÆ.

219. **Chalcostetha**, *Cab.* 220
724. insignis, *Jard.* 220
220. **Æthopyga**, *Cab.* 220
725. saturata, *Hodgs.* 221
726. Vigorsii, *Sykes.* 221
727. seheriæ, *Tickell* 222
728. ignicauda, *Hodgs.* 224
729. nipalensis, *Hodgs.* 225
730. sanguinipectus, *Wald.* 226
731. gouldi, *Vigors.* 226
732. dabryi, *J. Verr.* 227
221. **Cinnyris**, *Cuv.* 228
733. asiatica, *Lath.* 228
734. brevirostris, *Blanf.* 228
735. lotenia, *Linn.* 229
736. minima, *Sykes.* 230
737. zeylonica, *Linn.* 230
738. hasselti, *Tem* 232
739. flammaxillaris, *Blyth.* 233
222. **Arachnothera**, *Tem.* 234
740. longirostris, *Lath.* 234
741. magna, *Hodgs.* 235
742. modesta, *Eyton.* 236
743. chrysogenys, *Tem.* 237
223. **Anthothreptes**, *Swains.* 237
744 hypogrammica, *S. Mull.* 238
745. simplex, *S Mull.* 238
746. phœnicotis, *Tem.* 239
747 malaccensis, *Scop.* 240

Family—MELIPHAGIDÆ.

Sub-Family—ZOSTEROPINÆ.

224. **Zosterops**, *Vig.* 242
748. palpebrosa, *Tem.* 242
749. aureiventer, *Hume.* 243
750. siamensis, *Blyth.* 243

PAGE

Section—FRINGILLIFORMES.

Family—DICÆIDÆ.

225. **Dicæum**, *Cuv.* 244
751. cruentatum, *Linn.* 244
752. trigonostigma, *Scop.* 245
753. ignipectus, *Hodgs.* 246
754. chrysorrhæum. *Tem.* 247
755. concolor, *Jerd.* 247
756. inornatum, *Hodgs.* 248
757. erythrorhynchum, *Lath.* 249
226. **Prionochilus**, *Strickl.* 249
758. ignicapillus, *Eyton.* 249
759. maculatus, *Tem.* 250
760. melanoxanthus, *Hodgs* 251
761. squalidus, *Burton.* 251
762. modestus, *Hume.* 252

Family—HIRUNDINIDÆ.

Sub-Family—HIRUNDININÆ.

227. **Chelidon**, *Boie.* 253
763. urbica, *Linn.* 253
764. cashmiriensis, *Gould.* 254
765. lagopus. *Pall.* 254
766. nipalensis, *Hodgs.* 255
228. **Cotile**, *Boie.* 255
767. riparia, *Linn.* 255
768. sinensis, *J. E. Gray* 256
769. concolor, *Sykes* 257
770. rupestris, *Scop.* 258
771. obsoleta, *Cab.* 258
229. **Hirundo**, *Linn.* 259
772. rustica, *Linn.* 259
773. gutturalis, *Scop.* 261
774. erythrogastra, *Bodd.* 262
775. Tytleri, *Jerd.* 262
776. Javanica, *Sparrm.* 263
777. Smithi, *Leach* 264
778. nipalensis, *Hodgs* 265
779. Japonica, *Temm. and Schleg* ... 265
780. erythropygia, *Sykes.* 266
230. **Petrochelidon**, *Cab.* 268
781. fluvicola, *Blyth.* 268

Family—MOTACILLIDÆ.

231. **Motacilla**, *Linn.* 269
782. alba, *Linn.* 269
783. ocularis, *Swinh.* 272
784. personata, *Gould.* 273
785. leucopsis, *Gould.* 275

PAGE
786. Hodgsoni, *Blyth.* 276
787. madraspatensis, *Gm.* 277
788. melanope, *Pall.* 278
789. citreola, *Pall.* 279
790. citreoloides, *Hodgs.* 280
791. beema, *Sykes.* 281
792. borealis, *Sundev.* 281
793. Feldeggi, *Michah.* 282
232. **Limonidromus**, *Gould.* 283
794. indicus, *Gould.* 283
233. **Anthus**, *Linn.* 284
795. trivialis, *Linn.* 284
796. maculatus, *Hodgs.* 285
797. nilghiriensis, *Sharpe.* 286
798. sordidus, *Rupp.* 287
799. Jerdoni, *Finsch.* 288
800. Richardi, *Vieill.* 289
801. striolatus, *Blyth.* 290
802. campestris, *Linn.* 290
803. rufulus, *Vieill.* 291
804. cervinus, *Pall.* 292
805. rosaceus, *Hodgs.* 293
806. spipoletta, *Linn.* 294
234. **Oreocorys**, *Sharpe.* 295
807. sylvanus, *Hodgs.* 295

Family.—FRINGILLIDÆ.

Sub-Family.—COCCOTHRAUSTINÆ.

235. **Coccothraustes**, *Linn.* 296
808. humii, *Sharpe.* 296
236. **Mycerobas**, *Hodgs.* 296
809. melanoxanthus, *Hodgs.* 296
237. **Pycnoramphus**, *Hume.* 297
810. icteroides, *Vigors.* 297
811. affinis, *Blyth.* 298
812. carneipes, *Hodgs.* 298

Sub-Family.—FRINGILLINÆ.

238. **Fringilla**, *Linn.* 299
813. montifringilla, *Linn.* 299
239. **Procarduelis**, *Hodgs.* 299
814. nipalensis, *Hodgs.* 299
815. rubescens, *Blanf.* 300
240. **Carduelis**, *Briss.* 300
816. caniceps, *Vigors.* 300
241. **Chrysomitris**, *Boie.* 301
817. spinoides, *Vigors.* 301
818. thibetana, *Hume.* 301
242. **Callacanthis**, *Reich.* 302
819. burtoni, *Gould.* 302

PAGE

243. **Acanthis,** *Bechst.* 302
820. brevirostris, *Bp.* 302
821. fringillirostris, *Bp. and Schleg.* 303
244. **Montifringilla,** *Linn.* 303
822. adamsi, *Moore.* 303
823. ruficollis, *Blanf.* 304
824. blanfordi, *Hume.* 304
825. sordida, *Stol.* 305
826. nemoricola, *Hodgs.* 305
827. Brandti, *Bp.* 306
245. **Rhodopechys,** *Cab.* 306
828. sanguinea, *Gould.* 306
246. **Erythrospiza,** *Bp.* 307
829. githaginea, *Licht.* 307
247. **Petronia,** *Kaup.* 308
830. flavicollis, *Frankl.* 308
248. **Passer,** *Briss.* 309
831. montanus, *Koch.* 309
832. domesticus, *Linn.* 310
833. pyrrhonotus, *Blyth.* 310
834. hispaniolensis, *Temm.* 311
835. cinnamomeus, *Gould.* 311
836. assimilis, *Wald.* 312
837. flaveolus, *Blyth.* 313
249. **Serinus,** *Koch.* 314
838. pectoralis, *Murray* 314
839. pusillus, *Pall.* 315
250. **Pyrrhoplectus,** *Hodgs.* 315
840. epauletta, *Hodgs.* 315
251. **Carpodacus,** *Kaup* 316
841. erythrinus, *Pall.* 316
842. sipahi, *Hodgs.* 317
843. rubicilla, *Gould.* 317
844. grandis, *Blyth.* 318
845. rhodochrous, *Vigors.* 318
846. rhodopeplus, *Vigors.* 318
847. Edwardsii, *Verr.* 319
848. thura, *Bp. & Schleg.* 320
849. dubius, *Pryer.* 320
850. ambiguus, *Hume* 321
851. pulcherrimus, *Hodgs.* 321
252. **Pyrrhospiza,** *Hodgs.* 322
852. punicea, *Hodgs.* 322
253. **Loxia,** *Linn.* 323
853. curvirostra, *Linn.* 323
254. **Pyrrhula,** *Briss.* 324
854. erythrocephala, *Vigors.* 324
855. nipalensis, *Hodgs.* 324
856. erithacus, *Blyth.* 325
857. aurantiaca, *Gould.* 325

PAGE

255. **Propyrrhula,** *Hodgs.* 326
858. subhimalayensis, *Hodgs.* 326

Sub-Family—EMBERIZINÆ.

256. **Emberiza,** *Linn.* 326
859. schœniclus, *Linn.* 326
860. pusilla, *Pall.* 327
861. fucata, *Pall.* 328
862. melanocephala, *Scop.* 329
863. luteola, *Sparrm.* 329
864. aureola, *Pall.* 330
865. rutila, *Pall.* 331
866. spodocephala, *Pall.* 332
867. Buchanani, *Blyth.* 333
868. Stracheyi, *Moore.* 333
869. Stewarti, *Blyth.* 334
870. leucocephala, *Gm.* 334
257. **Fringillaria,** *Swains.* 335
871. striolata, *Licht.* 335
258. **Melophus,** *Swains.* 337
872. melanicterus, *Gm.* 337

Sub-Family—PLOCEINÆ.

259. **Ploceus,** *Linn.* 338
873. phillipinus, *Linn.* 338
874. baya, *Blyth.* 339
875. manyar, *Horsf.* 339
876. bengalensis, *Linn.* 340
877. Javanensis, *Less.* 340

Sub-Family.—ESTRELDINÆ.

260. **Amadina,** *Swains.* 341
878. malacca, *Linn.* 341
879. atricapilla, *Vieill.* 342
880. punctulata, *Linn.* 342
881. pectoralis, *Jerdon* 343
882. leucogastra, *Blyth.* 343
883. acuticauda, *Hodgs.* 344
884. striata, *Linn.* 344
885. malabarica, *Linn.* 345
261. **Erythrura,** *Swains.* 346
886. prasina, *Sparrm.* 346
262. **Estrilda,** *Swains.* 346
887. punicea, *Horsf.* 346
888. amandava, *Linn.* 347
889. formosa, *Lath.* 348

Family—ALAUDIDÆ 348

263. **Mirafra,** *Horsf.* 348
890. Assamica, *McClell.* 348
891. affinis, *Jerd.* 349

CONTENTS.

PAGE

892. erythroptera, *Jerd.* 350
893. cantillans, *Jerd.* 350
264. **Ammomanes,** *Cab.* 351
894. lusitania, *Gmel.* 351
895. phœnicura, *Frankl.* 352
265. **Pyrrhulauda,** *Smith.* 352
896. grisea, *Scop.* 352
897. melanauchen, *Cab.* 353
266. **Calendrella,** *Kaup.* 355
898. brachydactyla, *Leisl.* 355
267. **Melanocorypha,** *Boie.* 355
899. bimaculata, *Menet.* 355
268. **Alaudula,** *Blyth.* 356
900. raytal, *Blyth.* 356
901. Adamsi, *Hume* 357
269. **Otocorys,** *Bonap.* 358
902. penicillata, *Gould.* 358
270. **Spizalauda,** *Blyth.* 359
903. deva, *Sykes.* 359
271. **Alauda,** *Linn.* 359
904. gulgula, *Frankl.* 359
272. **Galerida,** *Boie.* 360
905. cristata, *Linn.* 360
273. **Certhilauda,** *Swains.* 361
906. desertorum, *Stanley.* 361

Section.—OSCINES CULTIROSTRES.

Family—STURNIDÆ.

Sub-Family—STURNINÆ.

274. **Sturnus,** *Linn.* 363
907. vulgaris, *Linn.* 363
908. minor, *Hume.* 363
909. unicolor, *Marmora.* 364
275. **Sturnopastor,** *Hodgs.* 364
910. superciliaris, *Blyth.* 364
911. contra, *Linn.* 364
276. **Acridotheres,** *Vieill.* 365
912. tristis, *Linn.* 365
913. ginginianus, *Lath.* 365
914. fuscus, *Tem.* 366
915. siamensis, *Swinh.* 367
277. **Sturnia,** *Less.* 367
916. pagodarum, *Gmel.* 367
917. sturnina, *Pall.* 368
918. sinensis, *Gmel.* 368
919. burmannica, *Jerd.* 369
920. leucocephala, *Gigl. and Salv.* 369
921. malabarica, *Gmel.* 370
922. Blythi, *Jerd.* 371
923. nemoricola, *Jerd.* 371

PAGE

278. **Calornis,** *G. R. Gray.* 371
924. chalybea, *Horsf.* 371
279. **Pastor,** *Tem.* 372
925. roseus, *Linn.* 372
280. **Gracula,** *Linn.* 373
926. intermedia, *A. Hay.* 373
927. religiosa, *Linn.* 373
281. **Saraglossa,** *Hodgs* 374
928. spiloptera, *Vigors.* 374
282. **Ampeliceps,** *Blyth.* 374
929. coronatus, *Blyth.* 374
283. **Gracupica,** *Less.* 375
930. nigricollis, *Payk.* 375

Family—PITTIDÆ. 375
284. **Anthocincla,** *Blyth.* 376
931. Phayrii, *Blyth.* 376
285. **Pitta,** *Viell.* 376
932. nipalensis, *Hodgs.* 376
933. Oatesi, *Hume* 377
934. cærulea, *Raffles* 377
935. cyanea, *Blyth.* 378
936. cyanoptera, *Temm.* 379
937. megarhyncha, *Schl.* 379
938. brachyura, *Linn.* 380
939. coccinea, *Eyton.* 380
940. cucullata, *Hartl.* 381
286. **Eucichla,** *Cab. et Hein.* 381
941. Gurneyi, *Hume* 381

Family—EURYLÆMIDÆ, *Swains* ... 382

Sub-Family—CALYPTOMENINÆ. 382
287. **Calyptomena,** *Raffles* 382
942. viridis, *Raffles* 382
288. **Psarisomus,** *Swains.* 382
943. dalhousiæ, *Jameson* 383
289. **Serilophus,** *Swains.* 383
944. lunatus, *Gould.* 383
945. rubropygius, *Hodgs.* 384
290. **Eurylæmus,** *Horsf.* 385
946. Javanicus, *Horsf.* 385
947. ochromelas, *Raffles.* 385
291. **Corydon,** *Lesson* 386
948. sumatranus, *Raffles* 386
292. **Cymborhynchus,** *Vigors.* 386
949. macrorhynchus, *Gm.* 386

Order—MACROCHIRES 387

Family—CYPSELIDÆ 387
Sub-Family—CYPSELINÆ. 388
293. **Cypselus,** *Illiger.* 388
950. melba, *Linn.* 388

PAGE

951. apus, *Lin.* 388
952. affinis, *Gray* 388
953. acuticaudus, *Blyth.* 389
954. pacificus, *Lath.* 389
955. subfurcatus, *Blyth.* 389
956. leuconyx, *Blyth.* 390
957. batassiensis, *Gray* 390
958. infumatus, *Sclater.* 390

Sub-Family—CHÆTURINÆ. 391

294. **Hirundinapus**, *Hodgs.* 391
959. giganteus. *Van Hass.* 391
960. indicus, *Hume* 392
961. leucopygialis, *Blyth.* 392
962. sylvatica, *Tickell* 392
963. caudacuta, *Lath.* 393
295. **Collocalia**, *Gray* 393
964. unicolor, *Jerd.* 393
965. innominata, *Hume* 394
966. spodiopygia, *Peale* 394
967. Linchi, *Horsf.* 394
296. **Dendrochelidon**, *Boie.* 395
968. coronatus, *Tick.* 395
969. longipennis, *Rafin.* 396
970. comatus, *Temm.* 397

Family—CAPRIMULGIDÆ, *Vigors.* 397
Sub-Fam.—STEATORNINÆ, *Gray.* 397
297. **Batrachostomus**, *Gould.* 397
971. moniliger, *Blyth.* 397
972. affinis, *Blyth.* 398

Sub-Family—CAPRIMULGINÆ. ... 399
298. **Caprimulgus**, *Lin.* 399
973. asiaticus, *Lath.* 399
974. mahrattensis, *Sykes.* 399
975. monticolus, *Frankl.* 400
976. albonotatus, *Tick.* 400
977. atripennis, *Jerd.* 401
978. Unwinii, *Hume* 401
979. indicus, *Latham.* 402
980. kelaarti, *Blyth.* 403
981. jotaka, *Tem.* 400

Sub-Family—PODAGERINÆ. 404
299. **Lyncornis**, *Gould.* 404
982. cerviniceps, *Gould.* 404

Sub-Order—COCCYGES HETERODACTYLÆ .....

Family—TROGONIDÆ 405
300. **Harpactes**, *Swainson* 405

PAGE

983. fasciatus, *Gmel.* 405
984. erythrocephalus, *Gould.* 405
985. oreskios, *Temm.* 406
986. Duvaucelli, *Temm.* 407

Sub-Order—ZYCODACTYLI ... 407
Family—CUCULIDÆ, *Leach.* ... 408
Sub-Family—CUCULINÆ. ... 408
301. **Cuculus**, *Linn.* 408
987. canerus, *Linn.* 408
988. striatus, *Drap.* 408
989. poliocephalus, *Latham* 409
990. Sonnerati, *Lath.* 410
991. micropterus, *Gould.* 410
302. **Hierococcyx**, *Müller.* 411
992. sparverioides, *Vigors.* 411
993. varius, *Vahl.* 412
994. nanus, *Hume* 412
995. nisicolor, *Hodgs.* 413
303. **Cacomantis**, *Müller.* 413
996. threnodes, *Cab. et Hein.* 413
997. nigra, *Jerd.* 414
304. **Surniculus**, *Lesson.* 414
998. lugubris, *Horsf.* 414
305. **Chrysococcyx**, *Boie.* 415
999. maculatus, *Gm.* 415
1000. xanthorhynchus, *Horsf.* 416
1001. Limborgi, *Tweed.* 416
306. **Coccystes**, *Gloger* 416
1002. Jacobinus, *Bodd.* 417
1003. coromandus, *Linn.* 417
307. **Endynamys**, *Vig. and Horsf.* ... 418
1004. honorata, *Linn.* 418
1005. malayana, *Cab. et Hein.* 418

Sub-Family—PHŒNICOPHÆINÆ 418
308. **Rhinortha**, *Vigors.* 419
1006. chlorophæa, *Raffles.* 419
309. **Rhopodytes**, *Cab. et Hein.* 419
1007. tristis, *Lesson.* 419
1008. diardi, *Lesson.* 420
1009. sumatranus, *Raffles.* 420
1010. viridirostris, *Jerd.* 421
310. **Rhamphococcyx**, *Cab. et Hein.* 421
1011 erythrognathus, *Hartl.* 421
311. **Zanclostomus**, *Swains.* 422
1012. javanicus, *Horsf.* 422

Sub-Family—CENTROPODINÆ, *Bp.* 422
312. **Centrococcyx**, *Illiger.* 422
1013. maximus, *Hume.* 422

PAGE

1014. rufipennis, *Illiger.* 423
1015. intermedius, *Hume.* 423
1016. bengalensis, *Gmel.* 424
313. **Taccocua**, *Lesson.* 425
1017. leschenaulti, *Less.* 425
1018. sirkeer, *Gray.* 425
1019. infuscata, *Blyth.* 425
Family—CAPITONIDÆ. 426
314. **Megalæma**, *G. R. Gray.* 426
1020. marshallorum, *Swinh.* 426
1021. virens, *Bodd.* 427
1022. mystacophanus, *Tem.* 427
1023. hodgsoni, *Bonap.* 427
1024. caniceps, *Frankl.* 428
1025. inornata, *Wald.* 428
1026. viridis, *Gmel.* 429
315. **Cyanops**, *Bonap.* 429
1027. asiatica, *Lath.* 429
1028. Davisoni, *Hume.* 430
1029. incognita, *Hume.* 430
1030. Ramsayi, *Wald.* 430
316. **Xantholæma**, *Bonap.* 431
1031. hæmacephala, *P. L. S. Mull.* 431
1032. malabarica, *Blyth.* 432
1033. cyanotis, *Blyth.* 432
317. **Caloramphus**, *Less.* 432
1034. Hayi, *Gray.* 432
ORDER—PICI. 433
Family—PICIDÆ. 433
Sub-Family—YUNCINÆ 433
318. **Yunx**, *Linn.* 433
1035. torquilla, *Linn.* 433
Sub-Family—INDICATORINÆ. 433
319. **Indicator**, *Blyth.* 433
1036. xanthonotus, *Blyth.* 434
Sub-Family—PICUMNINÆ ... 435
320. **Vivia**, *Hodgs.* 435
1037. innominata, *Burton.* 435
321. **Sasia**, *Hodgs.* 436
1038. ochracea, *Hodgs.* 436
Sub-Family—GECININÆ. ... 436
322. **Gauropicoides**, *Malh.* 436
1039. rafflesi, *Vigors.* 436
323. **Gecinulus**, *Blyth.* 437
1040. grantia, *McClell.* 437
1041. viridis, *Blyth.* 437

PAGE

324. **Tiga**, *Kaup.* 438
1042. javanensis, *Ljungh.* 438
325. **Brachypternus**, *Strickl.* 439
1043. aurantias, *Linn.* 439
1044. chrysonotus, *Less.* 440
326. **Micropternus**, *Blyth.* 440
1045. phæoceps, *Blyth.* 440
1046. brachyurus, *Viell.* 441
1047. gularis, *Jerd.* 441
327. **Venilia**, *Bonap.* 441
1048. pyrrhotis, *Hodgs.* 441
1049. porphyromelas, *Boie.* 442
328. **Callolophus**, *Salvad* 442
1050. mentalis, *Tem.* 443
1051. malaccensis, *Lath.* 443
1052. puniceus, *Horsf.* 444
329. **Chrysophlegma**, *Gould.* 444
1053. flavinucha, *Gould.* 444
1054. chlorolophus, *Vieill.* 445
1055 chlorigaster, *Jard. and Selb.* 446
330. **Gecinus**, *Boie.* 446
1056. squamatus, *Vigors.* 446
1057. striolatus, *Blyth.* 447
1058. occipitalis, *Vigors.* 447
1059. viridanus, *Blyth.* 448
1060. erythropygius, *Elliot.* 449
Sub-Family—CAMPEPHILINÆ. 449
331. **Thriponax**, *Cab. et Hein.* 449
1061. Hodgsoni, *Jerd.* 449
1062. Javensis, *Horsf.* 450
1063. Feddeni, *Blanf.* 450
332. **Mulleripicus**, *Bonap.* 450
1064. pulverulentus, *Tem.* 450
333. **Chrysocolaptes**, *Blyth.* 451
1065. strictus, *Horsf.* 451
1066. festivus, *Bodd.* 452
334. **Hemicercus**, *Swains.* 453
1067. cordatus, *Jerd.* 453
1068. sordidus, *Eyton.* 453
335. **Picus**, *Linn.* 454
1069. himalayanus, *Jard. and Selby* 454
1070. majoroides, *Hodgs.* 455
1071. cathpharius, *Hodgs.* 455
1072. sciodianus, *Gould.* 455
1073. macii, *Vieill.* 456
1074. analis, *Tem.* 456
1075. atratus, *Blyth.* 457
1076. brunneifrons, *Vigors.* 457
1077. mahrattensis, *Lath.* 457

PAGE
1078. canicapillus, *Blyth.* 475
1079. pumilus, *Hargitt.* 458
336. **Hypopicus**, *Bonap.* 459
1080. hyperythrus, *Vigors.* 459
337. **Iyngipicus**, *Bonap.* 459
1081. rubricatus, *Blyth.* 459
1082. pygmæus, *Vigors.* 460
1083. Hardwickii, *Jerd.* 460
338. **Meiglyptes**, *Swains.* 460
1084. grammithorax, *Malh.* 460
1085. jugularis, *Blyth.* 461
1086. tukki, *Lesson.* 461
Order—PSITTACI. 462
Family—PSITTACIDÆ 462
Sub-Family—PSITTACINÆ ... 462
339. **Psittinus**, *Blyth.* 462
1087. incertus, *Shaw.* 462
Sub-Family—LORIINÆ. 463
340. **Loriculus**, *Blyth.* 463
1088. vernalis, *Sparrm.* 463
Sub-Family—PALÆORNINÆ. 464
341. **Palæornis**, *Vigors.* 464
1089. fasciatus, *P. L. S. Müller.* ... 464
1090. columboides, *Vigors.* 465
1091. indo-burmannicus, *Hume.* ... 465
1092. schisticeps, *Hodgs.* 466
1093. torquatus, *Bodd.* 467
1094. cyanocephalus, *Linn.* 467
1095. rosa, *Bodd.* 468
Sub-Order—COCCYGES ANISODACTYLÆ 469
Family—UPUPIDÆ. 469
Sub-Family—UPUPINÆ, *Bp.* 469
342. **Upupa**, *Linn.* 469
1096. epops, *Linn.* 469
1097. longirostris, *Jerd.* 469
1098. ceylonensis, *Reich.* 470
Family—MEROPIDÆ. 470
343. **Merops**, *Linn.* 470
1099. viridis, *Linn.* 471
1100. phillipinus, *Linn.* 471
1101. Leschenaulti, *Vieill.* 472
1102. persicus, *Pall.* 473
1103. apiaster, *Linn.* 473
344. **Nyctiornis**, *Swains.* 474
1104. Athertoni, *Jard. and Selby.* .. 474
1105. amicta, *Tem.* 474
PAGE
Family—CORACIADÆ. 475
345. **Coracias**, *Linn.* 475
1106. garrula, *Linn.* 475
1107. indica, *Linn.* 476
1108. affinis, *McClell.* 476
346. **Eurystomus**, *Vieill.* 477
1109. orientalis, *Linn.* 477
Family—ALCEDINIDÆ. 478
Sub-Family—ALCEDININÆ. . 478
347. **Alcedo**, *Linn.* 478
1110. bengalensis, *Gm.* 478
1111. grandis, *Blyth.* 479
1112. ispida, *Linn.* 479
1113. asiatica, *Swains.* 479
1114. euryzona, *Tem.* 480
448. **Ceryle**, *Boie* 481
1115. guttata, *Vigors.* 481
1116. rudis, *Linn.* 481
Sub-Family—HALCYONINÆ.. 482
349. **Halcyon**, *Swains.* 482
1117. coromanda, *Lath.* 482
1118. smyrnensis, *Linn.* 483
1119. pileata, *Bodd.* 483
1120. chloris, *Bodd.* 484
1121. concreta, *Tem.* 485
350. **Carcineutes**, *Cab. et Hein.* 486
1122. pulchellus, *Horsf.* 486
351. **Ceyx**, *Lacep.* 486
1123. tridactyla, *Pallas* 486
352. **Pelargopsis**, *Gloger* 487
1124. gurial, *Pearson.* 487
1125. amauroptera, *Pearson.* 487
1126. burmannica, *Sharpe.* 488
Family—BUCEROTIDÆ. 488
353. **Dichoceros**, *Gloger.* 489
1127. bicornis, *Linn.* 489
354. **Anthracoceros**, *Reich.* 490
1128. coronatus, *Bodd.* 490
1129. albirostris, *Shaw.* 490
1130. affinis, *Hutton.* 491
355. **Rhinoplax**, *Gloger.* 491
1131. vigil, *F. R. Forst.* 491
1132. griseus, *Lath.* 492
356 **Ocyceros**, *Hume.* 492
1133. birostris, *Scop.* 492
357. **Rhytidoceros**, *Reich.* 493
1134. subruficollis, *Blyth.* 493

PAGE

1135. undulatus, *Shaw.* 494
358. **Aceros.** 494
1136. nipalensis, *Hodgs.* 494
359. **Anorrhinus,** *Rich.* 495
1137. comatus *Raffles.* 495
1138. galeritus, *Tem.* 495
1139. Tickelli, *Blyth.* 496
Order—GEMITORES. 497
Family—TRERONIDÆ. 497
360. **Treron,** *Vieill* 497
1140. nipalensis, *Hodgs.* 497
361. **Crocopus,** *Bonap.* 497
1141. phœnicopterus, *Lath.* 498
1142. chlorigaster, *Blyth* 498
1143. viridifrons, *Blyth* 499
362. **Osmotreron,** *Bonap* 499
1144. bicincta, *Jerd.* 499
1145. vernans, *Linn.* 500
1146. malabarica, *Jerd.* 500
1147. Phayrii, *Blyth* 501
1148. fulvicollis, *Wagler.* 501
1149. pompadoura, *Gmel.* 502
363. **Sphenocercus,** *Gray* 502
1150. sphenurus, *Vigors.* 502
1151. apicaudus, *Hodgs.* 503
Sub-Family—CARPOPHAGINÆ ... 503
364. **Carpophaga,** *Selby* 503
1152. ænea, *Linn.* 503
1153. insignis, *Hodgs.* 504
1154. griseicapilla, *Wald.* 504
1155. bicolor 505
Family—COLUMBIDÆ. 505
Sub-Family—PALUMBINÆ. ... 505
365. **Palumbus,** *Linn.* 505
1156. pulchricollis, *Hodgs.* 505
1157. casiotis, *Bonap.* 506
1158. Elphinstonei, *Sykes* 507
366. **Palumbæna,** *Bonap.* 507
1159. Eversmanni, *Bonap.* 507
367. **Columba,** *Linn.* 507
1160. intermedia, *Strickl.* 507
1161. livia, *Bonap.* 508
1162. rupestris, *Pall.* 509
1163. leuconota, *Vigors.* 509
368. **Alsocomus,** *Tick.* 509
1164. puniceus, *Tickell.* 509
1165. Hodgsonii, *Vigors.* 510

PAGE

Sub-Family—MACROPYGIINÆ ... 510
369. **Macropygia,** *Swains.* 511
1166 leptogrammica, *Temm.* 511
1167. assimilis, *Hume* 512
Sub-Family—TURTURINÆ..... 512
370. **Turtur,** *Selby.* 512
1168. pulchratus, *Hodgs.* 512
1169. meena, *Sykes.* 513
1170. senegalensis, *Linn.* 513
1171. suratensis, *Gm.* 514
1172. tigrinus, *Tem.* 515
1173. risorius, *Linn.* 515
1174. humilis, *Temm.* 516
Family—GOURIDÆ 517
Sub-Family—PHAPIDINÆ ... 517
371. **Chalcophaps,** *Gould.* 517
1175. indica, *Linn.* 517
372. **Geopelia,** *Swains.* 518
1176. striata, *Linn.* 518
Sub-Family—CALŒNINÆ ... 518
373. **Calœnas,** .....
1177. nicobarica, *Linn.* 518
Order—RASORES. 519
Family—PTEROCLIDÆ 519
374. **Pterocles,** *Tem.* 519
1178. coronatus, *Licht.* 520
1179. senegallus, *Linn.* 521
1180. arenarius, *Pall.* 523
1181. exustus, *Tem.* 524
1182. alchata, *Linn.* 525
1183. Lichtensteinii, *Tem.* 526
1184. fasciatus, *Scop.* 527
375. **Syrrhaptes,** *Lin.* 528
1185. thibetanus, *Gould.* 528
Family—PHASIANIDÆ. 529
Sub-Family—PAVONINÆ ... 529
376. **Pavo,** *Linn.* 529
1186. cristatus, *Linn.* 529
1187. muticus, *Linn.* 529
377. **Argusianus,** *Rafin.* 530
1188. argus, *Linn.* 530
378. **Polyplectron,** *Tem.* 531
1189. thibetanum, *Gm.* 531
Family—MEGAPODIDÆ. 531
379. **Megapodius** 532
1190. nicobariensis, *Blyth.* 532

PAGE

Sub-Family—PHASIANINÆ. 532
380. **Crossoptilon**, *Hodgs.* 532
1191. thibetanum, *Hodgson.* 533
381. **Lophophorus**, *Temm.* 533
1192. Impeyanus, *Lath.* 533
1193. Sclateri, *Jerd.* 534
382. **Ceriornis**, *Swainson.* 534
1194. satyra, *Linn.* 534
1195. melanocephalus, *Gray.* 535
383. **Ithaginis**, *Wagler* 536
1196. cruentus, *Hardw.* 536
384. **Pucrasia**, *Gray.* 538
1197. macrolopha, *Lesson.* 538
385. **Phasianus**, *Linn.* 539
1198. Wallichii, *Hardw.* 539
386. **Euplocamus**, *Temm.* 540
1199. albocristatus, *Vigors.* 540
1200. leucomelanus, *Lath.* 541
1201. melanonotus, *Blyth.* 541
1202. horsfieldi, *G. R. Gray.*, ... 542
1203. lineatus, *Elliot.* 542
1204. Cuvieri, *Temm.* 543
1205. Andersoni, *Elliot.* 544
1206. Vieilloti, *G. R. Gray.* 544
Sub-Family—GALLINÆ. 545
387. **Gallus**, *Linn.* 545
1207. ferrugineus, *Gm.* 545
1208. Sonneratti, *Tem.* 546
388. **Galloperdix**, *Blyth* 547
1209. spadiceus, *Gmel.* 547
1210. lunulatus, *Valenc,* 548
Family—TETRAONIDÆ. 549
Sub-Family—PERDICINÆ ... 549
389. **Tetraogallus**, *Gray*, ... 549
1211. Himalayensis, *G. R. Gray.* ... 549
1212. thibetanus, *Gould.* 549
390. **Lerwa**, *Hodgs.* 550
1213. nivicola, *Hodgs.* 550
391. **Francolinus** 550
1214. vulgaris, *Steph.* 550
1215. pictus, *Jerd. and Selby.* 551
1216. chinensis, *Osb.* 552
392. **Caccabis**, *Kaup.* 552
1217. chukor, *Gray.* 553
393. **Ammoperdix**, *Gray.* 553
1218. bonhami, *Gray.* 553
394. **Ortygornis**, *Reich.* 554
1219. ponticeriana, *Gmel.* 554
1220. gularis, *Temm.* 554

PAGE

395. **Arboricola**, *Hodgs.* 555
1221. torqueola, *Valenc.* 556
1222. atrogularis, *Blyth.* 556
1223. brunneipectus, *Tickell.* 556
1224. chloropus, *Tickell.* 557
1225. intermedia, *Blyth.* 558
1226. rufogularis, *Blyth.* 558
1227. Mandelli, *Hume* 559
396. **Bambusicola**. 560
1228. Fytchii, *Anderson.* 560
397. **Caloperdix**, *Blyth*..... 560
1229. oculea, *Temm.* 560
398. **Rollulus**, *Bonn.* 561
1230. roulroul, *Scop.* 561
399. **Perdicula**, *Hodgs.* 562
1231. asiatica, *Latham.* 562
1232. argoondah, *Sykes.* 562
400. **Ophrysia**, *Gray.* 563
1233. superciliosa, *J. E. Gray.* 563
401. **Microperdix**, *Gould.* 564
1234. erythrorhyncha, *Sykes.* 564
1235. Blewitti, *Hume.* 565
Sub-Family—COTURNICINÆ. ... 565
402. **Coturnix**, *Brisson.* 565
1236. communis, *Linn.* 565
1237. coromandelica, *Gmel.* 566
403. **Excalfactoria**, *Bonap.* 567
1238. chinensis, *Linn.* 567
Family—TINAMIDÆ. 568
404. **Turnix**, *Bonap.* 568
1239. plumbipes, *Hodgs.* 568
1240. joudera, *Hodgs.* 569
1241. Dussumieri, *Temm.* 570
1242. maculosa, *Temm.* 570
1243. albiventris, *Hume.* 571
Order—GRALLATORES. 571
Tribe—PRESSIROSTRES, *Cuvier*.... 571
Family—OTITIDÆ. 572
405. **Otis**, *Linn.* 572
1244. tarda, *Linn.* 572
1245. tetrax, *Linn.* 573
406. **Eupodotis**, *Less.* 574
1246. Edwardsi, *Gray* 574
407. **Houbara**, *Bonap.* 575
1247. Macqueenii, *Gray.* 575
408. **Sypheotides**, *Lesson.* 577
1248. bengalensis, *Gmel.* 577
1249. auritus, *Lath.* 578

PAGE

Family—CURSORIDÆ. 578

409. **Cursorius**, *Lath.* 579
1250. coromandelicus, *Gmel.* 579
1251. gallicus, *Gmel.* 579
410. **Rhinoptilus**, *Strickland.* 580
1252. bitorquatus, *Jerd.* 580

Family—GLAREOLIDÆ. 580

411. **Glareola**, *Linn.* 581
1253. orientalis, *Leach.* 581
1254. pratincola, *Linn.* 581
1255. lactea, *Tem.* 582

Sub-Family—CHARADRINÆ. 583

412. **Squatarola**, *Cuv.* 583
1256. helvetica, *Linn.* 584
413. **Charadrius** .....
1257. fulvus, *Gm.* 584
1258. pluvialis, *Linn.* 584
414. **Ægialitis**, *Boie* 585
1259. Geoffroyi, *Wagl.* 585
1260. mongolica, *Pall.* 586
1261. cantiana, *Lath.* 587
1262. dubia, *Scop.* 588
1263. Jerdonii, *Legge* 588

Sub-Family—VANELLINÆ 589

415. **Vanellus**, *Linn* 589
1264. cristatus, *Meyer* 589
416. **Chettusia**, *Bp.* 590
1265. gregaria, *Pallas.* 590
1266. leucura, *Licht.* 591
1267. cinerea, *Blyth.* 591
417. **Hoplopterus**, *Bonap.* 592
1268. ventralis, *Wagl.* 592
418. **Lobivanellus**, *Strickl.* 592
1269. indicus, *Bodd.* 592
1270. atronuchalis, *Blyth.* 593
419. **Sarciophorus**, *Strickl.* 593
1271. bilobus, *Gmel.* 593

Sub-Family—ÆSACINÆ. 594

420. **Æsacus**. 594
1272. recurvirostris, *Cuv.* 594
421. **Œdicnemus**, *Cuv.* 595
1273. crepitans, *Temm.* 596

Family—HÆMATOPODIDÆ, *Bp.* 596

Sub-Family—STREPSILINÆ, *Bp.* 596

422. **Strepsilas** .....
1274. interpres, *Linn.* 597

PAGE

423. **Dromas**, *Payk.* 598
1275. ardeola, *Paykl.* 598
424. **Hæmatopus**, *Linn.* 599
1276. ostralegus, *Linn.* 599

Family—GRUIDÆ. 599

425. **Grus**, *Linn.* 599
1277. antigone, *Linn.* 599
1278. leucogeranus, *Pall.* 600
1279. cinerea, *Bechst.* 601
426. **Anthropoides**, *Vieill.* 602
1280. virgo, *Linn.* 603

Tribe—LONGIROSTRES.

Family—SCOLOPACIDÆ. 603

427. **Scolopax**, *Linn.* 603
1281. rusticola, *Linn.* 603
428. **Gallinago**, *Steph.* 604
1282. nemoricola, *Hodgs.* 604
1283. solitaria, *Hodgs.* 605
1284. stenura, *Kuhl.* 605
1285. scolopacina, *Bonap.* 606
1286. gallinula, *Linn.* 608
429. **Rhynchæa**, *Cuv.* 609
1287. capensis, *Linn.* 609
430. **Limicola**, *Koch.* 610
1288. platyrhyncha, *Temm.* 610

Sub-Family—TRINGINÆ. 610

431. **Eurynorhynchus**, *Nilsson.* ... 611
1289. pygmæus, *Linn.* 611
432. **Tringa**, *Linn.* 611
1290. minuta, *Leisl.* 611
1291. subminuta, *Midd.* 612
1292. Temmincki, *Leisl.* 613
1293. crassirostris, *Temm.* 613
1294. subarquata, *Gould.* 615
1295. cinclus, *Linn.* 615
433. **Machetes**, *Cuv.* 616
1296. pugnax, *Linn.* 616
434. **Calidris**, *Cuv.* 617
1297. arenaria, *Linn.* 617

Sub-Family—PHALAROPINÆ. 617

435. **Phalaropus**, *Briss.* 617
1298. hyperboreus, *Linn.* 617
1299. fulicarius, *Linn.* 618

Sub-Family—TOTANINÆ. ... 619

436. **Actitis**, *Ill.* 619
1300. hypoleucos, *Linn.* 619

PAGE

1301. ochropus, *Linn.* 619
437. **Totanus,** *Bech.* 620
1302. glareola, *Gm.* 620
1303. canescens, *Gmel.* 621
1304. stagnatilis, *Bechst.* 621
1305. calidris, *Linn.* 622
1306. fuscus, *Linn.* 622
1307. Haughtoni, *Hume* 623
1308. dubius, *Murray* 623
438. **Terekia,** *Bonap.* 624
1309. cinerea, *Gould.* 624
Sub-Family—LIMOSINÆ 625
439. **Pseudoscolopax,** 625
1310. semipalmatus, *Jerd.* 625
440. **Limosa,** *Briss.* 626
1311. ægocephala, *Linn.* 626
1312. lapponica, *Linn.* 627
Sub-Family—NUMENINÆ ... 629
441. **Numenius** 629
1313. phæopus, *Linn.* 629
1314. arquatus, *Linn.* 630
442. **Ibidorhynchus,** *Vigors.* 631
1315. Struthersii, *Vigors.* 631
Sub-Fam.—RECURVIROSTRINÆ. 631
443. **Recurvirostra,** *Linn.* 631
1316. avocetta, *Linn.* 631
444. **Himantopus,** *Briss.* 632
1317. candidus, *Linn.* 632
Family—PARRIDÆ 632
445. **Metopodius,** *Wagl.* 633
1318. indicus, *Lath.* 633
Sub-Family—PARRINÆ 633
446. **Hydrophasianus,** *Wagl.* 633
1319. chirurgus, *Scop.* 634
Family—RALLIDÆ 634
Sub-Family—GALLINULINÆ. 634
447. **Porphyrio,** *Briss.* 635
1320. poliocephalus, *Lath.* 635
448. **Fulica,** *Linn.* 636
1321. atra *Linn.* 639
449. **Podica,** *Less.* 637
1322. personata, *G. R. Gray* 637
450. **Hypotænidia,** *Reich.* 637
1323. striata, *Linn* 637
451. **Rallus,** *Linn.* 638
1324. indicus, *Blyth* 638
452. **Rallina,** *Reich.* 639
1325. euryzonoides, *Lafresn.* 639

PAGE

1326. fasciata, *Raffl.* 640
1327. Canningi, *Tytler* 640
Sub-Family—RALLINÆ 641
453. **Porzana,** *Vieill.* 641
1328. Bailloni, *Vieill.* 641
1329. maruetta, *Linn.* 642
1330. fusca, *Linn.* 642
1331. minuta, *Pall.* 643
1332. akool, *Sykes* 643
454. **Gallinula,** *Briss.* 644
1333. chloropus, *Linn.* 644
1334. phœnicura, *Penn.* 645
455. **Gallicrex,** *Blyth* 646
1335. cinereus, *Gm.* 646
Order—HERODIONES 647
Family—CICONIDÆ 647
456. **Leptoptilos** 647
1336. argula, *Lath.* 647
1337. Javanicus, *Horsf.* 648
457. **Xenorhynchus,** *Bp.* 648
1338. asiaticus, *Lath.* 648
458. **Ciconia,** *Linn.* 649
1339. nigra, *Linn.* 649
1340. alba, *Belon.* 649
1341. leucocephala, *Gm.* 649
Family—ARDEIDÆ 650
459. **Ardea,** *Linn.* 651
1342. goliath, *Tem.* 651
1343. sumatrana, *Raffles* 651
1344. insignis, *Hodgs.* 652
1345. cinerea, *Linn.* 652
1346. purpurea, *Linn.* 653
460. **Herodias,** *Boie.* 653
1347. alba, *Linn.* 655
1348. intermedia, *Von Haast.* 655
1349. garzetta, *Linn.* 655
1350. eulophotes, *Swinh.* 656
461. **Demi-egretta,** *Blyth* 656
1351. gularis, *Bosc.* 656
1352. sacra, *Gmel.* 657
462. **Bubulcus,** *Pucher.* 657
1353. coromandus, *Bodd.* 657
463. **Ardeola,** *Boie.* 658
1354. Grayi, *Sykes.* 658
1355. prasinoceles, *Swinh.* 658
464. **Butorides,** *Blyth.* 659
1356. Javanica, *Horsf.* 659
465. **Ardetta,** *Gray.* 660
1357. flavicollis, *Lath.* 660

PAGE
1358. cinnamomea, *Gmel.* 661
1359. sinensis, *Gmel.* 661
1360. minuta, *Linn.* 662
466. **Botaurus**, *Brisson* 662
1361. stellaris, *Linn* 662
467. **Nycticorax**, *Steph.* 663
1362. griseus, *Linn.* 663
468. **Gorsachius**, *Pucher.* 664
1363. melanolophus 664
Family—TANTALIDÆ. 664
Sub-Fam.—TANTALINÆ. 664
469. **Tantalus**, *Linn.* 665
1364. leucocephalus, *Penn.* 665
Sub-Fam.—PLATALÆINÆ. ... 665
470. **Platalea**, *Linn.* 665
1365. leucorodia. 665
Sub-Fam.—ANASTOMINÆ ... 666
471. **Anastomous**, *Illiger.* 666
1366. oscitans, *Bodd.* 666
Sub-Fam.—IBIDINÆ. 666
472. **Threskiornis**, *Gray.* 667
1367. melanocephalus, *Lath.* 667
473. **Geronticus** 667
1368. papillosus, *Tem.* 667
474. **Graptocephalus**, *Elliot.* 667
1369. Davisoni, *Hume.* 667
475. **Falcinellus**, *Bech.* 668
1370. igneus, *Linn.* 668
Order—NATATORES. 669
Family—PHŒNICOPTERIDÆ. 669
476. **Phœnicopterus**, *Linn.* 669
1371. antiquorum, *Tem.* 669
1372. minor, *Geoff. St. Hill.* 670
Family—CYGNIDÆ. 671
477. **Cygnus**, *Linn.* 671
1373. olor, *Gm.* 671
Family—ANSERIDÆ 672
Sub-Fam.—ANSERINÆ 673
478. **Anser**, *Briss.* 673
1374. cinereus, *Meyer.* 673
1375. brachyrrhynchus, *Baillon.* ... 673
1376. albifrons, *Gm.* 674
1377. erythropus, *Linn.* 675
1378. indicus, *Lath.* 675
Family.—ANATIDÆ. 676
Sub-Fam.—PLECTOPTERINÆ. . 676
479. **Sarkidiornis**, *Eyton.* 677
1379. melanonotus, *Penn.* 677
PAGE
480. **Nettapus**..... 677
1380. coromandelianus, *Gmel.* 677
Sub-Fam.—TADORNINÆ 678
481. **Dendrocygna**, *Sw.* 678
1381 javanica, *Horsf.* 678
1382. fulva, *Gmel.* 679
482. **Casarca**, *Bp.* 679
1383. rutila, *Pall.* 680
1384. scutulata, *P. L. S. Mull.* 680
483. **Tadorna** 681
1385. cornuta, *Gm.* 681
Sub-Fam.—ANATINÆ 682
484. **Spatula**, *Boie.* 682
1386. clypeata, *Linn.* 682
485. **Anas**, *Linn.* 683
1387. boscas, *Linn.* 684
1388. pæcilorhyncha, *Forst.* 684
1389. caryophyllacea, *Lath.* 685
486. **Chaulelasmus**, *Gray.* 686
1390. streperus, *Linn.* 686
1391. rufiventris, *Sp. Nov.* 686
1392. augnstirostris, *Menet.* 687
487. **Dafila**, *Leach.* 689
1393. acuta, *Linn* 689
488. **Mareca**, *Steph.* 691
1394. penelope, *Linn.* 691
489. **Querquedula**, *Steph.* 692
1395. crecca, *Linn.* 692
1396. circia, *Linn.* 693
1397. formosa, *Georgi.* 694
1398 falcata, *Georgi.* 695
Sub-Fam.—FULIGULINÆ..... 697
490. **Fuligula**, *Steph.* 697
1399. rufina, *Pall.* 697
1400. cristata, *Linn.* 698
1401. marila, *Linn.* 699
1402. ferina, *Linn.* 700
1403, nyroca, *Gould.* 701
491. **Clangula** 702
1404. glaucion, *Linn.* 702
492. **Erismatura**, ... 703
1405. leucocephala, *Scop.* 703
Family—MERGIDÆ. 704
493. **Mergus**, *Linn.* 704
1406. serrator, *Linn.* 704
1407. merganser, *Linn.* 706
494. **Mergellus**, *Selby.* 706
1408. albellus, *Linn.* 706
Family—PODICIPIDÆ 707

PAGE

495. **Podiceps**, *Lath.* 707
1409. cristatus, *Linn.* 707
1410. nigricollis, *Linn.* 708
1411. minor, *Linn.* 709
Family—PROCELLARIDÆ ... 709
Sub-Fam.—PROCELLARINÆ.. 709
496. **Oceanites**, *Keys and Blas.* 709
1412. oceanica, *Kuhl.* 709
497. **Daption**, *Stephens.* 710
1413. capensis, *Linn.* 710
498. **Puffinus** 711
1414. persicus, *Hume.* 711
1415. chlororhynchus, *Less.* 712
Order—GAVIÆ 712
Family—LARIDÆ 712
Sub-Fam.—STERCORARINÆ.. 712
499. **Stercorarius**, *Briss.* 712
1416. asiaticus, *Hume.* 713
Sub-Fam.—LARINÆ. 714
500. **Larus**, *Linn.* 714
1417. cacchinnans, *Pall.* 714
1418. affinis, *Reinhardt.* 715
1419. gelastes, *Licht.* 715
1420. hemprichi, *Bp.* 716
1421. brunneicephalus, *Jerdon.* ... 717
1422. ichthyætus, *Pall.* 717
1423. ridibundus, *Linn.* 718
Sub-Fam.—STERNINÆ. 719
501. **Hydrochelidon**, *Boie* 719
1424. hybrida, *Pall.* 719
1425. leucoptera, *Meisn. & Schinz.* . 719
1426. nigra, *Linn.* 720
502. **Gelochelidon**, *Linn.* 721
1427. anglica, *Mont.* 721
503. **Sterna**, *Linn.* 721
1428. caspia, *Pall.* 721
1429. Bergii. *Licht.* 721
1430. cantiaca, *Gm.* 722
1431. media, *Horsf.* 723
1432. melanauchen, *Temm.* 723
1433. seena, *Sykes.* 724
1434. melanogastra, *Temm.* 724
1435. Dougalli, *Mont.* 725

PAGE

1436. hirundo, *Linn.* 726
1437. albigena, *Licht.* 726
1438. Saunderi, *Hume.* 727
1439. sinensis, *Gm.* 728
1440. anæsthetus, *Scop.* 728
1441. fuliginosa, *Gm.* 729
504. **Anous**, *Leach.* 729
1442. stolida, *Linn.* 730
1443. tenuirostris, *Tem.* 730
1444. leucocapillus, *Gould.* 730
Sub-Fam.—RHYNCHOPSINÆ. 731
505. **Rhynchops**, *Linn.* 731
1445. albicollis, *Swains.* 731
Order—STEGANOPODES 731
Family—PHÆTONTIDÆ. 732
506. **Phæton**, *Lin.* 732
1446. rubricauda, *Bodd.* 732
1447. flavirostris, *Brandt.* 732
1448. indicus, *Hume.* 733
Family—FREGATIDÆ..... 733
507. **Fregata**, *Briss.* 734
1449. aquila, *Linn.* 734
Family—PELECANIDÆ 734
Sub-Fam.—SULIDÆ 734
508. **Sula** 734
1450. cyanops, *Sundev.* 734
1451. australis, *Steph.* 735
1452. piscator, *Linn.* 735
Sub-Fam.—PELECANINÆ..... 735
509. **Pelecanus**, *Linn.* 735
1453. crispus, *Bruch* 736
1454. manillensis, *Gm.* 737
1455. roseus, *Gm.* 738
Sub-Fam.—PHALACROCORACIDÆ 738
510. **Phalacrocorax**, *Briss.* 738
1456. carbo, *Linn.* 738
1457. fuscicollis, *Steph.* 739
1458. pygmæus, *Pall.* 740
Sub-Fam.—PLOTINÆ. 740
511. **Plotus**, *Linn.* 741
1459. melanogaster, *Penn.* 741

ORDER, GEMITORES—Pigeons and Doves.

Bill short, straight, compressed, front half of mandible vaulted and curved at the tip, the base with a soft fleshy membrane, in which are the nostrils; wings moderate or long; tail variable, of 12, 14, or 16 feathers, even or rounded; tarsi strong. Habits monogamous. Both sexes assist in making the nest, incubating the eggs, and feeding the young. Nests loosely constructed of twigs, straw, and almost any material which could be readily got and built on trees, roof of buildings or ledges and holes in rocks; eggs two in number, white. They feed on fruit and grain, and in feeding the young disgorge the food from their craw.

Family, TRERONIDÆ—Fruit Pigeons.

Bill variable, short, thick, or slender; tip vaulted; tail of 14 feathers; tarsi more or less feathered, the bare portion reticulated.

Gen. **Treron**.—*Vieill.*

Bill strong and deep; eyes surrounded by a nude space.

1140. Treron nipalensis (*Hodgs.*), *Jerd.*, *B. Ind.* ii. p. 445, No. 771; *Hume*, *Str. F.* iii. p. 160; *Blyth and Wald.*, *B. Burm.* p. 163; *Hume and Dav.*, *Str. F.* vi. p. 410; *Hume*, *Str. F.* viii. p. 109; *Bingham*, *Str. F.* ix. p. 193; *Oates*, *Str. F.* x. 235; *id.*, *B. Br. Burm.* ii. p. 306.—The Thick-billed Green Pigeon.

Head and nape ashy, palet on the crown and tinged with greenish on the nape; rest of the plumage bright green, except the back, scapulars, and most of the wing coverts, which are maroon; other coverts and tertiaries green, the median series broadly edged with yellow; greater coverts blackish, edged with yellow; primaries and their coverts black, the latter narrowly edged with white; secondaries black, edged externally with yellow; central feathers of the tail green, the next pair greenish with ashy tips, the rest of tail feathers ashy, tinged with green on the outer webs, and with a black bar across; under tail coverts cinnamon brown. The *female* differs in wanting the ashy head and maroon mantle Bill red at base; the culmen yellowish; corneous portion bluish white; eyelids greenish blue; irides blue; legs bright red; corneous portion of bill extending to the forehead.

Length.—10·5 to 10·8 inches; tail 3·5; wing 5·5 to 5·7; tarsus 0·9; bill from gape 0·95.

Hab.—The hill tracts of Eastern Bengal and S.-E. Himalayas, the hilly, parts of Burmah, extending down the Malay Peninsula to Sumatra; also Siam and Cochin-China. Found in flocks; feeds on fruits. Breeds in March. Eggs 2, pure white.

Gen. **Crocopus**.—*Bonap.*

Characters those of the Sub-Family; basal portion of bill with the fleshy protuberance occupying one-half its length or nearly as much; third primary sinuated on its inner web.

1141. Crocopus phœnicopterus (*Lath.*), *Jerd.*, *B. Ind.* ii. p. 447, No. 772; *Hume*, *Str. F.* ii. p. 423. Crocopus Hardwickii, *Gould*, *Cent. Him. B.* pl. 58.—The Bengal Green Pigeon.

Top of head and demicollar ashy grey; back of the neck yellowish green; forehead tinged with greenish; wing coverts lilac, the greater series margined yellow, forming an oblique bar across the wing; tail ashy grey above, and for the terminal two-fifths tinged with green; middle portion blackish; neck in front and breast bright yellow green; middle of abdomen ashy grey; vent white and green; lower abdomen bright yellowish green; under tail coverts dull maroon, and with white tips; bill whitish; feet yellow; irides carmine; eyelids smalt blue.

Length.—12·5 inches; tail 5; wing 7·5; bill at gape 0·9.

Hab.—Bengal and Upper India, extending to Assam, Sylhet and Tipperah. Found in the Eastern portions of Rajpootana, the Punjab, Central and N.-W. Provinces and Oudh; also in Central India. Breeds from March to June, in trees. Eggs two in number, of an oval shape, white and glossy, varying in length from 1·16 to 1·35 inch, and in breadth from 0·9 to 1 inch.

1142. Crocopus chlorigaster, *Blyth*, *J. A. S. B.* xvii. p. 167; *Jerd.*, iii. p. 448, No. 773; *Str. F.* ii. p. 423; *Murray*, *Hdbk.*, *Zool. &c.*, *Sind*, p. 193; *Tem. Pig.* t. 2. C. jerdoni, *Strickl.*—The Southern Green Pigeon.

Forehead, crown and nape ashy grey, as also are the lores, sides of the face and ear coverts; neck behind yellowish green, followed on the upper back by a narrow band of ashy grey; back, scapulars, rump and upper tail coverts green, slightly tinged with yellowish on the scapulars; primaries dusky brown, margined on their outer web with pale yellow; the wing coverts broadly margined with the same colour, forming an oblique wing bar; shoulder of wing lilac; tail above greenish at base and ashy grey for the terminal half; under tail coverts dull maroon, the feathers broadly tipped with white; chin and throat greenish yellow; neck in front, breast and abdomen bright yellow, tinged greenish on the flanks; vent mixed green and white; bill whitish; legs and feet yellow; irides carmine.

Length.—11·75 to 12·5 inches; wing 7; tail 5; bill at front 0·75.

Hab.—Nearly throughout the Peninsula of India and Ceylon (*Jerd.*), Malabar Coast, Madras and Southern India generally; Lower Bengal, Oudh, Central Provinces, Khandeish, the Deccan, Sind, and North Guzerat. Rare in Sind,

and has only been found on the frontier, at Jacobabad. Breeds from March to June, nesting on trees. Eggs two in number, pure white and glossy, 1·12 to 1·3 a length by 0·9 to 1·0 in breadth.

1143. Crocopus viridifrons (*Blyth*), *Hume, Str. F.* iii. p. 161; *Blyth, B. Burm.* p. 143; *Oates, Str. F.* v. p. 163; *Anders., Yunnan Exped.* 664; *Hume and Dav., Str. F.* vi. p. 410; *Hume, Str. F.* viii. p. 109; *Bingham, Str. F.* ix. p. 194; *Oates, Str. F.* x. p. 235; *id.; B. Br. Burm.* ii. p. 307.—The YELLOW-FRONTED GREEN PIGEON.

Lores, *forehead*, cheeks, throat, breast, sides and back of the neck and thighs deep yellow; ear coverts, crown, nape, and a band across the nape ashy; also the abdomen, sides of the body and under wing coverts; vent mixed yellow and ashy; under tail coverts maroon, tipped with white; back, scapulars, tertiaries, rump and lesser wing coverts dull green, a patch of lilac near the bend of the wing; winglet and primary coverts dark brown; quills dark brown, edged with yellow; greater coverts dark brown, broadly edged with yellow; *basal half of tail greenish yellow;* terminal half of tail and upper tail coverts ashy. (*Oates.*) Irides blue, the outer circle pink; eyelids plumbeous; legs orange yellow.

Length.—12·5 to 12·8 inches; tail 4·7; wing 7·5; tarsus 1·1; bill from gape 1.

Hab.—British Burmah, where it is said to be extremely common, and spread over the whole Province alike in the hills and plains. It extends through the Indo-Burmese countries to Cachar, and eastwards to Cochin-China. Breeds in April. Nest placed in low trees. Eggs white, two in number.

Gen. **Osmotreron**—*Bonap.*

General characters as in *Crocopus;* bill more slender; legs red; sexes differ much in plumage.

1144. Osmotreron bicincta, *Jerd., B. Ind.* ii. p. 449; *Hume, Nests and Eggs Ind. B.* p. 493; *Blyth and Wald., B. Burm.* p. 144; *Armstrong, Str. F.* iv. p. 337; *Oates, Str. F.* vi. p. 163; *Hume and Dav., Str. F.* vi. p. 411; *Hume, Str. F.* viii. p. 109; *Legge, B. Ceylon* p. 725; *Oates, Str. F.* x. p. 235; *id., B. Br. Burm.* ii. p. 308.—The ORANGE-BREASTED GREEN PIGEON.

Upper surface of the body, including the lesser wing coverts, tertiaries and greater wing coverts green, the two latter broadly edged on the external web with yellow; winglet, primaries, and the primary coverts black; secondaries also black, narrowly margined with yellow; occipital region, nape, hind neck, under wing coverts, axillaries, sides of the body, and central tail feathers ashy; other tail feathers dark ashy, all tipped with greyish white; forehead, front of crown, sides of the head and neck, chin, throat, abdomen, and vent yellowish green; flanks yellow, streaked with dark green; breast orange, separated from

the neck by a lilac band across, forming a collar; under tail coverts cinnamon. The *female* has not the lilac and orange breast, and the under tail coverts are pale ashy white, dashed with dull greenish; bill glaucous green; legs pinkish red; irides blue, with an outer circle of red.

Length.—12 inches; tail 4·2; wing 6·3; tarsus 0·8; bill from gape 1.

Hab.—The more moist and wooded portions of India and Ceylon, and in the greater part of British Burmah. Extends to Assam, Cachar, and countries to the eastward. Recorded from Lower Bengal and the coasts east and west of India. Occurs abundantly in Nepaul, Sylhet, Tipperah, and Arrakan; also the Sub-Himalayan terais of Behar and Oudh, and the Eastern forest regions of the Central Provinces. Breeds in the Nepaul terai from April to June, making a nest generally on the outer branch of a tree. Eggs two in number, oval, and pure white.

1145. Osmotreron vernans (*Linn.*), *Wald. Trans. Zool. Soc.* viii. p. 81; *Hume and Dav., Str. F.* vi. p. 411; *Hume, Str. F.* viii. p. 109; *Kelham, Ibis*, 1881, p. 526; *Oates, B. Br. Burm.* ii. p. 309. Columba vernans, *Linn., Mantissa Plant.* p. 526. Columba viridis, *Scop., Del. Flor. et Faun. Insub.* ii. p. 94. Osmotreron viridis, *Hume, Str. F.* i. p. 460. Treron vernans, *Salvad., Ucc. Born.* p. 286.—The Pink-necked Green Pigeon.

Forehead, crown, sides of the head, chin, throat, and sides of the body ashy; nape, hind neck, sides of the neck and breast vinaceous pink; lower breast orange; back, rump, scapulars, tertiaries and wing coverts green, the outer, median and greater coverts and some of the tertiaries margined with yellow; quills blackish, very narrowly margined with yellow; upper tail coverts rufescent; abdomen greenish yellow; vent and flanks mixed green and yellow; under tail coverts deep chestnut; tail ashy, with a broad subterminal blackish band, and tipped with paler ashy. The *female* has not the vinaceous pink breast; and the whole head, neck, and breast are green; under tail coverts yellowish white, marked with cinnamon and dull ashy green; legs and feet carnation pink; bill pale plumbeous; cere dirty yellowish; irides Prussian blue, with pink and buff outer circles.

Length.—11 inches; tail 4; wing 5·7; tarsus 0·8, bill from gape 0·85.

Hab.—Southern Tenasserim, extending down the Malay Peninsula and eastwards to Cochin-China. Found also in Sumatra, Java, Borneo, Celebes, and the Phillipine Islands. Breeds in the Malay Peninsula during March on bushes in swampy places.

1146. Osmotreron malabarica, *Jerd., Ill. Ind. Orn.* pl. 31; *id., B. Ind.* ii. p. 450; *Hume, Nests and Eggs Ind. B.* p. 493; *Hume, Str. F.* iii. p. 162; *id., Str. F.* iv. p. 261; vi. p. 414.—The Grey-fronted or Malabar Green Pigeon.

Forehead greyish white; mantle and wing coverts maroon; rest of upper parts, including the lores, face and ear coverts green; wing coverts broadly

in

edged with bright yellow; quills the same, but narrow; tail green, with a broad medial dark band and broadly tipped with ashy white; under surface of the body green; throat and neck yellowish; vent and thigh coverts mixed green and pale yellow; under tail coverts cinnamon. The *female* has not the maroon patch; bill glaucous green; legs and feet pinkish red; irides red, with an outer blue circle.

Length.—10·2 to 10·5 inches; tail 4; wing 5·75. No nude space round the eye.

Hab.—Wooded and hilly tracts of the Indian Peninsula; abundant in Malabar and South India, also in Central India and the Eastern ghauts. It is also found in Mysore and South Wynaad, as well as in the Assamboo hills.

Breeds during April. Eggs pure white, and Hume says, thickly studded with minute pores.

1147. Osmotreron Phayrii, *Blyth, J. A. S. B.* xxxi. p. 344; *Jerd., B. Ind.* ii. p. 451, No. 776; *Hume, Str. F.* iii. p. 162; *Blyth, B. Burm.* p. 144; *Hume and Dav., Str. F.* vi. p. 412; *Hume, Str. F.* viii. p. 109; *Bingham, Str. F.* ix. p. 194; *Oates, Str. F.* x. p. 235; *Oates, Br. Burm.* ii. p. 310.—Phayre's Green Pigeon.

Very like *Osmotreron malabarica*, differing only in having the entire cap ashy in both sexes; breast greenish, tinged with orange. The *female* has not the orange breast, and the maroon of the male is replaced by green; the under tail coverts are mixed green, ashy and white; bill bluish; legs lake red; irides blue, with an outer pink circle.

Length.—11 to 11·5 inches; tail 4; wing 6·3; tarsus 0·9; bill from gape 1.

Hab.—Lower Bengal, Assam, Sylhet, and Burmah, where it occurs in all the hilly tracts of the province, as far as Tavoy, and extends to the east as far as Cochin-China.

1148. Osmotreron fulvicollis (*Wagler*), *Hume and Dav., Str. F.* vi. p. 413; *Hume, Str. F.* viii. p. 109; *Oates, B. Br. Burm.* ii. p. 311. Columba fulvicollis, *Wagl., Syst. Av. Columba*, No. 8; *Wald., Trans. Zool. Soc.* ix. p. 213. Treron fulvicollis, *Salvad., Ucc. Born.*, p. 288.—The Ruddy Green Pigeon.

Entire head, neck and upper breast ruddy vinaceous, paling on the lower breast; abdomen green; vent and flanks ashy green and yellow; thighs bright yellow; rump ashy green; sides of the body greyish white; under tail coverts cinnamon; back, scapulars and lesser wing coverts maroon; upper tail coverts and central tail feathers dull green; others green at base with a subterminal dark band and tipped with pale ashy. Legs and feet purplish pink; bill deep red; irides buffy pink; orbital skin plumbeous green.

Length.—10·5 inches; tail 3·5; wing 5·5; tarsus 0·8; bill from gape 0·8.

Hab.—Tenasserim, in the extreme south, extending down the Malay Peninsula, and occurring in Sumatra, Borneo, and the Phillipines.

1149. Osmotreron pompadoura (*Gmel.*), *Jerd.*, *B. Ind.* iii. p. 452, No. 777; *Hume*, *Str. F.* iii. p. 162; vi. p. 414. Osmotreron flavogularis, *Blyth*, *J. A. S. B.* xxvi. p. 225.—The YELLOW-FRONTED GREEN PIGEON.

Like *Osmotreron malabarica*; differs in having a yellowish forehead, pure yellow throat, no buff patch on the breast, and the under tail coverts are green in both sexes, with broad whitish tips; bill glaucous green; irides red, with an outer blue circle.

Length.—10·5 inches; tail 4; wing 5·75.

Hab.—South India.

Osmotreron chloroptera is said to occur in the Andamans and Nicobar Islands.

Gen. **Sphenocercus.**—*Gray*.

Bill moderately slender and lengthened, the basal two-thirds soft and tumid; corneous extremity feeble; a small wide space round the eyes; third primary not sinuated; tail with the central feathers much elongated and narrow; soles of feet slender.

1150. Sphenocercus sphenurus (*Vigors*), *Jerd.*, *B. Ind.* ii. p. 453; *Hume, Nests and Eggs Ind. B.* p. 494; *id.*, *Str. F.* iii. p. 163; *Wald. in Blyth's B. Burm.* p. 144; *Hume and Dav.*, *Str. F.* vi. p. 415; *Hume*, *Str. F.* vii. p. 109; *Scully*, *Str. F.* viii. p. 339; *Oates*, *Str. F.* x. p. 235; *id.*, *B. Br. Burm.* ii. p. 304. Vinago sphenurus, *Vigors*, *P. Z. S.*, 1831, p. 173.—The WEDGE-TAILED GREEN PIGEON or the KOKLA.

Plumage green, with a ruddy tinge on the head and breast; shoulder of wing and mantle maroon; wing coverts, tertiaries, back, rump and upper tail coverts dark dull green; upper back slaty green; quills dusky or dark brown; tail green, the outer feathers slate colour, and with a dark subterminal band; greater wing coverts and secondaries narrowly margined with yellow; under surface of the body green; part of the throat, and entire breast suffused with orange buff; vent and under tail coverts pale cinnamon. The *female* has not the orange buff colour on the breast, and the under tail coverts are mixed white and green; bill glaucous blue, albescent at the tip; irides blue, with an outer circle of red; orbital skin pale blue; legs coral red.

Length.—13 inches; tail 5·5; wing 7; bill at front 0·75.

Hab.—Himalayas, extending into Assam and Sylhet, ascending as high as from 4,000 to 8,000 feet. Found also in Pegu. Jerdon says it is common at Darjeeling, and that at Mussoorie they leave in October and return to breed in April. Nest made on trees, composed of twigs. Eggs two in number, pure white.

1151. Sphenocercus apicaudus (*Hodgs.*), *Jerd.*, *B. Ind.* iii. p. 454; *Wald. in Blyth's B. Burm.* p. 144; *Hume and Dav.*, *Str. F.* vi. p. 415; *Hume*, *Str. F.* viii. p. 109. Treron apicauda, *Hodgs.*, *J. A. S. B.* xiv. p. 854.—The PIN-TAILED GREEN PIGEON.

Plumage green; crown of the head with a yellowish tinge; upper tail coverts and under surface of the body tinged with yellowish; primaries slate colour; wing with two narrow conspicuous yellow bars; breast tinged with russet; tail with the medial pair of feathers much elongated beyond the rest, green at the base and pale grey at the tips; the others grey with a medial dark bar. Bill glaucous blue; legs coral red; irides dark yellow.

Length.—15·5 to 16 inches; tail 6·5, to end of central pair 8·0; wing 6·5; tarsus 0·9; bill from gape 1.

Hab.—S.-E. Himalayas, in Nepaul and Sikkim; also British Burmah, in Tenasserim, extending to the hill ranges of Eastern Bengal and Assam. Habits not unlike other pigeons. Jerdon says its not unlike the last species, but its *coo* is less loud, musical and prolonged.

Sub-Family CARPOPHAGINÆ.—FRUIT PIGEONS.

Bill longer than in *Treroninæ*, more slender and depressed at the base; the terminal third corneous; wings long; tail even or rounded, longer than in the *Treroninæ*; feet with broad soles; tarsus short and well feathered; under mandible feathered to nearly the tip. Breeds at high altitudes, and lays but one egg.

Gen. **Carpophaga**.—*Selby*.

General characters of the sub-family; plumage above glossy metallic green or coppery brown.

1152. Carpophaga ænea (*Linn.*), *Hume, Nests and Eggs Ind. B.* p. 496; *id.*, *Str. F.* ii. p. 260; iii. p. 163; *Blyth, B. Burm.* p. 144; *Wald.*, *Trans. Zool. Soc.* ix. p. 215; *Armstrong*, *Str. F.* iv. p. 337; *Inglis*, *Str. F.* v. p. 39; *Hume and Dav.*, *Str. F.* vi. p. 416; *Hume*, *Str. F.* viii. p. 109; *Legge, B. Ceylon* p. 718; *Bingham*, *Str. F.* ix. p. 194; *Parker*, *Str.* F. ix. p. 481; *Oates, B. Br. Burm.* ii. p. 301. Columba ænea, *Linn.*, *Syst. Nat.* i. p. 283. Columba sylvatica, *Tick.*, *J. A. S. B.* iii. p. 581. Carpophaga sylvatica (*Tick.*), *Jerd.*, *B. Ind.* ii. p. 455, No. 780.—The IMPERIAL GREEN PIGEON.

Whole head and neck and entire under parts pearl grey, tinged with ruddy vinaceous; under tail coverts deep maroon; orbital feathers, base of bill and chin whitish; back, rump, upper tail coverts, tertiaries, upper wing coverts and tail shining coppery green; axillaries buff; primaries and secondaries greenish brown, tinged with ashy on the outer webs. Bill greyish, the base dull red; eyelids, legs, and feet lake red.

Length.—17 inches; tail 6·5; wing 9; tarsus 1·1; bill from gape 1·5.

Hab.—The whole of India, from Ceylon to Assam and Sylhet, except the North-West Provinces and the Himalayas. It is also found in Burmah, and extends through the Malay Peninsula to Sumatra and Java. Affects forests and well-wooded parts of the country. Abundant in the Malabar forests, in Central and Southern India, Midnapore and the countries to the north-east generally. Breeds in the Andamans and in Tenasserim; also in the forests of Central India, laying only a single egg in a nest made of twigs in thickets and bamboo bushes. March and April are the months in which it breeds.

1153. Carpophaga insignis (*Hodgs.*), *Ferd.*, *B. Ind.* ii. p. 457, No. 781; *Hume, Nests and Eggs Ind. B.* p. 496; *id.*, *Str. F.* iii. p. 328.—The Bronze-backed Imperial Pigeon.

Whole head, neck and under parts pale lilac grey; back and wings vinaceous brown with a faint coppery gloss; rump and upper tail coverts dusky cinereous; tail dusky with its terminal fourth dull ashy, the tip beneath whitish grey; chin white; under tail coverts buffy white; bill dull lake red at base, slaty at tip; orbits lake red; irides red-brown and hoary grey; legs dull lake red.

Length.—18 to 20 inches; tail 6·8 to 7; wing 9·5; tarsus 1; bill from gape 1·4. (*Ferd.*)

Hab.—S.-E. Himalayas; also the Khasia hills, Sikkim and Arrakan. Jerdon adds that it is found in the mountain regions of Malabar, in Coorg, the Wynaad, and the Western slopes of the Neilgherries. Associates in small parties or in pairs, frequenting the loftiest trees and feeding on various fruits. According to Hodgson it breeds in Nepaul from May to July, laying a single white egg.

1154. Carpophaga griseicapilla (*Wald.*), *Dav.*, *Str. F.* v. p. 460; *Hume, and Dav.*, *Str. F.* vi. p. 418; *Hume*, *Str. F.* viii. p. 109; *Oates*, *B. Br. Burm.* ii. p. 302. Ducula griseicapilla, *Wald.*, *Ann. Nat. Hist. Ser.* iv. xvi., p. 228; *id.*, *Ibis*, 1875, p. 459; *Hume*, *Str. F.* iii. p. 402; *Wardlaw-Ramsay*, *Ibis*, 1877, p. 467. Carpophaga insignis, *apud. Bl. B. Burm.* p. 144.—The Grey-headed Imperial Pigeon.

Forehead, crown, nape, cheeks and ear coverts pure French grey; back of neck vinous; interscapulary region brown, with a vinous tinge; wing coverts brown like the back, but not so strongly tinged with vinous; quills dark brown; uropygium and upper tail coverts dark ash; rectrices above dark brown, with a broad grey terminal band; lower surface of rectrices pale grey; chin and throat pure white; remainder of lower surface pale grey, the breast being tinged with lilac; under tail coverts pale cream colour (*Walden*, ex *Oates*); legs and feet deep lake pink; bill the same but the corneous portion pale whity brown; irides pearly grey. (*Davison.*)

Length.—18·5 inches; tail 8; wing 9·5; tarsus 1·1; bill from gape 1·6.

Hab.—British Burmah on the Karen hills, east of Tounghoo, at from 4,000 to 4,200 feet elevation, also the Mooleyit mountain. Breeds in January.

1155. Carpophaga bicolor (*Scop.*), *Ball, Str. F.* i. p. 79; *Hume, Nests and Eggs Ind. B.* p. 496; *id., Str. F.* ii. p. 264; *Salvad., Ucc. Born.* p. 292; *Blyth, B. Burm.* p. 145; *Hume and Dav., Str. F.* vi. p. 418; *Hume, Str. F.* viii. p. 109. Columba bicolor, *Scop., Del. Flor. et Faun. Insub.* ii. p. 94. Myristivora tricolor, *Wald., Trans. Zool. Soc.* ix. p. 217.—The RED IMPERIAL PIGEON.

Winglet, primaries and secondaries black; terminal portion of tail black, the black occupying about half the feather on the centrals, decreasing in extent towards the outer feathers, and on the outermost pair, occupying merely a small portion of the tip and the outer web; remainder of the plumage white, with a creamy or yellow tinge (*Oates*); legs and feet pale smalt blue; bill leaden blue; tip darkish horny or dark plumbeous; irides dark brown. (*Davison.*)

Length.—16 inches; tail 5; wing 9; tarsus 1·2; bill from gape 1·3.

Hab.—Mergui Archipelago, according to Blyth. Occurs in the Nicobars and probably also in the Andamans with *C. insularis*, a large species with darker plumage than *C. ænea*, and the under tail coverts dingy brown tinged with chestnut, and the tail blue black. *C. palumboides* also occurs in the Andamans; it is characterized by having blackish wings and tail, and dusky slaty blue plumage.

Family—COLUMBIDÆ.—*Bp.*—PIGEONS AND DOVES.

Bill horny at apex only; tail generally of 12 feathers only; tarsus lengthened; plumage sombre; feet more fitted for walking on the ground. Breeds in holes of rocks, buildings or wells.

Sub-Family—PALUMBINÆ.—WOOD PIGEONS.

General characters of the family.

Gen. Palumbus.—*Linn.*

Characters those of the sub-family; the distinguishing feature is the patch on each side of the neck.

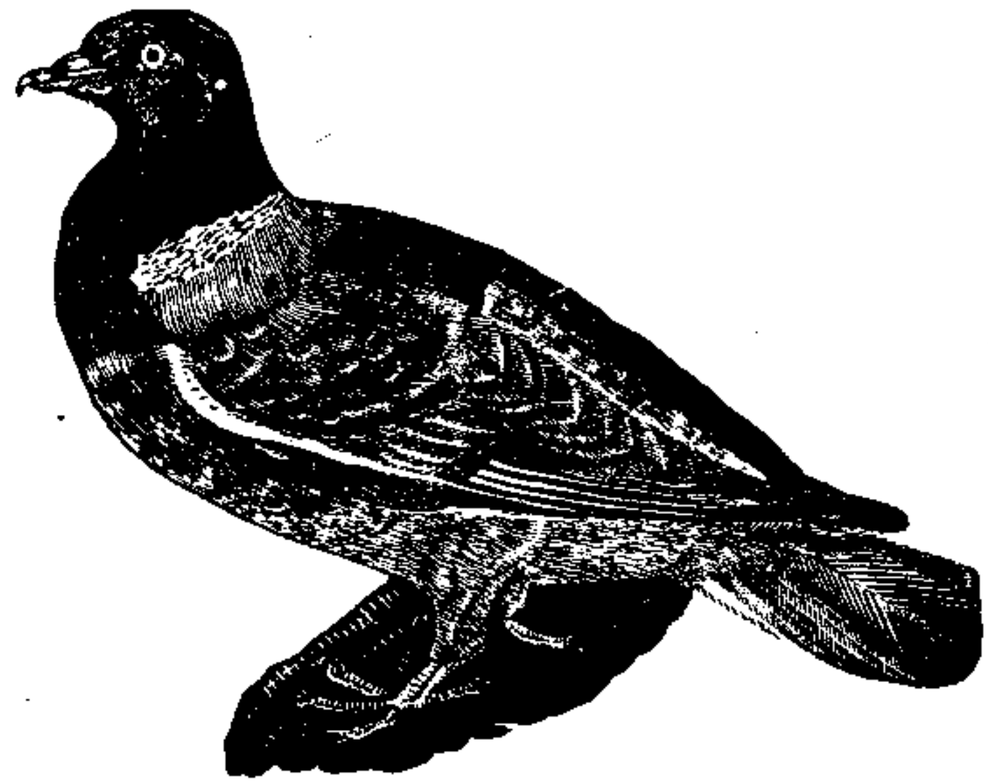
1156. Palumbus pulchricollis, *Hodgs., J. A. S. B.* xiv. p. 866; *Gould, B. Asia* pt. vi. pl. 13; *Jerd., B. Ind.* ii. p. 465, No. 785.—The DARJEELING WOOD PIGEON.

Above, general colour dusky grey; head, cheeks, and ear coverts light ashy; sides of the neck glossed with green and purple; neck patch black at base and with broad isabelline tips, followed by whitish at the extreme tip; tail blackish; under surface of the body pale vinous dove grey, albescent towards the vent and under tail coverts; throat whitish; breast glossed with green and purple. Bill livid at base, the tip yellow; irides yellow; legs dull red.

Length.—13·5 to 14 inches; tail 4·75 to 5; wing 8·5 to 9.

Hab.—S.-E. Himalayas, in Nepaul and Sikkim. Not very common at Darjeeling.

1157. Palumbus casiotis, *Bonap., Ic. Pig.* t. 58; *Jerdon, Birds of Ind.* iii. p. 464, No. 784; *Murray, Hdbk., Zool., &c., Sind*, p. 193.—The HIMALAYAN CUSHAT.



Palumbus casiotis.

Head, lores, sides of the face, chin and throat bluish ashy; nape, hind neck and sides of the neck glossed green and purple, the latter predominating on the upper back and sides of the breast; neck patch on each side pure fulvous or yellowish clay; scapulars and tertials dusky or hair brown, lighter on the latter; breast dull lilac or ruddy vinaceous, paling on the upper abdomen to a vinous ash; lower abdomen, vent and under tail coverts ashy white; rump bluish ash; primaries and their coverts dusky, nearly dark brown; the primaries and some of their hindmost coverts margined with white on their exterior web; secondaries bluish ash, the tips dusky; wing coverts dark ashy; the lower series white on their outer web, and forming a longitudinal patch; winglet dark brown; tail dark ashy grey at the base, followed by a broad light ashy grey band, and a broad black tip; the under surface much darker, and the central band nearly white; bill orange at the tip, whitish at the base; legs red.

Length.—17 inches; wing 10·25 to 10·5; tail 7.

Hab.—This, the largest of the pigeon tribe, is found in Nepaul, N.-W. Himalayas, Sind, Punjab, Persia, Beloochistan, and S. Afghanistan. Found in Sind on the frontier only, at Jacobabad. Breeds as far as has yet been ascertained only in the extreme N.-W. Himalayas, and Hume adds, perhaps also in the higher fir forests below the snow range in the Western Himalayas. They remain about Simla, Almorah and Mussoorie from November to April, and then are found in forests between the Jumna and the Ganges.

1158. Palumbus Elphinstonei (*Sykes*), *Jerd., B. Ind.* ii. p. 465, No. 786; *id., Ill. Ind. Orn.* pl. 48; *Gould, B. Asia* pt. vi. pl. 12; *Hume, Str. F.* vii. pp. 95, 424. Palumbus torringtoni (*Kelaart*), *Blyth, Ibis*, 1867; *Hume, Str. F.* vii. p. 424.—The NEILGHERRY WOOD PIGEON.

Head and neck ashy; nuchal patch black, with small *white tips*; back of neck and interscapulars cupreous ruddy, slightly glossed with greenish; rest of upper surface of body ruddy brown, dark ashy on the rump and upper tail coverts; wings, including the quills, dusky black, narrowly edged with ruddy cupreous; outer primaries pale edged; tail dull black; under surface of the body ashy, albescent on the throat; neck and breast glossed with green; vent and lower abdomen albescent; bill deep red, tipped with yellow; legs and feet dull red.

Length.—15 to 16 inches; tail 5·75 to 6; wing 8 to 8·25.

Hab.—The Neilgherries and the dense woods above the Khandalla ghauts in the Deccan. Breeds from March to July, laying only a single egg. Nests placed on high trees in dense woods. Egg spotless glossy white, oval, 1·46 × 1·2.

Gen. **Palumbæna.**—*Bp.*

Bill straight, compressed, convex, bent at the tip; base of upper mandible covered with soft skin, more or less inflated, in which are the nostrils; hind toe on the same plane with the front ones; wings ample; 1st quill shorter than the second, which is the longest.

Feet fitted for walking, as well as for perching; habits and colouring intermediate to *Palumbus* and *Columba*. (Jerd.)

1159. Palumbæna Eversmanni, *Bp., Ic. Pig.* t. 61; *Jerd., B. Ind.* iii. p. 467, No. 787; *Hume, Str. F.* i. p. 217; *Murray, Hdbk., Zool., &c., Sind*, p. 193.—The INDIAN STOCK PIGEON.

Dark ashy, with a whitish grey rump; crown and breast tinged with vinaceous, two or three black spots on the wings, forming the rudiments of bands, and the end of the tail black; its outermost feather white for the basal two-thirds of its exterior web, or showing a black, and then a narrow grey band towards its tip; beneath the wings whitish, where it is dark ashy in the European bird. Bill yellowish translucent; legs with a yellowish tinge; skin round the eye yellow; irides buff.

Length.—11·5 inches; expanse 24; wing 8; tail 4. (*Jerdon.*) I have only a single specimen of this species from Shikarpoor, in Sind, and in a very unsatisfactory state for describing. Jerdon says this species is found in Western and Central India, and is probably migratory.

Gen. **Columba.**—*Linn.*

Characters same as those of *Palumbæna*.

1160. Columba intermedia, *Strickl., Ann. Nat. Hist. Ser.* 1. xiii. p. 39; *Jerd., B. Ind.* ii. p. 469, No. 788; *Hume, Nests and Eggs Ind. B.* p

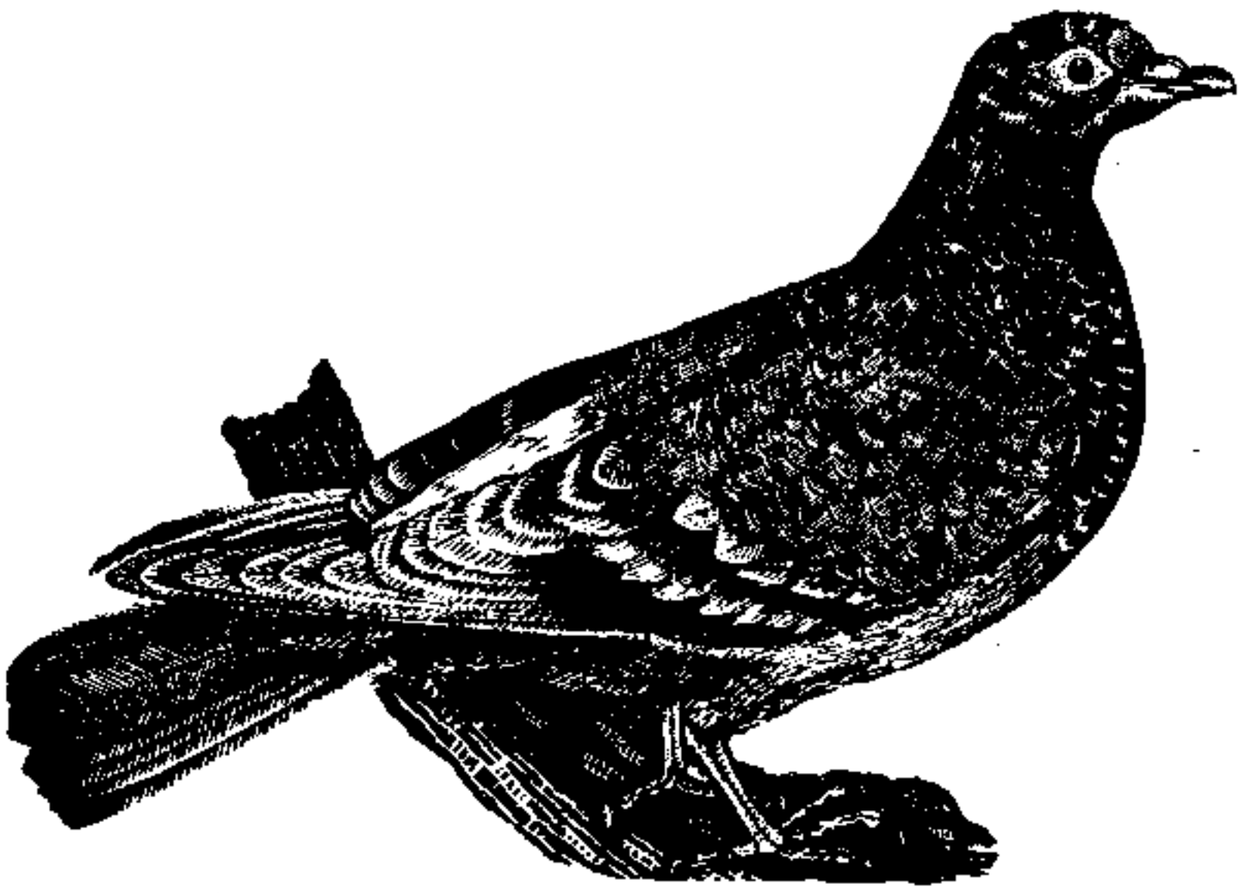
499; *David et. Oust. Ois. Chine*, p. 384; *Hume and Dav., Str. F.* vii. p. 449; *Hume, Str. F.* viii. p. 109; *Scully, Str. F.* viii. p. 339; *Legge, B. Ceylon* p. 698; *Blf., East Pers.* p. 268; *Murray, Vert. Zool. Sind*, p. 202. Columba livia, *apud. Bl. B. Burm.*, p. 145.—The INDIAN BLUE ROCK PIGEON.

Head, nape, chin, abdomen, vent, and upper and under tail coverts dark slaty grey; back, scapulars, secondaries, tertials, inner webs of primaries and rump pale ashy, paler on the rump; the outer webs of the primaries dusky grey, as are also their tips; secondaries broadly tipped dusky, the innermost tertials and greater wing coverts with a subterminal black patch on the outer web only, forming two black wing bands; neck all round and breast glossy, changeable green and amethystine, in varying lights; throat also slightly tinged with glossy green; under wing coverts white; tail like the upper tail coverts, or a little paler for two-thirds its length, then broadly black, with a very narrow terminal ashy tip; the basal two-thirds or more of the outer web of the outermost feather white. Bill black; cere whitish; irides dull orange; legs pinkish red.

Length.—12 to 13 inches; wing $8\frac{3}{4}$ to 9; tail 5; bill at front 0·75.

Hab.—Throughout India to Ceylon, the Himalayas, Assam, Burmah, Persia, Beloochistan and Afghanistan in great abundance, congregating in large flocks. Breeds throughout India. Eggs 2 in number, white and glossy 1·2 × 1·25. Nesting in mosques, tombs, buildings, walls, and in holes in rocks, and caverns.

1161. Columba livia, *Bp., Ic.* t. 62; *Bodd., Pig. Pl. En.* 510; *Naum. vogt.* t. 150; *Tem. Pig.* t. 12; *Gould, B. Eur.* pl. 245; *Gray, Handlist Birds*, No. 9231; *Blf., East. Pers.* p. 268; *Hume, Str. F.* i. 218; vii. 296; *Murray, Hdbk. Zool., &c., Sind*, p. 193.—The ROCK DOVE.



Columba livia.

Differs from *C. intermedia* in having a *pure white* instead of an ash coloured rump.

Hab.—S.-E. Europe, Sind, Beloochistan, S. Persia, S. Afghanistan, Arrakan, and some parts of Burmah. Breeds in December, laying, like *intermedia*, two white eggs.

1162. Columba rupestris, *Pall., Zoogr. Rosso-As.* pl. 25; *Jerd., B. Ind.* iii. p. 470, No. 789. Columba livia, *apud Adams, B. Ind.*, No. 208. —The Blue Hill Pigeon.

Like *Columba intermedia*, but much paler in colour, the head and sides of the face being ashy grey instead of dark slaty grey; wing coverts and upper back light grey; middle of back white; upper tail coverts dark ashy grey; quills grey, black shafted and darker at the tips and on the outer webs; a patch of greyish black on the wing, forming two bands; tail dark grey at the base, broadly tipped with black and a subterminal broad white stripe; outer rectrices white, tipped with black; chin ashy grey; neck glossed with purple; upper breast glossed with green; bill black; cere grey; irides red.

Length.—12·7 inches; tail 5; wing 8.

Hab.—Kumaon and Mussoorie.

1163. Columba leuconota, *Vigors, P. Z. S.* 1831, p. 331; *Gould, Cent. Him. B.* pl. 59; *Jerd., B. Ind.* iii. p. 471, No. 790; *Hume, Str. F.* iii. p. 256.—The White-bellied or Imperial Rock Pigeon.

Crown of the head and ear coverts blackish ash; neck behind white; interscapulars light brownish grey; rump white; wings light brownish grey, paler on the median coverts; primaries dull blackish near the tips, the secondaries broadly tipped with dusky; tertiaries and their coverts tipped greyish white, and forming 3—4 conspicuous bars; upper tail coverts and tail ashy black, with a broad greyish white curved band, the points of which reach the tips of the outer feathers, which are basally white externally; bill black; irides yellow; legs red.

Length.—13·5 to 14 inches; tail 5; wing 9·5.

Hab.—N.-W. Himalayas from 10,000 feet to snow level.

Gen. **Alsocomus.**—*Tick.*

Bill small, much compressed; wings long, 2nd quill equal to 4th, the 3rd longest and sinuate on the outer web.

1164. Alsocomus puniceus, *Tickell, J. A. S. B.* xi. p. 462; *B. Ind.* ii. p. 462, No. 782; *Blyth, B. Burm.* p. 145; *Wardlaw-Ramsay, Ibis, Jerd.*, 1877, p. 147; *Hume and Davison, Str. F.* vi. p. 418; *Legge, B. Ceylon*, p. 698; *Hume, Str. F.* viii. p. 109; *Oates, Str. F.* viii. p. 167; *Bingham, ibid.* p. 196; *Oates, Str. F.* x. p. 235; *Oates, B. Br. Burm.* ii. p. 289.—The Purple Wood Pigeon.

Whole plumage vinaceous ruddy, inclining to chestnut on the back and wings, the feathers more or less glossed with metallic green and amethystine,

especially on the neck; head greyish white; quills blackish, edged slightly with ashy; rump and upper tail coverts dark ashy; tail black; under tail coverts brown; bill livid at base, yellow at tip; legs and feet lake pink; irides orange; orbital skin purplish pink.

Length.—14·8 to 15 inches; tail 6; wing 8·5; tarsus 1; bill from gape 1·1.

Hab.—Tenasserim and Pegu, also in the Eastern portions of Central India, extending to near the sea coast in Midnapoor, and probably outwards towards Cuttack. It has been occasionally met with in Ceylon. To the east of the Bay of Bengal, in Assam, Arrakan, Singbhoom and Tenasserim it is more common. Oates says it is sparingly distributed over many parts of Pegu, and that it is more abundant near Kyakpadien than elsewhere. It has also been procured at Tounghoo. Tonka, where Hume records it from, appears to be the southernmost point of its distribution. Eggs similar to those of pigeons, and one in number only.

1165. Alsocomus Hodgsoni (*Vigors*), *Jerd. B. Ind.* ii. p. 463, No 783. Columba Hodgsoni, *Vigors, P. Z. S.* 1832. Dendrotreron Hodgsoni, *Hume, Nests and Eggs Ind. B.* p. 497.—The Speckled Wood Pigeon.

Above dark vinaceous ruddy, the median coverts speckled with white; rump and upper tail coverts dusky ash; tail ashy black; head and beneath the throat in front of the neck cinereous tinged with ruddy; nape vinous grey, the feathers minutely tipped with greyish white; wing coverts greyish; quills dusky brown, the first three primaries very narrowly margined externally with whitish, not however present in all specimens; under surface of the body vinous grey; the feathers of the neck, breast and upper abdomen mesially streaked with ruddy; lower abdomen dark vinous; flanks speckled with white; under tail coverts dusky ash; bill purplish black; irides hoary; orbital space livid; legs and feet blackish green in front, yellow behind.

Length.—15 inches; tail 6; wing 9 to 9·25; tarsus 1. The *female* has a duller tinge on the upper and lower parts.

Hab.—Himalayas to Nepaul, ranging in the latter to 10,000 feet. In Sikkim, Jerdon says, it keeps to the higher ranges only. It inhabits deep forests in the middle region of the Himalayas. It is not found on the outer range of hills in the North-West Himalayas, but is far from rare on the Tyne range and other mountains, in the interior, where Blyth was informed that it is tolerably common, frequenting the pine forests.

Sub-Family—MACROPYGIINÆ.

Cuckoo doves with short feet, long and broad tails. The head too is small; wings rather short. Plumage ruddy brown.

Gen. **Macropygia**.—*Swains.*

Bill long and slender; tail long, broad and much graduated; legs and feet fitted for perching; lateral toes somewhat unequal; soles flat; rump more or less spinous.

1166. Macropygia leptogrammica (*Temm.*), *Wald.*, *Ibis*, 1875, p. 439; *Oates*, *B. Br. Burm.* ii. p. 295. Columba leptogrammica, *Temm.*, *Pl. Col.* 560. Coccyzura tusalia, *Hodgs*, *J. A. S. B.* xii., p. 937. Macropygia tusalia, *Jerd.*, *B. Ind.* ii. p. 473, No. 791; *Hume*, *Nests and Eggs Ind. B.* p. 500; *Wald.*, *in Blyth's B. Burm.* p. 146; *Wardlaw-Ramsay*, *Ibis*, 1877, p. 468; *Hume and Dav.*, *Str. F.* vi. p. 419; *Hume*, *Str. F.* viii. p. 110.—The Bar-tailed Cuckoo Dove.

Forehead buff, with a vinous tinge; crown, nape and sides of the head vinaceous, glossed with changeable green and amethystine; hind neck also glossed the same; back, rump, upper tail coverts and scapulars, also tertiaries and wing coverts, dusky black, barred with numerous narrow deep rufous bars; central tail feathers black, barred with rufous; the next two pairs ashy at base and barred indistinctly with black and rufous at the end; the outermost feathers ashy, with a broad subterminal black band; outer web of the outermost feathers whitish; quills dark brown; chin and throat buff, with a vinous tinge; breast and sides of the neck vinous brown, with purple and green reflections, each feather with a concealed black bar and lilac tip; abdomen, vent and under tail coverts buff; sides of the body tinged with ashy. The female has the breast and upper abdomen barred with brown and the colours are less bright; bill horny brown; legs and feet dull lake red; irides brown, with an outer pink circle; orbital skin pale livid.

Length.—15 to 16 inches; tail 7·5; wing 7·2; tarsus 0·9; bill from gape 1.

Hab.—S.-E. Himalayas, from Nepaul to Bhootan, extending to the Khasia hills. In Sikkim, according to Jerdon, it frequents the zone from 3000 to nearly 7000 feet. Hodgson says it lays in the Central forests of Nepaul in May and June. At Darjeeling, according to Theobald, during July. It also occurs along the hill tracts of Eastern Bengal; in the north-eastern portion of Pegu on the Karin hills at 4000 feet elevation and on the Tounghoo hills at an altitude of 3500 feet. Oates adds, that Mr. Davison obtained it in Tenasserim on the Mooleyit mountain and at Kollidoo further north. They are shy birds and keep to thick forests, associating in small flocks. They breed on trees, making a nest of twigs and laying two eggs. Breeding season March and April. *Macropygia rufipennis*, Blyth, an allied species, is found in the Nicobar Islands. Nothing appears to have been noticed by late observers of *M. ruficeps*, Temm., a Javan species which Jerdon notices as occurring also in Tenasserim.

1167. Macropygia assimilis, *Hume*, *Str. F.* ii. p. 441; *Wald. in Blyth's B. Burm.* p. 146; *Wardlaw-Ramsay*, *Ibis*, 1877, p. 468; *Hume*

and Dav., Str. F. vi. p. 420; *Hume, Str. F.* viii. p. 110; *Oates, B. Br. Burm.* ii. p. 296.—The TENASSERIM CUCKOO DOVE.

Forehead and crown chestnut; sides of the head and neck, also hind neck and back, minutely freckled with greyish white; rump and upper tail coverts brown, suffused with rufous at the edges; wing coverts, scapulars and tertiaries dark brown, tipped with chestnut; quills dark brown; chin and throat fulvous; lower plumage rufous, blotched with black on the breast; under wing coverts chestnut; four central tail feathers brown, the others brown at the base and chestnut, with a subterminal dusky bar. (*Oates*) Legs and feet dark brownish red; bill pinkish red or pale purplish brown; irides sometimes grey with an inner ring of blue or grey only, or pearly white; orbital skin pale blue. (*Davison*).

Length.—13 inches; tail 6·5; wing 5·6; tarsus 0·7; bill from gape 0·9.

Hab.—Tenasserim on the Mooleyit mountain, and further north at Kollidoo; also on the Karin hills east of Tounghoo at an elevation of 3000 feet. Extends down the Malay Peninsula. Nothing is known of its nidification.

Sub-Family.—TURTURINÆ.—*Bp.*

Habits terrestrial and arboreal; tail somewhat long, with pale tips to the outer feathers; neck usually adorned with a ring or spot.

Sub-Family, TURTURINÆ.—*Bonap.*

Bill lengthened, slender, the base soft and tumid; wings long; feet short; feathers of the rump rather rigid.

Gen. Turtur.—*Selby.*

Bill slender; wings long, 2nd and 3rd quills longest; tail moderate, rounded or graduated; tarsi scutellated in front, naked; outer toe shorter than the inner.

1168. Turtur pulchratus, *Hodgs., J. A. S. B.* xiii. Turtur rupicolus, *apud Jerd., B. Ind.* ii. p. 476, No. 792; *Hume and Dav., Str. F.* vi. p. 421.—The ASHY TURTLE DOVE.

Forehead pale isabelline; top of head bluish ashy, nape with a vinous tinge; upper back, cheeks, sides of the face and sides of the body, also the upper breast, vinous; chin and a small gular streak pale isabelline; neck patch black, each feather tipped with paler bluish white; *lower back and rump bluish ash;* also the upper tail coverts, which in some are edged with pale rufous; *central tail feathers dusky black, the others black and tipped broadly with greyish white, the outermost feather on each side white on the outer web and at tip*; scapulars, tertiaries, lesser and median coverts dark brown, margined with rufous; greater coverts dusky on the inner web and ashy on outer; primaries and secondaries dusky brown; darker on their outer web and very narrowly edged with dirty white; innermost secondaries edged and

tipped with rufous; lower breast vinous, becoming albescent or ashy white on the middle of the belly, and *pure white on the vent and under tail coverts*; flanks and under wing coverts bluish ash. Bill brown, vinous on the basal half; irides orange; legs vinous red.

Length.—14 to 14·5 inches; tail 5·5; wing 8; tarsus 1·1; bill from gape 1·1.

Hab.—The Himalayas from Afghanistan to Sikkim at elevations of from 4,000 to 8,000 feet, also the Central Provinces, Central India, the N.-W. Provinces, and Nepaul. Breeds on the lower ranges of the Himalayas during May and June. At Mussooree and Murree it is said to lay in May two pure white eggs, which Hume adds are glossy and regular ovals, varying in length from 1·1 to 1·34, and in breadth from 0·85 to 1.

1169. Turtur meena (*Sykes*), *Jerd.*, *B. Ind.* ii. p. 476, No. 793; *Hume, Nests and Eggs* p. 501; *id.*, *Str. F.* iii. p. 163; *Bl. B. Burm.* p. 146; *Hume and Dav.*, *Str. F.* vi. p. 420; *Hume*, *Str. F.* viii. p. 110; *Scully*, *Str. F.* viii. p. 340; *Oates*, *Str. F.* x. p. 235; *id.*, *B. Br. Burm.* ii. p. 292. Columba meena, *Sykes*, *P. Z. S.* 1832, p. 140. Turtur rupicolus (*Pall.*), *Jerd.*, *B. Ind.* ii. p. 476, No. 792.—The Rufous Turtle Dove.

Forehead, crown, nape, hind neck and back ashy brown, suffused with vinous, and the feathers indistinctly edged with rufous; a patch on the neck black with greyish tips; lower back and rump dark ashy, edged paler; upper tail coverts brown, edged with pale rufous; scapulars, tertiaries, lesser and median coverts brown, broadly edged with rufous; greater coverts and secondaries edged with ashy, the innermost ones edged with rufous; primaries dark brown edged with rufous; lower plumage vinous red, tinged with purplish in some, paler on the chin and throat; sides of the body, under wing coverts, vent and *under tail coverts ashy*; central tail feathers ashy brown, the others ashy brown, tipped with grey (*Oates*); bill brown, with a tinge of ashy on the basal half; iris orange-red; legs vinous red.

Length—13 inches; tail 5; wing 7; tarsus 1·1; bill from gape 1.

Hab.—The Himalayas to Nepaul and Ceylon. It is a permanent resident of the hilly portions of Southern India, and of the broken belt of hills that stretch across the continent of India from the northern portions of the Western Ghauts to Cuttack; thence it extends into Eastern Bengal, Khasia hills, Cachar, Assam and along the bases of the Himalayas as far west as the Sikkim and Nepaul Terais, and again southwards into Arrakan, Pegu and Northern Tenasserim. (*Hume.*) Breeds from December to April, but the majority lay in March, April and May. The number of eggs is two, and like all doves, pure glossy white.

1170. Turtur senegalensis (*Linn.*), *Lev. O. A.* t. 270; *Tem. Pig.*, t. 41; *id.*, *Descr. Egypt*, t. 9, 3; *Gray*, *Handlist Birds*, No. 9317; *Blf.*,

East. Pers. p. 270; *Hume, Str. F.* vii. 463. Turtur cambayensis (*Gm.*), *Jerd., B. Ind.* iii. p. 478, No. 794; *Murray, Hdbk. Zool., &c*, *Sind.* p. 193; *id., Vert. Zool., Sind*, p. 203.—The Little Brown Dove.

Head, nape, lores and sides of the face pinkish vinaceous, as are also the sides of the neck, throat and breast, gradually shading to paler on the upper abdomen, and white or fulvous white on the lower abdomen, vent and under tail coverts; chin white, sides with a patch of black and dark rufous feathers; back and scapulars brown, the latter with a slight rufous tinge; primaries and their coverts dusky brown, first three quills edged with fulvous white; secondaries darker brown than the primaries, slightly edged and tipped with pale grey; wing coverts pale grey, the edges of the feathers lighter; rump, upper tail coverts and central tail feathers like the back, the others black at the base and white for nearly their terminal half; edge of the wing and under wing coverts dark ashy. Bill black; irides dark brown with a white inner circle; legs lake red.

Length.—10·5; wing 5; tail 4·5.

Hab.—Nearly throughout India, Sind, Kutch, Rajputana, Deccan, Concan, Punjab, N.-W. Provinces, Southern India generally, Beloochistan, Persia and Afghanistan. In Central and Western India specially abundant. Breeds all over the plains of India during March and April.

1171. Turtur suratensis, *Gm., Tem. Pig.* t. 43; *Jerd., B. Ind.* iii. p. 479, No. 795; *Str. F.* v. pp. 231, 409; *Gray, Handlist* No. 9315; *Murray, Hdbk., Zool., &c., Sind*, p. 194; *id., Vert. Zool. Sind*, p. 203.—The Spotted Dove.

Forehead greyish white; crown, nape, breast and upper abdomen pale vinaceous, darker on the breast, paling on the lower abdomen and flanks, and albescent on the under tail coverts; chin and throat white; patch on the neck black with narrow rufous tips; back and scapulars isabelline brown, or rufous brown, the feathers with dark shaft-stripes, broadening into a nearly triangular spot at the tip, on each side of which, especially on the scapulars and wing coverts, is a pale rufous or vinaceous spot; in some specimens scarcely a spot, but with this colour edging the feathers; edge of the wing, and the lower series of wing coverts near it greyish white, with faint dark shaft-stripes; primaries and secondaries dusky brown, the first three quills, and some of the secondaries edged with pale or greyish white; primary coverts dark brown; tail with the central feathers brown, the outermost black at the base, and tipped white for the terminal half, and the others with the white tips decreasing in extent; bill blackish; irides hazel, surrounded by a reddish sclerotic membrane; legs reddish.

Length.—12 inches; wing 5·5 to 5·75; tail 5·5, graduated.

Hab.—Throughout India nearly, to Ceylon and the Himalayas. Replaces the last on the Malabar Coast and in Lower Bengal. Jerdon says it is rare in

the bare Carnatic land, the Deccan, and N.-W. Provinces. Uncommon in Upper Sind, but less so in Lower Sind. Breeds in April and May. It occurs, but less abundantly, in Rajputana and N. Guzerat.

1172. Turtur tigrinus (*Tem.*), *Hume, Nests and Eggs Ind. B.* p. 506; *id., Str. F.* i. p. 461, iii. p. 164; *Blyth, B. Burm.* p. 145; *Armstrong, Str. F.* iv. p. 337; *Oates, Str. F* v. p. 164; *Anders., Yunnan Exped.* p. 665; *Hume and Dav., Str F.* vi. p. 422; *Hume, Str. F.* viii. p. 110; *Bingham, Str. F.* ix. p. 194; *Oates, Str. F.* x. p. 235; *id., B. Br. Burm.* ii. p. 290. Columba tigrina, *Temm., Knip. Pig.* i. p. 94, pl. xliii. Spilopelia tigrina, *Salvad., Ucc. Born.* p. 296.—The Malayan Spotted Dove.

Forehead and cheeks grey; crown, nape, breast and upper abdomen vinaceous, paling on the chin, vent and under tail coverts; patch on the neck and hind neck black, each feather with two white spots at the tip; back, scapulars, wing coverts and rump brown, each feather blackish along the shaft and tipped on both webs with lighter brown; outermost wing coverts pure grey on the outer webs; quills dark brown, some of the tertiaries with blackish shaft streaks and tipped paler; tail brown, the outer feathers broadly tipped with white, the white decreasing in extent on each inner feather on each side till it disappears on the fifth or central pair of feathers, which are dark brown; bill bluish black; irides reddish.

Length.—12·4 inches; tail 6; wing 5·5; tarsus 1; bill from gape 0·9.

Hab.—The whole province of British Burmah, extending northwards through the Indo-Burmese Countries to Cachar and eastwards to Cochin-China. Ranges down the Malay Peniusula to Sumatra, Java, Borneo and Celebes. Breeds from August to March in low trees and bushes, laying two eggs.

1173. Turtur risorius (*Linn.*), *Jerd., B. Ind.* ii. p. 481; *Hume, Nests and Eggs Ind. B.* p. 506; *id., Str. F.* iii. p. 165; *Wald. in Blyth's B. Burm.* p. 146; *Dresser, B. Eur.* vii. p. 51; *Dav. et Oust. Ois. Chine,* p. 387; *Cripps, Str. F.* vii. p. 297; *Legge, B. Ceylon* p. 702; *Hume, Str. F.* viii. p. 110; *Oates, Str. F.* x. p. 235; *Oates, B. Br. Burmah* ii. p. 293; *Blanf., East Pers.* p. 270; *Murray, Hdbk. Zool. &c., Sind,* p. 194; *id., Vert. Zool., Sind,* p. 204. Columba risoria, *Linn., Syt. Nat.* i. p. 285.—The Indian Ring Dove.

Head pale greyish brown, with a vinous tinge; the forehead albescent; nape and neck pale vinaceous; collar black, a narrow line of white before and behind it; back, scapulars and innermost tertiaries grey brown, as also are the rump and upper tail coverts; primaries and their coverts dusky brown; the primaries margined narrowly with whitish, and their coverts tinged with greyish; edge of the wing, lower series of the median coverts and greater series also pale grey; under wing coverts greyish white; chin and

throat albescent; breast and upper abdomen, also the sides of the neck and breast pale vinaceous; flanks, lower abdomen, vent, thighs and under tail coverts ashy grey, the latter with whitish tips; tail with the central feathers like the back; outermost feathers on each side narrowly margined with greyish white on their outer web, with a broad black band about the middle, greyish at base, and broadly terminated with white, which on the others increase in extent. Bill black; irides crimson; orbital skin whitish; legs pinkish.

Length.—12 to 13 inches; wing 6·5; tail 5; bill at front 0·81.

Hab.—India generally, and Ceylon, except the more moist regions, as the Malabar Coast; abundant in Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, Concan, Deccan, Central and South India, also Beloochistan and Southern Afghanistan. Rare in Burmah. Breeds throughout the year.

1174. Turtur humilis (*Temm.*), *Jerd., B. Ind.* ii. p. 482; *Hume, Nests and Eggs Ind. B.* p. 507; *id., Str. F.* ii. p. 269; iii. p 165; iv. p. 292; *Armstrong, Str. F.* iv. p. 338; *Wald., Trans. Zool. Soc.* ix. p. 219; *David et. Oust. Ois. Chine,* p. 388; *Hume and Dav., Str. F.* vi. p. 423; *Hume, Str. F.* viii. p. 110; *Oates, Str. F.* x. p. 235; *id., B. Br. Burm.* i. p. 294; *Murray, Hdbk., Zool., &c., Sind,* p. 194; *id., Vert. Zool., Sind,* p. 204. Turtur tranquebaricus, *Herm., Obs. Zool.* p. 200; *Bly., B. Burm.* p. 145. Turtur humilior, *Proc. As. Soc. Beng.* 1874, p. 241; *id., Str. F.* iii. p 279.—The Red Turtle Dove.

Male.—Head and nape ashy grey, also the lores and sides of the face, slightly paler on the forehead; collar black, set off by whitish before and behind it; back, scapulars and wing coverts brick red, slightly paler behind the black collar; chin whitish; throat, breast and entire lower surface pale vinous red, white on the vent and lower tail coverts; rump and upper tail coverts deep slaty; primaries, their coverts and secondaries dusky brown; the margin of the primaries, as also the margins and tips of the secondaries whitish; primary coverts slightly tinged with vinous-red on their outer webs; edge of the wing greyish, some of the dark bases of the median coverts showing through; tail with the middle feathers ashy brown, the others greyish black at the base, and broadly tipped with white; outermost feathers on each side white on the exterior web; bill black; irides dark brown; legs purplish red.

Length.—9 inches; wing 5·5 to 5·75; tail 3 to 3·25. The *female* is duller in colour on the back, being more of an earthy brown and much paler below.

Hab.—The drier regions in India, to Ceylon and the foot of the Himalayas. Common in the Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, Concan and Deccan, but less so in Sind. Occurs also in Assam and Northern Burmah. In Sind it affects the northern districts chiefly; seldom seen below Sukkur. It is not known from S. Afghanistan, where *T. senegalensis* replaces it.

Family, GOURIDÆ.—Ground-Doves.

Wings moderate; tarsus longer than in the *Turturinæ*, as are also all the toes; wings shorter and less pointed. The Indian representatives of the family belong to the *Phapidinæ* and *Calœninæ*.

Sub-Family, PHAPIDINÆ.

General characters as of the family; tarsus not feathered; tail of 12, 14 or 16 feathers.

Gen. Chalcophaps—*Gould*.

Bill slender; wings moderately long; 2nd and 3rd quills nearly equal and longest; tail rather short and rounded; tarsus not feathered; plumage rich glossy metallic green.

1175. Chalcophaps indica (*Linn.*), *Jerd.*, *B. Ind.* ii. p. 484, No. 798; *Hume, Nests and Eggs Ind. B.* p. 509; *id.*, *Str. F.* ii. p. 269; iii. p. 165; *Salvad., Ucc. Born.* p. 299; *Bourdillon, Str. F.* iv. p. 404; *Blyth, B. Burm.* p. 147; *Dav. et. Oust. Ois. Chine*, p. 384; *Hume and Dav., Str. F.* vi. p. 424; *Hume, Str. F.* viii. p. 110; *Legge, B. Ceylon* p. 714; *Oates, Str. F.* x. p. 235; *Kelham, Ibis*, 1881, p. 528; *Oates, B. Br. Burm.* ii. p. 297.—The Emerald Dove.

Forehead white, continued as a supercilium over the eye; crown, nape, a narrow band down the hind neck and another across the upper back ashy-grey; back and wings shining dark emerald green; quills dark brown, the secondaries metallic green on the external web; tertiaries bright metallic green; smaller coverts near the edge of the wing white; on the lower back a narrow band of ashy, followed by a broad black one, then a second ashy one, and lastly a broad band, which with the upper tail coverts is dark ashy brown, tipped darker; sides of the head and neck and the whole under surface of the body deep vinaceous, rather duller on the abdomen; under tail coverts ashy; three central pairs of tail feathers dark brown, tipped paler, the others banded with black and ashy; under wing coverts chestnut; bill red; irides dark brown; eyelids plumbeous; legs dusky red.

Length.—10·5 inches; tail 4; wing 5·8; tarsus 1; bill from gape 0·9.

Hab.—Throughout India in forest countries and well wooded districts; not in the drier regions, as Sind, Rajputana, Kattyawar, &c. It is abundant in Lower Bengal; extends to Assam and all the countries on the east of the Bay of Bengal as far as Tenasserim. It also occurs in Ceylon, the Andamans, Nicobars, the Indo-Burmese Countries, South China, Siam, the Malay Peninsula, and all the islands nearly down to Australia. Frequents thick forests, and is met with in small parties or in pairs. Breeds from March to July in suitable localities. The nests, according to Hume, are placed in some dense bush or

low thick-foliaged tree. They are more regular saucers than those of other doves, composed of roots, grass, or twigs, but comparatively neat and with a central depression. Eggs two in number, pure white, from 1 to 1·1 inch in length and from 0·82 to 0·86 in breadth.

Gen. **Geopelia**.—*Swains.*

General characters of *Turtur*; tail of 12 feathers only.

1176. Geopelia striata (*Linn.*), *Salvad., Ucc. Born.* p. 298; *Hume and Dav., Str. F.* vi. p. 423; *Hume, Str. F.* viii. p. 110; *Kelham, Ibis*, 1881, p. 528. Columba striata, *Linn., Syst. Nat.* i. p. 282.—The Barred Ground Dove.

Forehead and crown, as far as the eyes, also the cheeks, chin, and throat pure grey; upper part of the ear coverts grey; lower part brown; remainder of the crown and nape vinous brown; sides of the neck, whole hind neck and upper back, sides of the breast and of the body white, closely and finely barred with black; centre of the breast and abdomen vinaceous; vent and under tail coverts white; lower back, rump, upper tail coverts, scapulars, wing coverts and tertiaries brown, each feather with a terminal black bar; primaries and secondaries dark brown, the latter broadly edged with the colour of the back; central tail feathers pale brown, the others dark brown, the four outer pairs broadly tipped with white; under wing coverts chestnut. (*Oates.*) Front of tarsus and toes pinkish purple, with the scutation divided by pink lines; back of tarsus and soles fleshy pink; bill blue at base, bluish white terminally; irides white or grey, brown. (*Davison.*)

Hab.—Tenasserim, in the extreme south, extending down the Malay Peninsula; is also found in Sumatra and Java. According to Davison its habits are like those of *Turtur tigrinus*

Sub-Family, CALŒNINÆ.

Bill strong with a tubercle at base; legs and feet stout; head with long crest; plumage metallic.

1177. Calœnas nicobarica (*Linn.*), *Hume, Str. F.* ii. p. 271; *id., Nests and Eggs* p. 510; *Blyth, B. Burm.* p. 147; *Hume and Dav., Str. F.* vi. p. 425; *Hume, Str. F.* viii. pp. 68, 110; *Oates, B. Br. Burm.* ii. p. 299. Columba nicobarica, *Linn., Syst. Nat.* i. p. 283.—The Hackled Ground-Pigeon.

Entire head and neck from deep slaty grey to blackish brown; a long and thick bunch of narrow hackles from the base of the occiput hairlike and slaty grey and from the back of the neck metallic green, shot with gold and copper and margined with slaty grey; rest of upper plumage except the tail and longer and upper tail coverts which are white—refulgent with metallic reflections; lesser wing coverts, outer webs of primaries, winglet, greater coverts, and earlier

secondaries glossed with deep blue; other portion of secondaries and their coverts, most of the median coverts, rump and shorter upper tail coverts brilliant green; scapulars adjoining the wing coverts the same, but with a coppery glow; upper breast like the head; lower breast, abdomen, sides, flanks, vent and shorter under tail coverts variegated deep metallic green and dark slaty, the latter forming a fringe to the feathers; first two primaries unglossed; inner webs of the primaries and secondaries and their under surface blackish brown; wing lining and axillaries brighter or duller metallic green or deep blackish slaty with a tinge of gloss; lower breast deep metallic green, the feathers tipped purplish; tibial plumes rich purplish blue. The young want the metallic gloss and protuberance at base of bill, and is duller everywhere; bill dark blackish grey; irides deep brown; legs dull purplish lilac.

Length.—16 inches; tail 3·5; wing 10; tarsus 1·7; bill from gape 1·5.

Hab.—This, the most lovely species of the Pigeon group, inhabits the Mergui Archipelago and the Nicobars, and extends to the Malay Peninsula. Feeds on fruit; nests on trees only as far as has yet been ascertained on the Island of Battye Malve in the Nicobars. The nests are like those of other pigeons. Egg, one only, spotless white; 1·84 × 1·27.

Order, Rasores,—Gallinaceous or Game Birds.

Bill usually short, vaulted, more or less arched and bent down at the tip; nostrils situated in a membrane at the base of the bill; wings usually short; tail variable in length and form; tarsi long and strong, often spurred; hinder toe short and elevated from the ground.

Family, PTEROCLIDÆ,—Sand or Rock-Grouse.

Bill short, curved to the tip and compressed at the sides; wings and tail long and pointed; tarsi feathered; hind toe small.

Gen. Pterocles.—*Tem.*

Bill small, rather stout; culmen curved, sides compressed; nostrils at base partly covered by membrane; wings long, 1st and 2nd primaries longest; tail with the median rectrices sometimes lengthened beyond the rest; tarsi short, feathered in front and on the inner side.

Mr. D. G. Elliott has a very clear and exhaustive paper on the *Pteroclidæ* Family in the Proceedings of the Zoological Society of London, 1878, pp. 233, 264, giving the literature of the Family, its classification and a review of the geographical distribution, as well as a key and descriptions, with the synonomy of each species. The following key is extracted from the paper referred to, and will be found most useful.

A. "Without pectoral band.

(*a*) Stripe on each side of forehead from nostril to above the eye; chin and centre of throat black...*P. coronatus.*

(*b*) Lores and band encircling back of head pearly grey; cheeks, ear-coverts and throat orange yellow; centre of abdomen black .....*P. senegallus.*

B. With pectoral band.

(*a*) Without black bar on forehead.

(*a'*) Median rectrices not lengthened beyond rest; upper part of throat and sides of neck rufous; lower portion of throat black; band on lower part of breast, abdomen and flanks black.....*P. arenarius.*

(*b'*) Median rectrices greatly lengthened beyond the rest.

(*a''*) Throat yellow; black band across breast; abdomen and flanks chestnut .....*P. exustus.*

(*b''*) Throat and stripe behind the eye black; sides of throat rufous; centre of breast chestnut, bordered above and below with black; rest of under parts white .....*P. alchata.*

(*b*) With black bar on forehead.

(*a'*) Breast uniform greenish buff.

(*a''*) Throat pale buff; upper part of breast buff, crossed with numerous narrow black bars; middle of breast uniform buff, crossed in the centre by a narrow black bar and another of the same hue on its lower edge; rest of under parts yellowish white, barred narrowly with black .....*P. lichtensteini.*

(*b''*) Throat and breast buff; triple band separates the fulvous breast from the abdomen, the first maroon, the second creamy white, and the 3rd unspotted chocolate brown.....*P. fasciatus.*

1178. Pterocles coronatus, *Licht. Verz. d' Doubl.* p. 65; *Tem. Pl. Col.* No. 339, 340; *Heugl. Syst. Ueber. N. O. Afr.* p. 304; *Ibis*, 1864, pp. 27, 240; *id.*, 1870, pp. 9, 16; 1871, p. 144; *Str. F.* i. p. 224; *id.* (1876); iv. p. 230; *Blf., East. Pers.* ii. p. 272; *Murray, Hdbk., Zool., &c., Sind*, p. 200; *Elliott, P. Z. S.* 1878, No. 282.—THE CORONATED SAND GROUSE.

PLATE, fig.

Male.—A line on each side of the forehead from the nostrils to above the eye black, and a pale fulvous one between these from the point of the forehead. Crown of the head pale chestnut, vinous or rufescent fawn. A pearly grey band from the anterior angle of the eye, continued as a supercilium and

1



2



3



4



5



6



1. *Pterocles senegallus.* 2. *Pterocles coronatus.* 3. *Pterocles fasciatus.*
4. *Pterocles Lichtensteini.* 5. *Plerocles exustus.* 6. *Pterocles alchata.*

extending round to the nape;* lores and a narrow band edging the black chin and throat stripe white; sides of the face, ear-coverts and the neck all round orange buff; base of the neck and upper back isabelline, the feathers edged dusky grey; interscapulars the same, with median buffy spots at the tips; rump and upper tail-coverts a dark or dirty grey, mixed with the fulvous of the base of the feathers; tail with the median rectrices of a pale vinous colour, dark shafted, with a subterminal dark spot, and very narrowly tipped with white; lateral feathers deeper vinous with also a subterminal dark bar, and broadly tipped with white; all the feathers with a few dusky sprinkles behind the dark band; primaries and their coverts dull grey or dusky brown; all the primaries, except the first three, broadly margined with fulvous white obliquely towards the tips on their inner webs, and also slightly tipped the same; secondaries hair brown; tertiaries vinous on their inner webs and edged on the outer with buffish; scapulars vinous at the base, dark shafted, with a subterminal dark band, and mesially tipped with a nearly oval buff spot; median wing coverts the same; the greater series greyish buff or buffy isabelline; abdomen, flanks, under wing coverts, vent and lower tail coverts white; slightly soiled on the middle of the abdomen, and in some specimens a pale isabelline; tarsal plumes white.

The *female* has the throat and sides of the neck orange buff; the chin paler and nearly albescent; the crown very pale cinnamon; entire upper surface buff, with, in some specimens, a vinous tinge and barred with numerous crescentic and broken bands of dark brown; breast and under parts paler buff, also with crescentic bands; the flanks albescent; scapulars largely blotched with dusky, and with buff tips; primaries and secondaries as in the male, but very pale or hair brown.

Length.—11·75 to 12 inches; wing 7 to 7·75; tail 3·75; bill at front 0·45.

Hab.—Sind, Persia, Beloochistan, Afghanistan, N. W. Arabia, Egypt and Nubia. Breeds in the southern portions of the Sahara, where it is said to replace *P. arenarius*.

1179. Pterocles senegallus, *Lin. Mantissa.* 1771, p. 526; *Lath., Ind. Orn.* vol. ii. p. 642; *Gray, Gen. B.* vol. iii. p. 519; *Tristram, Ibis,* 1860; *Str. F.* i. p. 221; iii. pp. 418, 4; v. 231; *Murray, Hdbk., Zool., &c., Sind,* p. 197. Pterocles guttatus, *Licht. Verz. Doubl.*, Pterocles senegalensis, *Shaw, Nat. Misc.* vol. iv. pl. 933; *Shelley, Ibis,* 1871, p. 144.—THE SPOTTED SAND GROUSE.

PLATE, fig. 1.

"The male has the whole chin and throat with a patch extending upwards from the throat, towards, but not quite meeting on the back of the

* In two specimens I possess there is a distinct pearly grey band across the forehead immediately behind the termination of the black forehead stripes.

neck, bright buffy yellow or orange buff; lores, forehead, a broad stripe over the eye continued round the nape and the back of the neck, pale blue grey, dull and tinged fawny in some specimens; crown, occiput, and nape, a sort of dove colour or pale, slightly rufous fawn; back and rump a somewhat similar, but more sandy colour, in many specimens more tinged with fawn; the upper tail coverts buffy yellow, all, but the longest obscurely tipped with a somewhat pinkish mouse colour. They are more or less pale dove colour at their bases, which colour however is not seen till the feathers are lifted. The central tail feathers have the pointed tips black, in many specimens more or less tinged hoary buffy, and the rest of the visible portion yellowish buff, but the bases, as may be seen on lifting the feathers, are greyish; the lateral tail feathers are a greyish brown at base, dark-shafted, with conspicuous white tips, and broad blackish brown subterminal bands; the primaries are pale isabelline, the shafts conspicuous and black; they have broad ill-defined subterminal brown bands, beyond which there is a narrow paler tipping, and they are pretty conspicuously margined on their inner webs towards the tips with still paler isabelline. The first primary has the outer web browner, the others have the outer webs, especially toward the bases, a brighter isabelline. The whole visible portions of the lesser coverts and of the primary greater coverts are yellowish fawn, or isabelline, varying much in shade in different specimens; these greater coverts are dark shafted, and with a brownish tinge next the shafts on the inner webs; the scapulars bluish grey at the bases, tipped broadly, but chiefly on the outer webs, with buffy yellow, and the lesser ones tinged immediately above the yellow with a somewhat brownish purple, or dull greyish vinaceous. The secondary, median, and greater coverts like the lesser scapulars, but showing more of the vinaceous hue. The secondaries are brown, lighter towards their bases. The lower part of the neck in front and upper breast are nearly the same blue grey or greyish fawn as the back of the neck; the lower breast, abdomen, sides, flanks, axillaries, and wing lining isabelline or desert colour; the upper abdomen often with a faint orange buffy tinge. A broad irregular deep brown patch runs down the centre of the abdomen to the vent; the lower tail-coverts are greyish brown at their bases, but are broadly tipped with white (often tinged buffy or isabelline) which is the only colour visible until the feathers are lifted. The lower surfaces of the quill shafts are white.

"The female has the yellow chin and throat patch like the male, but paler; the lores and feathers immediately encircling the eye pale isabelline white; the whole upper parts and the neck all round pure isabelline, tinged slightly rufous on the occiput, nape, and back, and conspicuously spotted with dull, somewhat greyish, black; the spots on the forehead and front part of the head are small and irregular; on the nape and occiput they are more or less arranged in rows (so as to produce more of a striated appearance) and in a band running from behind the eye round the nape, they are very much

more densely set; on the upper tail coverts they are larger; while on the scapulars they take the form of double spots or irregular bars. The primaries and their greater coverts ar much as in the male, but paler; the central tail feathers are isabelline, dark shafted, the point greyish black, and the rest of the feather with narrow, transverse, irregular bars of the same colour on both webs; the lateral tail feathers are much as in the male, but have the basal portions more tinged with isabelline, and more or less imperfectly barred. The breast, abdomen, and wing lining are as in the male, but somewhat purer and paler; the abdominal patch is narrower, and perhaps also somewhat paler.

"Irides brown, bare; orbital skin yellowish; bill pale plumbeous, bluish grey, or bluish white, always somewhat more dusky towards the tip; feet pale plumbeous or bluish white, paler towards the tips of the toes; weight 8 to 12 ounces, but averaging about 10 ounces.

"*Male, length.*—13·4 to 14·7 inches; expanse 23 to 23·7; tail from vent 5·3 to 6; wing 7·5 to 7·9, the wings when closed reach to within from 2·3 to 2·8 of the end of the longest tail feathers, viz., the central ones, which exceed the others by from 1·75 to 2; bill at front 0·44 to 0·47; tarsus 1 to 1·05.

"*Female, length.*—12·4 to 13·1 inches; expanse 22 to 22·6; tail from vent 4 to 4·6; the central tail feathers only extending from 0·75 to 1·2 beyond the rest; wing 7·3 to 7·5; bill at front 0·4 to 0·44."—*Hume, Str. F.* i. p. 219.

Common throughout Rajputana, Kutch, Kattiawar, Guzerat and the Punjab. Breeds in Sind. Like the preceding species it is found in N. Africa, also in N. W. Arabia, and in Beloochistan.

PLATE.

1180. Pterocles arenarius, *Pall., Nov. Comm. Petrop.* vol. xix. p. 418; *id., Rosso. As.* ii. p. 73; *Lath., Ind. Orn.* ii. p. 642. Pterocles arenarius, *Tem. Pig. et. Gallin.* vol. iii. p. 240; *id., Pl. Col.* Nos. 52, 53; *Gray, Gen. B.* iii. p. 518; *P. Z. S.* 1858, p. 501; *Ibis,* 1859, p. 352; 1860, p. 69; *Jerd., B. Ind.* iii. p. 496; *Str. F.* i. p. 219; iii. 418; iv. 179; *Blf., East. Pers.* ii. 271; *Murray, Hdbk., Zool., &c., Sind,* p. 194.—The Large Sand Grouse.

"Forehead and crown greyish brown, with a faint pearly tinge, in some specimens with a buffy tinge; lores behind the eye and ear coverts light grey, in some specimens, especially old males, the dark shafts of the feathers of the lores, under the eye, and of the ear coverts are distinctly visible and end in bristles; nape and base of the neck, like the crown; back, scapulars, upper tail and wing coverts rich buff or orange buff with a subterminal dark bar, the bases of the feathers paler buff, with waved barrings and vermiculations; primaries greyish and black shafted, the outer web of the outermost quill dark brown, and with the two following tipped blackish, the rest the same,

but edged on the tip and the outer edge of the inner web near the tip, with whitish, the under surface black; the secondaries basally white or fulvous white, with faint vermiculations on the exterior webs, all broadly tipped dusky, and the margin of the exterior web blackish; tertiaries dusky grey, or buffish, with vermiculations basally, and margined at the tips on the exterior web with rich buff or orange buff; the visible portion of the lower series of the median and greater coverts rich buff or orange, forming in the closed wing, with the outer edges of the tertiaries, an oblique bar of rich buff; edge of the wing fulvous white; under wing coverts pure white; chin, upper throat, sides of the neck to behind the ear coverts and nape deep chestnut; middle of the throat with a large triangular patch of black; breast dull ashy or pearly grey, crossed on the lower part by a broad black band, succeeded by a broad buffy one, about four times the width of the black band; abdomen, vent and thigh coverts deep black; under tail coverts black, tipped with white; tail with the central tail feathers like the back, or orange buff, with numerous dark bands, and slightly elongated beyond the others; lateral feathers dusky rufescent, with darker narrow bars, tipped white, and with a subterminal black band; tarsal feathers fulvous white; bill bluish; feet dull yellowish brown; irides dark brown.

"*Length.*—11·75 to 12·5; wings 9·25; tail 4 to 4·25; tarsus 1·1.

"The female differs in having the whole head and upper parts, and also the breast narrowly barred with brown. The pectoral band is narrower and the chin fulvous with a narrow black edge."

Hab.—The desert regions of Asia, Southern Europe and North Africa; Asia Minor and Palestine. Everywhere common in Sind, Punjab, N.-W. Provinces, Oudh and Bengal; Kutch, throughout Rajputana, Kattiawar and North Guzerat; Beloochistan, Persia, Afghanistan and Eastern Turkistan.

1181. Pterocles exustus, *Tem. Pl. Col.* Nos. 354, 360; *Rupp. Les. Trait. Orn.* p. 517; *Sykes, P. Z. S.* 1832, p. 154; *Gray, Gen. B.* iii. p. 519; *Jerd., Madras Jour.* xii. p. 3; *Handlist, Syst. Orn. W. Afr.* p. 205; *Jerd., B. Ind.* iii. p. 502; *Hume, Str. F.* vii. p. 160; *Elliott, P. Z. S.* 1878, p. 248; *Murray, Hdbk., Zool., &c., Sind,* p. 202.—The COMMON SAND GROUSE.

PLATE, fig. 5.

Head, nape, sides of the neck and breast isabelline with a faint fulvous tinge; lores, sides of the face, chin and throat yellowish or light orange buff; back and rump like the breast, the feathers with darker tips; scapulars tipped greyish fulvous; upper tail coverts with a greenish cast; primaries dusky brown, all, except the four outermost broadly white on their inner margins near the tip, the innermost also tipped white; secondaries hair brown, their terminal third with buffy edges on their exterior webs; tertiaries the same, but with narrower buff edgings; wing coverts buff, the feathers tipped narrowly

with blackish chestnut; tail with the central feathers much elongated beyond the rest, slightly darker buff than the wing coverts, black-shafted and the lengthened narrow portion black; lateral feathers dusky rufescent, with pale rufous bars on their exterior webs, tipped white and with a subterminal dark band; a narrow black pectoral band occasionally edged on its upper side with fulvous white followed by a broad band of isabelline; rest of the under parts chocolate brown, paler on the vent; flanks and thigh coverts chestnut; lower tail coverts creamy or fulvous white; tarsal plumes fulvous or yellowish white.

The female has the entire upper plumage, as also the space between the pectoral band and abdomen, fulvous, closely barred with deep brown; breast unspotted isabelline, like the male.

Length.—10 to 11·5 inches; wings 7; tail 3·5. The males average from 9·5 to 10 inches in length; bill leaden brown; legs brown; irides dark brown.

Hab.—N.-E. Africa, Arabia, Nubia, Egypt, Abyssinia and Palestine; Sind, Kutch, Rajputana, Kattiawar, N. Guzerat and Deccan; Punjab, N.-W. Provinces, Bengal, Sylhet, Burmah, Beloochistan, Quetta and Afghanistan. Breeds almost everywhere from February to August according to locality, laying 2—3 eggs of a fine smooth texture and gloss, rather long and cylindrical, of a pinkish stony colour, thickly spotted and streaked or irregularly blotched with dark and light shades of olive brown and inky purple, varying in length from 1·32 to 1·6 inches and in breadth from 0·95 to 1·11.

1182. Pterocles alchata, *Linn., Syst. Nat.* i. p. 276; *Gmel., Syst. Nat.* i. 754; *Lath., Ind. Orn.* ii. p. 641; *Licht., Verz. Doubl.* p. 64; *Jerd., B. Ind.* iii. p. 500, No. 801; *Hume, Str. F.* i. p. 221; *Blf., East. Persia* ii. p. 271; *Murray, Hdbk., Zool., &c., Sind*, p. 197; *Elliot, P. Z. S.* 1878, p. 251. Pterocles setarius, *Tem., Pig. et Gallinæ* iii. pp. 256, 714.—The Pin-tailed Sand Grouse.

PLATE, fig. 6.

Male.—Forehead and crown, also the nape and sides of the face yellowish buff with a ferruginous tinge; the crown with some nearly obsolete dark bars; chin, throat and a streak behind each eye black; neck in front and upper breast greenish buff, the feathers above pale chestnut, those of the breast with a dark brown transverse band forming a bar across; lower breast pale chestnut, the feathers ashy white at base, with a subterminal dark or dusky bar, and broadly terminated with chestnut; a black band separates the chestnut breast from the white of the abdomen; hind neck olive brown; upper back the same, each feather tipped with yellow; lower back, rump and upper tail-coverts pale buff, with, in some, a rufescent tinge, barred transversely with black; scapulars rufescent or orange buff, the feathers barred with black and tipped with yellow; on some feathers this yellow tip is subterminal, with a very narrow black margin at the extreme tip; shoulder of wing olive brown; lesser, median and greater coverts broadly maroon, bounded

above and below with a narrow white line, and tipped narrowly with black, the bases of the feathers being brownish ash; upper series of the median and greater coverts olive brown at base, then broadly greenish yellow and margined with black at the tips; primary coverts brownish ash, black-shafted; primaries black-shafted, all (except the outer web of the first which is black) with their outer webs ashy grey, their inner webs rufescent grey near the shaft; (not extending to the tip) then broadly dusky brown, and narrowly margined to the tip with white; secondaries with the outer webs and tips of the inner webs dusky brown, rest of the inner web and edging to the outer web white; tertiaries greenish olive on their outer web and rufescent grey on their inner, the uppermost with a yellow spot terminally; abdomen, flanks and axillaries white, the shafts of the feathers, except those of the axillaries, black basally; a large white patch on the under surface of the wing, formed by the white bases of the inner webs of the secondaries and their coverts; the edge of the wing inside dusky brown; tarsal plumes whitish; tail with the lateral feathers white on their outer webs, their inner webs grey brown, margined with narrow, nearly obsolete dusky and buff bars, the tips of the feathers broadly white; rest of the tail feathers barred buff and dark brown, plain grey brown near the shaft, and all (except the longest rectrices, which are black) tipped with white; bill horny; orbits dark plumbeous; irides dark brown.

Length.—To end of longest rectrices 13 inches; wing 8; tail 6 to end of longest rectrices.

Female.—Top of head and back deep buff, barred with black; sides of face and neck orange yellow; throat and chin white; a dark band on the lower neck, another on the upper breast, and a third on the lower breast separating the white of the abdomen. Upper plumage barred black and buff; secondaries the same, with a subterminal grey bar.

Length.—13 inches; wing 7·75; tail 5·37; irides and orbits as in the male.

Hab.—Sind, Punjab, N.-W. Provinces and Rajputana; Beloochistan (in the Bolan, Quetta and at Khelat), Persia, at Bushire, Southern and Eastern Afghanistan and Eastern Turkestan. It also inhabits N. Africa, Palestine, Spain and Portugal, and is said to breed in parts of Western Asia. In Sind, in especially the Northern districts, the Pintail is found in flocks, and sometimes in countless numbers; in the southern parts it is also found, but evidently only as stragglers.

1183. Pterocles Lichtensteinii, *Tem. Planch. Col.* 355-361; *Heuglin, Syst. Ueber. Vog. N. Afr.* p. 304; *Speke, Ibis*, p. 247; *Hume, Str. F.* i. p. 219; *Murray, Hdbk., Zool., &c., Sind*, p. 195. *Butbur*, Sind.—The Close-barred Sand Grouse.

PLATE, fig. 4.

Male.—Frontal zone white, or buffy white; a broad black semicircular band behind it extending from the anterior angle of the eye on each side; behind

this another white or buffy white band, interrupted on the crown, the feathers of which are buffy white and mesially dark brown; a buff spot above the hinder angle of each eye; chin and throat pale buff, their sides the same, with minute black spots; upper breast, hind neck and back pale or fulvous white, with regular and close barrings of black; scapulars, wing coverts and tertiaries the same, the black transverse bars rather broader and deeper in colour, the tips of the feathers broadly yellowish buff; upper tail coverts fulvous white, the black bars more distant and as wide as the fulvous interspaces; primaries and their coverts hair brown, the outer web of the first margined with dull white, more conspicuous basally, and some of the inner ones with white margins to the tips; secondaries dark brown; lower breast yellowish buff with a narrow black band crossing it in the middle and another on the lower part of the breast, formed by the dark termination of the lowest breast feathers; below this the abdomen, flanks, vent and under tail coverts are white, with transverse brown bars; tarsal plumes buffy white; tail barred buff and black, the terminal black bar broadest, with a streak running up the shaft of the feathers and partially dividing the broad buffy tips.

The *female* wants the frontal patch and the semicircular band behind it, also the buff breast and band crossing it in the middle; the chin and throat are pale buffy, minutely spotted with dark brown; the upper surface of the body finely, closely and narrowly barred with pale fulvous and dark brown; the lower surface the same, but the fulvous interspaces are broader and the dark bars narrower; bill horny; feet yellow; irides brown; orbits lemon yellow.

Length.—10 inches; wing 7·25; tail 3·25; bill 0·62.

Hab.—Sind, Punjab, Arabia, N.-E. Africa.

1184. Pterocles fasciatus (*Scop.*), *Gould, B. Asia*, pt. ii. pl. 14; *Jerd., Ill. Ind. Orn.* pl. 10 and 36; *id., B. Ind.* ii. p. 498, No. 800; *Hume, Nests and Eggs Ind. B.* p. 511; *id., Str. F.* i. p. 391; vii. p. 160.—The PAINTED SAND GROUSE.

PLATE fig. 3.

A narrow white band on the forehead followed by a broad black one and succeeded by a narrow white one, and another black one which widens behind the eye and ends in a white spot; occiput and nape streaked with black and fulvous; sides of the head, neck, breast and shoulder of wing fulvous yellow or buff; back, scapulars, tertiaries and tail fulvous yellow banded with deep brown; quills, brownish black with narrow pale edging; median and greater coverts and some of the secondaries broadly banded with black and edged with white, ; a triple band—a maroon, a creamy white and a chocolate brown one—separates the fulvous breast from the abdomen, which with the vent and under tail coverts are also chocolate brown, the feathers tipped with white. The *female* has not the bars on the occiput and nape, nor the pectoral bands and the wing bars; the sides of the neck, breast, wings, and tail are mixed fulvous

and rufous and finely barred with black; lower breast and abdominal region finely barred with blackish and creamy or fulvous white; bill red; irides dark brown; feet dull yellow.

Length.—10 inches; wing 7; tail 3·25; tarsus 1·1.

Hab.—The greater part of India, except in the very moist countries. It is recorded from the Deccan, Carnatic and Central India, also from Sind, Punjab, and the N.-W. Provinces, and from Delhi to Mount Aboo in Guzerat, Jodhpore, and Sambhur. Affects the low ranges of rocky and more or less barren hills. They breed almost everywhere they occur, making a depression in the soil and laying 2—3 eggs, a delicate pinkish fawn or pale salmon colour, here and there finely speckled, spotted and streaked with brownish red and numerous spots of pale pinky purple underlying as if it were the primary marking. In shape and markings the eggs vary a good deal. In length they vary from 1·3 to 1·62, and in breadth from 0·93 to 1·05.

Gen. **Syrrhaptes**—*Lin.*

Feet smaller than in *Pterocles*, and feathered to the claws; hind toe wanting; 1st and 2nd primaries lengthened and attenuated.

1185. Syrrhaptes thibetanus. *Gould, Cent. Him. B.* pl.; *id., Birds Asia*, p. ii. pl. 69; *Jerd., B. Ind.* iii. p. 504 (*note and descr.*); *Hume and Marsh., Game Birds Ind.* i. p. 43, pl.—The Thibetan Sand Grouse.

Male.—Forehead and lores whitish, faintly tinged with buffy, the feathers dark shafted; crown, occiput and nape white, closely and narrowly barred transversely with dark brown; chin, throat, cheeks, ear coverts, sides and front of neck buffish yellow during the breeding season; and buffish white during winter; back of the neck, upper back and lower breast whitish, tinged with vinaceous, and transversely barred narrowly with brown; scapulars and tertials vinaceous fawn, the inner webs of the scapulars with large black blotches, and everywhere excessively finely vermiculated with blackish brown; lower back and rump white, vermiculated with greyish brown; upper tail coverts fawn colour, also vermiculated with greyish brown; central tail feathers fawn colour, the attenuated portion slaty black; lateral tail feathers rufous buff, tipped with white and barred widely with black; primaries and their coverts slaty black, with a white patch near the tip on the inner web; secondaries black; lower breast grey; rest of under surface white, the feathers of the leg tinged with fulvous.

Length.—18 to 20 inches; wing 9·9 to 10·5; tail 7·5 to 9·5; bill at front 0·74 to 0·78.

Hab.—The semi-desert plains of Ladak and the upper portions of the Sutlej Valley. Hume adds that he saw numbers on the Roopshoo plains about the head of the Pangong Lake. It has also been got by Wilson on the water shed range crossing from the Mussoorie hills into Thibet.

Family.—PHASIANIDÆ.

Bill moderate, strong, vaulted, the tip of the upper mandible hooked over the lower; nostrils apert. Wings moderate or short; tail of from 12 to 18 feathers, long and broad; tarsus moderate or long, spurred in the males; toes long; hind toe raised. This family includes the Peafowls, also the Jungle and Spur fowls and Pheasants.

Sub-Family.—PAVONINÆ—Peafowl.

Plumage brilliant green, shot with gold, and ocellated.

1186. Pavo cristatus, *Linn., Syst. Nat.* i. p. 267; *Elliot, Mon. Phas.* i. pl. v.; *Jerd., B. Ind.* iii. p. 506; *Hume and Marsh., Game Birds* p. 83; *Murray, Vert. Zool., Sind,* p. 212.—The Common Peacock.

Crest with bare shafts, except at the tip. Whole head, neck, and breast rich purplish blue with gold and green reflections; scapulars, tertiaries and lesser wing coverts rufescent, barred with black; facial skin greyish white; back green, the feathers scale-like in appearance with coppery edges; median coverts deep blue; primaries and tail chestnut; abdomen and under surface black; train green, ocellated. Bill horny brown; irides dark brown.

Length.—Without train, 42 to 48 inches; with train, more than double the length of head to true tail; wing 18.

The pea hen is chestnut brown on the head and nape; neck greenish, edged with whitish brown; upper surface of the body hair brown with undulations; quills brown; tail deep brown, tipped with white; chin and throat white; breast greenish, like the neck; abdomen white; under tail coverts brown.

Length.—38 to 40 inches; wing 16; tail 14. Crest feathers with bare shafts except at the tip.

Hab.—Throughout India proper, extending into Ceylon and Assam. This lovely bird is so well known that any account of its habits would be superfluous. They generally roost at night on high trees, seldom, if ever, on the ground, except perhaps when disturbed at night and are forced to fly down. They pair in the early part of the hot weather, when the peacock has then his full train of upper tail coverts to display to his wives. They lay in July and August. Eggs, pure white, or a rich *café au lait* or reddish buff, with strong glossy shells pitted all over with minute pores. Size 2·55 to 3 × 1·92 to 2·2 inches.

1187. Pavo muticus, *Linn., Syst. Nat.* i. p. 268; *Elliot, Mon. Phas.* i. pl. 5; *Hume, Str. F.* iii. p. 165; *Blyth and Wald., B. Burm.* p. 147; *Dav. et Oust. Ois. Chine,* p. 402; *Anders., Yunnan Exped.,* p. 668; *Hume and Dav., Str. F.* vi. pp. 425, 520; *Hume, Str. F.* vii. p. 455; viii. p. 110; *Hume and Marsh., Game Birds* p. 94, pl.; *Bingham, Str. F.* ix. p. 195; *Oates, Str. F.* x. p. 235; *Kelham, Ibis,* 1881, p. 529; *Oates, B. Br. Burm.* ii. p. 312.—The Burmese Peafowl.

Feathers of crest webbed throughout their whole length; head, neck and breast brilliant green; scapulars, tertiaries and lesser wing coverts uniform and unbarred rufescent; facial skin blue above and round the eyes; deep yellow on the remainder of the face; wing coverts violet blue, edged with pale greenish yellow; quills rufescent. Legs and feet dark horny brown; irides dark brown.

Length.—To end of true tail 40 to 48 inches; train projects beyond end of tail from 24 to 44; wing 16·75 to 19·75; tail from vent 15·5 to 17·5; tarsus 5·5; bill from gape 1·95 to 2·5.

Hab.—British Burmah, extending north as far as Chittagong; east through Siam to Cochin-China, and south down the Malay Peninsula.

Gen. **Argusianus.**—*Rafin.*

Bill short and strong; upper mandible deflected at the tip, convex; nostrils basal lateral; head naked; tail long.

1188. Argusianus argus (*Linn.*), *Oates, B. Br. Burm.* ii. p. 313. Phasianus argus, *Linn., Syst. Nat.* i. p. 272. Argusianus giganteus, *Bl., B. Burm.* p. 148. Argus giganteus, *Elliot, Mon. Phas.* i. pl. 11; *Hume and Dav., Str. F.* vi. p. 427; *Hume, Str. F.* viii. p. 110; *Hume and Marsh., Game Birds* i. p. 99, pl. Argusa giganteus, *Kelham, Ibis*, 1881, p. 530.—The Argus Pheasant.

Head, cheeks, chin, and gular region naked and slaty blue; some bristly feathers on the occiput black, forming ear-like tufts; back of neck buffish, minutely spotted with black; lower neck, breast and upper back reddish chestnut, also minutely streaked and speckled with black; lower back and rump buffish, lighter on the rump; upper tail coverts dark vinaceous, thickly and closely variegated with ocelli. Wing coverts buffish, thickly freckled and speckled with dark brown; tertiaries longer than the primaries and beautifully ocellated; tail with the centre feathers much elongated; breast and upper abdomen ferruginous, finely vermiculated with ziz-zag lines. The female is duller in colour and wants the elongated tertials and tail feathers, otherwise as in the male.

Legs and feet from pale to bright red.

Length of the Male.—68 to 70 inches; tail about 50; wing to end of primaries 18; tarsus 4·7; bill from gape up to 2. *Length of Female.*—About 30 inches; tail 12; wing 17; tarsus 3·6; bill from gape up to 1·7.

Hab.—Tenasserim in the extreme south, where it was observed by Mr. Davison in the forests about Malewoon and Bankasoon and the higher portions of Pakchan. It extends down the Malay Peninsula, and is found in Sumatra. According to Davison they are confined entirely to the evergreen forests. The male and female live quite solitarily. The males, Mr. Davison says, have a peculiar habit of selecting a piece of ground some six or eight yards square,

thoroughly cleaning it from all vegetation and rubbish, and taking up their quarters there. They, however, roost on trees at night. Food—fruit, ants, slugs, and insects generally.

Gen. **Polyplectron**.—*Tem.*

Head sub-crested; bill less large and convex, more compressed, the tip deflected over the lower mandible; wing short; tail long; tarsus spurred.

1189. Polyplectron thibetanum (*Gm.*), *Elliot, Mon. Phas.* i. pl. vi.; *Hume and Dav., Str. F.* vi. pp. 432, 521; *Hume, Str. F.* viii. p. 110; *Hume and Marsh, Game Birds* i. p. 105 pl.; *Bingham, Str. F.* ix. p. 195; *Oates, B. Br. Burm.* ii. p. 315. Pavo tibetanus, *Gmel., Syst. Nat.* i. p. 731. Polyplectron chinquis, *Temm., Pig. et Gall.* ii. p. 363; iii. p. 675; *Blyth and Wald., B. Burm.* p. 148; *Inglis and Hume, Str. F.* v. p. 40.—The GREY PEACOCK-PHEASANT.

Crown of head subcrested, the feathers thick set; whole head and neck greyish brown, minutely freckled and stippled with brown; rest of upper plumage including the wings and tail dark brown, minutely freckled all over with greyish white; the feathers of the back, scapulars, tertiaries and wing coverts tipped with pale buff and each having near the tip a large roundish violet-blue spot, tinged with a coppery gloss next the buff tip. Each tail feather with a large oval metallic-green patch on each web, surrounded by a blackish and a buff ring; lower plumage pale ochraceous barred with brown. The *female* is similar, but duller in colour, the spots on the tail are small and inconspicuous, and those on the tail coverts altogether absent. (*Oates.*) Bill with the upper mandible and the tip of the lower one black; rest of the bill and facial skin pale yellow; irides white; legs and feet blackish; in the female dark plumbeous; the bill horny brown; and the facial skin pale dingy fleshy yellow. (*Davison.*)

Hab.—The dense hill forests of the Indo-Burmese region, its furthest limits northwards and westwards being the Buxa Doars and the outer slopes of the Bhootanese Himalayas. Eastwards it is not rare in suitable localities in the Eastern Doars, northern portions of Goalpara, Kamrup, and Durrang, and Hume adds possibly, further east. South of the Brahmaputra it occurs in the Garo, Khasia and Naga hills, in Sylhet, Cachar, Hill Tipperah, Chittagong, Arrakan, Pegu and Tenasserim as far south as Tavoy. A closely allied species, *P. bicalcaratum*, is said to have occurred at Mergui, but this requires confirmation. Hume, however, says that from the southern boundary of Tenasserim to the extreme south of the Malay Peninsula it certainly occurs, and that it may yet prove to occur in the higher hills of Southern Tenasserim.

Family.—MEGAPODIDÆ.

Birds with large legs and feet, commonly known as Mound-birds; facial skin nude; head crestless; tail short; tarsi thick and strong; hind toe on the

same plane as the anterior one. Eggs large, laid in a mound of earth, heaped up by the parent birds.

Gen. **Megapodius**.—*Lin.*

Characters the same as those of the family.

1190. Megapodius nicobariensis, *Blyth, J. A. S. Beng.* xv. p.; *Hume, Str. F.* i. p. 82; iii. pp. 276, 499; *id., Nests and Eggs Ind. B.* iii. p. 517; *Hume and Marsh., Game Birds Ind.* i. p. 110.—The NICOBAR MOUND BIRD or MEGAPODE.

Upper and lower surface of the body dull chocolate brown, darker on the back and lower abdomen, slightly tinged with rufescent on the lesser, median and greater wing coverts, and greyer on the breast; all the feathers margined lunately with black; primaries (3—4) yellowish, edged with black; top of head greenish brown; lores, orbital and aural region and visible portions of the skin of the neck from a light somewhat dull cherry red to a bright brick red. Legs and feet dark greenish horny; scuta somewhat paler; soles of the feet pale carneous; knee brick red; bill light greenish horny.

Length.—14·5 to 17 inches; wing 8·5 to 9·5; tail 2·75 to 3·5; tarsus 2·6 to 2·75; bill at front 0·94 to 1·1.

Hab.—The central and southern portions of the Nicobar Islands. According to Hume, the Nicobar Megapode never wanders far from the seashore, and throughout the day keeps in thickish jungle a hundred yards or so above water mark. They come out generally at dusk and in the early dawn. Generally met with in pairs, coveys and flocks of from thirty to fifty, and Mr. Hume adds that they are unsurpassed. "The flesh is white, very sweet and juicy, loaded with fat, is delicious, a sort of *juste milieu* between that of a fat Norfolk turkey and a fat Norfolk pheasant." The eggs too, he says, are quite equal if not superior to those of the Peafowl. Eggs, 10—18 in number, elongated ovals, pointed towards one end, whitish, of a chalky texture, varying in size from 3·01 to 3·4 in length and from 1·9 to 2·25 in breadth.

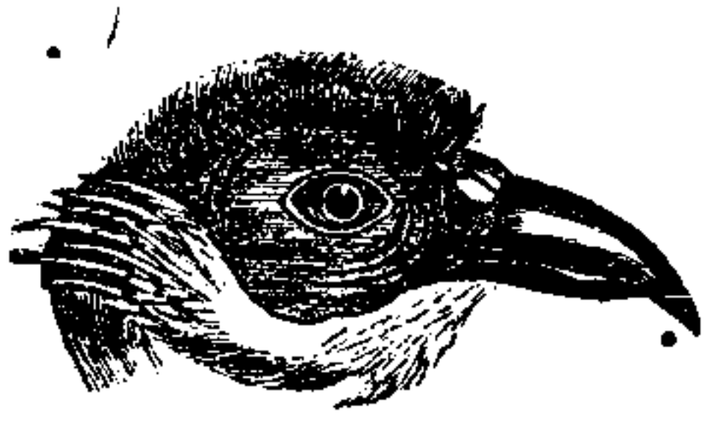
Sub-Family.—PHASIANINÆ.

Tail typically long, with the central feathers of great length; plumage rarely ocellated; head more or less crested. Includes (*Monaul*), the Horned, Gold and Silver, Snow and Blood pheasants, Firebacks and Jungle fowl.

Gen. **Crossoptilon**.—*Hodgs.*

Bill strong, broadly convex; upper mandible longer than and overlaying the lower mandible; cere and facial skin nude; nares basal; wing with the 6th quill longest; tail ample, of 18 feathers; upper tail coverts long, and covering the tail feathers; tarsi nude, scutate before and behind; males only with a spur.

1191. Crossoptilon thibetanum. *Hodgson, J. A. S. B.* 1849; *Hume and Marsh., Game Birds Ind.* p. 115, pl.; *Tickell, Field* iii., 1886, p. 170. Crossoptilon drouyni, *Verr.*—HODGSON'S EARED PHEASANT.



Head of Crossoptilon thibetanum.

Top of the head black, the feathers narrow, short, erect, velvetty and thick set; cheeks and facial skin nude and red; wings short, stiff, bowed and rounded; quills blackish on their outer webs; lesser and median wing coverts greyish ash, tinged with blue; upper plumage bluish hoary, paler and tinged with yellowish on the lower surface; alar and caudal plumes dusky or black, glossed more or less with changeable blue; bill dull ochreous red. (*Hodgson.*)

Length.—38 to 40 inches; tail 19 to 20; wings 12·5; tarsus 4·12; bill 1·62.

Hab.—Nepaul. Mr. Hume figures this bird in his "Game Birds of India," and though he says it could hardly claim to be included in the Indian Avifauna, I have (owing to the rarity of the species, and the remarks of Colonel Tickell in a note by Mr. Hume,) given a description of it in the event of the bird being found, as Colonel Tickell surmises, nearer Nepaul.

Gen. **Lophophorus**, *Temm.*

Head crested, the shafts of the feathers bare except at the tip; orbits bare; bill somewhat lengthened, the tip deflected; tarsus spurred; tail short. Plumage rich metallic green and gold.

1192. Lophophorus Impeyanus (*Lath.*), *Gould, Cent. Him. Birds*, pls. 60, 61; *id., B. Asia* pt. ii. pl. 7; *Jerd., B. Ind.* iii. p. 510, No. 804; *Hume and Marsh., Game Birds of Ind.* i. p. 125.—The MONAUL PHEASANT.

Head, including the crest, also the throat, brilliant metallic green; back of the neck brilliant iridescent purple, passing into bronzy green, and all with a golden gloss; upper back and wing coverts, also the rump and upper tail coverts richly glossed with purple and green, the latter colour prevailing on the wings and furthest tail coverts. Middle of back white; quills black; tail cinnamon rufous; whole lower surface black, glossed on the throat with green and purple, dull and unglossed elsewhere. Bill dark horny; naked orbits blue; irides brown; legs dull ashy green. (*Jerd.*)

Length.—27 to 29 inches; wing 11 to 12·2; tail from vent 9·5 to 10·5; tarsus 2·7 to 3; bill from gape 1·9 to 2. Females are smaller. The female has the chin and throat white, the rest of the body pale buffy brown, with dark brown spots, bars and undulations; secondaries barred black and rufous; tip of tail and external margin of tail coverts whitish. Bill blackish; legs dusky greenish.

Length.—24 to 26 inches; wing 10·3 to 11; tarsus 2·65 to 2·7.

Hab.—The western borders of Cashmere to the more western portions of Bhootan, and throughout the Himalayas, as far east as Sikkim. Jerdon says in Sikkim it is not found at a lower elevation than 10,000 feet. Common about Mussoorie at one time, and also about Simla. Breeds throughout the forest-clad ranges of the Himalayas during May and June. The eggs are laid in a bare depression in the ground under the shelter of some overhanging rock, or the massive root of some large tree. The eggs, 4 to 6 in number, are long ovals, a good deal compressed at one end; the ground colour is buffish white thickly and coarsely freckled all over, especially in the middle, with deep reddish brown. Size from 2·41 to 2·69 in length by 1·7 to 1·89 in breadth.

1193. Lophophorus Sclateri, *Jerd., Ibis,* 1870, p. 147; *id., J. A. S. Beng.* 1870, p. 61; *Sclater, P. Z. S.* 1870, p. 162, pl. xiv.; *Elliot, Mon. Phas.* i. pl. xx.; *Hume, Game Birds* p. 135, pl. Lophophorus (Chalcophasis) Sclateri, *G. R. Gray, Hand List B.* ii. p. 261. Chalcophasis Sclateri, *Gould, B. Asia* vi. pl. 70.—Sclater's Crestless Monaul.

Top of head covered by a short recurved green crest; occiput, cheeks, throat and entire under parts deep velvetty black; back of neck red, becoming orange yellow on the lower part; back and wings metallic green, with blue and purple reflections; shoulders reddish bronze; primaries brownish black; rump white with mesial black lines; upper tail coverts white; tail deep chestnut tipped broadly with white; facial skin deep blue, with short, black hair-like feathers; legs and feet brown; bill greenish horn.

Length.—27 inches; wing 12·4; tail 9·0; bill at front 1·3; from gape 1·95; tarsus 3·2; irides brown.

Hab.—East and South-East of Sadiya. Nothing is known of its habits.

Gen. **Ceriornis.**—*Swainson.*

Bill rather short; head with two small erectile fleshy horns behind the nude orbits; crown crested; throat with extensile gular wattles; tail short, broad, of 18 feathers; tarsi short.

1194. Ceriornis satyra (*Linn.*), *Gould, Cent. Him. B.* pl. 62; *Jerd., B. Ind.* iii. p. 516, No. 805; *Hume and Marsh., Game Birds* i. p. 137.

Meleagris satyra, *Linn.*, *Syst. Nat.* i. p. 717. Satyra Lathami (*Gray*), *Hardwick, Ill. Ind. Zool.*, pl. 49, 51.—The SIKKIM HORNED PHEASANT or INDIAN CRIMSON TRAGOPAN.

Forecrown, nape, and sides bordering the nude parts black; crest formed of slender hair-like feathers black basally and red terminally; back, rump, wings and upper tail coverts brown, finely barred with black and with white ocelli; wing coverts and sides of the rump brown, the ocelli on a maronne-red spot at the tip of each feather; shoulder of wing bright fiery red; tail black, barred narrowly with rufous; sides and back of the neck, the breast, and under surface of the body rich crimson red, with white, black-edged spots. Bill brown; orbits, horns and nude parts fine blue; wattles blue, with crimson bars when excited; irides deep brown; legs yellowish brown.

Length of Males.—26·5 to 28·5; wing 10 to 10·6; tail 10 to 11·5; tarsus 3·25 to 3·75; bill from gape 1·4 to 1·5. *Females*—21·5 to 23·75; wing 8·5 to 9; tail 8 to 10; tarsus 3 to 3·25; bill from gape 1·25 to 1·45.

Hab.—The higher wooded ranges of the Central and Eastern Himalayas, westwards to Kumaon and the western portions of Garhwal. Found in suitable localities throughout Nepaul and Sikkim and well into Bhootan. Occurs also in the Dafla Hills; also in the vicinity of Darjeeling. Breeds at elevations of from 9,000 to 12,000 feet in the forests that lie below the snow. Eggs are like large hen's eggs, white, freckled with dull lilac.

1195. Ceriornis melanocephalus (*Gray*), *Gould, Cent. Him. B.* pls. 63, 64, 65; *Jerd., B. Ind.* iii. p. 517, No. 806; *Hume and Marsh., Game Birds* i. p. 143. Phasianus nipalensis (*Gray, the female*), *Hardw., Ill. Ind. Zool.* i. pls. 46, 47, 48 and 2 pl. 40; *Elliot, Mon. Phas.* i. pl.—The SIMLA HORNED PHEASANT or the WESTERN TRAGOPAN.



Head of Ceriornis melanocephalus.

Head black, crest tipped with red; nape, the back and sides of neck dark red; back and upper parts dark brown, minutely barred irregularly with black, each feather with a round white spot on a black ground; shoulder of wing dark red; quills blackish, mottled and barred with brown; some of the wing coverts with dusky olive spots; tertiaries mottled like the back and with the scapulars have a large white spot; upper tail coverts lengthened, the lateral

feathers with a large fulvous tip edged with dull black and white spotted; tail black, unspotted towards the tip, but barred with white, brown for the greater part of its length; beneath, the throat and neck below the wattle vivid scarlet, passing into flame-colour and yellow on the lower part of the neck; breast and lower parts black, dashed with dull red, and each feather with a round white spot; thigh coverts mottled black and brown, paler and yellowish near the joint. Bill blackish; irides hazel brown; orbits bright red; fleshy horns pale blue; gular wattles purple in the middle, spotted and edged with pale blue and fleshy on the sides; legs and feet fleshy.

Length.—27 to 29 inches; wing 11·25; tail 10·5 to 11; tarsus 3.

The female has the head and all the upper parts mottled with dark and light brown and blackish with small pointed streaks of pale yellow; quills and tail dark brown, minutely mottled and barred; under surface light ashy brown, powdered with blackish and marked with irregular spots of white; fleshy horns and wattles absent.

Hab.—Western borders of Nepaul to the extreme N.-W. Himalayas. It is found about Simla and Mussoorie, but more abundant near Almora. It is not a very rare species, and is very easily reared in captivity, as well as easy to shoot. They feed chiefly on berries, but insects also form part of their food. They begin to pair in April. Eggs have been obtained in May at from 8,000 to 11,000 feet elevation. They are, according to Hume, elongated ovals considerably compressed towards the small end, and about the size of the egg of the Monaul. The shell is devoid of gloss, and vary in colour from a pale *café au lait* to a dull reddish buff. Size from 2·4 to 2·55 by 1·68 to 1·72.

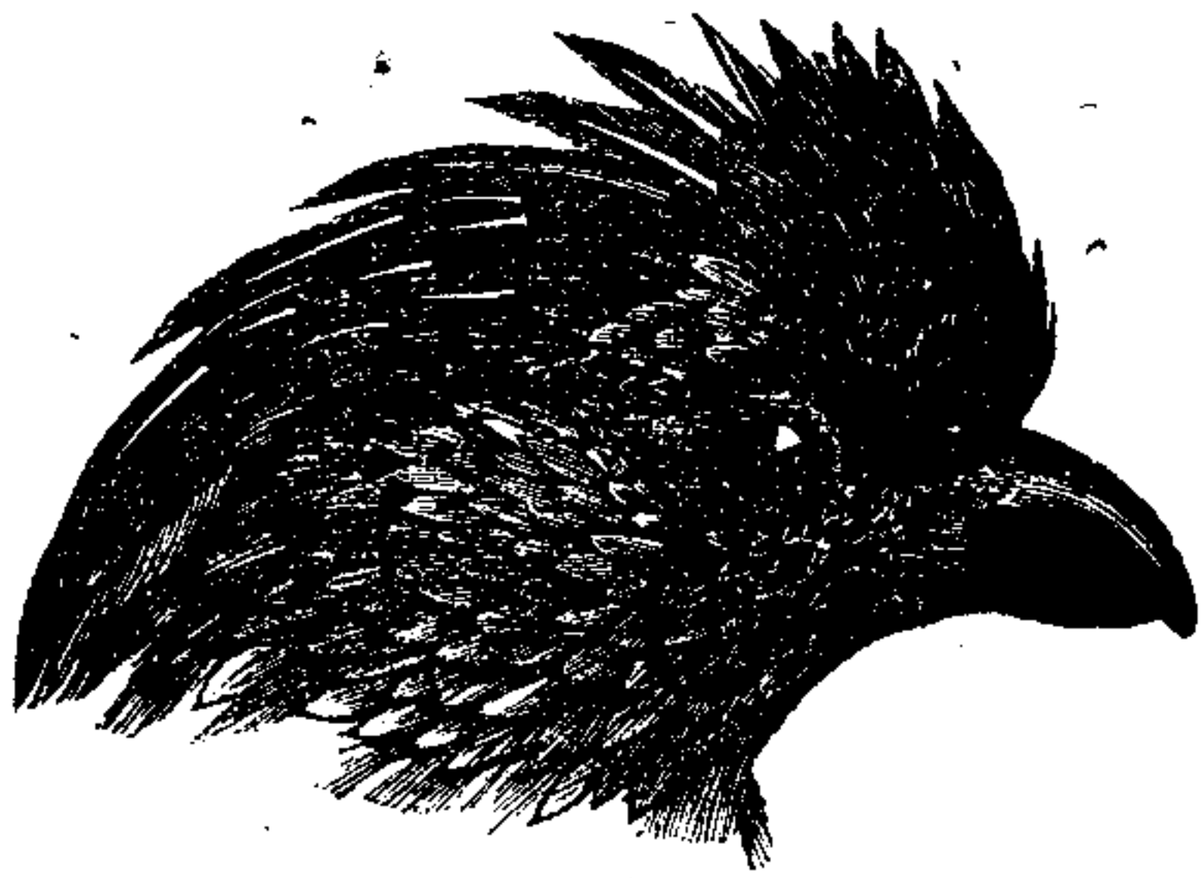
Ceriornis Blythi, *Jerd.*, *J. A. S. Beng.*, 1870, p. 60; *Gould*, *B. Asia* vii. pl. 47. This is another species of which much is not known. It is said to occur in the Naga and Assam hills: the forecrown and occiput is black; lores, orbital region, cheeks, chin, throat and nude parts adjoining golden yellow; back of the head, neck all round and breast bright brick red or lake; a black post orbital and gular band; upper surface of the body rich maroon red, with white ocelli on a black ground at the tip of each feather; flanks more yellowish; belly grey; tail dark brown.

Gen. **Ithaginis**—*Wagler*.

Bill short, stout; tail of 14 feathers; tarsus of male with several spurs; head sub-crested; neck feathers elongated.

1196. Ithaginis cruentus (*Hardw.*), *Gould*, *B. Asia*, pt. iii. pl. 3; *Jerd.*, *B. Ind.* iii. p. 522, No. 807; *Elliott*, *Mon. Phas.* i. pl. 10; *Hume and Marsh.*, *Game Birds* i. p. 155. Phasianus cruentus, *Hardw.*, *Linn.*

Trans. xiii. p. 237. Phasianus Gardneri, *Hardw.* (the female).—The GREEN BLOOD PHEASANT.



Head of Ithaginis cruentus.

Forehead black; crown buff; crest dull grey, with a mesial streak of buff; lores and cheeks, also a broad ring round the red orbital region black; base of the bill, chin and throat blood red; lower throat brownish to black, with a mesial stripe of greenish buff down each feather; ear-coverts black, with buffish striæ; hind neck and upper surface of the body dark grey, each feather striped mesially with buff, which is again bounded by black; wing coverts the same; tail grey, passing into greyish-white at the tips; the shafts white and the basal three-fourths of the feathers broadly margined with blood red; breast, sides of the abdomen and flanks pale green with lighter shafts; breast feathers with a blood red spot near the centre of either margin; centre of abdomen, thighs and vent dark brownish grey, with a greenish mesial stripe bounded by black; under tail coverts deep blood red, tipped with pale yellow.

Bill brownish, black at tip and red at the base; irides brown; legs and feet coral red.

Length.—16 to 17 inches; wing 8·5; tail 6·5; tarsus 2·75.

The *female* has the forehead, cheeks and chin, bright rusty yellow; upper parts ferruginous brown mottled very finely with blackish; first primary plain dark brown, the others and the tail dark brown, freckled finely with blackish; lower parts brighter ferruginous brown than the back; under tail coverts and vent mottled with brown.

Hab.—S.-E. Himalayas, in Nepaul and Sikkim, more abundant in the latter, affecting ranges from 10,000 to 14,000 feet. According to Hodgson they are not rare. In November and December numbers are caught. They ascend and descend with the snow, and are easily captured, being fearless and stupid.

Gen. **Pucrasia**—*Gray.*

Bill short; head double-crested; tarsus spurred; toes slender, long; tail long, of 16 feathers.

1197. Pucrasia macrolopha (*Lesson*), *Gould, Cent. Him. B.* pls. 69, 70; *id., B. Asia, pt.* vi. pl. 4; *Jerd., B. Ind.* iii. p. 524; *Elliot, Mon. Phas.* 1 pl.; *Hume and Marsh., Game Birds* i. p. 159. Pucrasia nipalensis, *Gould, Cent. Him. B.* pl. 6; *Hardw., Ill. Ind. Zool.* pl. 40; *Hume, Str. F.* vii. p. 428; *Hume and Marsh., Game Birds* i. p. 165. Pucrasia castanea, *Gould, B. Asia,* pt. vi. pl. v.; *Hume, Str. F.* v. p. 138; vii. pp. 124, 428.—The Koklass Pheasant.



Head of Pucrasia macrolopha.

Head glossy dark green, the crown and medial crest ashy brown; the lateral feathers of the crest dark green and from 4 to 4·2 inches long; an oblong patch of white on each side of the neck; upper surface of the body light ashy, each feather with a mesial streak of black; wing coverts light chestnut brown, the feathers with black patches; upper tail coverts light ashy; tail chestnut brown, tipped with black and narrowly edged with whitish; chin and throat black, also the upper edge of the oblong white neck patch; breast and centre of abdomen deep chestnut; flanks ashy; vent chestnut, tipped with white. Bill black; irides dark brown; legs and feet ashy.

Length.—24 inches; wing 10; tail 12; tarsus 2·5.

The plumage of the female is pale yellow brown above, variegated and banded with dark brown chestnut, and pale yellowish; chin and throat yellowish white; under surface of the body yellowish-chestnut, with dark brown markings, paler along the abdomen and darker on the flanks.

Length.—20 inches; wing 8·1 to 8·6; tail 7 to 7·5; tarsus 2·2 to 2·5.

Irides deep brown; bill dusky black, yellowish horny at the tip of upper and base of lower mandible; legs and feet dusky plumbeous.

Hab.—N.-W. Himalayas, from the west of Nepaul to beyond Simla, extending probably into the Bhootan Himalayas. It is said to be common to the whole of the wooded regions from an elevation of about 4,000 feet to

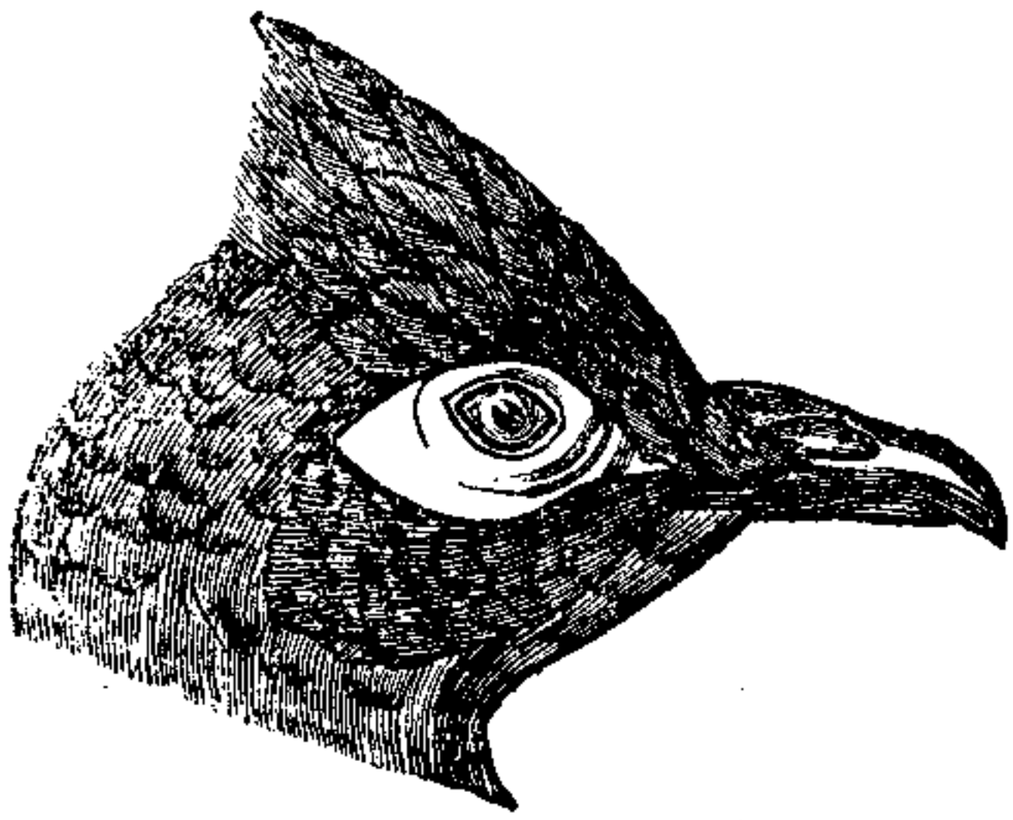
nearly the extreme limits of forest, but more abundant in the lower and intermediate ranges, where its favourite haunts are wooded ravines and hill sides where oak and chestnut are plentiful. It is found singly or in pairs. There is much difference of opinion as to whether it is good eating, but all agree that it affords good sport. Hume says the spot for Koklass is either some depression or saucer-like valley, or some place in a gorge where a horizontal plateau is thrown out inside the gorge. October and November are said to be good months about Mussoorie for Koklass.

It feeds chiefly on leaves and buds, also roots, grubs, acorns and berries. Breeds in May throughout the Himalayas in all well-wooded localities within the limits above indicated. Eggs, 6—9, oval, more or less pointed towards the small end; of a rich pale buff colour, densely and thickly speckled and spotted, or boldly and thinly blotched and splashed with deep reddish brown. They vary in size from 1·85 to 2·29 in length, and from 1·39 to 1·57 in breadth.

Gen. **Phasianus**.—*Linn.*

Tail long, cuneate, of 18 feathers; cheeks naked; tarsi spurred in the males.

1198. Phasianus Wallichii (*Hardw.*), *Gould, Cent. Him. B.* pl. 68; *Jerd., B. Ind.* iii. p. 527; *Hume and Marsh., Game Birds* i. p. 169; *Elliott, Mon. Phas.* i. pl.—The CHEER PHEASANT.



Head of Phasianus Hardwickii.

Head with a crest composed of a few long hair-like feathers and dark ashy in colour; neck pale ashy, barred narrowly with dusky black; back and scapulars and rump pale reddish chestnut, barred with bluish black; tail with the two long middle feathers pale yellow, broadly barred and speckled with black; the rest barred with pale yellow, black, and dark chestnut; chin

soiled buffish; throat and breast yellowish ashy, with a few broken black bars; abdomen dusky; wing coverts yellowish ash, with curved black bars and shining golden spots in some feathers; primaries dusky, with a few pale yellow bars; thigh coverts and vent yellowish chestnut marked with dusky. Bill pale horny; nude orbits bright red; irides yellowish hazel; legs and feet brown.

Length.—34 to 40 inches; wing 9·6 to 10·4; tail 20 to 23·0; tarsus 2·8 to 2·95; bill from gape 1·35 to 1·45. The females are 24 to 29·5 in length, with a wing of 8·8 to 9·5, and tail of 13·5 to 15·5.

Hab.—W. and N.-W. Himalayas, Nepaul, Garhwal, Dehra Dhoon, and about Chamba. "Mountaineer," according to Jerdon, says that it is an inhabitant of the lower and intermediate ranges, seldom found at very high elevations and never approaching the limits of forest. They are confined to particular localities, and not like other pheasants scattered indiscriminately over almost every part of the regions they inhabit. Grassy hills, scattered oak forests, sites of deserted villages and long grass in precipices are the haunts of this species. In the interior they are often found in the immediate vicinity of villages in flocks of 5 and 6. During the day they sit concealed, and only issue out in the morning and evening to feed. They run fast and lie very close and are flushed within a few yards. "Mountaineer" says he has knocked them over with a stick and even taken them with his hand; they feed chiefly on roots, grubs, insects, seeds and berries. The Cheer breeds throughout the lower ranges of the Himalayas during April, May and June, making a nest in grass or grass tufts. The eggs are of a pale stone colour, almost devoid of markings, but generally there are some few specks of red at one end. Size, from 2·05 to 2·22 inches × 1·4 to 1·56.

Gen. **Euplocamus**.—*Temm.*

Head more or less crested; orbits naked, red; plumage glossy black and white; feathers of the neck and breast hackled; tail moderately long, of 16 feathers, divaricated, raised in the centre, as in Jungle fowl, and held demi-erect, the feathers curving outwards and drooping. (*Jerd.*).

1199. Euplocamus albocristatus (*Vigors*), *Gould, Cent. Him. B.* pls. 66, 67; *Hume, Str. F.* iv. 42; *id., Str. F.* vii. p. 429; *Hume and Marsh., Game Birds* i. p. 178. Phasianus Hamiltoni (*Gray*), *Hardw., Ill. Ind. Zool.* i. pl. 41. Gallophasis albocristatus (*Vigors*), *Jerd., B. Ind.* iii. p. 532.—The White-crested Kalij Pheasant.

A long crest of decomposed feathers white; head, neck, wings and tail glossy bluish-black; lower back dull white; *rump and upper tail coverts broadly tipped white;* throat and *breast greyish white, the feathers sharp-pointed;* abdomen and vent dark grey. Bill greenish white, dusky at the tip; irides orange brown; nude orbits bright scarlet to deep crimson, dotted here and there with tiny tufts of abortive black feathers; legs and feet livid white

with a purplish or brownish tinge. The *female* is of a light brown colour throughout, each feather being tipped with pale whity brown; chin whitish; lateral tail feathers dark brown.

Length—Males—24 to 29 inches; wing 8·7 to 10; tail 10·2 to 13; tarsus 2 9 to 3·1; bill from gape 1·3 to 1·55. *Females—Length*—20 to 23 inches; wing 8 to 8·3; tail 7·8 to 9.

Hab.—N.-W. Himalayas, as far as Nepaul in the westernmost portions. Hume says, throughout the fairly-wooded lower and middle ranges of the Himalayas from Kumaon to Hazara; also occurs in the Siwaliks, in some places very abundantly. Usually three or four are found together, and sometimes as many as a dozen. It feeds on roots, grubs, insects, seeds and berries, and the leaves and shoots of shrubs. Thick clumps of bushes near the banks of rivers are its favourite haunts. It breeds everywhere in the Himalayas, according to Hume, south of the first snowy range from the borders of Afghanistan to those of Nepaul; also in the Dhoon and at Simla from April to June. There is no regular nest, except a pad, with a slight depression, made of leaves, fine grass and coarse roots. Eggs, 9 to 14 in number, oval, moderately elongated, a good deal pointed towards one end, glossy and closely pitted with minute pores. In colour they vary from a pale creamy buff to a rich reddish buff, often thickly speckled with minute white spots. Size from 1·85 to 2·03 × 1·25 to 1·52.

1200. Euplocamus leucomelanus (*Lath.*), *Hume, Str. F.* vii. p. 428; *id. and Marsh., Game Birds Ind.* i. p. 185. Phasianus leucomelanus, *Lath., Ind. Orn.* ii. p. 633.—The Nepaul Kalij.

Differs from *albocristatus* in having a black crest and more narrowly white tipped rump and upper tail coverts. Bill greenish horny; irides dark brown; orbital skin fine crimson red and papillated; legs and feet pale brownish.

Length.—23 to 26 inches; wing 8·7 to 9·2; tail 10·9 to 12·3; tarsus 2·8 to 3·05; bill from gape 1·25 to 1·37. Females 19·3 to 20·5; wing 7·8 to 8·5; tail 7·3 to 8·5; tarsus 2·3 to 2·9; bill from gape 1·2 to 1·3.

Hab.—Nepaul, ranging just inside the limits of British India.

1201. Euplocamus melanonotus (*Blyth*), *Jerd., B. Ind.* iii. p. 534; *Hume, Str. F.* v. p. 42; *id.*, p. 124; *id. and Marsh., Game Birds Ind.* i. p. 192.—The Black-backed Kalij.

Differs from *leucomelanus* in having the rump and upper tail coverts entirely black. Bill, legs and feet as in the last.

Length.—21 to 25 inches; wing 8·9 to 9·5; tail from vent 9·5 to 12·3; tarsus 3·05 to 3·2; bill from gape 1·28 to 1·36. *Femaies—Length.*—18 to 21 inches; wing 8·1 to 8·8; tail 7·5 to 8·6; tarsus 2·7 to 2·9; bill from gape 1·15 to 1·25.

Hab.—Sikkim, and the Eastern parts of Bhootan. According to Jerdon it is the only Pheasant common in Darjeeling at all elevations between 2,000 and 7,000 feet. Breeds during March, April, and May. Eggs, 8—10 in number, similar to those of other species. Size 1·79 to 2 inches by 1·4 to 1·54.

1202. Euplocamus horsfieldi (*G. R. Gray*), *Hume, Str. F.* v. p. 42; vii. p. 429; *Hume and Marsh., Game Birds B. Ind.* i. p. 197.—The Black-breasted Kalij.

Differs from *albocristatus, leucomelanus* and *melanonotus* in having the breast black, with rounded instead of lanceolate feathers, and the rump and upper tail coverts broadly tipped with white. Bill greenish horny, paler at tip, dusky towards the base; nude orbital skin crimson; irides reddish brown; legs and feet plumbeous.

Length, Males.—23 to 24 inches; wing 9 to 10; tail 9 to 10·75; tarsus 3·2 to 3·25; bill from gape 1·37 to 1·5.

Length, Females.—21 to 22·5 inches; wing 8·5 to 8·9; tail 7·75 to 8·5; tarsus 3 to 3·05; bill from gape 1·15 to 1·3.

Hab.—Cachar and around the bases of and up to four thousand feet elevation on the Khasia and Garo hills; thence eastwards in suitable localities right up the valley of Assam to beyond Sadiya. Has been met with in Eastern Bhootan and in the lower ranges of the Dafla hills, also in Tipperah and Northern Chittagong. Dilkusha, Sylhet and Cachar are districts in which they are fairly abundant. (*Hume.*) Breeds in April and May. Eggs of the usual type.

1203. Euplocamus lineatus, *Elliot, Mon. Phas.* ii. pl. 23 (pt.); *Hume, Nests and Eggs Ind. B.* p. 525; *id., Str. F.* iii. p. 165; *Anders., Yun. Exped,* p. 669 (part); *Hume and Dav., Str. F.* vi. p. 436; *Hume, Str. F.* viii. p. 110; *Hume and Marsh., Game Birds* i. p. 205, pl.; *Bingham, Str. F.* ix. p. 195; *Oates, Str. F.* x. p. 236; *Oates, B. Br. Burm.* ii. p. 316. Phasianus lineatus, *Lath. in Vigors, P. Z. S.* 1831, p. 24. Nycthemerus lineatus, *Blyth and Wald., B. Burm.*, p. 149. Gennæus lineatus, *Oates, Str. F.* v. p. 164.—The Lineated Silver Pheasant.

Whole head, including crest, also the chin, throat and lower plumage black; sides of breast and body streaked with white; forehead and feathers above the red facial skin stippled with white dots; sides of the head and neck, also the hindneck and the whole of the upper plumage and wing coverts black, finely and closely vermicellated with white; wings and tail the same, but the wavy bars of white broader; central pair of tail feathers almost entirely white on the inner webs. Younger males have more white streaks on the lower plumage extending to the whole breast and abdomen. The *female* has the forehead, crown and crest olive brown tinged with rufous; chin and throat grey; sides and back of the neck olive brown, streaked with white; front of the neck

pale chestnut with white streaks, the remaining lower plumage rich chestnut streaked with white; base of the hind neck and the back olive brown with white arrow-head-shaped marks; wings, coverts, lower back, rump and the shorter upper tail coverts olive brown, the feathers edged paler; longer upper tail coverts yellowish white, barred with black; six outer pairs of tail feathers blackish, broadly barred with white, each white bar having another black bar within it; between the white bars there are marks of chestnut; the next pair similar, but the terminal half of the inner web yellowish, vermiculated with black; central pair wholly yellowish white on inner web, the outer web vermiculated with black. In the male the irides are reddish hazel; bill green, turning to dusky at the tip and at the base of the culmen; bare skin of the head rich crimson; legs plumbeous brown; claws pale horn; spur dark brown. (*Oates.*)

Length.—27 inches; wing 9·3; tail 12·5; tarsus 3·2; bill from gape 1·35.

Female, Length.—20 inches; wing 8·5; tail 7·5; tarsus 3; bill from gape 1·3.

Hab:—British Burmah. Confined to Pegu, Tenasserim, north of Tavoy, the south-western portions of Independent Burmah, and the N.-W. portions of Siam. Hume says it is not a bird of high elevations. It is numerous at from 1,000 to 3,000 feet. It is almost omnivorous, and feeds according to season and locality on all kinds of berries, young leaves, green shoots and flower buds. The breeding season commences in March and is over by the end of April. The nest is merely a hollow scratched in the ground and thinly lined and sprinkled with dry leaves, placed under a shrub, or at the foot of a large tree. Eggs, 7—8, of a pinkish stone colour, minutely pitted all over. Size, 1·81 to 2·03 by 1·4 to 1·52 in width.

1204. Euplocamus Cuvieri (*Temm.*), *Oates, Str. F.* iii. p. 343; *Hume, Str. F.* viii. p. 110; *Hume and Marsh., Game Birds* i. p. 201, pl.; *Sanderson, Str. F.* viii. p. 493; *Oates, B. Br. Burm.* ii. p. 318. Lophophorus Cuvieri (*Temm. Pl. Col.*), *Hume, Str. F.* iii. p. 166 (note). Nycthemerus Cuvieri, *Blyth, B. Burm.* p. 149.—The Arracan Silver Pheasant.

Like *E. lineatus*, but with no white streaks on the lower plumage, the breast is strongly tinged with deep blue, and a tinge of blue runs all through the upper plumage; rump and upper tail coverts with broad white margins; vermiculations on the upper plumage are not so frequent nor so white, and there is less white on the tail. The *female* is also like the female of *E. lineatus*, but differs in having the feathers of the upper plumage margined paler; the white stripes on the lower surface are reduced in breadth, are buffy in colour, and are almost entirely confined to the breast; the whole back and wings are a more or less rich rufous-olivaceous-brown everywhere, closely freckled with blackish brown; tail rufous, pale on the central tail feathers, deep chestnut on the four exterior ones, and freckled only on the inner webs.

Length.—25 inches; tail 11·2; wing 9·3; tarsus 3·4; bill from gape 1·6. The *female*—wing 8·5; tail 8·8.

Hab.—Arracan Hills, extending northwards to Chittagong. Habits same as last.

1205. Euplocamus Andersoni, *Elliot, P. Z. S.* 1871, p. 137; *Anderson, Yunnan Exped.*, p. 670, pl. liii; *Elliot, Mon. Phas.* ii. pl. 22; *Oates, B. Br. Burmah*, ii. p. 319. Euplocamus Crawfurdi, *Hume and Dav., Str. F.* vi. pp. 437, 521; *Hume, Str. F.* viii. p. 110; *Hume and Marsh., Game Birds* i. p. 203, pl.—ANDERSON'S SILVER PHEASANT.

Upper parts black, each feather having three or four white irregular lines, running parallel to and meeting towards the edges; secondaries black, with broken irregular black lines, running lengthwise with the feather; feathers of the rump like the back, but fringed with white, which overlaps the feather beneath and gives this part a beautiful silvery appearance; top of head, lengthened crest and entire under parts deep rich blue; tail moderately long, middle feather white, thickly covered with rather broad irregular black lines, these most numerous on the outer web and towards the base, becoming less on the inner web, and disappearing entirely at the tip and on the edge of inner web; rest of tail feathers black, with fine broken lines of white, these disappearing towards the tips; primaries dark brown, marked with white lines. (*Elliott.*) Hume says the characteristic points in which typical *E. Crawfurdi* = *E. Andersoni* differs from *E. lineatus* are, first, the much coarser and bolder character of the markings of the upper surface, which are all longitudinal and more or less parallel to the margins of the feathers, which are entirely free from the fine more or less transverse markings or mottlings characteristic of *E. lineatus*; second, in the whole of the central tail feathers, except just at the tip and margins of the inner webs, being boldly variegated black and white, instead as in *E. lineatus* almost the whole of the inner webs and the terminal half at any rate, of the outer webs being white or sullied white free from markings, and such markings as exist on the basal portions being fine. Bill pale bluish horny; facial skin deep crimson; legs and feet dark pinkish fleshy; irides brown. (*Davison.*)

Length.—30 inches; tail 13·5; wing 11·5; tarsus 3·62; bill from gape 1·55.

Hab.—Tenasserim proper, in the hills at the N.-E. extremity. Dr Anderson also procured specimens on the confines of Upper Burma and Yunnan.

1206. Euplocamus Vieilloti (*G. R. Gray*), *Sclater, P. Z. S.*, 1863, p. 118; *Hume and Dav., Str. F.* vi. p. 438; *Hume, Str. F.* viii. p. 110; *Kelham, Ibis*, 1881, p. 532; *Oates, B. Br. Burm.* ii. p. 320. Gallophasis Vieilloti, *G. R. Gray, Gen. B.* iii. p. 498. Euplocamus ignitus, *Elliot, Mon. Phas.* ii. pl. 26 (part); *Blyth, B. Burm.* p. 149; *Elliot, Ibis* 1878, p. 12;

General colour of the plumage, including crest, metallic violet blue; sides of the body streaked with white; centre of abdomen and vent, secondaries and lateral tail feathers black; lower back and rump glistening fiery chestnut; primaries brown; central pair of tail feathers white, the next pair white, with the basal half of the outer web brown. The *female* has the whole upper plumage chestnut; the chin and throat albescent; the front and sides of the neck streaked with white; the head, hind neck and upper back plain; all the other parts finely vermiculated with black; breast black, the feathers with chestnut tips and white margins; upper abdomen, sides of the body and thighs black, the feathers margined with white; lower abdomen and vent white; under tail coverts chestnut. Bill whitish to horny brown; facial skin smalt blue; legs and feet vermilion red; irides pale red.

Length.—27·5 to 29 inches; tail 10 to 10·5; wing 10·75 to 12·12; tarsus 4·25 to 4·4; bill from gape 1·6 to 1·8. *Female*—23 to 24 inches; tail 7·5 to 9; wing 9·7 to 10·75; tarsus 3·5 to 3·75; bill from gape 1·6 to 1·7.

Hab.—Tenasserim, in the south, extending down the Malay Peninsula. According to Davison it frequents thick evergreen forests in small parties of five or six, feeding there on berries, tender leaves, and insects. Hume says they appear to breed in the monsoon. The only egg he obtained was laid by a captured hen in July. The egg is simply like a large game fowl's egg.

Sub-Family—GALLINÆ.

Head generally furnished with fleshy crests and wattles, crested or sub-crested; tail of 14 feathers, more or less divaricate, and held demi-erect; upper tail coverts of males elongated and pendant.

Gen. Gallus.—*Linn.*

Head furnished with a fleshy crest; face and wattles nude; tarsus in males spurred; other characters as in the sub-family.

1207. Gallus ferrugineus (*Gm.*), *Jerd.*, *B. Ind.* ii. p. 236; *Elliot*, *Mon. Phas.* ii. pl. 32; *Hume*, *Nests and Eggs Ind. B.* p. 528; *id.*, *Str. F.* iii. p. 171; *Blyth*, *B. Burm.* p. 148; *Oates*, *Str. F.* v. p. 104; *Hume and Dav.*, *Str. F.* vi. p. 442; *Hume*, *Str. F.* viii. p. 111; *Hume and Marsh.*, *Game Birds* i. p. 217, pl.; *Bingham*, *Str. F.* x. p. 195; *Oates*, *Str. F.* x. p. 236; *id.*, *B. Br. Burm.* ii. p. 322. Tetrao ferrugineus, *Gm.*, *Syst. Nat.* i. p. 761.—The Common Jungle Fowl.

Head and neck rich golden, becoming yellow on the longer hackles which cover the back; back, lesser wing coverts, and lower plumage black; tertiaries black, the greater coverts also black with a bluish tinge; median wing coverts glistening maroon chestnut, also a band connecting them with the lower back, which is followed by a broad band of rich purplish brown; lower rump and upper tail coverts rich golden; tail black, glossed with greenish.

The *female* has the crown rufous, the shafts darker; hackles of the neck dark brown edged with yellow; upper plumage and wing coverts yellowish brown mottled with black, and the shafts yellowish; primaries and secondaries dark brown, the outer webs of the latter and both webs of the tertiaries mottled with yellowish brown; under surface of the body reddish brown with paler shaft streaks, and most of the feathers stippled with blackish. (*Oates.*) Bill dark brown, reddish towards the base; under parts dull red; irides orange red; legs and feet purpurescent.

Length.—25 to 28 inches; wing 8·12 to 9·5; tail 11·25 to 14·3; tarsus 3 to 3·12; bill from gape 1·19 to 1·37. Females do not exceed 18·5 in length, and have a wing of from 7·1 to 7·5.

Hab.—Himalayas, in the lower ranges, the Dhoons, Terais, and sub-montane districts. The whole of Assam, Oudh, Central and N.-W. Provinces, Eastern Bengal, including the Sunderbuns, Arracan, Pegu, Tenasserim; all the hilly portions of Western Bengal and Northern and Central Provinces. Southwards and eastwards, it occurs north of the Godavery, Orissa, the Tributary Mehals, Ganjam, Vizagapatam, Joonaghur, Nowagur, Jeypore. There is no description of jungle from which it is absent. In the dry, level, alluvial plains and semi-deserts of Upper India it is absent. It is very partial to bamboo jungle, broken ground and ravines with dense vegetation. It breeds from January to July, according to locality. Eggs, a pale yellowish, *café au lait* colour, 8 to 12 in number.

1208. Gallus Sonnerati, *Tem., Pl. Col.* 232, 233; *Jerd., B. Ind.* iii. p. 539, No. 813; *Elliot, Mon. Phas.* ii. pl. 34; *Hume, Nests and Eggs Ind. B.* p. 531; *id., Str. F.* iv. pp. 5, 404; *Hume and Marsh., Game Birds* i. p. 231, pl.—The Grey Jungle Fowl.

Head, neck and hackles blackish grey, the feathers with white shafts and two yellow spots; wing coverts with oblong spots of wood brown; ear coverts pale rufous; rest of the plumage blackish grey above and below, the feathers with albescent shafts, those of the flanks centred and tipped with wood brown; outermost primaries dusky, edged paler; rest black; upper tail coverts glossy purple; tail feathers glossy green, plainer on the lateral feathers; under tail coverts glossy black with white shafts. The *female* has the head and neck rufous brown, paler on the chin and throat; the upper surface of the body is mottled with brown; wing coverts pale shafted; beneath blackish brown, the feathers broadly centred with white; flanks, thighs, vent and under tail coverts dull brown; primaries dark brown, the secondaries mottled brown; tail blackish brown. Bill yellowish horny; comb, nude orbits and wattles red; irides orange brown; legs and feet horny yellowish or reddish yellow.

Length.—28 to 32 inches; wing 9·35 to 9·65; tail from vent 14 to 16; tarsus 2·85 to 3; bill from gape 1·28 to 1·3. *Females—Length*— 18 to 20 inches; wing 7·8 to 8·3; tail 6 to 7; tarsus 2·2 to 2·5; bill from gape 1·02 to 1·2.

Hab.—Throughout the peninsula of India in suitable localities, extending northwards in the Central Provinces to Puchmurree, and on the west as far north as Mount Abu. It ascends the Neilgherries to 5,000 feet. Breeds wherever found in March and April, making a nest in woods on the ground. Eggs, 7 to 13, dirty white or buff colour, from 1·7 to 2·05 inches in length, and from 1·35 to 1·5 inches in breadth.

Gen. **Galloperdix**.—*Blyth*.[1]

Bill somewhat lengthened; orbits nude; tail moderately long, of 14 feathers, held erect and folded as in the domestic fowl; tarsus of male with 2 or more spurs; females also spurred.

1209. Galloperdix spadiceus (*Gmel.*), *Hardwicke, Ill. Ind. Zool.* i. pl. 42, fig. 2; *Gould, B. Asia*, pt. vi. pl. 3; *Jerd., B. Ind.* iii. p. 541, No. 814; *Hume, Nests and Eggs, Ind. B.* p. 532; *id., Str. F.* iv. p. 5; *Hume and Marsh., Game Birds*, p. 248 pl.—The Red Spur Fowl.

Forehead buffish; crown of the head and nape dusky olive brown; orbital region whity brown; chin, throat, and sides of the neck pale brown; rest of body both above and below rich bay, each feather margined paler; central feather of the tail chestnut, the rest dark brown, more or less mottled in adolescents, the mottlings obsolete in old adults; lower abdomen, vent, and under tail coverts olivaceous. In the female the crown is dusky blackish, the neck olive brown; upper plumage pale rufous brown, each feather banded with black and minutely speckled; rump and upper tail coverts the same; tail feathers with black bars and rufous mottlings; primaries, their coverts and winglet spotless dusky brown; in some specimens the primaries are margined whitish and the secondaries barred with dark yellowish, the winglets too are finely barred with black and white; chin and throat albescent; neck olive brown, tipped with black; breast and flanks bright ferruginous with narrow black fringes; belly dusky brown; under tail coverts freckled rufous brown. Bill dusky, red at base, horny towards the tip; legs and feet from coral to vermilion red. Males have from 2 to 3 spurs; females also have spurs, sometimes one on one leg only, on others one on each leg; irides orange brown.

Length.—14 to 15 inches; wing 6·2 to 6·5; tail 5 to 6; tarsus 1·65 to 1·75; bill from gape 1 to 1·2. Females are smaller.

Hab.—Southern India, on the Neilgherries, Shevaroys, Wynaad, Malabar Coast, Western Ghauts, up to Mount Abu; the Eastern parts of Central India, between Nagpur and Nerbudda and in the Vindhian range; also in the Rajmehal and Kurruckpore hills. It has been found north of the Ganges and in the Nepaul and Goruckpur Terai. Wherever it is found, Hume says, he believes it is a permanent resident. It lays from the end of February to the middle of June, about 10 eggs, similar to that of a hen in shape and size, though this varies much, and also in colour.

1210. Galloperdix lunulatus (*Valenc.*), *Jerd.*, *B. Ind.* iii. p. 543, No. 815; *Hume, Nests and Eggs Ind. B.* p. 533; *Str. F.* ii. pp. 427, 458, 532; *Hume and Marsh., Game-Birds* i. p. 255, pl.; *Elliot, Mon. Phas.* ii. pl. 34 (?) Francolinus nivosus, *Deless., Voy. Aux. Indes.* pl. 10. Perdix Hardwickii (*Gray*), *Hardw., Ill. Ind. Zool.* i. pl. 52; *Jerd., Ill. Ind. Zool.* i. pl. 52; *Jerd., Ind. Orn.* pl. 42 (the female).—The PAINTED SPUR FOWL.

Crown, lores, nape, cheeks, chin and throat variegated with streaks and spots of black and white; upper breast black with triangular white or buffish white spots; back, rump, upper tail coverts and wing coverts rich chestnut, the back and wing coverts with a spot of white encircled by black on each feather, and the lower back and rump with black edges to the feathers; lower breast and abdomen ochreous buff, the feathers edged with black and with a triangular black spot; thigh coverts, flanks, and under tail coverts dull chestnut, the feathers edged with black and with a white spot on each feather; primaries earthy brown, margined with chestnut, secondaries the same; tail dark sepia brown, in adults glossed with green. The *female* has the top of the head dusky; the forehead, superciliary region and nape tinged very slightly with chestnut; moustachial streak buffish, edged with dark brown; upper and under plumage olivaceous brown, except the breast and abdomen, which are ochreous with blackish lunulated margins. Bill blackish; orbits red; irides red brown; legs horny brown; legs and feet plumbeous.

Length.—12·5 to 13·6; wing 5·85 to 6·2; tail 4·3 to 5; tarsus 1·5 to 1·65; bill from gape 0·8 to 0·9. Females are smaller. The males have from one to three spurs on each leg, generally two on each, often two on one and three on the other. The females also generally have at least one spur on each leg, sometimes two, rarely none at all.

Hab.—Southern India south of the Neilgherries, the Eastern Ghauts and the high broken country connected with these into Cuttack, the Tributary Mehals, Raipoor, Bhundara, Mirzapoor and Monghyr hills. On the other hand, at Goomsoor, in the north of the Ganjam districts, *spadiceus* only occurs. The distribution of this and *spadiceus*, Hume says, is as yet very imperfectly understood and difficult to disentangle. This species is especially partial to low rocky hills covered with impenetrable thickets. They are found either singly or in pairs, and generally met with in the morning and evening, when they descend to the more open spaces to feed. It breeds in suitable localities in the eastern two-thirds of the Peninsula of India, south of the Neigherries, during March, April, and May, making only a slight excavation in the ground for the eggs under the shelter of a boulder or rock in a thicket. The eggs are rather regular ovals, whitish buff in colour, and somewhat more elongated than the typical fowl's egg. *Galloperdix zeylonensis*, which Hume figures in his Game Birds of India, is peculiar to Ceylon.

Family.—TETRAONIDÆ.

Bill generally short, stout and thick; wings rounded in most, pointed in a few, longer comparatively than in the *Phasianidæ*; tail short; tarsus short and stout.

Sub-Family.—PERDICINÆ.

Tarsus not feathered; orbital region not feathered in some; tarsus often spurred. This includes the Snow Cocks and Partridges, also the Rock or Sand Partridges.

Gen. **Tetraogallus,**—*Gray*.

Bill moderately long, broad and stout; a small nude patch behind the eye; tail of 18 feathers; tarsi short and stout, and with a blunt spur.

1211. Tetraogallus Himalayensis (*G. R. Gray*), *Gould, B. Asia*, pt. v. pl. 2; *Jerd., B. Ind.* iii. p. 549, No. 816; *Hume, Game Birds of Ind.* p. 267, pl.—The HIMALAYAN SNOW COCK.

Crown of the head, cheeks and back of neck grey; a chestnut band from above the eye down the sides of the nape, and a second one from the angle of the mouth down the sides of the neck; two dark brown lunate marks on the sides of the neck; chin and throat whitish; ear coverts greyish; breast whitish, the upper feathers each with a black lunule; upper surface of the body light ashy grey, minutely freckled with black, more ashy on the wings and fringed with rufous; feathers of the back, rump and wing coverts striped with rufescent buff; primaries white, broadly tipped with dusky and freckled with greyish; under surface of the body grey, minutely freckled with brown, with a double broad streak of chestnut on each feather; vent and under tail coverts white. Bill pale horny or slaty; nostril dark horny; irides dark brown; legs and feet yellowish red or orange.

Length.—26 to 29 inches; wing 11·25 to 12·6; tail 7·8 to 8·1; tarsus 2·7 to 2·8; bill from gape 1·35 to 1·55. Females are smaller. *Length*—21·5 to 23 inches, with a wing of 10·8 to 11·5.

Hab.—The Himalayas from the eastern portions of Kumaon to Hazara. Affects bare rocky hillsides, ravines and passes in the higher snowy ranges. Common also in the northern portions of British Garhwal.

1212. Tetraogallus thibetanus, *Gould, B. Asia* part v. pl. 4; *Jerd., B. Ind.* iii. p. 554; *Hume, Str. F.* vii. p. 430; *id. and Marsh., Game Birds* p. 276, pl.—The THIBETAN SNOW COCK.

Head and neck grey; ear coverts white; upper plumage freckled with buff grey and black, the latter colour forming dashes; primaries grey; secondaries broadly edged externally with white, forming a marked wing band; tail rufous brown; chin, throat and breast white, separated from the grey of the head and neck by a dusky freckled line and a gorget of freckled grey and

buff; abdomen white; flanks and lower belly with dashes of black; under tail coverts black; bill horny; legs red. (*Jerd.*)

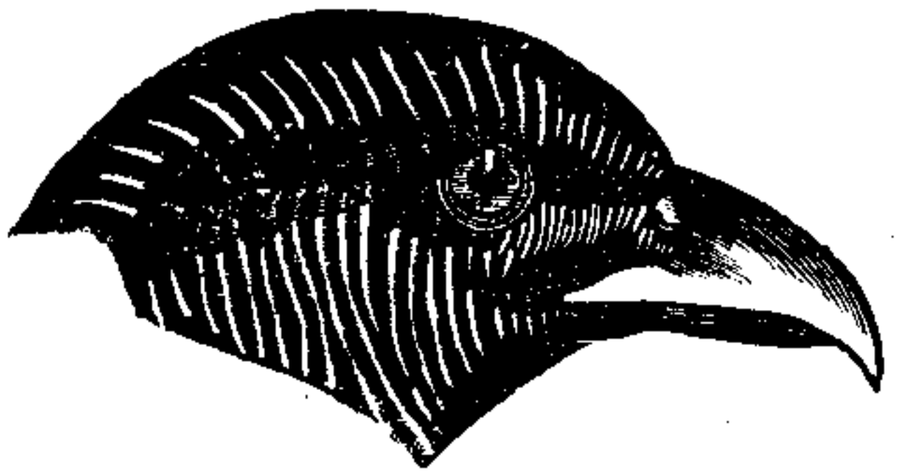
Length.—22 inches; wing 10·5; tail 7; tarsus 2·5. (*Jerd.*)

Hab.—Kumaon, in the Himalayas, Ladak, and other places across the Himalayas.

Gen. **Lerwa.**—*Hodgs.*

Bill short and stout; orbits feathered; wings moderately long and pointed, 2nd quill longest; tail of 14 feathers; tarsi partly feathered and with short spurs in the male.

1213. Lerwa nivicola (*Hodgs.*), *Jerd.*, *Madras Journ Lit.* 1837; *Jerd.*, *B. Ind.* iii. p. 555, No. 817; *Hume and Marsh.*, *Game Birds* vol. ii. p. 1, pl. Perdix lerwa, *Hodgs.*, *P. Z. S.* 1833; *Hardw.*, *Ill. Ind. Zool.* 2, pl. 44, fig. 1; *Gould*, *B. Asia*, pt. vii. pl. 8.—The Snow Partridge.



Head of Lerwa nivicola.

Head, neck and whole upper plumage, including the wings and tail, minutely barred with black and greyish white; the sides of the neck tinged with chestnut, also the wing coverts; quills dusky brown, narrowly freckled with buffy white on their outer edges, and the secondaries broadly tipped with white; tail dusky, with freckled bars of grey and rufous, the feathers black-shafted; chin greyish; throat, breast and upper abdomen chestnut red with dashes of buff especially on the flanks; lower abdomen, vent, and thigh coverts like the back, but with a rufous tinge; lower tail coverts chestnut red, with buffy white tips. Bill bright red; irides dark brown; legs and feet red.

Length.—15 to 16 inches; wing 8; tail 4; tarsus 1·5.

Hab.—The whole extent of the Himalayas to the extreme N.-W. in Sikkim. According to Jerdon they are gregarious in coveys, nestle and breed under jutting rocks, feed on seeds and insects.

Gen, **Francolinus.**—*Steph.*

Bill very slightly curved at tip; tail of fourteen feathers, even or rounded; tarsi of male with blunt spurs.

1214. Francolinus vulgaris (*Steph.*), *Gould*, *B. Eur.* pl. 259; *Jerd.*, *B. Ind.* iii. p. 558, No. 818; *Hume*, *Nests and Eggs Ind. B.* p. 537; *id.*, *Str. F.* iv. p. 5; *id. and Marsh.*, *Game Birds* ii. p. 9, pl.; *Murray*,

Hbdk., Zool., &c., Sind, p. 202; *id., Vert. Zool., Sind,* p. 213.—The BLACK PARTRIDGE.

PLATE.

Male.—Top of head black, the feathers behind edged with rufescent brown; lores, chin, throat and neck in front black; nape and hind neck black, each feather with four white spots, two on each side of the shaft, the lower of which near the tip showing through; a streak under the eye to the ear coverts white; a chestnut red collar round the neck; upper part of the back black, also the scapulars, the smaller feathers with four roundish spots, two on each side of the shaft, and the longer ones with six rufescent marks, two transverse and a longitudinal streak on each side of the shaft, the longitudinal ones only showing from under the feathers; middle and lower back, rump and upper tail coverts barred with black and white; wing coverts black, edged with rufescent; quills barred with rufous and black; tail black, the middle feathers barred like the back with black and white, the rest barred at the bases only; breast, abdomen and flanks deep black, the feathers of the flanks with 3—4 white spots, the hinder ones near the vent with broad white tips; thigh and under tail coverts and feathers round the vent chestnut; bill black; irides brown; legs reddish.

Length.—13 to 14 inches; wing 5·5 to 5·75; tail 3·5.

The *female* wants the black head and neck of the male and the rufous collar. It is generally much browner in colour.

Hab.—The whole of Northern India from the Himalayas to the valley of the Ganges; also the Punjab. Southwards, through Rajpootana to Sind. Eastwards, through Dacca to Assam, Sylhet and Tipperah. Breeds in suitable localities, wherever it occurs, during July and August, laying from six to ten eggs, unspotted fawn brown in colour, varying in size from 1·42 to 1·8 in length and 1·22 to 1·38 in breadth. It frequents, by preference, grass meadows near water; also cultivated fields of corn, mustard or pulse, and any patch of moderately high green herbage. In Sind it affects low tamarisk jungle and wheat fields. Its call in the early mornings is unmistakable, and is always made from some little eminence, as an ant hill or the stump of a tree. It affords good sport with a pointer, and is tolerably good eating, but, like all the *Tetraonidæ*, is best cold, and after at least 36 hours.

1215. Francolinus pictus (*Jard. and Selby*), *Jerd., B. Ind.* iii. p. 561, No. 819; *Hume, Str. F.* v. p. 211; *id., Nests and Eggs Ind. B.* p. 538; *id. and Marsh., Game Birds* p. 19 pl. Perdix pictus, *Jard. and Selby, Ill. Orn.* pl. 50.—The PAINTED PARTRIDGE.

Crown of the head dark brown, the feathers edged paler; forehead and lores, also the cheeks and ear coverts, chestnut; back and scapulars deep brown, the feathers margined with white; wings chestnut, banded with black; lower back, rump, and upper tail coverts with wavy bars of black and white;

tail deep brown, the feathers narrowly barred across; chin white; neck all round pale ferruginous; breast and abdomen variegated black and white, each feather being white with two dark bands, and the shafts and tip black; under tail coverts chestnut. Bill blackish; irides dark brown; legs yellowish red.

Length.—12 inches; wing 6; tail 2·75; tarsus 1·75.

Hab.—Central and Southern India, where it replaces *F. vulgaris*. Found throughout Bundelkund and the Saugor and Nerbudda territories, thence south to Nagpore and the Deccan; west it extends into Khandesh and perhaps Guzerat, and eastwards to the Northern Circars. Like its northern congener, Jerdon adds that it delights in grassy plains and fields, but affects more the open, dry and raised plains with scattered bushes. It breeds during the monsoon (July to September), laying 7—8 eggs, rather of a peg-top shape, broad and obtuse at the large end, and much pointed towards the small end; the colour may be said to be a pale *café au lait*. Size 1·3 to 1·45 by 1·1 to 1·22.

1216. Francolinus chinensis (*Osb.*), *Hume, Nests and Eggs Ind. B.* p. 539; *id., Str. F.* iii. p. 171; *Wardlaw-Ramsay, Ibis*, 1877, p. 468; *Oates, Str. F.* v. p. 164; *Dav. et Oust. Ois. Chine*, p. 400; *Hume and Dav., Str. F.* vi. p. 443; *Hume, Str. F.* viii. p. 111; *Hume and Marsh., Game Birds* ii. p. 27, pl.; *Oates, Str. F.* x. p. 236; *id., B. Br. Burm.* ii. p. 323. Tetrao chinensis, *Osb., Voy.* ii. p. 326. Tetrao perlatus, *Gm., Syst. Nat.* i. p. 758. Francolinus Phayrei, *Blyth, J. A. S. B.* xii. p. 1011; xxiv. p. 480; *id., B. Burm.* p. 149. Francolinus perlatus, *Anders., Yunnan Exped.* p. 672.—The CHINESE FRANCOLIN.

Crown of the head black, each feather edged with chestnut; a band from the bill over the eyes and ear coverts black; space between this and the crown chestnut, a dark band from the bill on each side down the sides of the throat; space between these and the superciliary streak white; chin and throat white. Neck, back, breast, abdomen and sides of the body black, ocellated with fulvous white; under tail coverts chestnut; rump and upper tail coverts barred black and white; scapulars and tertiaries chestnut; coverts and wings blackish, ocellated and barred with white; tail black, barred with white, except at the tip.

The *female* has the whole lower plumage barred with black; the chin white, and wants the superciliary and coronal band, and there are no ocellations on the wings; irides hazel; bill dusky, paler at tip of upper mandible; legs orange.

Length.—13 inches; tail 3·3; wing 5·7; tarsus 1·7; bill from gape 1.

Hab.—British Burmah, confined to the upper portion of the Irrawaddy valley above Prome. Habits same as its other congeners. Breeds in June and July. Eggs 8 in number, pale buff. Size—1·45 to 1·51 by 1·2.

Gen. **Caccabis**.—*Kaup*.

Bill red, slightly longer than in *Francolinus;* tarsi of male with a blunt spur; a small bare patch behind the eye.

1217. Caccabis chukor, *Gray, Ill. Ind. Zool.* pl. 54; *Jerd., B. Ind.* iii. p. 564, No. 820; *Hume, Nests and Eggs, Ind. B.* p. 139; *Murray, Hdbk., Zool., &c., Sind*, p. 203; *id., Vert. Zool., Sind*, p. 213; *Hume and Marsh., Game Birds* ii. p. 33, pl.—The CHUKOR PARTRIDGE.

Above pale bluish or olive ashy, with a rufescent tinge on the back; sides of the face, chin and throat fulvous, pale chestnut or rufescent, encircled by a broad black band from the forehead through the eye along the side of the neck on to the breast, meeting its fellow from the other side and forming a large pale chestnut or rufous pectoral gorget; a pale white line behind the eye; ear coverts chestnut; sides of the lower mandible and chin with a black spot; breast bluish ashy, slightly tinged with rufescent; abdomen and under tail coverts buff, the flanks from the axil deeper buff, each feather ashy at the base with two dark bands, the interspace of which is buff and terminated broadly with chestnut; wings concolorous with the back, the ends of all the primaries, except the first, margined to nearly the tip on their outer webs with buff, some of the secondaries also; axillaries buff. Tail rufous, except the central feathers, which are concolorous with the back.

Length.—14 to 15·75 inches; expanse 21 to 23·25; wing 6·25 to 6·8; tail 4 to 4·8. The female is slightly smaller. *Length*—13 to 14·25; resembles the male, and wants the spur.

Hab.—Throughout the Himalayas to Afghanistan. Common also in Beloochistan, Sind, Punjab Salt Range, Persia and along the Arabian Coast. Breeds from May to July in Chaman (S. Afghanistan), making a nest composed of a little grass under the shelter of grass tufts or bushes. The normal number of eggs is 12, but as many as 14 and 16 have been taken from a single nest, all varying in size and shape, from peg-tops to elongated ovals. The colour is also variable, but typically is a pale *café au lait* ground colour, with brick-red specklings. The Chukor Partridge is very pugnacious, especially during spring time, when two fighting cocks may be almost knocked over with a stick. They are much prized for their fighting propensities, and in Beloochistan and Afghanistan the men have a number trained for the purpose, on which large bettings are made.

Gen. **Ammoperdix**.—*Gray*.

Bill reddish; wings long; tarsi not spurred.

1218. Ammoperdix bonhami, *Gray, Des. Murs. I. O.* t. 29; *Gould, B. As.* pt. ii. pl. 4; *Jerd., B. Ind.* iii. p. 567; *Str. F.* i. 226; *Murray, Hdbk., Zool., &c., Sind*, p. 203; *Hume, Nests and Eggs Ind. B.* p. 540; *Hume and Marsh., Game Birds* p. 45 pl.—The SEESEE PARTRIDGE.

Male.—Head and cheeks dull grey; forehead, a streak above and below the eye and a border to the ear coverts black; lores, a band behind the eye and ear coverts silky white, rufous behind; throat greyish white; breast vinaceous or vinous fawn; sides of the neck spotted with white; upper

parts isabelline or pale brownish, freckled with dusky; rump and upper tail coverts like the back, with darker markings; primaries isabelline on their outer webs, finely pencilled with dusky, and all, except the first, with broad whitish bands or bars; tail brownish, tinged with chestnut, the tips of the feathers freckled with dark brown; legs and feet dingy yellow; irides bright or orange yellow; bill orange; cere orange red.

Length.—9 to 11 inches; wing 4·75 to 5·75; tail 2·5. *Female* slightly smaller, has not the dull grey crown of the male, and in general is more brownish throughout; the black markings on the head are replaced by freckles of dusky or black and white, and the entire upper and lower surface of the body is mottled.

Hab.—Sind, Punjab, N.-W. Provinces, Beloochistan and Afghanistan, also Persia. Numerous throughout Upper Sind, also in Beloochistan, where in the early morning, especially on broken ground and on the road in the Bolan, as many as two or three hundred may be met with, feeding on the droppings of cattle, or, in its absence, on grass seeds along the hill sides. Breeds in the Punjab, Beloochistan and Afghanistan in April and May, nesting in a slight depression in the ground under some thick bush or jutting rock. Eggs 10—12 in number rather lengthened ovals, more or less compressed or pointed towards one end; in colour from pure white to a pale *café au lait*. They vary in size from 1·3 to 1·5 inches in length × 0·98 to 1·1 in breadth.

Gen. **Ortygornis.**—*Reich.*

1219. Ortygornis ponticeriana, *Gmel., Syst. Nat.* i. p. ; *Gray, Ill. Ind. Zool.*, pl. 56, fig. 2; *Jerd., B. Ind.* iii. p. 569, No. 822; *Murray, Hbdk., Zool., &c., Sind*, p. 203; *id., Vert. Zool., Sind*, p. 214; *Hume, Nests and Eggs, Ind. B.* p. 542; *Hume and Marsh., Game Birds* p. 51, pl.—The Common Grey Partridge.

Forehead, over the eyes, lores, nape rufous, the face with dusky freckles; top of the head olive brown rufescent brown; back, scapulars and wing coverts dark chestnut, each feather with two or three transverse buffy bars, bordered with black on both sides; feathers of the rump and upper tail coverts similar, but olive brown instead of chestnut; tail feathers rich chestnut or deep ferruginous, with a broad subterminal dark brown nearly black band, tipped with pale or yellowish white; central tail feathers like the back; beneath the chin and throat are white or creamy, encircled from the base of the lower mandible with dark spots, forming a gular patch; breast and entire lower parts creamy white, or very pale buff, the feathers with transverse dark bars; lower tail coverts ferruginous. The female is like the male, but paler in colour, and wants the spur.

Length.—11·5 to 13·5 inches; wing 5·5 to 6; tail 3·35 to 4; legs bright red; irides brown; the orbital ring with a row of minute white feathers; bill dusky brown.

Hab.—Throughout India, Ceylon, Beloochistan and S. Persia. Affects dry, scrubby or bare stony tracts. Delights among *Euphorbia* bushes. In the morning they are generally found in fields or on the edges of cultivation, where they pick up seeds and corn, also insects of all kinds. They afford fair sport with one or two good men, or a good dog and one's wits against the birds. Breeds from February to May, and from July to November. In Bengal, either in the deltaic district or in the Eastern Provinces, it does not occur, nor in Assam or Burmah. In the Deccan it ascends to 2,500 feet or more; in the Himalayas and Southern India not above 1,000 feet.

1220. Ortygornis gularis (*Temm.*), *Jerd.*, *B. Ind.* iii. p. 572, No. 823; *Hume, Nests and Eggs Ind. B.* p. 544; *id. and Marsh., Game, Birds* p. 59, pl. Perdix gularis, *Hardw., Ill. Ind. Zool.* i. pl. 56, fig. 1.—The KYAH PARTRIDGE.

Crown olive brown; lores, a streak below the eye and supercilium pale buff; a line through the eye to the ear coverts dusky brown; back brown, barred with buff; wing coverts the same; primaries brown on the outer web, ferruginous on the inner; tail ferruginous, central feathers brown; chin and throat rusty ferruginous; breast and abdomen brown with broad white streaks edged with black; under tail coverts ferruginous; under wing coverts ferruginous. Bill blackish; irides dark brown; legs litharge or dull red.

Length.—15 to 15·5 inches; wing 7·1 to 7·25; tail 4·5; tarsus 2·5; bill from gape 1·01.

Hab.—Bengal from Tirhoot and Goruckpoor to the Sunderbuns, extending eastwards into Assam, Sylhet, Cachar, and Tipperah. In the Western Provinces of Bengal, it is found on the north bank of the Ganges, crossing in a few suitable localities from Monghyr to Rajmahal. It is also found up to the base of the Himalayas and in the Oudh Terai. Jerdon adds that its favourite grounds are thick beds of reeds and long grass, along the banks of rivers, jheels and watercourses, and especially in those swampy patches of reeds where the creeping rose bushes form thickets impenetrable to aught but an elephant. It is said to breed from March to May. The eggs, 5 in number, are, it is said, laid under some thick bush in a dry spot, and to be white, like those of the Grey Partridge.

Perdix Hodgsoni, Gould, figured by Gould in his "Birds of Asia," pt. ix., pl. 2, does not appear to have been yet obtained within our limits. The upper plumage is olive brown, and the lower parts buff; sides and back of the neck and wings chestnut red; head red, speckled with white; line from the forehead round the ear coverts and throat black. (*Jerd.*)

Gen. **Arboricola.**—*Hodgs.*

Tarsus not spurred; toes long with long claws; tail short, of 12 feathers. Sexes similar in plumage.

1221. Arboricola torqueola (*Valenc.*), *Jerd.*, *B. Ind.* iii. p. 577, No. 824; *Hume, Str. F.* ii. p. 449; *id., Nests and Eggs Ind. B.* p. 544; *id. and Marsh., Game Birds* ii. p. 65, pl. Perdix megapodiæ, *Tem., Pl Col.* 462, 463. Perdix olivacea, *Gray and Hardw., Ill. Ind. Zool.* i. p. 57.—The Common Hill Partridge.

Top of the head uniform bright chestnut; lores black, also above and below the eye; ear coverts chestnut, continued as a streak down the sides of the nape; back and rump olive, the feathers edged with dusky and forming lunules; wing coverts pale chestnut with blackish shaft streaks and spots; chin and throat black, the feathers margined with white; *breast pale ashy, surmounted by a broad white band;* lower breast and abdomen ashy white; flanks olive, broadly dashed with chestnut and with large white spots; tail olive, speckled with black. The female has the head and neck olive, speckled with black; the lores white with the same but distant speckles; middle of throat unspotted rufous; breast grey, tinged with rusty. Bill black; irides brown, deep brown or reddish brown; orbital skin and a spot at gape crimson; legs and feet blue grey, tinged with red.

Length.—10·5 to 12 inches; wing 5·7 to 6·2; tail 2·75 to 3·25; tarsus 1·6 to 2; bill from gape 0·8 to 1.

Hab.—Throughout the outer ranges of the Himalayas from Simla to Darjeeling. In Sikkim it is found from about 6,000 to 9,000 feet. It extends to Bhootan and also to the Naga hills. Hume says it haunts dark, densely jungled watercourses and ravines running down the hillsides and never or seldom rising when disturbed. Nothing appears to be known of the nidification of this species.

1222. Arboricola atrogularis (*Blyth*), *Jerd.*, *B. Ind.* iii. p. 579; *Hume, Str. F.* ii. p. 449; v. p. 14 (note); *Hume and Marsh., Game Birds,* p. 79, pl.—The Black-throated Hill Partridge.

Not unlike *A. torqueolus*, but differs in having the top of the head greyish olive, more or less black spotted, and the breast pale uniform grey. Bill blackish brown; irides deep brown; orbital space and gular skin vermilion; legs orange red.

Length.—10 to 11 inches; wing 5 to 5·9; tail 2·15 to 2·5; tarsus 1·5 to 1·7; bill from gape 0·85 to 0·87.

Hab.—Assam, extending to the Garo hills, thence it occurs in Cachar, Sylhet and Tipperah; also in Chittagong. Breeds in Sylhet, where Mr. Cripps took two nests. The eggs were broad ovals, a good deal pointed towards the small end, and white. In size they vary from 1·33 to 1·43 in length and from 1·1 to 1·13 in breadth.

1223. Arboricola brunneipectus (*Tickell*), *Blyth*, *J. A. S. B.* xxiv. p. 276; *Blyth, B. Burm.* p. 150; *Hume and Dav., Str. F.* vi. p. 443;

Hume, Str. F. viii. p. 114; *Hume and Marsh., Game Birds* ii. p. 87 pl.; *Bingham, Str. F.* ix. p. 195; *Oates, Str. F.* x. p. 236; *Oates, B. Br. Burm.* ii. p. 325. Arborophila brunneipectus, *Hume, Str. F.* ii. p. 449; iii. p. 174; *Wald., Ibis*, 1875, p. 459.—The Brown-breasted Hill Partridge]

Forehead and supercilium, which extends to the nape, fawn colour; lores, circle round the eye, a line continued from behind the eye over the ear coverts to the sides of the neck black, forming in the latter a large black patch, behind which and around the throat and upper breast are spots of black; crown and nape olive brown, the feathers tipped with black; hind head nearly all black; back and scapulars olive brown, barred, straight or lunately with black; rump olive brown with but few bars; upper tail coverts plain olive brown; tail olive brown, mottled with black; primaries brown, their tips mottled with rufescent; secondaries brown, edged on the outer webs with pale chestnut; tertiaries and longer scapulars olive brown, tipped with chestnut and a subterminal black oval patch; wing coverts olive brown, some of the median and greater series with large black patches; breast uniform tawny or ferruginous olive; middle of abdomen and vent whitish; sides of abdomen and body tawny, the feathers with a large white spot and edged in crescent form with black; under tail coverts tawny brown barred with black. Bill black; eyelids, orbital patch, and gular skin bright red, very thinly covered with feathers; legs and feet dull coral to bright red.

Length.—10·6 to 11·6; wing 5·2 to 6; tail 2·1 to 2·6; tarsus 1·5 to 1·8; bill from gape 1·0 to 1·1. Females are smaller and average only 10 inches in length.

Hab.—The Pegu hills on the eastern spurs and Tenasserim, as far south as Tavoy. Oates adds that it is common in densely-wooded ravines and nullahs. They skulk in the undergrowths, and would seldom be seen were they not to come to the beds of streams to drink and bathe.

1224. Arboricola chloropus (*Tickell*), *Blyth, J. A. S. B.* xviii. p. 453; *Blyth, B. Burmah*, p. 150; *Hume and Dav., Str. F.* vi. p. 444; *Hume, Str. F.* viii. p. 111; *Hume and Marsh., Game Birds* ii. p. 91, pl.; *Bingham, Str. F.* ix. p. 195; *Oates, Str. F.* x. p. 236; *id., B. Br. Burmah* ii. p. 326. Tropicoperdix chloropus (*Tickell*), *Blyth, J. A. S. B.* xxviii. p. 415. Arborophila chloropus, *Hume, Str. F.* ii. p. 449. Peloperdix chloropus, *Hume, Str. F.* iii. p. 176.—The Green-legged Hill-Partridge.

Forehead and supercilium continued on to the sides of the nape and meeting behind white, the feathers slightly edged with blackish; crown and nape rich olive brown; the back, scapulars, tertiaries, lesser wing coverts, rump, and upper tail coverts rich olive brown tinged with fulvous and irregularly but closely barred with blackish; primaries dark brown, freckled on the outer webs with fulvous; greater coverts and secondaries freckled and marked with fulvous and pale rufous; tail rufous brown, with freckles and

broken bars of black; upper abdomen ferruginous; lower abdomen, vent and under tail coverts buffy white; sides of the body pale ferruginous with wavy bars of black. Irides hazel; bill dusky red at base, rest greenish; eyelids and orbital skin purplish; legs greenish.

Length.—11·4 to 12 inches; wing 6·05 to 6·6; tail 2·9 to 3·5; tarsus 1·7 to 1·79; bill from gape 0·8 to 9. The females are smaller.

Hab.—The evergreen forests of the eastern slopes of the Pegu hills; also in Tenasserim from the extreme north down to Tavoy. Habits same as the last.

1225. Arboricola intermedia, *Blyth, J. A. S. B.* xxiv. p. 277; *Hume, Str. F.* viii. p. 111.; *Hume and Marsh., Game Birds* ii. p. 85, pl. Arborophila intermedia, *Hume, Str. F.* ii. p. 450; *Oates, Str. F.* iii. p. 344; *id., B. Br. Burmah* ii. p. 327.—The Arrakan Hill-Partridge.

Front of the head as far back as the eyes pale grey; rest of head and nape hair brown, streaked with black; lores, and a broad supercilium reaching to the back of the head greyish white, the feathers with a central black streak; ear coverts, cheeks, sides of the neck and feathers under the eye black, the bases rufous and showing through; back, rump, and upper tail coverts glossy olive brown, edged darker, and all the feathers except those on the back with a small lanceolate spot of black; tail olive brown, mottled with black, the outer feathers tipped with white; primaries brown, narrowly edged and tipped with pale buff; secondaries with broader edges and tips; tertiaries, scapulars and wing coverts a mixture of chestnut, fulvous and black, the latter colour being in the form of large oval spots near the tips; throat and foreneck black, a rufous patch below it; breast and upper abdomen dark grey; sides of the body chestnut, each feather with a large grey patch, inside of which is a long and narrow white streak; lower abdomen greyish white; flanks and thigh coverts pale buff with large black spots; under tail coverts black at base, white at tip.

Length.—10 to 11 inches; wing 5·15 to 5·7; tail 2·2 to 2·4; tarsus 1·5; bill from gape 0·8 to 0·9.

Hab.—Arracan hills; also Cachar and the Naga hills.

1226. Arboricola rufogularis, *Blyth, J. A. S. B.* xviii. p. 819; *Jerd., B. Ind.* ii. p. 578; *Blyth, B. Burm.* p. 150; *Hume, Str. F.* v. p. 114; *Hume and Dav., Str. F.* vi. p. 444; *Hume, Str. F.* viii. p. 111; *Hume and Marsh., Game Birds* ii. p. 75, pl.; *Scully, Str. F.* viii. p. 349; *Oates, B. Br. Burm.* ii. p. 328. Arborophila rufogularis, *Hume, Str. F.* ii. p. 450. Arboricola tickelli, *Hume, in Hume and Marsh. Game Birds* ii. p. 78, note.—The Red-throated Hill-Partridge.

Very similar to *A. intermedia*, but differs in the throat, foreneck and sides

of the foreneck divided from the grey breast by a black band. (*Oates*) Legs and feet pale pinky red; bill horny black; irides deep brown; orbital skin bright red. (*Davison.*)

Length.—11 inches; tail 3; wing 5·5; tarsus 1·5; bill from gape 1·1.

Hab.—Tenasserim, and along the Himalayas from Assam to Kumaon. Habits the same as the other species of the genus.

1227. Arboricola Mandelli, *Hume, Str. F.* ii. p. 449; iii. p. 262, pl. 1; *Hume and Marsh., Game Birds* ii. p. 84, pl.—The Bhootan Hill-Partridge.

Lores, forehead, and sinciput a rich deep brownish chestnut; under the anterior portion of the lores a narrow yellowish streak; crown, occiput and nape rich deep rufescent olive brown; supercilum grey, continued back over the ear coverts to the nape; chin, throat, cheeks, ear coverts, sides of the neck and basal portion of the back of the neck rich bright ferruginous, spotted everywhere except on the chin and throat with velvetty black, a band of which clearly defines the ferruginous across the base of the throat. Immediately above this black band, in the centre of the base of the neck in front, is a conspicuous pure white patch, about 0·8 inch long and 0·35 to 0·4 deep. Below the black band, the breast and sides of the breast are rich slightly ferruginous maroon; on either side of the upper portion of the throat a very narrow mandibular white stripe, about 0·6 inch long, runs down from the base of the lower mandible; above this a black line, beginning under the posterior portion of the lores, runs under the eye; the abdomen and rest of the lower parts pale slaty grey, rather sullied, and in some lights slightly brownish, and many of the feathers with a small irregular central white spot near the tip. The flank feathers (where the white spots are largest and most conspicuous) tinged or margined with rusty or ferruginous chestnut; the vent and lower tail coverts strongly tinged with dull olive, the coverts, moreover, having the white spot nearer the tips and more or less expanded into a bar, and being here and there a little tinged with rusty; wing lining about the carpal joint a rich hair brown; the rest a pale grey brown (much the colour of the lower surface of the quills), a little tipped with white. Upper back and inter-scapulary region plain olive, a little slaty in some lights towards the bases of the feathers, some of the feathers very narrowly and inconspicuously fringed with black; lower back, rump and upper tail coverts rather browner and brighter olive, some of the feathers very narrowly fringed with black and most of them with conspicuous hastate subterminal velvet black spots; coverts and scapulars and tips of tertiaries similar (the black spots varying in shape from a sort of lunule on the scapulars to the linear lanceolate dash on some of the coverts), but the feathers more or less tinged towards the margins with deep ferruginous; the primaries plain, uniform hair brown; secondaries similar, but freckled and mottled more or less on the outer webs and at the tips with ferruginous. (*Hume, Game Birds.*) The soft parts are not described.

Length.—8·5 inches; wing 5; tarsus 1·5; bill from gape 0·9; bill at front 0·65; tail 1·5.

Hab.—The Bhootan Doars. Nothing is known of its habits, though it may be presumed that they do not differ materially from those of its congeners.

Gen. **Bambusicola.**

General characters as in Arboricola; wings short and rounded; male tarsi spurred.

1228. Bambusicola Fytchii. *Anderson, Yunnan Exped.*; *Hume, Str. F* iii. p. 399; *id.*, v. p. 493; *Hume and Marsh., Game Birds* ii. p. 97. —The Western Bamboo Partridge.

Top of head, hind neck, lower back, rump and upper tail coverts dull pale olivaceous brown, more or less barred with very fine zigzag lines of a paler colour; some of the upper tail coverts mesially with a black spot; tail rufous brown, banded transversely with freckly bars of black and rufescent buff; wing coverts, tertiaries, and longer scapulars with chestnut and black spots at the tips; sides and flanks ochraceous, with a large velvet black subterminal spot; chin pale ochraceous; lores, a streak above the black streak behind the eye, sides of the face and cheeks ochraceous; breast tinged with chestnut; primaries chestnut on the outer webs; bill dark brown; irides hazel brown; legs pale greenish grey.

Length.—14 to 14·3 inches; wing 6·1 to 6·45; tail from vent 4·62 to 5·13; tarsus 1·75 to 1·93; bill from gape 0·9 to 0·97. Females average smaller.

Length.—12·5 to 13 inches, with a wing of 5·6 to 5·8.

Hab.—Shillong, in the Khasia hills, also in the Garo, North Cachar and Naga hills, and probably the hill ranges of Upper Burmah and Assam. It is said to be a shy bird, and to frequent dense grass.

Gen. **Caloperdix.**—*Blyth.*

Bill longer and stouter than in *Arboricola*; tarsus stout and strong, double-spurred in the males. Plumage of the sexes alike.

1229. Caloperdix oculea (*Temm.*), *Salvad., Ucc. Born.* p. 310; *Hume and Dav., Str. F.* vi. p. 449; *Hume and Marsh., Game Birds Ind.* iii. p. 101, pl.; *Hume, Str. F.* viii. p. 111; *Oates, B. Br. Burm.* ii. p. 329. Perdix oculea, *Temm., Pig. et Gall.* iii. p. 732. Tetrao ocellatus *Raffl., Trans. Linn. Soc.* xiii. p. 322. Caloperdix ocellata, *Blyth, B. Burm.* p. 151.—The Ferruginous Wood Partridge.

Whole head, neck, breast, and abdomen chestnut, darkest on the crown and palest on the throat; a streak over the eye paler chestnut than the other parts; tips of the ear coverts black; lower abdomen and vent ashy white; base of the neck above, back, scapulars, sides of the breast and of the body black,

each feather with a subterminal white bar; lower back and rump black, each feather with a central oval spot of chestnut; upper tail coverts black, each feather with an irregular V-shaped mark of chestnut; flanks chestnut, with oval black drops; thighs plain chestnut; under tail coverts mixed chestnut and black, the longer ones black, tipped with fulvous white; tail brownish black, the two centre pairs of feathers irregularly marked with zigzag lines of pale fulvous; primaries plain brown, all but the first three tipped with fulvous; secondaries brown, edged on the outer webs with fulvous, the edging increasing in extent till it occupies the whole of the web on the inner secondaries; tertiaries and coverts liver brown, each feather with a black drop near the tip and the coverts narrowly edged with rufous; under wing coverts brown. (*Oates.*) Legs and feet pale dirty green; bill black; irides deep brown. (*Davison.*)

Length.—11 inches; tail 2·5; wing 5·8; tarsus 1·8; bill from gape 1.

Hab.—British Burmah in Tenasserim, south of Mergui; tolerably abundant at Malewoon and Bankasoon. Found also throughout the Malay Peninsula and Sumatra.

Gen. **Rollulus**.—*Bonn.*

Claw of the hind toe wanting; no spurs; head crested; bare orbital space crimson.

1230. Rollulus roulroul (*Scop.*), *Wald.*, *Ibis*, 1872, p. 382; *Salvad.*, *Ucc. Born.* p. 308; *Hume and Dav.*, *Str. F.* vi. p. 448; *id.*, *Str. F.* viii. p. 111; *id. and Marsh.*, *Game Birds* ii. p. 103, pl.; *Oates*, *B. Br. Burm.* ii. p. 330. Phasianus roulroul, *Scop.*, *Del. Flor. et Faun. Insubr.* ii. p. 93. Tetrao viridis, *Gmel.*, *Syst. Nat.* i. p. 761. Columba cristata, *Gm.*, *Syst. Nat.* i. p. 774. Perdix coronata, *Lath.*, *Suppl. Ind. Orn.* pl. lxii. Rollulus cristatus, *Blyth and Wald.*, *B. Burm.* p. 151.—The Red-crested Wood Partridge.

A long crest of feathers from the hinder part of the crown to the nape maroon; base of crest in front white; head and neck black; lower plumage, sides of the breast and lesser wing coverts bluish black; median and greater coverts, secondaries and tertiaries dark brown, freckled more or less with rufous brown on the outer webs; back, rump and upper tail coverts glossy bluish green; tail black; outer webs of primaries rufous, freckled with brown; inner webs plain brown.

The female has no crest, but there are a few hairs springing from the forehead, the whole head and neck are grey, and there is a band of dull black on the hind neck; whole of the plumage green, washed with slaty on the abdomen and vent; tail slaty brown; wings and their coverts chestnut, more or less freckled with brown. Legs, feet and base of bill scarlet-red; rest of bill black; irides slaty grey; facial skin bright red.

Length.—11 inches; tail 2·5; wing 5·5; tarsus 1·6; bill from gape 0·8.

Hab.—The extreme south of Tenasserim, extending down the Malay Peninsula, to Sumatra and Borneo. According to Davison it is always found in small parties of six or eight or more; keeps to the dense forests, and never ventures in the open; lives on berries, seeds and insects.

Gen. **Perdicula**.—*Hodgs.*

Bill short, thick, curved; tarsus with a blunt tubercle; wings rounded; outer webs of most of the primaries sinuated; tail short of 12 feathers. Size small.

1231. Perdicula asiatica (*Latham*), *Gould, B. A. S.* part xv. pl. 12; *Temm., Pl. Col.* p. 447; *Hume, Str. F.* vii. p. 156; *Hume and Marsh., Game Birds* p. 109, pl. Coturnix pentah, *Sykes, Trans. Zool. Socy.* ii. pl. 3; *Hardw., Ill. Ind. Zool.* 2, pl. 45, fig. 3. Perdicula cambayensis, *apud Jerd., B. Ind.* iii. p. 581, No. 826.—The Jungle Bush Quail.

Above rich dark reddish brown, mottled with dull rufous; supercilium rufous white, narrowly edged with black, an indistinct pale line from the gape; feathers of the back of the neck and the back white shafted; scapulars and wing coverts richly marked on their inner webs with pale creamy white and black; primaries red-brown with tawny spots and bars; tail with a few black bars; chin rich chestnut; rest of the under surface white, tinged with rufescent on the lower abdomen, flanks, vent and lower tail coverts, and with numerous cross bars of black, smallest on the throat and sides of the neck. Bill dusky, tinged with reddish; irides light brown; legs yellowish red.

Length.—6·5 to 7·2 inches; wing 3 to 3·5; tail 1·5 to 1·78; tarsus 0·94 to 1; bill from gape 0·5 to 0·6.

Hab.—Generally distributed throughout India, Ceylon, Malabar Coast, the Wynaad, Mysore, Madras, Eastern Ghauts, Western Ghauts, Khandalla, Mahableshwar, Rutnagherry, and South Konkan generally; Chanda, Seoni, Nursingpur, Manbhoom, Rajmahal hills, Mirzapoor, Etawah, Kuchawan Hills, Mount Abu, Lucknow, Umballa, the Dhoon, Mussoorie, Simla, lower Himalayan ranges below Kumaon and Kashmir, are some of the recorded localities given by Mr. Hume, where this species is common. They always keep in small coveys in grass jungle or stubble long enough to hide them. They feed of course on seeds and grains of sorts. Breeds from September to January according to locality, making a nest on the ground under the shelter of some bush or tuft of grass. It is shallow and circular, and lined or made up of grass roots, grass and a few dead leaves. Eggs, 5—7 in number, regular ovals, more or less pointed towards one end, with a faint gloss, and in colour spotless creamy white. Size from 0·96 to 1·1 in length and 0·79 to 0·9 in breadth.

1232. Perdicula argoondah, *Sykes, Trans. Zool. Soc.* ii.

p. 545 ; *id., Str. F.* vii. p. 156 ; *Hume and Marsh., Game Birds* ii. p. 117.—The Rock Bush Quail.

Upper plumage brownish rufous, the feathers minutely freckled and lineated with black and tawny ; feathers of the head and neck tipped with black ; some of the scapulars and wing coverts with irregular black blotches ; primaries dark brown, with tawny bars on their outer webs ; tail with the lateral feathers also barred ; supercilium from the base of the bill over the eye bordered by dusky, and another shorter one from the gape ; cheeks, sides of the face, chin and throat bright rufous ; under surface of the body, including the sides of the neck white, with numerous cross bars of black ; flanks tinged with rufous ; also the lower belly and thigh coverts. Bill dark slaty ; irides brown ; orbits pale ; legs red.

Length.—6·7 to 7·25 inches ; wing 3·1 to 3·5 ; tail 1·5 to 1·9 ; tarsus 0·75 to 1·0 ; bill from gape 0·5 to 0·67.

Hab.—The Punjab, N.-W. and Central Provinces, Central India, Rajpootana, Eastern Madras districts, Coimbatore, Mysore, throughout the Deccan, in Bundelkund, Deesa, the Panch Mahals, Kutch, Sambhur Lake, Jodhpore, and Mount Abu, but not in Sind nor anywhere in Lower Bengal. Affects rocky hills with low scrub jungle. Breeds from August to December and again in March. Eggs. 6—7, of the type of the Jungle Bush Quail.

Gen. **Ophrysia**.—*Gray*.

General characters the same as those of Perdicula.

1233. Ophrysia superciliosa (*J. E. Gray*), *Hume, Str. F.* vii. p. 434 ; *id. and Marsh., Game Birds* ii. p. 105 ; *Gould, B. Asia*, pl.—The Mountain Quail.

Lores, chin, throat and sides of the face and ear coverts deep black ; forehead and a broad stripe above and behind the eye silvery grey, the feathers of the forehead paler shafted at base, and darker on the shaft towards the tip ; hind head and nape light greyish brown ; upper surface of the body, tail and under surface olive, tinged with grey on the breast and abdomen ; all the feathers of both surfaces margined on each side with a line of black ; under tail coverts black, every feather with a small tooth-like mark of white on each side near the base, a similar but larger mark about two-thirds from the base, and two coalescing oval spots of white at the tips ; bill reddish ; tarsi brown. Total length 9 inches ; bill 0·62 ; wing 3·5 ; tail 2·75 ; tarsi 1·33.

Female.—General tint cinnamon brown, with a rufous edging to each feather ; those of the upper surface with light coloured shafts and triangular mark of dull black on the inner web near the tip, preceded by a small mark of the same hue as the shafts ; on the under surface the dark mark occupies the centre of the tip of each feather, and is of a lanceolate form ; the throat is

superciliary stripe seen in the male : the feathers of the crown and behind the eye being somewhat greyer than the others, and having polished shafts ; on each side of the nape a dark stripe as in the male ; tail irregularly barred with black ; under tail coverts dark cinnamon, with a stripe of black in the centre, between which and the margin is a stripe on each side, which unites with a large patch of the same hue near the tip. (*Gould, B. of Asia.*) Bill coral red ; legs and feet pinkish.

Length.—10 inches ; wing 3·6 ; tail 3·3 ; tarsus 1 ; bill from gape 0·58.

Hab.—Only known from Mussoorie in the neighhourhood of Naini Tal.

Gen. **Microperdix**, *Gould*.

Bill red, slender, no tarsal tubercle in the male, otherwise as in *Perdicula*.

1234. Microperdix erythrorhyncha (*Sykes*), *Hardw., Ill. Ind. Zool.* 2, pl. 44, f. 2 ; *Gould, B. Asia* pt. xiv. pl. xvi. Coturnix erythrorhyncha, *Sykes, Trans. Zool. Soc.* vol. ii., pl. i. Perdicula erythrorhyncha, iii. p. 584, No. 828.—The Painted or Red-billed Bush Quail.

Forehead, lores and crown of the head black ; a white frontal band continued as a supercilium over each eye ; upper plumage rich olive brown with black lunules ; scapulars, wing coverts and secondaries with large patches of black, the shafts pale yellow and some faint cross lines of the same ; primaries brown, the outer webs barred with dark rufous ; tail brown, with black spots, and barred with narrow pale lines ; beneath the chin is pure white bordered by black ; rest of lower parts rufous, passing into olive brown on the sides of the neck and with a few spots of black on the breast and side of the neck ; flanks with large spots of deep black tipped with white. Bill and legs fine red ; irides yellow brown.

Length.—6·5 inches ; wing 3 ; tail 1·5 ; tarsus 1. The female has the head brown, and the white parts rufous.

Hab.—Southern India, from the Wynaad to the Deccan in Poona Has also been obtained in Coorg and on the Neilgherries ; also at Karlee above the Khandalla Ghauts, and near Dharwar. Habits the same as Bush Quails, living in small bevies. Breeds in the Neilgherries from August to November. According to Mr. Mahon Daly, it is very common amongst the coffee on the Shevaroys, and often in rocky ground with low jungle. They go about nearly always in pairs, and not in large bevies as stated by Jerdon. They lay from 6 to 8 eggs on the ground, with just a few leaves placed around the nest. It is very daring. Mr. Daly adds that he has seen it fly at a dog in defending its brood. January to March, and again September and October, are the months in which this species breeds. The eggs are long ovals, pointed towards one end, rather glossy and spotless *café au lait*, varying in length from 1·35 to 1·45

1235. Microperdix Blewitti, *Hume, Str. F.* ii. p. 512; *id. and Marsh., Game Birds* ii. p. 129, pl.—The EASTERN PAINTED BUSH QUAIL.

Very similar to *M. erythrorhyncha*, but differs in the male having the black frontal band much narrower, and the white band surmounting it, also the supercilium, broader; the chestnut of the lower surface is much paler; the feathers of the upper breast, sides of the breast, part of the upper mandible fringed with greyish pink, with black subterminal spots much larger and more widely spread; upper surface paler brown; chin very narrowly black, or pure white. Irides brown; bill, legs and feet coral red.

Length.—5·9 to 6·5; wing 2·8 to 3·15; tail 1·4 to 1·6; tarsus 0·87 to 0·91; bill from gape 0·5 to 0·6.

Hab.—Chota Nagpur, in the Raipur, Sambulpoor, Bhandara, Mandla and Seoni districts of the Central Provinces; affects grass patches and fields in fairly large bevies. Breeds during June and July. The flesh like that of all the *Perdicinæ* is delicate and well flavoured.

Sub-Family.—COTURNICINÆ.—QUAILS.

Wings long, rather pointed; bill moderate; tarsus not spurred; tail short, coriceated by the upper tail coverts.

Gen. Coturnix.—*Brisson.*

Bill short, straight, very slightly curved at the tip; tarsi not spurred; tail short; wings long and pointed; 1st and 2nd quills longest.

1236. Coturnix communis (*Linn.*), *Bonn., Tabl. Enc. Meth.* p. 217; *Bodd, Pl. Enl.* 170; *Jerd., B. Ind.* iii., p. 586, No. 829; *Hume, Nests and Eggs, Ind. B.* p. 549; *Blyth, B. Burm.* p. 151; *Dav. et Oust. Ois. Chine*, p. 396; *Dresser, B. Eur.* vii. p. 298; *Hume, Str. F.* viii, p. 111; *Scully, Str. F.* viii. p. 350; *Hume and Marsh., Game Birds* ii. p. 133, pl.; *Hume, Str. F.* x. p. 236 (*note*); *Murray, Hdbk., Zool., &c., Sind*, p. 203; *id., Vert. Zool., Sind*, p. 215; *Oates, B. Br. Burm.* ii. p. 331.—The COMMON EUROPEAN OR LARGE GREY QUAIL.

PLATE.

The following synopsis of the two known species will suffice to identify them:—

Primaries *with pale rufous bars* on their outer webs.—*C. communis.*

Primaries *without* pale rufous bars on their outer webs.—*C. coromandelica.*

Top of head brown, the feathers edged paler; a mesial buffy line on the crown; supercilium pale yellowish white, reaching above the ear coverts, which are partially brown; lores and a line below the eye white; sides of the neck white; two narrow blackish lines from the sides of the neck to below

perfect; chin and throat patch dark brown; breast pale buff, buffy white or rufous, with pale shafts to the feathers; sides of the breast and flanks similar or deeper in colour, with pale shafts; abdomen white, pale rufous, or buff; back, scapulars and upper tail coverts from brown to a rich dark brown, each feather shafted a rich rufous, or buff, with three transverse bars or bands of the same colour on each side, the tips being pale buff; *primaries dusky brown with pale rufous bars on their outer webs;* the secondaries with pale tips, and the tertials barred buffy on both webs, the borders of the buffy bars darker than the ground colour of the feathers. The female is like the male, but wants the central throat patch, and the breast is spotted with brown or dark brown. She is also much larger.

Length.—7 to 8 inches; wing 4 to 4·5; tail 1·6 to 2·25; irides brown or hazel; legs pale fleshy; bill blackish with a brownish horny tinge above and at the tip.

Hab.—Sind, Punjab, Beloochistan, Afghanistan, Persia, Arabia, the Deccan, N. Guzerat, Rajputana, Kutch, Kattiawar and Southern and Central India generally to Nepaul. A rare visitor to Burmah and in the countries S.-E. of the mouths of the Ganges, Chittagong, Arracan and Pegu, where it may be considered a straggler. It is found throughout Europe and nearly the whole of Asia. The greater bulk of these which come into India, Hume says, are migratory. They arrive from the North from Central Asia across the Himalayas, and from the west from Persia, Beloochistan, &c. Hume adds, that arrived within our boundaries, while a certain number remain scattered about, some remaining in the lower ranges and valleys of the Himalayas up to an elevation of 4000 to 5000 feet, the greater bulk move forward, southwards and eastwards, and arrive about the middle of October in Sylhet, Bengal, and the Deccan, and frequent the crops of peas, millet, &c., to the end of March; their stay, however, depends much on the supply of food. They migrate invariably at night, and evidently in large numbers at a time. Numbers are netted throughout India, for the table, for quaileries, and the cock-birds for fighting purposes,—a favourite pastime nearly throughout India amongst Mahomedans. Breeds generally in the N.-W. and Upper Provinces of India, laying six eggs, from February to April. Eggs broad ovals, a good deal pointed towards one end. The ground colour is a clear yellowish or reddish buff, thickly speckled and freckled and thinly blotched with reddish brown.

1237. Coturnix coromandelica (*Gmel.*), *Jerd*, *B. Ind.* iii. p. 588, No. 830; *Hume, Nests and Eggs Ind. B.* p. 550; *id.*, *Str. F.* iii. p. 178; *Blyth, B. Burm.* p. 157; *Hume, Str. F.* viii. p. 111; *Hume and Marsh., Game Birds* ii. p. 151, pl.; *Oates, Str. F.* x. p. 236; *id., B. Br. Burm.* ii. p. 333; *Murray, Hdbk., Zool., &c., Sind,* p. 203; *id., Vert. Zool., Sind,* p. 216. Tetrao coromandelica, *Gmel., Syst. Nat.* i. p. 764.—The Black-breasted Rain Quail.

Male.—Top of head brown, with a longitudinal pale stripe on the crown; supercilium white, extending above and beyond the ear coverts; a white streak under the eye, followed by a dark brown one, which meets the first dark brown stripe running below the throat, and forming with its fellow on the other side a triangle, from the middle of which to the chin runs a broad throat stripe; a triangular patch of white on each side of the throat; there is also on the throat a second dark stripe behind the first, running down to the breast, the interspace between both being white; breast with a large jet black patch, some of the feathers of the lower part of which are edged with pale buff or white; sides of the breast dark rufous, the feathers pale shafted, and a few with dark spots on both webs; flanks and abdomen pale buff and white intermixed, the feathers black shafted; lower tail coverts and vent rufous; back, scapulars and upper tail coverts same as in the large grey quail, from which it may be readily distinguished *by the absence of rufous bars on the first two primaries*, the first primary having a pale outer edge, and by the well-defined lines on the chin and throat, and the patch on the breast, also by its much smaller size.

Length.—6·25 to 7 inches; wing 3·43 to 3·7; tail 1 to 1·5; irides dark brown; legs and feet pale fleshy; bill dusky black.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Beloochistan, Persian Gulf, Rajputana, N. Guzerat, Kutch, Kattiawar, the Concan, Deccan, Central and parts of South India, also Dacca and Sylhet. Rain Quail visit India during the monsoon months, about the end of July, and remain to breed. The majority breed in the Deccan, Guzerat, Central India and parts of the Central Provinces. In Oudh, Behar and the N.-W. Provinces, only a very limited number remain to breed. July to October are the months in which they breed. The eggs are not unlike those of *C. communis*. They leave about the end of October or middle of November.

Gen. **Excalfactoria**.—*Bonap.*

General characters similar to those of *Coturnix*. Wings less pointed and more rounded; 1st quill shorter than the 2nd; 3rd, 4th and 5th graduating very slightly from the 2nd.

1238. Excalfactoria chinensis (*Linn.*), *Jerd.*, *B. Ind.* ii. p. 591; *Hume, Nests and Eggs Ind. B.* p. 553; *Salvad., Ucc. Born.* p. 311; *Oates, Str. F.* iii. p. 345; *Wald., Trans. Zool. Soc.* ix. p. 224; *Blyth, B. Burm.* p. 151; *David et Oust. Ois. Chine*, p. 397; *Hume and Dav., Str. F.* vi. p. 447; *Hume, Str. F.* viii. p. 111; *Oates, Str. F.* viii. p. 167; *Hume and Marsh., Game Birds* ii. p. 161 pl.; *Bingham, Str. F.* x. p. 196; *Oates, Str. F.* x. p. 236. Tetrao chinensis, *Linn., Syst. Nat.* i. p. 277. Coturnix chinensis, *Legge, B. Ceylon*, p. 755.—The BLUE-BREASTED QUAIL.

A narrow white line from the nostrils to the eye, forehead, feathers round the eye, ear coverts, breast, sides of the neck and of the body slaty blue; abdomen, vent and tail chestnut; upper plumage, wing coverts and tertiaries olive brown, marked with black and pale rufous, and most of the feathers with pale shaft streaks; primaries and secondaries plain brown; chin, throat, and cheeks black; a broad moustachial stripe from the gape white; a broad collar below the black of the throat white, succeeded by a narrow band of black. The female has the upper plumage almost similar to the male; the supercilium, forehead and throat are rufous, enclosing a dull white chin; sides of the head pale rufous, speckled with black; lower plumage pale buff; all but the centre of the abdomen barred with black. Bill bluish black; irides red; eyelids plumbeous; legs bright yellow.

Length.—5·7 inches; tail 1; wing 2·8; tarsus 0·8; bill from gape 0·5.

Hab.—Generally distributed over Eastern India and Ceylon. Occurs in Bengal, Assam, Burmah, Southern and Cochin-China, the Malay Peninsula, Sumatra, Java, and Borneo. In Ceylon it is fairly common, especially towards the south of the island. In Burmah it is generally distributed, but is nowhere common except in Pegu, where it arrives in May in large numbers. In Raipur, Mandla, and the Chanda districts, also in the Tributary Mahals, Singbhoom, Calcutta, Cachar, Sylhet, Khasia hills, as well as in the Dafla hills and in the valley of Nepaul it is fairly common. It is also recorded from Arracan. Open, swampy grassy lands or meadows are their favourite haunts, and they are seldom found far from such spots. They do not appear shy but freely come into the open to feed. Breeds in Pegu, Cachar, Purneah, and the Sub-Himalayan districts from Sikkim to Kasauli. Lays from June to the 1st or 2nd week in September. Eggs, 5—6, broad ovals, of the shape of those of the Common Black Partridge, *café au lait* tinged with olive in colour. In size they vary from 0·95 to 1·04 in length and from 0·7 to 0·81 in width.

Family, TINAMIDÆ.

Bill short, rather slender, and very slightly curved at the tip; tail short or none; tarsi not spurred; hind toe small or wanting.

Gen. **Turnix**.—*Bonap.*

Characters the same as those of the Family; nostrils linear; 1st quill longest; no hind toe.

1239. Turnix plumbipes (*Hodgs.*), *Hume, Nests and Eggs Ind. B.* p. 554; *Blyth, B. Burm.* p. 152; *Oates, Str. F.* v. p. 164; *Anders., Yunnan Exped.*, p. 673; *Hume and Dav., Str. F.* vi. p. 450; *Hume, Str. F.* viii. p. 111; *Scully, Str. F.* viii. p. 350; *Hume and Marsh., Game Birds* ii. p. 177, pl.; *Oates, Str. F.* x. p. 236; *id., B. Br. Burm.* ii. p. 337. Hemipodius plumbipes, *Hodgs., Beng. Sport. Mag.* ix. p. 345. Turnix ocellatus (*Scop.*),

Jerd., B. Ind. ii. p. 597, No. 833. Turnix pugnax (*Temm.*), *Hume, Str. F.* iii. p. 178; *id., Nests and Eggs Ind. B.* p. 553. Turnix taigoor, *Sykes, Trans. Zool. Soc.* 2, pl.; *Jerd., B. Ind.* iii. p. 595, No. 832; *Hume and Marsh., Game Birds* ii. p. 169, pl.—The INDO-MALAYAN BUSTARD QUAIL.

Above rufous with transverse black lines and pale yellow streaks; below rufescent or pale ferruginous, becoming chestnut on the flanks and undertail coverts; the foreneck, breast and sides of the body lunated with black.

The *female* is a much larger bird, and the plumage is darker; the crown and sides of the head, the sides and back of the neck are spotted with white; chin, throat and breast black; sides of the breast and body lunated with black. Legs and feet plumbeous or pale leaden; irides pearly grey.

Length.—5·6 to 6·25; wing 3·12 to 3·5; tail 1·0 to 1·4; tarsus 0·95 to 1·12; bill from gape 0·7 to 0·81.

Hab.—Throughout India nearly (except Sind, Kathiawar and Jodhpoor, and other similar dry places), extending to Ceylon, Burmah, the Malay Peninsula, Siam, and Cochin-China. It frequents gardens, land covered with grass, also bushes, roadsides, &c. Breeds in July and August, wherever it occurs, laying 4—6 eggs, of a stone grey colour, irrorated with small specks of brown interspersed with larger spots of a neutral tint.

It will be seen that I have made *T. taigoor* a synonym of *T. plumbipes*. There can be no doubt of both species being identical; the rufous tint of the Malayan race can only be considered as climatic. There are no other characters which could be considered sufficient to warrant a separation.

1240. Turnix joudera *Hodgs., Beng. Sport. Mag.* 1838, pl. 1, fig. 1; *Jerd., B. Ind.* iii. p. 599, No. 834; *Str. F.* vii. p. 453; *Hume, Nests and Eggs Ind. B.* p. 556; *id. and Marsh., Game Birds* ii. p. 187, pl. Turnix Dussumieri, *apud. Jerd.*, viii. p. 599.—The INDIAN BUTTON QUAIL.

Male.—Top of head light brown with a faint longitudinal streak on the crown; back of neck, back and scapulars ferruginous brown, the feathers behind the head with dark spots, and those of the back, scapulars and under tail coverts with narrow transverse striæ, distinct on the lower part of the back; scapulars with a few white spots or edgings to the feathers; wing coverts pale earthy brown, the tips broadly white, each with a dark ocelli in the centre; primaries pale earthy brown, narrowly edged with pale white; chin and upper throat white; middle of breast ferruginous, the sides of the breast like the scapulars, with white tipped feathers, in the middle of which is a dark spot; under parts ferruginous; vent whitish.

Length.—5·5 to 6 inches; wing 2·75; bill at front 0·43.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, Deccan, South India; Kutch, Kattiawar, N. Guzerat, Rajputana and Punjab during the rains; rare in the Deccan and sparingly distributed in

Bengal; affects chiefly large open grassy plains; occurs also in South Travancore, and probably in Ceylon.

1241. Turnix Dussumieri (*Temm.*), *Blyth*, *Ibis*, 1867, p. 161; *Hume*, *Nests and Eggs Ind. B.* p. 556; *David et Oust. Ois. Chine*, p. 397; *Hume*, *Str. F.* viii. p. 111; *Hume and Marsh*, *Game Birds* ii. p. 193, pl; *Oates*, *Str. F.* x. p. 237; *id.*, *B. Br. Burm.* ii. p. 336. Hemipodius Dussumieri, *Temm.*, *Pl. Col.* 454, fig. 2. Hemipodius Sykesi, *Smith*, *Ill. S. Afr. Zool. Aves. Sub.* tab xvi.; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 204; *id.*, *Vert. Zool.*, *Sind.*, p. 217.—The Little Button Quail.

Male.—Head brown, barred with black, and with a central longitudinal yellowish stripe; supercilium pale white or yellowish white; back and scapulars chestnut brown, the feathers with fine dark transverse striæ and edged with yellowish white; rump and upper tail coverts dark brown, closely barred with black, the feathers with whitish edges; throat white, with a few dark spots on the sides; breast pale ferruginous, the feathers on the sides with dark spots or lunules; abdomen whitish.

Length.—5 to 5·5 inches; wing 2·75; irides light yellow; legs and feet pale fleshy.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, and the Concan during the monsoon, in grassy plains or cultivated fields. In the Deccan it is very numerous and difficult to flush from the fields of pulse which it affects. Said to breed in the Himalayas and N.-W. India.

1242. Turnix maculosa (*Temm.*), *Hume*, *Str. F.* ii. p. 281; iii. p. 179; *Hume and Dav.*, *Str. F.* vi. p. 452; *Hume*, *Str. F.* viii. p. 111; *Hume and Marsh.*, *Game Birds* ii. p. 183, pl.; *Bingham*, *Str. F.* ix. p. 196; *Oates*, *Str. F.* x. p. 236; *id.*, *B. Br. Burm.* ii. p. 335. Hemipodius maculosus, *Temm*, *Pig. et Gall.* iii. p. 631. Turnix maculatus *Vieill.*, *Nouv. Dict. d'Hist. Nat.* xxxv. p. 47; *David et Oust. Ois. Chine* p. 398. Turnix Blanfordi, *Blyth*, *J. A. S. B.* xxxii. p. 80; *Blyth and Wald.*, *B. Burm.* p. 151.—Blanford's or the Burmo-Malayan Button Quail.

Upper plumage rufous, black and yellow, the first two colours preponderating, *and the yellow disposed in oval drops not streaks*; wing coverts yellowish-buff, with large black spots; hind neck and upper back rufous, forming a broad collar; crown of the head blackish with a pale rufous mesial line; sides of the head buff, barred with black; chin and throat buffy white; breast, sides of the body, vent, flanks and under tail coverts ferruginous; sides of the breast and sides of the body with large ovate or round spots of black. (*Oates.*) Legs yellow; upper mandible dark brown; lower mandible and gape pale brown, tinged with yellow; irides white.

Length, *Male*—6·5 inches; female 7; wing 3·62; tail 1·5; tarsus 1; bill

Hab.—Tenasserim, in Pegu, Arracan, and Hill Tipperah. Found about gardens or in the immediate vicinity of cultivation. It is said to be hard to flush, and only flies a short distance before again dropping. It is everywhere thinly distributed, and is a terrible skulk, like *joudera*, an allied species which is barely separable from this. Nothing is known of its habits or nidification.

1243. Turnix albiventris, *Hume, Str. F.* i. p. 310; ii. p. 281; *id. and Marsh., Game Birds.* ii. p. 199, pl.—The Nicobar Button Quail.

Lores and a circle round the eye pale fulvous; base of bill and two stripes along the crown to the nape black, the feathers narrowly margined with chestnut; ear coverts fulvous, tipped darker; sides of the neck fulvous buff, spotted with black; sides and back of the neck, interscapulary region and scapulars bright chestnut, more or less variegated with yellowish white and black; lower back and rump, also the upper tail coverts blackish brown, the feathers tipped with chestnut, and a subterminal freckled bar of the same colour; tail feathers greyish brown with obsolete blackish brown bars; primaries, secondaries and greater coverts pale satin brown, the outer web of the first nearly white; rest narrowly edged with pale fulvous; tertiaries pinkish-brown, mottled with blackish brown towards their tips, and with a yellowish brown spot there on the outer webs; most of the secondary coverts pale buff, with blackish brown irregularly shaped spots near the tips; chin and upper portion of the throat pure white; rest of throat and middle of breast light feruginous; sides of the breast pale buff, with regular narrow transverse blackish brown bars; middle of abdomen white; sides, vent, tibial plumes, flanks and lower tail coverts tinged buffy. The female has the black stripes on the head, edged with white and not chestnut; the stripe dividing them is also white; back of the neck and upper back occupied by a broad, intensely bright chestnut collar, entirely unmarked and unspotted; ear coverts, sides of the head, and a line under the eye pale fulvous, dotted with black; entire chin, throat and upper breast bright ferruginous; rest of the plumage like that of the male; irides white; legs and feet yellow, tinged orange; upper mandible horny brown, yellowish at gape; lower mandible yellow, tipped horny.

Length.—6 inches; wing 3; tail 1·4; tarsus 0·9; bill from gape 0·7.

Hab.—Port Blair in the Andamans; also the Nicobar Islands.

ORDER, GRALLATORES,—Waders or Shore Birds.

Tarsi long, rounded; tibia bare to a greater or less extent; hind toe imperfect in most or absent; wings long; neck long or of moderate length, generally in proportion to the length of the legs; bill variable in size and structure. All, except the Ostriches and Emeus (which do not fly) fly well, and stretch their legs out behind them during flight.

Tribe, PRESSIROSTRES.—*Cuvier*.

Hind toe small, absent or moderate; bill depressed at base, and rather compressed on the sides. It comprises the *Otitidæ* or Bustards and Floricans;

the *Cursoridæ*, or Courier Plovers; *Glareolidæ* or Swallow Plovers; *Charadridæ* or Sand Plovers; *Hæmatopodidæ* or Shore Plovers, and the *Gruidæ* or Cranes.

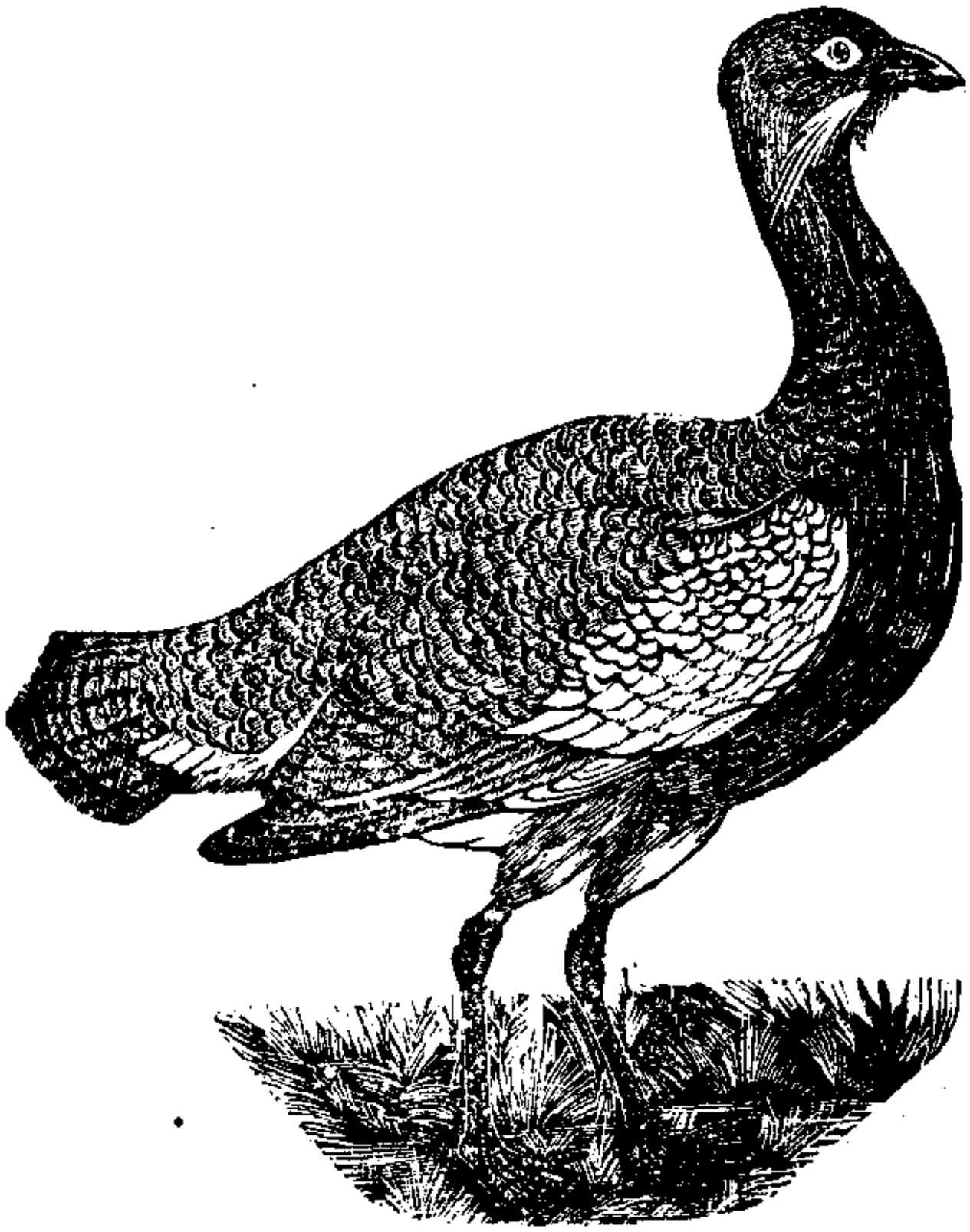
Family, OTITIDÆ.

Bill compressed, the tip scooped, and slightly curved; nostrils in a membranous groove, partially closed; wing, 2nd to 4th quills longest; tertials nearly as long as the primaries; tarsi reticulated; hind toe absent; plumage mottled fulvous and black. Food insects, young shoots, and grain. As game all the members of the family Otitidæ are eagerly sought after. For the table there is scarcely any other bird so succulent and delicious.

Gen. **Otis**.—*Lin.*

Bill moderately long, pointed and nearly straight; legs long, and strong; tarsi reticulated; claws short and blunt; wings ample; moustachial tufts long.

1244. Otis tarda, *Linn., Syst. Nat.* ii. p. 279; *MacGillivray, B. Eur.* iv. p. 31; *Hume, Str. F.* vii. p. 434; *id. and Marsh., Game Birds* p. i. pl.—The European Bustard.



Otis tarda.

Head and upper neck all round are light greyish-blue; on the upper part of the head is a longitudinal brown band; the elongated moustachial feathers white; the lower part of the neck interiorly is pale yellowish red; the forepart of the breast pale greyish blue, fading into white, of which colour are the other lower parts, excepting the sides of the lower neck and body, which are light yellowish red, barred with black, each feather having two subterminal unequal bars, and generally several spots; the tail feathers are similar, but tipped with white, and having the base of that colour; the outer wing coverts, secondary coverts, and inner secondary quills are white, the former tinged with grey; the primary quills brownish black, with the shafts white.

Male.—Bill pale yellowish brown, darker on the ridge; iris hazel; feet light brown, as are the claws.

Length.—To end of tail from 40 to 48 inches.

Female.—The female is much inferior in size to the male, generally weighing only ten or twelve pounds; there are no elongated feathers on the sides of the head; the bare parts are coloured as in the male; the upper part of the head is yellowish red, barred with black; the foreneck greyish blue, without any red at its lower parts; the colouring of the other parts as in the male; but the black markings on the back and tail more numerous.

Length.—To end of tail about 35 inches. (*MacGillivray*, vol. iv., p. 31.)

Hab.—According to Hume, has only once occurred within our limits in 1870, north of the Kabul river in Hastnagar, within a few miles of the most north-westerly point of British India proper in Lat. 34° N. and Long. 71·45 E.

1245. Otis tetrax, *Lin., Syst. Nat.* iii. p. 279; *MacGillivray, B. Eur.* iv. p. 31.; *Hume, Str. F.* ii. p. 423; *id. and Marsh., Game B.* p. 4, pl.—The Lesser Bustard.

Male in Summer.—Upper part of the head and the nape are pale reddish yellow, thickly variegated with longitudinal and transverse brownish black markings; sides of the head and throat to the length of two inches greyish-blue, with an inferior black margin, succeeded by a narrow ring of white, extending more than an inch downwards in front in a pointed form; middle of the neck, all round, for the length of two inches and a half, deep black, succeeded below by a half collar of white and another of black; all the lower parts white, excepting some feathers on the fore and lateral parts of the breast, which are similar to those of the back. Upper parts, including the back, scapulars, many of the small wing coverts, with the inner secondaries and their coverts, light reddish yellow, beautifully undulated transversely with brownish black; the upper tail coverts with white in place of yellow; wing with a broad band of white, commencing at the carpal joint, including the alula; eight of the outer secondary quills and their coverts are white at the base, chocolate brown and mixed with grey towards the end, with the tip white, which

becomes gradually more extended on the inner primaries, of which the tenth has only a narrow band of brown near the end; tail feathers are also white at the base and tip; in the rest of their extent pale yellow, undulated with black, and having three distinct transverse bands of the latter colour, the lateral feathers gradually becoming more white, and losing one of the black bands.

Bill brown, greyish blue at the base, the ridge and tips dusky; irides reddish yellow; feet light brownish grey; scutella of toes darker; claws dusky.

Length.—To end of tail, 18 inches; bill along the ridge, 1, along the edge of lower mandible 1·33; wing from flexure 10; tail 4·25; bare part of tibia 1; tarsus 2·66.

Female.—The female, which is about the same size, differs in having none of the blue or black so conspicuous on the neck of the male; the upper part of the head, its sides, and the neck all round, are pale reddish yellow, variegated with dark brown, each feather having a broad median longitudinal band and several transverse bars; throat yellowish white; upper parts as in the male, many of the feathers with large patches of black in the middle; wings and tail as in the male, but with the white less extended and barred with black; lower parts yellowish white; feathers of the breast and sides with transverse black lines; lower tail coverts black shafted. In winter the male resembles the female. (*Mac Gill.*)

Hab.—The Punjab and N.-W. Provinces. A regular and tolerably abundant winter visitant. Said to breed in Afghanistan.

Gen. **Eupodotis**.—*Less.*

Bill long, pointed, straight, the tip curved; legs long and strong; male with a pouch; wings ample.

1246. Eupodotis Edwardsi, *Gray, Ill. Ind. Zool.* pl. 59; *Gould, C. B.* pl. 72; *Jerdon, B. Ind.* iii. p. 607; *Murray, Hdbk., Zool., &c., Sind,* p. 204; *id., Vert. Zool. Sind,* p. 217; *Hume and Marsh., Nests and Eggs* iii. p. 557; *id., Game Birds,* i. p. 7, pl. (*Tokdar,* Sind.)—The Indian Bustard.

Male.—Top of head and crest black; sides of the face, neck all round, breast and entire lower parts white; the feathers of the breast and lower part of the neck long and hackled, those of the breast covered with minute dusky mottlings; a dark band across the breast; back, scapulars, wing and upper tail coverts brown, pale buff, or grey brown, beautifully mottled and vermiculated with minute black striæ; primaries snuff brown, darker on their inner webs, and tipped with white; some of the inner ones with 3—4 white patches on their inner webs; secondaries slaty, much irrorated basally, and broadly tipped with white; tertials as long as the primaries, concolorous with the back, also the lesser wing coverts; median coverts black, tipped with white;

greater wing coverts slaty grey, also tipped with white. Tail like the back with a subterminal dark band and tipped with white; flanks and sides dark brown, mixed with whitish or dark olive brown; vent and lower tail coverts the same as the back, with white tippings to the feathers.

Male, Length.—45 to 50 inches; expanse of wing 85—95 inches; wing 24·5 to 29; bill from gape 4 to 4·75; tarsi 7·5.

Female, Length.—36 to 38 inches; wings 20 to 22; legs and feet creamy yellow; irides yellow; bill yellowish at tip, dusky at the base.

Hab.—Sind (Thurr and Parkur), Punjab, N.-W. Provinces, Kutch, Rajpatana, N. Guzerat, Kattiawar, Jodhpore, Hydrabad (Deccan), Poona, Satara, Berars, and the Central Provinces. According to Mr. Doig, (*Hume, Game Birds,*) it is a permanent resident and breeds in the Thurr and Parkur districts. It is said to wander occasionally in the cold weather to the plains along the edge of the desert, sometimes going even as far as the Indus. It feeds on grain and insects, and frequents the cultivated districts at other than in the breeding season. Jerdon has an excellent description of its habits, &c. Breeds from July to September, laying from one to two eggs in a depression in the ground behind tufts of grass or small bushes, lined very sparingly with thin grass.

Gen. **Houbara**.—*Bonap.*

Legs shorter than in *Eupodotis*; bill rather lengthened and depressed at the base; males with a ruff; no hind toe.

1247. Houbara Macqueenii, *Gray, Ill. Ind. Zool.* pl. 47; *Gould, B. As.* pl. 8; *Jerd., B. Ind.* iii. p. 612; *Murray, Hdbk., Zool., &c., Sind,* p. 204. *id., Vert. Zool. Sind,* p. 218; *Hume and Marsh., Game Birds Ind.* i. p. 17. (*Tilloor*, Sind.)—The Houbara Bustard.

Male.—Head crested; forehead minutely speckled with greyish brown and white; crown with a crest of elongate feathers, which are white at the base and tipped black; the feathers behind the crest resting immediately on the crown entirely white; head behind, ear coverts and neck pencilled with pale brown and white. The ruff begins immediately behind the ear coverts with elongated feathers, one-half of which are white at the base for more than one-half their length, and the rest shining black; the lower half of the ruff entirely white, the upper half edged behind and in front with black, rather lax feathers; back and scapulars buff or rufous buff, delicately pencilled with dark brown, each feather with two dark bands, the hinder band only being visible externally; upper tail coverts with 3—4 narrow dark bands, which are distant from each other about an inch; tail brighter rufous or buff, with the same pencillings, the feathers with three bluish ashy bands, and the tips white;

under-tail coverts white, some of the feathers with transverse bands and brownish mottlings; chin, throat and cheeks white, the feathers of the latter with dark tips; feathers of the lower neck and breast grizzled with pencillings, the elongated feathers on the breast pale bluish white, with dark shafts; rest of the lower surface white, also the axillaries and wing lining; primaries white at their base, and black for the terminal half, except the 1st primary, which in some specimens are dark brown on the outer web; lesser wing coverts whitish with very fine vermiculations; winglet black; bill horny brown; irides bright yellow; legs greenish yellow.

Length.—25 to 32 inches; wing 14 to 15; tail 8·5 to 10. In non-breeding plumage the male has no crest nor the elongated black and white feathers, but the dark lax feathers are well developed in their place.

Hab.—Sind, Persia, Beloochistan and Afghanistan, Punjab, N.-W. and Central Provinces, Rajputana, Kutch and Guzerat, also Kattiawar.

In Sind, this fine bird is extremely common during winter, affecting chiefly the large plains and hill sides covered with *Grewia* bushes, on the fruits of which they principally live. It is usually found in parties of 2, 4, or 6, and, as game, is much sought for by all sportsmen. It is also largely hawked by the Sindees, *Falco sacer*, *Juggur* and *peregrinus* being used for the purpose. It is found all over the plains of the Punjab, also in Beloochistan, Southern Persia and Afghanistan; breeding in Persia and Afghanistan, where it occurs in the summer. In Rajputana too it has been found, also in Kutch, Northern Guzerat and Kattiawar. The following, extracted from *The Field*, entitled "Oobara shooting in Lower Sind," I think by "an old Sindee," gives a fair account of the mode of shooting this Bustard. He says:—"So far as my experience goes, the Oobara, which may be briefly described as a bird of the Bustard tribe, is chiefly to be found in Sind. I have occasionally come across a solitary one or two in Rajputana and Guzerat, and I also presume they are to be met with in many parts of the Punjab, and, in fact, perhaps anywhere where large sandy plains exist. They are, I believe, seldom, if ever, to be found in black soil.

"The Oobara is a migratory bird, coming in with the cold weather, and disappearing at the first approach of the hot season. They are usually to be found in pairs, and feed early in the mornings and late in the evenings. At these times they are so wary, as seldom to be got at even by careful stalking. They appear, however, to be peculiarly susceptible to heat, as the moment the sun attains any power they retire into the shade of a bush, and, if undisturbed, lie quiet throughout the heat of the day, or if flushed, only take short flights. This is the time to get them, and the usual method is by stalking them on a well-trained camel, driven by an experienced shikaree. The camel is made to circle round and round the bird, and the moment the bird perceives this it

crouches down, trusting to its colour, which is exactly that of the ground, and to being so exactly similar when in this position to the several stones lying around it, to escape observation. The circle gradually becomes smaller and smaller, until the bird is brought within range. Most men shoot it on the ground, but as a rule I have found it better sport and easier to let the bird rise before firing, and then dropping it on the wing. The bird fancying that (like an ostrich) when its head is hidden its whole body is out of sight, seldom, if ever, moves unless the camel stops in its circling, and even then its flight is so slow, as to make it almost impossible even for an ordinary shot to miss.

"As a game bird, the Oobara is perhaps one of the greatest delicacies that can be put upon the table, while its feathers are invaluable to the fishermen for salmon flies; and there is a little tuft of feathers just under the point of the shoulder which is greatly prized by the fair sex as an ornament for hats.

"All about Kurrachee is a very favourite country for Oobara, but, as may be imagined, anywhere within a radius of eight or ten miles they do not get much rest, and, in order to make a really good bag, it is now necessary to go beyond that distance. The nearest good spot I know of, where a day's sport can be had without finding another man stalking over the same plain, is about twenty-five miles by rail." At Mayting and Jempeer stations, on the S. P. and D. line, this Bustard is numerous, and it is not uncommon to see a bag from these places of from 10 to 12 a day.

Gen. **Sypheotides**.—*Lesson.*

Bill broad at base and ridged above; nostrils elongate; more than half of tibia bare.

1248. Sypheotides bengalensis (*Gmel.*), *Jerd.*, *B. Ind.* iii. p. 616; *Hume, Nests and Eggs Ind. B.* p. 559; *id. and Marsh., Game Birds* i. p. 4 pl. Otis deliciosa (*Gray*), *Hardw., Ill. Ind. Zool.* i. pls. 61 and 62. Otis himalayanus, *Gould, Cent. Him. B.*, pls. 73, 74, 75.—The Bengal Florikin.

In breeding dress the male has the whole head, which is fully crested, neck, breast, and lower parts with the thigh coverts glossy black; the breast feathers elongated, and those of the neck in front also elongated; back, scapulars, tertiaries, rump and upper tail coverts rich olive buff, closely and minutely mottled with black zigzag markings, and a black dash in the centre of each feather; shoulders, wing coverts and quills white, the tips, shafts and outer edges of the first three primaries black; tail black, minutely mottled with buff and with a broad white tip. Bill dusky above, yellowish beneath; irides brown; legs pale dirty yellowish. (*Jerd.*)

Length.—24 to 27 inches; wing 14; tail 7; tarsus 6; bill at front 1·25. The female has the whole upper plumage pale fulvous with black and brown mottlings, barrings and vermiculations; ear coverts whitish.

Hab.—Throughout Lower Bengal, parts of the Punjab, N.-W. Provinces, Oudh, Dacca, Hill Tipperah, Sylhet, Assam and northward to the foot of the Himalayas. Breeds in Sikkim and Nepaul, from May to July. Eggs two in number, variable in shades of colour—pink, brown and stone colour, blotched and freckled all over with dark brown.

1249. Sypheotides auritus (*Lath.*), *Jard. and Selby, Ill. Orn.* pls. 49, 92; *P. C.* 533; *Jerd., B. Ind.* iii. p. 619, No. 839; *Hume, Nests and Eggs Ind. B.* p. 561; *id. and Marsh., Game Birds* i. p. 5, pl.; *Murray, Hdbk., Zool., &c., Sind,* p. 207; *Str. F.* vol. iv. p. 10; *id., Vert. Zool. Sind,* p. 221. (*Likh*, Sind.)—The Lesser Florikin.

Male.—Head, neck, breast, ear tufts and entire lower parts black, paler on the vent and under tail coverts; chin white, a few of the elongated feathers under the chin white mesially; lower part of hind neck and large wing patch white; back, scapulars and upper tail coverts fulvous, mottled with buff and dark brown; tail brighter buff, with mottlings and three distinct bands, the last subterminal; first three or four primaries dark or dusky brown, the rest broadly barred with rufous or bright buff, the long narrow tips mottled; ear tufts three on each side, the shafts of the feathers bare for nearly three-fourths their length from their base.

The *female* is pure buff throughout, clouded and barred with deep brown; lower part of the body almost white; chin and throat white; bill pale yellow, the ridge and tip dusky brown; irides yellow.

Length.—17 to 19 inches; wing 7 to 7·8; tail 4 to 4·5. *Female* slightly larger.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Central and Southern India, Kutch, Kattiawar, Rajputana, Concan and the Deccan during September and October. Eggs, 4—5 in number, greenish of various shades in colour, everywhere pitted with minute pores, but smooth and glossy. In Sind it occurs only in the vicinity of Kurrachee during August and September, chiefly at Mulleer, affecting the high grass. It breeds in the Deccan. In Sind a single egg was found on the Hubb plains by Mr. F. C. Constable.

Family, CURSORIDÆ,—Courier Plovers.

Tarsi long, slender; bill slender, arched beyond the nostrils, which are in a short triangular groove; wings long and pointed; tail short of 12 feathers; toes three; no hind toe.

Gen. **Cursorius**.—*Lath.*

Bill moderatly long; tarsi long and slender, scutellated; 1st and 2nd quills longest; tail short.

1250. Cursorius coromandelicus, *Gmel., Syst. Nat.* i. p. 781; *Bodd., Pl. Enl.* 892; *Gould, B. As.* pl. 37; *Jerdon, B. Ind.* iii. p. 626, No. 840; *Hume, Str. F.* iv. p. 19; *id., Nests and Eggs Ind. B.* iii. p. 564; *Murray, Hdbk., Zool., &c., Sind*, p. 207; *id., Vert. Zool. Sind.* p. 221.—THE INDIAN COURIER PLOVER.

Forehead and top of head bright chestnut, a small patch of black on the nape; supercilium white, extending to and meeting behind the nape; a black streak from the base of the nostril and through the eye, also extending and meeting behind; chin and throat white or pale buffy white; neck all round pale ferruginous, darkening into deep ferruginous on the breast and upper abdomen; a dark patch in the middle of the abdomen; primaries and their coverts black; under tail coverts white; back, scapulars and wing coverts earthy brown; upper tail coverts the same; tail with the outer feathers on each side white, with a black edge subterminally on the inner web; rest, except the middle tail feathers, ashy brown at base, with a subterminal dark band and a white tip; bill black; irides brown; legs creamy white.

Length.—9 to 10 inches; wings 6; tail 2·37; tarsus 2·25.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Beloochistan, N. Guzerat, Rajputana, Kutch, Kattiawar, Concan and Deccan, also Southern India, affecting open grassy plains, feeding on grass seeds, insects, &c. They are extremely shy, and run with great speed, now and again stopping dead to look back, and when pressed do not fly far. Breeds from March to July, under some tuft of grass or bush, laying 3—4 eggs of a cream or bright buff colour with patches, spots, blotches and smears of pale inky grey either all over or on only some portion of the egg; the markings above this are narrow scratches and streaks of blackish brown.

1251. Cursorius gallicus, *Gmel., Syst. Nat.* i. p. 784; *Naum., vogt.* t. 171; *Gould, B. Eur.* pl. 266; *Jerd., B. Ind. App.* vol. iii. p. 874; *Hume, Str. F.* i. p. 228; iv. 11; *id., Nests and Eggs Ind. B.* p. 566; *Murray, Hdbk. Zool., &c., Sind*, p. 207; *id., Vert. Zool., Sind*, p. 221.—THE CREAM-COLOURED COURIER PLOVER.

Forehead and crown rufescent or pale orange buff, shading on to the back of head into grey or ashy grey, below which, on the nape, is a small black patch; supercilium white, extending to and meeting behind the nape, also a black streak from behind the eye; lores pale white; chin and throat pale white; breast isabelline brown, fading on the abdomen to albescent, and white on the under tail coverts; back, scapulars, tertials and wing coverts warm rufous buff, brighter on the tail, the outer feathers of which on each side have a

subterminal black band on the inner web only; the others on both webs, and all, except the central tail feathers, broadly tipped white; primaries black; secondaries with their outer webs concolorous with the back, the inner web, and subterminally on both webs also black, the edges of the tips white.

Length.—10·5 to 11 inches; wing 6·5 to 7; bill black, 1·06 in length in front; irides brown.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Beloochistan, Persia, Afghanistan, Kutch, Guzerat and Rajputana. Breeds in similar situations as *C. coromandelicus* from May to July. Eggs broad ovals, slightly compressed towards one end. In colour they are not unlike those of *C. coromandelicus*. In size they vary from 1·1 to 1·28 in length and from 0·9 to 1·04 in breadth. Extremely common on bare or open grassy plains.

Gen. **Rhinoptilus**.—*Strickland*.

Bill shorter and more robust than in *Cursorius*, straight, the tip slightly widened and curved; orbits feathered; 2nd and 3rd primaries sub-equal and longest; tarsus long, scutellate; feet short; outer toe joined by web.

1252. Rhinoptilus bitorquatus, *Jerd*, *Birds. Ind.* iii. p. 628, No. 841; *Blyth*, *J. A. S. B.* xvii. p. 254.—The Double-banded Plover.

Above sandy brown with a faint pink gloss; the feathers of the back slightly margined with rusty brown, and the wing coverts with pale rufescent and rusty lateral margins to the feathers; supercilium white, continued round the occiput; ear coverts streaked dusky and ferruginous; throat white, a broad rufous band below it, bordered by a white demi-collar, and followed by a broad brown gorget and another white collar margined above and below with dusky; this again is succeeded by brown, forming an ill-defined band on the lower part of the breast; rest of the lower parts isabeline; upper and lower tail coverts white; primaries and their coverts black, the first two obliquely marked with white, which on the 3rd primary is reduced to a large subterminal spot on the inner web; tail white at base, black terminally; all, except the middle feathers, with a small white spot at the tip on the inner web. Bill yellow at base, horny at tip; irides dark brown; legs pale fleshy yellow. (*Jerd.*)

Length.—9·5 to 10 inches; wing 6·75; tail 3; tarsus 2·6.

Hab.—Eastern Ghauts, off Nellore and in Cuddapah. Frequents rocky and undulating ground with thin scrub jungle.

Family, GLAREOLIDÆ.—Swallow Plovers.

Bill short, convex, broad at the base, compressed to tip; wings long, first quill longest; tail even or forked; tarsi short, reticulated; three toes in front, one behind, very small; gape large.

Gen. **Glareola.**

Tail short and even, or long and forked; other characters as in the family.

1253. Glareola orientalis, *Leach., Lin. Tr.* xiii. 132; *Gould, B. As.* vi. pl. 23; *Schiel., Handlist Dierk.* t. 7, 79; *Jerdon, B. Ind.* iii. p. 631; *Str. F.* ii. pp. 284, 465; viii. p. 371; *Murray, Hdbk., Zool., &c., Sind*, p. 208; *Hume, Nests and Eggs Ind. B.* p. 565; *Legge, B. Ceylon*, p. 980; *Bingham, Str. F.* ix. p. 196; *Oates, Str. F.* x. p. 237; *Kelham, Ibis*, 1882, p. 6; *Oates, B. Burm.* ii. p. 361; *Murray, Vert. Zool., Sind*, p. 222.—THE LARGE SWALLOW PLOVER.

Forehead, crown, back of head, sides of neck, ear coverts, back, scapulars and wing coverts hair brown; upper tail coverts white; tail forked, basally white, the feathers broadly tipped with dark brown; chin and throat rufescent, a few of the feathers in some specimens tipped dark brown; a dark line from each side of the mandible to below the neck, enclosing the rufous chin, throat and breast; upper abdomen and flanks earthy brown, with a tinge of rufescent; lower abdomen, vent and under tail coverts white; axillaries and under wing coverts behind chestnut; primaries dark brown, almost black; the shaft of the first primary white; a few of the upper secondaries tipped white; irides dark brown; bill black; gape reddish; legs and feet dusky brown.

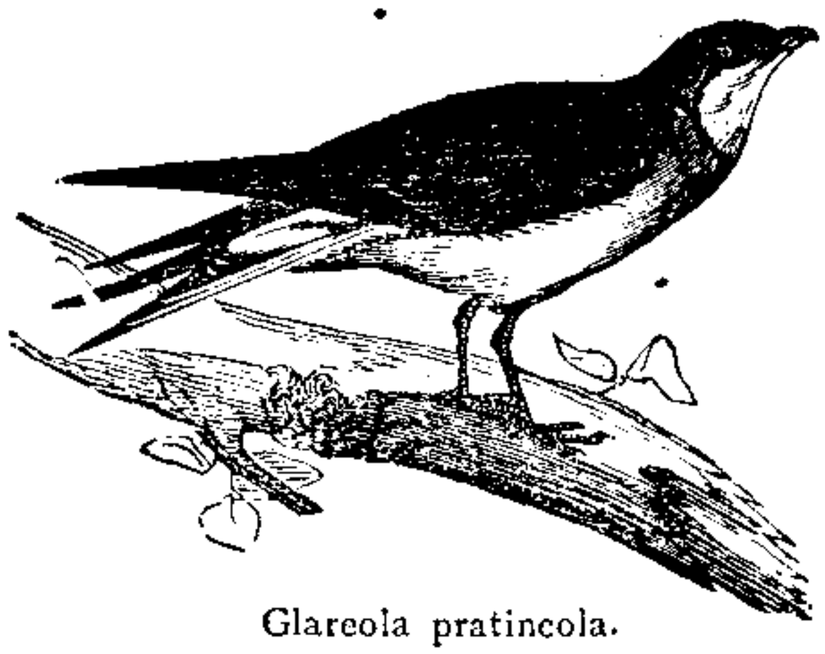
Length.—10 to 10·5 inches; wing 7·5; tail 4·25 to 4·5.

Hab.—Sind, Bengal and the Deccan, and throughout Burmah in suitable localities from February to June. Occurs in Mongolia and China, also Cochin-China, the Malay Peninsula, and Ceylon. Affects fields and open or cultivated land in small flocks. It has, like its congeners, a very rapid and swallow-like flight. Breeds in Sind. Mr. S. Doig, in an article in *Stray Feathers*, vol. viii., p. 375, gives an account of its nidification in company with *Glareola pratincola*. "The breeding ground," he says, "was about 15 acres in extent, and was a salt plain with patches of coarse sedge here and there on it, the whole being surrounded by dense tamarisk and rush jungle, and was situated about half a mile from the bank of the 'Narra.' The nests were slight hollows scraped in the ground, and the greatest number of eggs in any nest was three, which seemed to be the normal number, but some contained only two eggs, of a light dirty green or drab colour, covered all over with dark purple blotches, dense at the broader end, and forming a zone. In shape they are from broad ovals to nearly spherical, and vary in size from 1·1 to 1·35 in length, and from 0·8 to 1·05 in width."

The distribution of the *Glareolidæ* in India is not perfectly known.

1254. Glareola pratincola, *Linn., Syst. Nat.* i. 345; *P. E.* 882; *Naum. vogt.* t. 234; *Gould, B. E.* pl. 265; *Leach, Linn. Trans.* xiii. pl. 12., 1, 2; *Str. F.* viii. p. 371; *Murray, Hdbk., Zool., &c. Sind*, p. 207; *id.*,

Vert. Zool. Sind, p. 223. Glareola torquata, *Meyer*, ii. 404.—The Collared Pratincole.



Glareola pratincola.

Head, nape, back, scapulars and wing coverts greyish brown; throat and front of the neck white, slightly tinged ferruginous, encircled by a narrow, black band from the base of the bill; lores black; breast whitish brown; under wing coverts chestnut; lower surface of the body white, tinged with reddish; upper and under tail coverts white; tail forked, basally white, tipped with dark brown; bill black, red at the gape; irides red brown.

Length.—9 inches; wing 6·75 to 7.

Hab.—Sind, Arabia, Persia, Afghanistan and the Deccan. Breeds in Sind; eggs similar to those of *G. orientalis*.

1255. Glareola lactea, *Tem., Pl. Col.* 399; *Jerd., B. Ind.* iii. p. 632; *Hume, Nests and Eggs Ind. B.* p. 568; *Str. F.* iii. p. 179; *Blyth, B. Burm.* p. 154; *Hume, Str. F.* viii. p. 112; *Legge, B. Ceylon*, p. 984; *Oates, Str. F.* x. p. 237; *id., B. Br. Burm.* ii. p. 363; *Murray, Hdbk., Zool., &c., Sind*, p. 208; *id., Vert Zool. Sind*, p. 223.—The Small Swallow Plover.

Forehead, crown, back, scapulars and wing coverts pale earthy or grey brown, orbital feathers white; chin, throat and breast much paler than the back; lower abdomen, vent and under tail coverts white; tail basally white, the central feathers broadly dark brown subterminally and tipped with white; the lateral or outer ones on each side narrowly tipped with dark brown, and edged with white; upper tail coverts white; primaries dark brown, the first 3—4 distinctly white shafted and basally whitish on their inner webs; secondaries white, broadly edged on their outer webs and at the tip with brown; primary coverts dark brown, also the under wing coverts; bill black; gape reddish; irides deep brown.

Length.—6·5 to 6·75 inches; wing 5·5 to 5·75; tail 2 to 2·06; bill at front 0·37, at gape 0·56.

Hab.—Sind, Punjab, N.-W. Provinces and the Deccan, also British Burmah,

dantly on the larger rivers in Burmah, except in the southern part of Tenasserim. It breeds in Burmah on sandbanks, also on the banks of the Indus, Ganges, Chenab, Brahmaputra, Nerbudda and Mahanuddy. March to April appears to be the breeding season. Eggs, 4 in number, from pale green to stone colour, and marked with dark lines, blotches and spots.

Sub-Family. CHARADRINÆ.—Plovers.

Bill slender, straight, flattened at the base, compressed and grooved; wings long and pointed; tarsi moderate, 1st quill usually longest; hind toe small or wanting.

Gen. Squatarola.—*Cuv.*

Nasal groove short; bill bulged at the tip; a very minute clawed hind toe present.

1256. Squatarola helvetica (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 635, No. 144; *Dresser*, *B. Eur.* vii. p. 455; *Salvad.*, *Ucc. Born.* p. 313; *Blyth*, *B. Burm.* p. 153; *Scully*, *Str. F.* iv. p. 184; *Armstrong*, *Str. F.* iv. p. 338; *David et Oust. Ois Chine*, p. 424; *Hume and Dav.*, *Str. F.* vi. p. 455; *Hume*, *Str. F.* viii. p. 112; *Legge*, *B. Ceylon*, p. 929; *Oates*, *Str. F.* x. p. 237; *id.*, *Burm.* ii. p. 365; *Murray*, *Vert. Zool.*, *Sind*, p. 224. Tringa helvetica, *Linn.*, *Syst. Nat.* 1, p. 250.—The Grey Plover.

Winter Plumage.—Forehead, lores, supercilia, chin, abdomen and entire lower surface, including the under tail coverts, white; foreneck, sides of the breast and flanks white, the feathers with sub-triangular or sub-quadrate brownish markings; feathers below the wing from the axilla long and black; head dusky brown, the feathers with narrow tips; rest of the upper plumage dusky brown, the feathers edged and tipped with white or greyish white; tail basally white, with a slightly rufescent tinge terminally, and with 6—7 transverse brown bands or bars. In summer the entire lower surface from the chin, except the vent and under tail coverts, is black, also the lores and sides of the neck; forehead, supercilia and sides of the breast white; back and rump, scapulars and wing coverts black, broadly tipped with brown and white; top of head and nape grey brown, the feathers tipped with white; tail white, banded dark brown; primaries dark brown, their inner webs white.

Length.—11 to 12 inches; wing 8; tail 3·25; bill at front 1·25, black; irides dusky; feet dark brown, or dusky brown; weight 7·5 oz.

Hab.—Sind, Beloochistan Coast, Kutch, Kattiawar, and nearly all over the Indian Coast; also Burmah. Occurs in flocks along the Sind sea-coast during winter, especially on the mud flats. In the Kurrachee harbour it is numerous on the large island-like flats, especially about Baba Island, associated with the larger and smaller Kentish Plovers.

Gen. **Charadrius.**—*Gmel.*

Bill short and strong; first quill longest; hind toe wanting; other characters as in the sub-family.

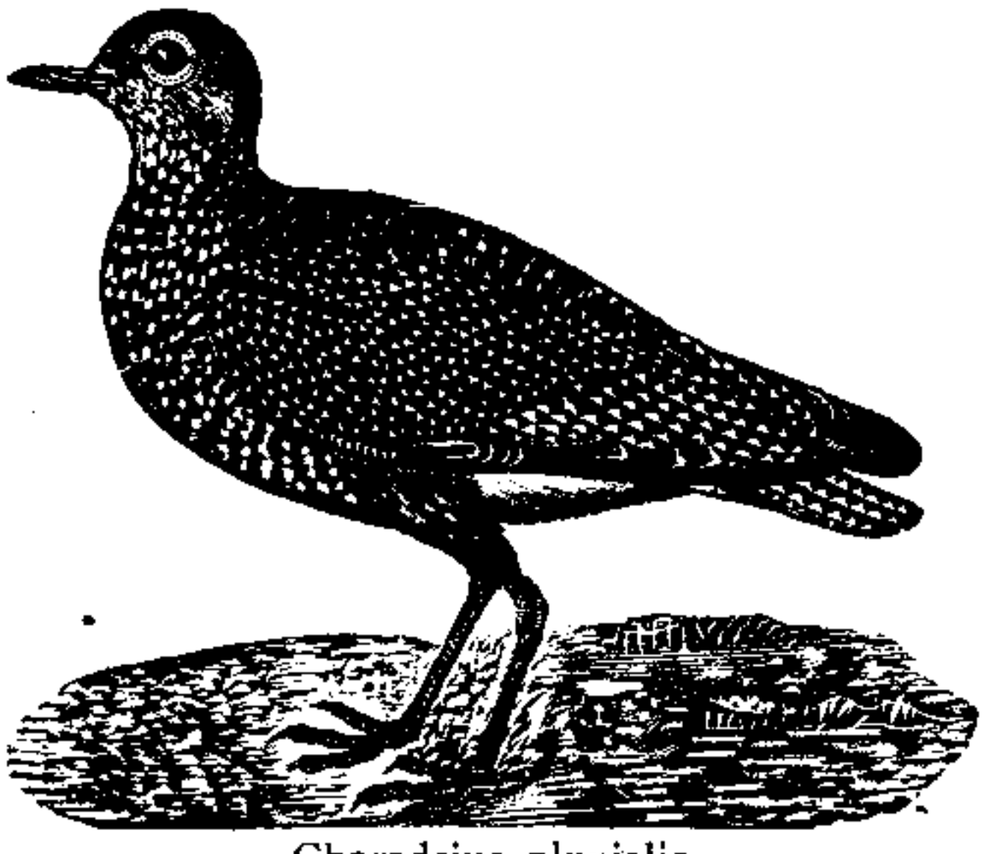
1257. Charadrius fulvus, *Gm., Syst. Nat.* i, p. 687; *Dresser, B. Eur.* vii. p. 443, pl.; *Hume, Str. F.* i. p. 228; ii. p. 287; *id., Nests and Eggs*, p. 570; *id., Str. F.* iii. p. 179; *Blyth, B. Burm.* p. 153; *Salvad., Ucc. Born.* p. 313; *David et Oust. Ois Chine*, p. 424; *Hume and Dav., Str. F.* vi. p. 455; *Hume, Str. F.* vii. p. 482; *Scully, Str. F.* viii. p. 350; *Legge, B. Ceylon*, p. 934; *Oates, B. Br. Burm.* ii. p. 364. Charadrius longipes (*Temm.*), *Bonap., Rev. Crit.*, 1850, p. 180; *Jerd., B. Ind.* ii. p. 636, No. 845; *Murray, Vert. Zool., Sind*, p. 224.—The Eastern Golden Plover.

Winter Plumage.—Head dark brown, the tips of the feathers yellow; forehead white or yellowish white, as are also the lores, supercilia, chin, foreneck and the under tail coverts; back, scapulars, rump, upper tail coverts and wing coverts dusky brown, the edges of the feathers with triangular or sub-triangular yellow spots; tail lighter in colour, the feathers also similarly edged with yellow spots; the neck behind, on the sides, and in front buffy, with a dusky tinge and yellow edgings and spots to the feathers; flanks pale brown, spotted with soiled white. In the summer plumage, the upper plumage is much darker, nearly black, the yellow spots less numerous and smaller, the forehead is white, and the cheeks, throat, neck, and entire under parts are black; primaries black, shafts of the first three white; secondaries tipped with white; also the median wing coverts; tail brownish with transverse bands of black.

Length.—10 to 10·5 inches; wing 6·75; tail 2·75; bill at front 0·87; tarsus 1·75; bill dusky at base, black at the tip; irides deep brown.

Hab.—Sind, Púnjab, Kutch, Kattiawar, Deccan and India generally, also Burmah, in open plains or in the vicinity of rivers and ploughed fields.

1258. Charadrius pluvialis. *Linn., Syst. Nat.* i. p. 251; *Dresser, B. Eur.* vii. p. 460; *Hume, Str. F.* v. p. 247; *id.*, vii. pp. 186; *Murray, Vert. Zool., Sind*, p. 225.—The European Golden Plover.



Charadrius pluvialis.

Winter Plumage.—Forehead yellowish white, streaked and spotted with pale brown and grey; head on the sides greyish brown; the crown, back of neck and nape greyish brown with purple reflections and yellow angular spots on the edges and tips of the feathers; chin and throat whitish; breast dusky greyish white, tinged yellow, and spotted with darker grey; axillary plumes white; greater and lesser wing coverts greyish black, the spots paler and the feathers of the greater coverts tipped with white; the tail is deep brown, and barred obliquely with yellowish or yellowish white; upper tail coverts like the back. In summer it undergoes the same change as *longipes*, but the yellow becomes brighter, and the lower parts intense black, except the sides of the neck, breast and body, which are yellowish white, with dark and dusky patches or marblings; primaries and secondaries dusky brown, the shafts of the first five white anteriorly.

Length.—10·5 to 11·5 inches; wing 7·5; bill black; irides deep brown.

Hab.—Sind, Punjab, and Beloochistan.

This species was first entered in the Sind list by Mr. Hume with a query. Since then all the specimens obtained by myself and others were *longipes*. In my *Handbook* mention was made that *pluvialis* would be found to occur, Mr. Blanford having recorded it from only 200 miles further west at Gwadur. Mr. Brooks, *Stray Feathers*, viii., 489, has since then recorded it from near Sehwan. Mr. Hume, in vol. i., p. 229 of *Stray Feathers*, points out the difference between *fulvus* = *longipes* and *virginicus* from America. He says, "*pluvialis* is at once distinguished by its pure white axillary plumes, which in *fulvus* are brownish or smoke grey. *Fulvus* and *virginicus* differ chiefly in their relative proportions, the former being always smaller." The following are the dimensions of the three given by Harting:—

	Bill.	Wing.	Tarsus.
C. virginicus	1·0	7 to 7·4	1·6
C. fulvus	0·8 to 0·9	6·4 to 6·6	1·5
C. pluvialis	0·9	7·5.	1·4

Gen. **Ægialitis**.—*Boie.*

Bill slender, grooved on upper mandible for two-thirds its length; front of bill raised; upper mandible slightly the longer; 1st quill longest. All the Sand Plovers are more or less gregarious in their habits, and feed either on ploughed lands, meadows, edges of marshes and ponds, sandbanks, mud lagoons and banks of rivers and tanks. They run with some speed, making a dead stop now and again to pick up a worm, mollusc, small crustacea or other insects on which they feed. Nearly all are migratory. Eggs, generally 4 in number, are of a stone yellow or greenish colour, richly blotched.

1259. Ægialitis Geoffroyi, *Wagl.*, *Syst. Av. Charadrius sp.* 19; *Jerd.*, *B. Ind.* iii. p. 638; *Harting*, *Ibis*, 1870, p. 378, pl. xi.; *Salvad.*, *Ucc. Born.* p. 318; *David et Oust. Ois. Chine.* p. 426; *Dresser*, *B. Eur.* vii.

p. 475, pl.; *Hume and Dav., Str. F.* vi. p. 455; *Hume, Str. F.* viii. pp 112, 200; *Legge, B. Ceylon*, p. 939; *Oates, B. Br. Burm.* ii. p. 366; *Kelham, Ibis*, 1882, p. 9; *Murray, Vert. Zool., Sind*, p 226. Cirrepidesmus Geoffroyi, *Hume, Str. F.* i. p. 229; ii. p. 288; *id., Nests and Eggs Ind. B.* p. 571.—The LARGE SAND PLOVER.

In winter plumage, head, neck, nape, back, sides of the breast, scapulars and wing coverts greyish brown; a streak from the base of the mandible under the eye to the ear coverts slightly darker; forehead, a streak above the eye, chin, throat, sides of the neck and rest of the lower parts white; upper tail coverts dull white or pale grey brown; primaries and their coverts dark brown; outer web near the tips and the tips of the secondaries white; longest tertial reaches to between the 3rd and 4th primaries. In summer plumage, the forehead, lores, ear coverts and beneath the eye are black; on each side of the forehead is a white spot; the neck and breast rufous; the throat and chin white; head tinged with rufescent, and the upper parts margined with the same; the shafts of the feathers of the back, scapulars and wing coverts in both stages are dark; primaries dark brown; the outer webs of the inner ones white, also the tips of the secondaries.

Length.—8 to 9·25 inches; expanse 15 to 19 inches; wing 5·4 to 5·98; tail 2; bill at front 1; tarsus 1·5; legs greenish; bill black; irides brown.

Hab.—Sind, Beloochistan Coast, Persian Gulf, Bengal, Rajputana, Kutch, Kattiawar and India generally during winter; also Burmah. Extremely common along the sea coast and at the mouths of the Indus in large flocks, where they may be seen running along the sandbanks for small crustacea, insects, molluscs, &c.

Eudromius veredus, Gould, and *Ægialitis placida*, G. R. Gray, also *Æ. nigrifrons*, Cuv., are species entered in the Avifauna of India of which there is no precise information or corroboration of the fact of their having been found in India. I have therefore not included them in this work.

1260. Ægialitis mongolica (*Pall.*), *Harting, Ibis*, 1870, p. 384; *Salvad., Ucc. Born.* p. 316; *Hume, Str. F.* iii. p. 170; *Blyth, B. Burm.* p. 153; *Armstrong, Str. F.* iv. p. 339. *Legge, B. Ceylon*, p. 942; *Kelham, Ibis*, 1882, p. 10. Charadrius mongolus, *Pall., Reis. Russ. Reichs.* iii. p. 700. Charadrius mongolicus, *Pall., Zoogr. Rosso-Asiat.* ii. p. 136. Charadrius pyrrhothorax, *Temm. in Gould, B. Eur.* pl. 299. Ægialitis pyrrhothorax, *Jerd., B. Ind.* iii. p. 639, No. 847; *Murray, Hdbk., Zool., &c., Sind*, p. 209; *id., Vert. Zool., Sind*, p. 226. Cirrepidesmus mongolicus, *Hume, Str. F.* i. p. 230; ii. p. 289; *id., Nests and Eggs Ind. B.* p. 571. Ægialitis mongolus, *Hume and Dav., Str. F.* vi. p. 455; *Oates, Str. F.* x. p. 237.—The LESSER SAND PLOVER.

In both winter and summer plumage similar to *Æ. Geoffroyi*, but smaller in all measurements.

Length.—7 to 7·25 inches; expanse 15 inches; wing 5 inches; tail 1·87; bill at front 0·75; tarsus 1·25. The tertials reach to between the first and second primaries; bill black; irides brown; legs dusky plumbeous.

Hab.—Sind, Beloochistan Coast, Persian Gulf, Afghanistan, and India generally, also Burmah, along the sea shore and banks of rivers, not far inland.

1261. Ægialitis cantiana (*Lath.*), *Jerd.*, *B. Ind.* iii. p. 647, No. 848; *Armstrong, Str. F.* iv. p. 340; *Dresser, B. Eur.* vi. p. 483, pl.; *Hume and Dav., Str. F.* vi. p. 456; *Legge, B. Ceylon*, p. 947; *Oates, Str. F.* x. p 237; *id., B. Br. Burm.* ii. p. 368; *Murray, Vert. Zool., Sind*, p. 226. Charadrius cantianus, *Lath., Ind. Orn. Suppl.* pl. lxvi. Ægialophilus cantianus, *Hume, Str. F.* i. p. 230; *id., Nests and Eggs*, p. 571.—The Kentish Plover.

Male in Winter Plumage.—Forehead, streak over the eye, extending to the ear coverts, chin, throat, ring round the neck, breast, abdomen and under tail coverts white; outer tail feathers on each side also white, with a subterminal dusky spot on the inner web; crown, nape, neck behind, a streak from the base of the bill under the eye, cheeks, back, scapulars, sides of breast and tertials earthy or greyish brown, the feathers with darker shafts; in some (February specimens) the feathers are tinged with rufous, and those on the fore part of the crown, very slightly (absent in most) white tipped; tail earthy or grey brown, darker subterminally, and all, except the central feathers, tipped pale fulvous or white; primaries dusky brown, 4th, 5th and 6th with a patch of white on their outer webs; secondaries edged and tipped terminally with white; edge of the wing and under wing coverts white.

In nuptial plumage, the white of the forehead extends broadly over the eye and beyond it, behind which on the forecrown is a patch of black followed by a reddish or reddish brown patch, tinged with grey. The streak from the base of the bill through the eye to the ear coverts is black, and there is a large patch of black on each side of the breast; back, scapulars and tertials greyish brown; the 1st primary is the longest; primaries dusky brown; wing coverts grey brown, the greater series tipped with white; secondaries white at their baes and tips; under wing coverts, chin, throat and under parts white; the tail is like the back, the middle feathers longest and dusky brown near the tip, the outer ones on each side white.

Length.—6·75 inches; wing 4·3; tail 2; bill at front ·75; bill black; irides brown; feet dusky greenish.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, South India and Ceylon. Abundant along the coast about the Delta of the Irrawaddy, and also at various points in Tenasserim. It is also recorded from Arracan. In Ceylon, Major Legge found it breeding in June and July on the banks of salt lagoons, in the south-east portion of the Island.

1262. Ægialitis dubia (*Scop.*), *Salvad.*, *Ucc. Born.* p. 316; *Blyth, B. Burm.* p. 153; *David et Oust. Ois. Chine*, p. 429; *Anderson, Yunnan Exped.* p. 676; *Hume, Str. F.* vii. p. 227 (note); *Oates, Str. F.* x. p. 237; *id., B. Br. Burm.* ii. p. 370. Charadrius dubius, *Scop., Del. Flor. et Faun. Insub.* ii. p. 93. Charadrius curonicus, *Gm., Syst. Nat.* i. p. 692. Charadrius phillipinus, *Lath., Ind. Orn.* ii. p. 745. Charadrius fluviatilis, *Bechst., Gemeinn Naturg. Deutschl.* iv. p. 422. Ægialitis phillipensis (*Scop.*), *apud. Jerd., B. Ind.* ii. p. 640, No. 849. Ægialitis fluviatilis, *Hume, Str. F.* i. p 230; ii. p. 289; *id., Nests and Eggs Ind. B.* p. 572. Ægialitis curonica, *Wald. in Blyth's B. Burm.* p. 154; *Dresser, B. Eur.* vii. p. 491; *Legge, B. Ceylon*, p. 952.—The Lesser Ringed Plover.

A narrow streak above the base of the bill continued behind, under, and through the eye to the ear coverts black; crown of head and ring round the neck black; a patch of white on the forehead above the black frontal streak; chin, throat, and under parts from below the black collar, including the under coverts, white; nape and upper plumage cinereous or greyish brown; primaries dusky brown; tail with the middle feathers paler than the lateral ones, except the outermost on each side, which are white, with a dusky spot on the inner web; under wing coverts white.

Length.—7 to 7·25 inches; wing 4·5; tail 2·5; bill at front 0·56; bill black; irides brown; legs yellowish.

Hab.—Sind, Beloochistan, Persia, Aghanistan, E. Turkestan, Nepaul, Cashmere, and throughout India, also throughout Burmah. Extremely common in rice fields and along the banks of the Indus. Breeds in the Deccan and Central Provinces during April and May. Eggs, three in number, broad ovals, elongated and pointed towards one end; of a fawn, drab or buffy stone colour, speckled and spotted with hieroglyphic-like lines and figures of brownish purple, blackish brown or black. Size 1·1 to 1·23 × 0·8 to 0·87.

1263. Ægialitis Jerdoni, *Legge, P. Z. S.* 1880, p. 39; *id., Birds Ceylon*, p. 956. Ægialitis minutus (*Pall.*), *apud. Jerd., B. Ind.* ii. p. 641; *Legge, Str. F.* iii., p. 372; *Hume and Davison, Str. F.* vi. p. 456; *Hume, Str. F.* viii. pp. 112, 199; *Oates, Str. F.* x p. 238; *id., B. Br. Burmah*, ii. p. 371. Ægialitis phillipinus (*Lath.*), *apud. Hume, Str. F.* p. 179.—The Little Indian Ringed Plover.

Similar to *Æ. dubia* from which it differs in being smaller, in having the edges of the eyelids swollen and protuberant, and in having the basal half of the lower mandible yellow. Another point of difference, according to Mr. Hume, is that in summer the legs of *Æ. Jerdoni* do not become yellow as in *Æ. dubia*.

Length.—6 inches; tail 2·2; wing 4·1; tarsus 9; bill from gape 5·5. The female is rather larger, approaching in size the male of *Æ. dubia*.

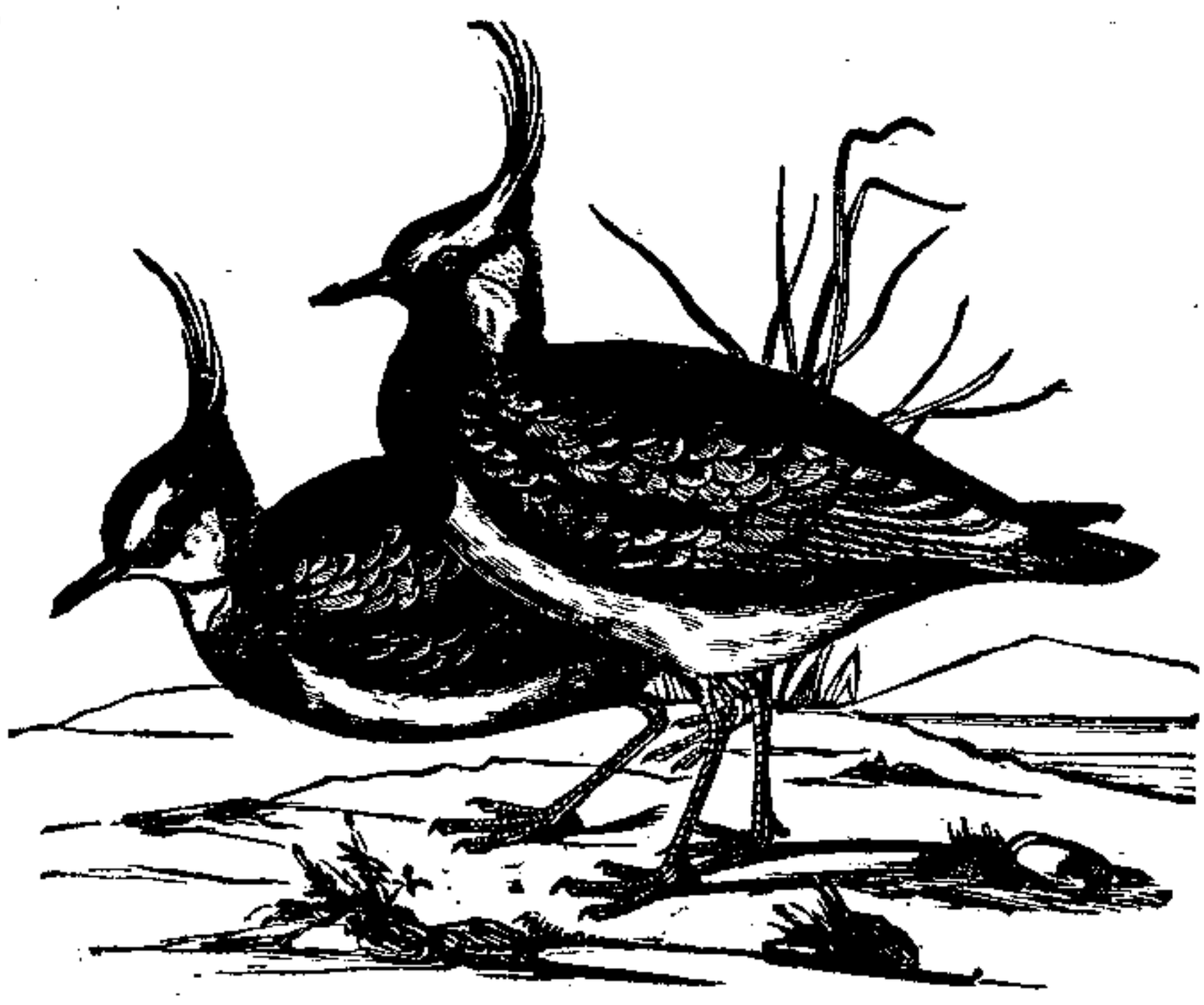
The Little Indian Ringed Plover is generally distributed over Burmah, but is nowhere very abundant. Oates procured it near Thayetmyo and also in Southern Pegu, along the banks of the canal. Capt. Wardlaw-Ramsay got it at Tounghoo, and Mr. Davison observed it in Tenasserim about the latitude of Moulmein. It occurs in suitable localities over the whole of India and Ceylon, the Indo-Burmese Countries, and Cochin-China, where Dr. Tiraud procured many specimens near Saigon. Oates says it is probably a constant resident in Burmah, notwithstanding the fact that all his specimens were procured in the winter season. In the rains, when sandbanks are submerged, its area of distribution must become very restricted, and it is likely at this time of the year to escape observation. Major Legge found it breeding in Ceylon.

Sub-Family, VANELLINÆ.—Lapwings.

Bill rather compressed, straight, convex at the tip; nostril in a long lateral groove; wings pointed and long; tail broad; hind toe short. Generally very active and lively birds. Nearly all winter visitants in India. Feed on worms, slugs, molluscs, &c., either along the sea shore, or river banks, or the edges of tanks and marshes; also in ploughed fields.

Gen. Vanellus.—*Linn.*

Bill straight; 2nd and 3rd quills longest; shoulder of wing with a small (not prominent) tubercle.



1264. Vanellus cristatus, *Meyer, P. E.* 242; *Gould., B. Eur.* pl. 291; *Jerd., B. Ind.* iii. p. 643; *Hume, Nests and Eggs, Ind. B.* p. 573;

Str. F. i. 231; *Murray, Hdbk., Zool., &c., Sind*, p. 210; *id., Vert. Zool. Sind*, p. 228.—The CRESTED LAPWING or PEEWIT.

Entire head, crest, chin, a line below the eye, breast and foreneck black, glossed with greenish; lores, supercilia and behind the eye, also sides and back of the neck, and from the termination of the black breast to the belly, white; the sides of the head in some immature specimens speckled with brown or dusky; upper tail coverts pale reddish chestnut; under tail coverts slightly paler; back and scapulars olive green, glossed with coppery and purple; golden green on the lower back and rump; primaries black, the first three broadly terminated with greyish white; 1st quill shortest, third longer than the second or nearly equal; greater and lesser wing coverts like the back; tail white basally, and broadly black terminally, with narrow white tips to all the feathers; the outermost feather entirely white, except a dusky spot subterminally on the inner web.

Length.—12 inches; wing 9; tail 4; tarsus 2; bill black; irides hazel brown; legs orange brown. In winter plumage the chin and throat are white, and there is much brown specklings on the sides of the face and nape. The female is like the male in winter plumage, and throughout of a duller tint.

Hab.—Sind, Punjab, N.-W. Provinces, Beloochistan, Persia, Afghanistan, and E. Turkistan, also Nepaul and Cashmere. It is said to breed in Yarkand. In Sind it is a winter visitant, and is found in open places, marshy ground, and the banks of canals. In England, the Vanellinæ are considered by some good for food, and their eggs a delicacy. In India, however, it is not the case, though some persons think them not amiss at any time. After October they are very fat and tender, and for the table are said to be undistinguishable from the Plovers.

Gen. **Chettusia**.—*Bp.*

Head not crested; plumage ashy; otherwise as in *Vanellus*.

1265. Chettusia gregaria, *Pallas, Zoogr.* ii. t. 56; *Gould, B. Eur.* pl. 292; *Jerd., Birds Ind.* iii. p. 644, No. 852; *Str. F.* i. 231; iv. 13; *Murray, Hdbk., Zool., &c., Sind*, p. 210; *id., Vert. Zool. Sind*, p. 229.—The BLACK-SIDED LAPWING.

Forehead, supercilium extending to the occiput, lower belly, vent and under tail coverts white; top of head, a narrow band from the base of the bill through the eye, and the middle of the abdomen black; back of neck, back, and scapulars olivaceous brown, tinged greyish; sides of head and neck pale rufous, passing to greyish or brownish on the breast; primaries black; secondaries white; tail and upper tail coverts white, with a broad subterminal black band, tipped with white; outermost feathers white.

Length.—12·5 to 13 inches; wing 8·5; tail 3·5; tarsus 2·3; bill at front 1·2. In the young the black abdominal patch is wanting. The females are

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. Provinces, Oudh, the Concan, Deccan, Kutch, Kattiawar, Rajputana and Central India. Frequents grassy plains in parties of from five to twenty. Its flesh is said to be very delicate.

1266. Chettusia leucura (*Licht.*), *Jerd.*, *B. Ind.* iii. p. 646, No. 853. Chettusia flavipes, *Savigny, desc. d l'Egypt. Zool.* p. 6, fig. 2. Chettusia Villotæi, *Audoin.*, *Hume, Str. F.* i. p. 232; *id.*, iv. p. 13; *Murray, Vert. Zool., Sind.* p. 229.—The White-tailed Lapwing.

Head and neck brown, very pale, almost fulvous on the forehead; a small whitish patch behind the eye; chin and throat white; back and scapulars brown, glossed with reddish purple; upper tail coverts and tail white; breast pale greyish brown, bluish ashy on the lower part; lower abdomen and under tail coverts white, the former tinged of a roseate hue; primaries black; secondaries white, broadly tipped on their outer webs with black; median and greater wing coverts basally ashy, broadly edged subterminally on the outer web with black and tipped with white.

Length.—11 to 11·5 inches; wing 7; tail 2·75; bill at front 1; bill black; irides brown red; legs bright yellow.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Beloochistan, Afghanistan, Persia, Kutch, Kattiawar, and North Guzerat, also in Central India, and probably the Deccan; common in the vicinity of jheels, tanks, &c.

1267. Chettusia cinerea (*Blyth*), *Hume, Str. F.* iii. p. 180; *Blyth, B. Burm.* p. 152; *David et Oust Ois. Chine*, p. 422; *Hume and Dav., Str. F.* vi. p. 456; *Cripps, Str. F.* vii. p. 300; *Hume, Str. F.* viii. p. 112; *Oates, Str. F.* x. p. 238; *id., B. Br. Burm.* ii. p. 372. Pluvianus cinereus, *Blyth, J. A. S. B.* i. p. 587. Lobivanellus inornatus, *Temm. et Schleg, Faun. Jap. Aves*, p. 106, pl. 63. Chettusia inornata, *Jerd., B. Ind.* iii. p. 646.—The Grey-headed Lapwing.

Head and neck all round grey; back, rump, lesser and median wing coverts and scapulars, also the tertiaries, greyish brown, with a faint vinous tinge; upper tail coverts white; tail white, with a broad black band near the tip, diminishing in width towards the lateral feathers and absent on the outermost; primary coverts and primaries black; greater wing coverts and secondaries white; breast greyish brown, bounded below by a broad black band; rest of under surface white; edges of the eyelids, lappets and basal two-thirds of the bill deep yellow; terminal third of bill black; irides red; legs dull yellow.

Length.—14·5 inches; tail 4·5; wing 9·8; tarsus 3; bill from gape 1·6.

Hab.—Northern India, Punjab, N.-W. Provinces, Oudh, Kumaon; also British Burmah in Southern Pegu, Bassein, Tongoo, the low-lying parts of Northern Tenasserim and Bengal, affecting swamps and marshy ground. It is a winter visitant to these parts, leaving India during April.

Gen. **Hoplopterus**—*Bonap.*

Shoulder of wing with a stout spur. No hind toe in the Indian species.

1268. Hoplopterus ventralis (*Wagl.*). *Jerd.*, *B. Ind.* iii. p. 650; *Hume, Nests and Eggs Ind. B.* p. 578; *id.*, *Str. F.* iii. p. 181; *Blyth, B. Burm.* p. 153; *David et Oust. Ois. Chine.* p. 423; *Anderson, Yunnan Exped.*, p. 675; *Hume and Dav.*, vi. p. 457; *Cripps, Str. F.* vii. p. 300; *Hume, Str. F.* viii. p. 112; *Scully, Str. F.* viii. p. 352; *Oates, Str. F.* x. p. 238; *id.*, *B. Br. Burm.* ii. p. 373; *Murray, Hdbk., Zool, &c., Sind.* p. 211; *id.*, *Vert. Zool., Sind.*, p. 231.—The Spur-winged Lapwing.

Head, crest, lores, sides of the face as far as the middle of the eye, chin, throat, and foreneck black; a white streak from behind the eye on each side meeting on the nape, bordering the black feathers of the hind crown and nape; cheeks white, the white extending on to the upper breast all round, enclosing the black of the foreneck and forming a pectoral patch; breast below black; scapulars and tertials pale brown; shoulder of the wing black; primaries black; secondaries basally white, tipped and edged with black, the black decreasing in extent on the hinder feathers; greater wing coverts white, forming a conspicuous wing band; upper and under tail coverts and entire under surface white, except a patch on the middle of the abdomen; tail white, broadly terminated with black.

Length.—12 inches; wing 7·75 to 8; tail 4 to 4·2; bill at front 1·1; bill black; irides deep brown; legs blackish, tinged with reddish.

Hab.—Northern India generally, Punjab, N.-W. Provinces, Oudh, British Burmah, Bengal, and Central India, along the sandy banks of rivers; also in Pegu and Nepaul. It is rare in Sind. A single specimen was got by Mr. W. Wallinger on the banks of the Indus near Buggatora, who also mentions having seen it on the Aral near Sehwan. Breeds on the banks and in the beds of most of the larger rivers of India and Pegu, penetrating the hills to 2,000 feet. March and April are the months in which it lays. Eggs, four in number, from a stone to olivaceous drab colour, profusely spotted with dark and purplish brown. In size they vary from 1·42 to 1·78 in length, and in breadth from 1·12 to 1·3 inches.

Gen. **Lobivanellus**.—*Strickl.*

A lappet of skin in front of the eye extending to the base of the bill; hind toe very small.

1269. Lobivanellus indicus, *Bodd.*, *P. E.* 807; *Gould, C. B. E.* pl. 78; *Str. F.* iii. 648; vii. 67; *Hume, Nests and Eggs Ind. B.* p. 574. Lobivanellus goensis, *Jerd.*, iii. p. 648, No. 855; *Murray, Hdbk., Zool., &c. Sind*, p. 211; *id.*, *Vert. Zool. Sind*, p. —The Red-wattled Lapwing or

Head, nape, back of the neck, chin, throat, neck in front and breast black; a broad streak from behind the eye along the sides of the neck, abdomen and upper and lower tail coverts white; tail white, with a subterminal dark band and broadly tipped white; back, scapulars and tertials pale brown; primaries and their coverts black; greater wing coverts like the back basally, and broadly edged and tipped with white, forming a conspicuous wing band.

Length.—12·5 to 13 inches; wing 9·5; tail 4·75, bill at front 1·27; wattles red.

Hab.—Throughout India, Beloochistan, Persia, and Afghanistan. In India it is everywhere common, during both winter and summer, and breeds from April to July. It is an extremely noisy bird, and especially so during the breeding season. Its vulgar name, "Did he do it," is very appropriately given, being its continuous cry, with "Pity to do it," the place resounding with its almost endless echoes, till the intruder is out of reach of its nest. The nest is usually a small depression in the earth, with or without lining of any kind, and made in the vicinity of a marsh. The eggs are generally of a deep green colour, irregularly marked with blotches and streaks of a brownish black.

1270. Lobivanellus atronuchalis (*Blyth*), *Jerd.*, *B. Ind.* ii. p. 648; *Hume, Nests and Eggs Ind. B.*, p. 376; *id.*, *Str. F.* iii. p. 181; *Blyth, B. Burm.* p. 152; *Hume and Davison, Str. F.* vii. p. 457; *Hume, Str. F.* viii. p. 112; *Oates, Str. F.* x. p. 238; *id.*, *B. Br. Burm.* ii. p. 374 Sarcogramma atrogularis, *Blyth, J. A. S. B.* xxxi. p. 345 (note).—The Burmese Lapwing.

Entire head, neck and breast black; a band over the ear coverts white, also a collar on the hind neck, upper tail coverts, the tail, except a broad black band and under plumage from the breast; back and rest of upper parts, including the wing coverts, grey, glossed with purplish on the coverts and green elsewhere; greater coverts grey, broadly tipped with white; primaries and secondaries black, the bases white, increasing in extent to the last secondary, which is nearly wholly white. Bill black on the terminal half; eyelid and wattles red; legs and feet pale yellow.

Length.—13 inches; tail 4·5; wing 8·15; tarsus 3; bill from gape 1·3.

Hab.—British Burmah and Karenne, extending northwards as far as Bhamo; eastwards to Cochin-China and southwards down to Singapore. Breeds in April and May, in paddy fields and grass lands. Eggs, usually four in number, buff, thickly spotted and blotched with blackish brown.

Gen. **Sarciophorus.**—*Strickl.*

Wattles yellow; bill rather slender; hind toe absent.

1271. Sarciophorus bilobus (*Gmel.*), *Jerd.*, *B. Ind.* ii. p. 649; *Blanf.*, *Ibis*, 1870, p. 470; *Blyth, B. Burm.* p. 153. Charadrius malabaricus,

Bodd. Tabl. Pl. Enl. p. 53. Charadrius bilobus, *Gmel., Syst. Nat.* i. p. 691: Lobipluvia malabarica, *Hume, Nests and Eggs Ind. B.* p. 477; *Hume, Str. F.* viii. p. 112; *Legge, B. Ceylon*, p. 966; *Parker, Str. F.* ix. p. 482; *Hume, Str. F.* x. p. 238 (*note*); *Oates, B. Br. Burm.* ii. p. 375; *Murray, Vert. Zool., Sind*, p. 230.—The YELLOW-WATTLED LAPWING.

Breeding Plumage.—Head and nape black; ear coverts white, extending behind the nape; chin and throat black; neck in front and behind, also the back, scapulars and tertiaries pale brown; breast slightly darker, edged with dark brown; rest of the under surface including the upper and lower tail coverts white; tail white, with a black band subterminally and white tip, except three of the lateral tail feathers, which are white, with a subterminal dusky spot on the outer web of the third feather; primaries and their coverts black; the inner webs of the primaries white, decreasing in extent to the inner ones; secondaries basally white, and terminated with black; greater wing coverts like the back, but broadly tipped and edged with white, forming a conspicuous white wing band.

Length.—11 to 11·75 inches; wing 8·25; tail 3·25; bill at front 1; irides brown; bill yellow at the base, the rest black; wattles yellow.

Hab.—Nearly throughout India, Burmah and Ceylon. In India it is a resident, frequenting dry stony or grassy plains usually in company with *Cursorius isabellinus* or *gallicus*. Breeds in August on the edges of cultivated land. The eggs are not unlike those of *L. indicus*, but are smaller, and have a stone colour ground, with deep brown and nearly black blotches. In the winter plumage, the chin and throat and the black edges to the feathers of the breast below are wanting, and the upper plumage is duller or paler brown.

Sub-Family, ÆSACINÆ.—STONE PLOVERS.

Bill strong and thick; no hind toe; nostrils linear, in a groove near the base of the bill; gonys strongly angulated.

Gen. Æsacus.

Bill long, sub-curved, the lower edge of the under mandible wide in the middle, then curving to a point.

1272. Æsacus recurvirostris (*Cuv.*), *G R. Gray, M. G. B.* pl. 142; *Jerd., B. Ind.* iii. p. 652, No. 858; *Hume, Nests and Eggs Ind. B.* p. 579; *id., Str. F.* ii. p. 182; *Blyth, B. Burm.* p. 152; *Str. F.* vol. v. p. 121; *Hume, Str. F.* vi. p. 458; *Oates, Str. F.* vii. p. 50; *Hume, Str. F.* viii. p. 112; *Legge, B. Ceylon* p. 974; *Oates, B. Br. Burm.* ii. p. 357; *Murray, Hdbk., Zool., &c., Sind*, p. 211; *id., Vert. Zool. Sind.* p. 231. (*Karwanak* : *Chota Taloor*, Sind).—The LARGE STONE PLOVER.

Forehead and a broad line down the sides of the face white; a broad dark streak on each side from the base of the lower mandible; feathers round and behind the eye white, broadly bordered with dark brown; chin, throat, abdomen, and under tail coverts white; top of head, neck behind, back, scapulars

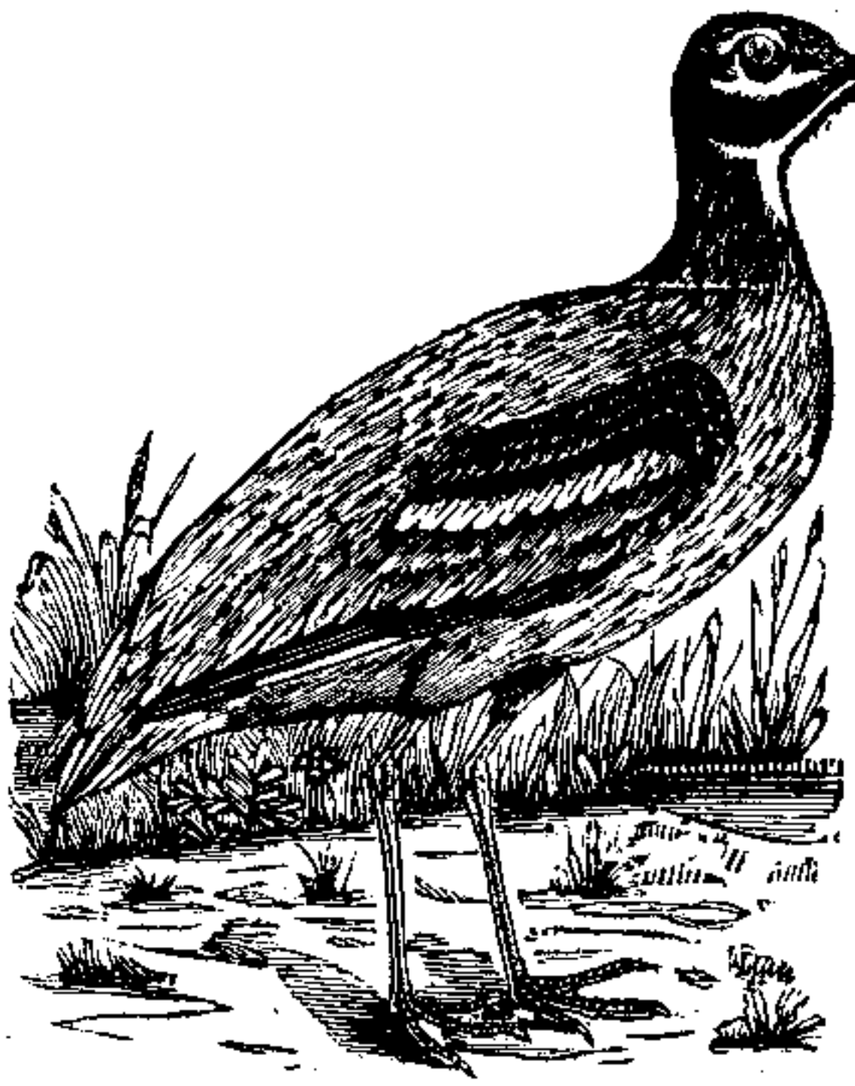
and tertials pale brown, the feathers distinctly dark-shafted; neck in front white, in some specimens obtained in April greyish brown; the breast ashy, contrasting with the pure white of the rest of the under surface; primaries black, the first three quills with a patch of white on their terminal thirds, and the last three basally and at tip white, with a subterminal black band; lesser wing coverts dark brown; median and greater coverts pale greyish brown, the latter white tipped; secondaries dark brown, their inner webs white; tail pale brown at base, with a subterminal white band and a broad black tip, except the outermost feather, which is white at the base and more broadly tipped with black; bill black, greenish at the base; irides yellow; legs yellow.

Length.—20 inches; wing 10·5; tail 4·37; tarsus 3·5; bill at front 3, at gape 3·75.

Hab.—Nearly throughout India, along the sea coast and banks of large rivers. From the stomach of a specimen got in the Kurrachee harbour ten calling crabs (*Gelasimus annulipes*) were extracted. *Æ. magnirostris*, an Australian species, is said to have occurred in the Andaman Islands and probably also occurs along the Burmese sea coast. There is however no precise information. It is distinguished from this species by being a little larger, and by the colour of the *sixth primary being all white* with only a brown band on the outer web.

Gen. **Œdicnemus.**—*Cuv.*

Bill longer than the head, straight and slightly depressed at the base; culmen raised near the point; mandible angulated beneath; nostrils in the middle of the bill in a longitudinal slit; toes three; tail graduated.



Œdicnemus crepitans.

1273. Œdicnemus crepitans. *Temm., Man. d' Orn.* p. 348; *Jerd., B. Ind.* iii. p. 654; *Hume, Str. F.* i. p. 232; *id., Str. F.* iii. p. 182; *Blyth, B. Burm.* p. 152; *Oates, Str. F.* xi. p. 238; *Murray, Vert. Zool. Sind,* p. 232. Charadrius œdicnemus, *Linn, Syst. Nat.* i. p. 255. Charadrius scolopax, *S. G. Gmel., Reisse Russ.* iii. p. 87, pl. 16. Œdicnemus indicus, *Salvad., Ass. Soc. Ital. Sc. Nat.* viii. p. 380; *Hume, Nests and Eggs Ind. B.* p. 581. Œdicnemus scolopax, *Dresser, B. Eur.* vii. p. 401, pl.; *Legge, B. Ceylon,* p. 969; *Oates, B. Br. Burm.* ii. p. 356.—The Stone Plover or Bastard Floriken.

Lores white, with a few brown spots; chin and throat white; a distinct narrow moustachial stripe from the base of the lower mandible; head, neck, back, scapulars and upper tail coverts reddish ashy, each feather with a mesial dusky streak; breast the same as the back; belly white; under tail coverts reddish ashy; tail white basally, all the feathers except the middle ones tipped with black; thigh coverts white; primaries black, the first three quills with a patch of white at their terminal third, and the last three white basally and at tip with a subterminal dark band; edges of the greater wing coverts white, forming a wing band.

Length.—16 inches; wing 9; tail 4·5; bill at front 1·5; irides and orbits yellow; also the legs and feet.

Hab.—Throughout India, including Burmah, also Ceylon and Persia. Affects stony places, waste land, grassy plains, dry river beds and the sides of sloping banks; runs very swiftly, especially when first surprised, stops short now and again after the manner of *Cursorius isabellinus*, and squats close to the ground, depending for safety on the colour of its plumage, which is like that of the ground. Its flight is strong and steady, but it seldom uses its wings, except when hard pressed; usually turns out in the evening in quest of food, which consists chiefly of worms. The young are said to run from the nest within three hours of their birth. It is not uncommon to meet with parties of this bird in looking for Oobara (*H. Macqueenii*) among Grewia bushes, and perhaps from this circumstance and its lineated plumage it is called the "*chota* or small Taloor." It is, as Jerdon says, a favourite quarry for the Sparrow Hawk and the Besra. Its flesh is as much esteemed almost as that of the Houbara, being highly flavoured. Breeds in Sind from February to April. It makes no nest, the eggs being laid in a small depression in the ground, usually sheltered by a stone.

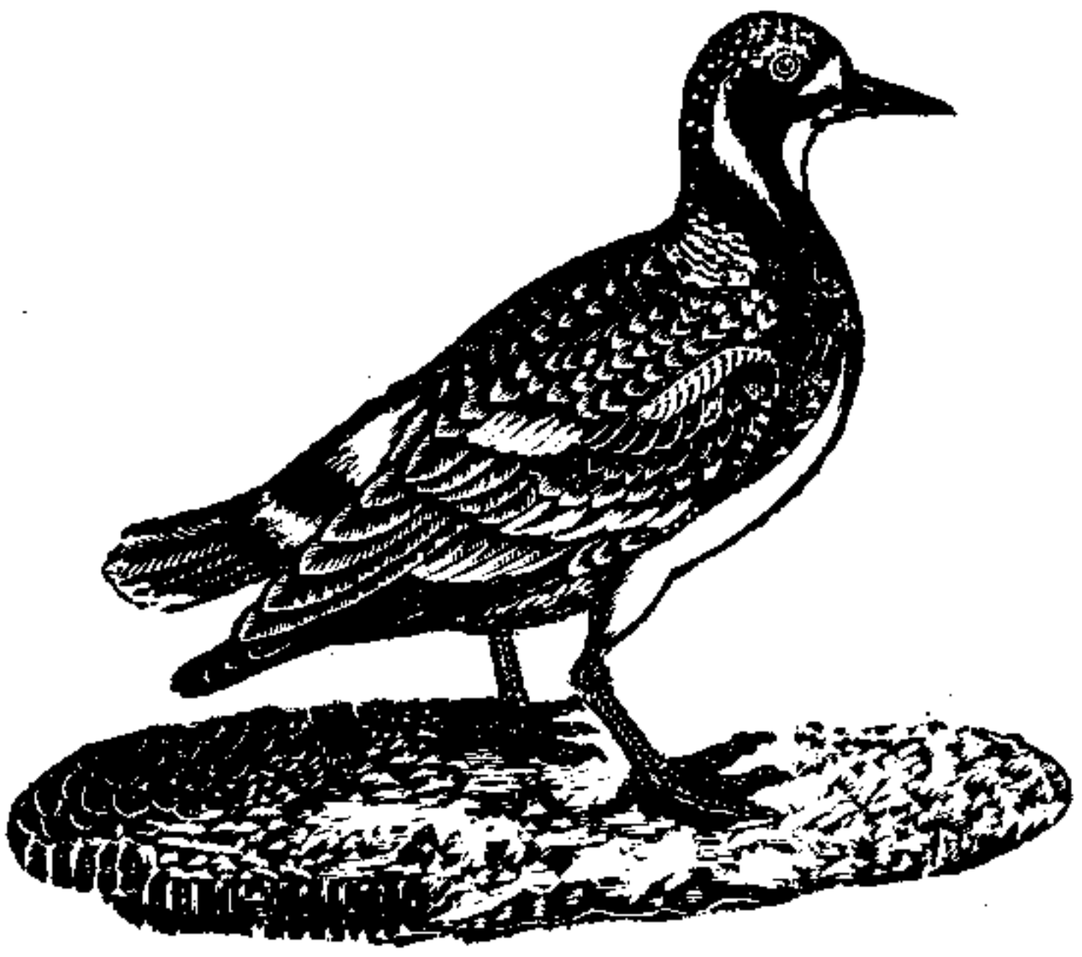
Family, HÆMATOPODIDÆ, *Bp.*—Sea Plovers.

Feet with three toes, and a very small hind toe; bill long, strong, front half compressed, tip blunt; wing long and pointed.

Sub-Family, STREPSILINÆ.—*Bp.*

Characters those of the Family; bill slightly curved upwards.

1274. Strepsilas interpres (*Linn.*), *Jerd.*, *B. Ind.* ii. p. 656; *Salvad.*, *Ucc. Born.* p. 320; *Blyth*, *B. Burm.*, p. 154; *Dresser*, *B. Eur.* vii. p. 555, pl.; *Hume*, *Str. F.* iv. p. 464; *Murray*, *Vert. Zool.*, *Sind*, p. 233; *Legge*, *B. Ceylon*, p. 987; *Oates*, *Str. F.* x. p. 238; *id.*, *B. Br. Burm.* ii. p. 376. Cinclus interpres, *Hume*, *Str. F.* i. p. 233; ii. p. 292. Tringa interpres, *Linn.*, *Syst. Nat.* i. p. 248.—The TURNSTONE.



Strepsilas interpres.

In winter the crown and hinder part of the head are dusky, edged very narrowly with greyish brown; the lores pale brown, or in some specimens greyish brown; the chin and throat are white, also a patch on each side of the neck, bordered in front along the sides of the white throat patch with dusky or dark brown; upper back, scapulars, rump, breast and sides of the breast dusky or dark brown, according to season, edged with rusty or brownish red; some of the scapulars partly edged with white; tertials long, reaching beyond the fifth quill, edged and tipped with rufous or red brown; lesser wing coverts, like the upper back, white at the shoulder; the secondary or greater coverts tipped with white, forming a conspicuous wing bar; primaries and secondaries black, the inner webs of the former and tips of the latter white; back, lower surface of the body from below the breast, also the thigh and upper and lower tail coverts white; a patch of black on the rump; tail feathers white, with a subterminal black band, except the central ones, which are entirely black. In the summer or breeding plumage, the forehead, a band over the eye, lores and a patch behind the eye are white; the crown of the head is also white, broadly streaked with black. There is also a black streak behind the white frontal patch, continued

to the front and below the eye on each side joining the black streak from the lower mandible, and getting lost on the neck, whence springs a black demicollar not extending on the upper surface of the neck, which, like the head, is white with dark streaks; back of neck white, extending down the sides between the black demicollar and sides of the breast; chin white; throat and breast deep black; upper back and scapulars black, the feathers broadly edged and tipped with red rust colour; some wholly so, especially the scapulars; lesser and median wing coverts black, broadly edged and tipped with bright rust colour; the tips of the greater or secondary coverts white, forming a wing band; quills black, the inner webs, and part of the outer webs of the last two or three basally white; secondaries like the quills, but broadly white on their inner webs, and also narrowly tipped white; tertials dark brown, edged and tipped with rusty; back, entire lower surface below the breast, and upper tail coverts white; rump with a patch of black; tail as in the winter plumage; irides deep brown; legs orange yellow.

Length.—8 to 8·5 inches; wing 6; tail 2·5.

Hab.—India generally, and Ceylon along the sea shores, and sometimes inland along the banks of large rivers. Its geographical range is very wide, being found in Europe, America, and Africa, and throughout Asia, in suitable localities. In Sind it is extremely common in the Kurrachee harbour and at the mouths of the Indus. It occurs also on the Sambhur lake, and on the banks of the river at Poona, in the Deccan; also on the Beloochistan Coast and in the Persian Gulf.

Gen. **Dromas**.—*Payk.*

Bill long, lower mandible strongly angulated; tarsus long; wings reach beyond the tip of the tail; feet webbed; hind toe long and slender.

1275. Dromas ardeola, *Paykl., Handlist Ac. Vet. Stockhlm.* t. 8; *Jard. and Selby, Ill. Orn.* pl. 157; *Jerd., B. Ind.* iii. p. 658; *Str. F.* ii. p. 293; vii. p. 186; viii. p. 383; *Murray, Hdbk., Zool., &c., Sind*, p. 212; *id., Vert. Zool. Sind*, p. 234; *Legge, B. Ceylon*, p. 986.—The Crab Plover.

Whole head, neck all round, chin, throat, breast, entire lower parts, back, upper and lower tail coverts and upper tertials white; generally a dark loreal spot; mantle and interscapulars black; primaries and secondaries black, their inner webs white; greater wing coverts black; tail reddish ashy, as also are some of the tertials near their tips; bill black, 2·5 inches in length; irides brown.

Length.—15 to 15·5 inches; wing 8·75 to 9; tail 2·5.

Hab.—Indian coasts, Ceylon, Africa, Red Sea, Seychelles, Madagascar, Beloochistan Coast and the Persian Gulf. Common in Sind in the Kurrachee

harbour. Breeds in the Persian Gulf near Bushire. Mr. Hume has given an account of its nidification in vols. vii. and viii. of *Stray Feathers*. There is no nest, and the eggs are laid in a burrow about 4 feet deep in the loose sand; but whether this is dug by the bird, or is that of a crab, is still a question, the holes being, it is said, too narrow to admit the bird.

Gen. **Hæmatopus**—*Linn.*

Bill straight, long, very slightly bent upwards; nostrils linear in a long cleft; toes three, all placed forward; no hind toe.

1276. Hæmatopus ostralegus *Linn.*, *Syst. Nat.* i, p. 257; *Jerd.*, *B. Ind.* ii. p. 659; *Hume, Str. F.* i. p. 234; *Blyth, B. Burm.* p. 154; *Dresser, B. Eur.* vii. p. 567; *Hume, Str. F.* viii. p. 112; *Legge, B. Ceylon* p. 987; *Murray, Vert. Zool. Sind*, p. 235. Hæmatopus osculans, *Swinh., P. Z. S.* 1871, p. 405; *Dav. et Oust. Ois Chine*, p. 432.—The Oyster Catcher.

Entire head, neck, breast, upper back, scapulars and tail black; lower orbital feathers white; lower back, and entire lower parts white, also a ring round the throat; primaries black, the inner webs and part of the outer webs of all, except the first two quills, white; the white on the outer webs of the innermost primaries spreading to the edges; secondaries basally and narrowly at tip white, with a subterminal black band; greater coverts and some of the secondaries and lower tertiaries white, forming a large wing patch; lesser and primary-coverts black; bill orange yellow, or bright scarlet, 3·5 to 3·75 inches long; irides lake red; orbits orange.

Length.—16 to 17 inches; wing 10·5; tail 4; tarsus 2·25.

Hab.—Europe, Siberia, India, Ceylon, Afghanistan, Beloochistan, Persian Gulf, Sind, the Eastern and Western Coasts of India; in fact has a very wide distribution. Inhabitant of the sea shores, being seldom found inland. It lives chiefly on molluscs, worms, &c., and is said to easily disengage limpets from the rocks, and to pluck out the oysters from their half-opened shells, with its admirably adapted wedge-shaped bill. Oyster-Catchers feed in the mornings and evenings, and also at night, and are at all times watchful and shy in their habits.

Family, GRUIDÆ.

Bill long; mandibles equal; nostrils in a deep groove; wings long; tertials long; tail short, even; tarsi long, scutellated.

1277. Grus antigone, *Linn.*, *Syst. Nat.* p. 235; *Jerd.*, *B. Ind.* ii. p. 662; *Hume, Nests and Eggs Ind. B.* p. 584; *Blyth, B. Burm.* p. 157; *Oates, Str. F.* v. p. 164; *Hume and Day, Str. F.* vi. p. 438; *Murray, Vert.*

Zool., Sind, p. 235; *Hume and Marsh., Game Birds* ii. p. 1, pl.; *Oates, B. Br. Burm.* ii. p. 354.—The SARUS CRANE.

Head and neck naked, covered behind with numerous crimson papillæ, and clad with a few black hairs, which accumulate below on the neck, and form a sort of mane down the nape of the neck; ear coverts white; below this the neck is whitish grey, which gradually passes into a blue or French grey, which is the colour of the whole plumage, the quills and inner webs of the tail feathers being dusky slaty; seasonally it assumes a pure white collar immediately below the crimson papillose skin of the neck, and some of the tertiaries and scapulars become white, lengthened, hang over gracefully and exceed the tail in length; bill pale sea green, brownish at the tip; irides orange red; legs and feet pale rosy red.

Length.—52 inches; wing 26; tail 9·25; bill at front 6·25, tarsi 12·5 to 13. (*Jerdon.*)

I have not a satisfactory specimen.

Hab.—Throughout the greater part of India. It is rare in Sind. In the Punjab it is found in the Delhi and other district, also in the N.-W. Provinces, Rajputana, Kutch, Concan and Deccan. It has also been found occasionally in Khandesh. Throughout the Central Provinces, also the Madras Presidency, north of the Godavery, Chota Nagpur and Lower Bengal it is common in suitable localities. Breeds over the whole of the N.-W. Provinces, Upper Bengal, British Burmah, Assam, Oudh and Guzerat; also Central India and Khandeish, during August and September, laying 2 eggs, of a pale green colour, speckled with yellowish brown purple or purplish pink. Many are quite unspotted.

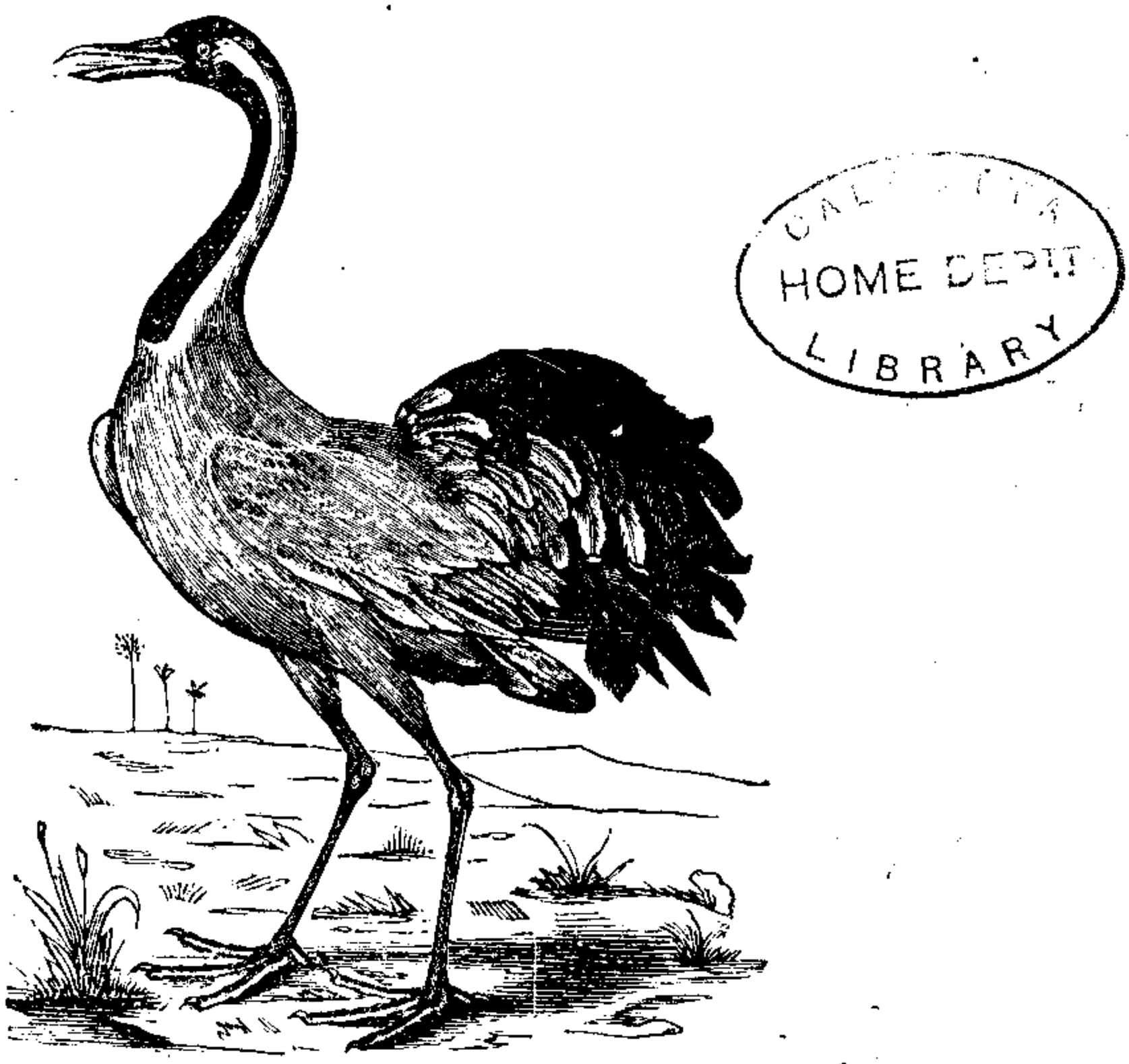
1278. Grus leucogeranus, *Pall, It.* t. i; *P.C.* 467; *Jerd., B. Ind.* iii. p. 663; *Str. F.* i. p. 235; vii. p. 437; *Murray, Hdbk., Zool., &c., Sind*, p. 213; *id., Vert. Zool. Sind*, p. 236.—The LARGE WHITE, SNOW-WREATH, OR SIBERIAN CRANE.

Plumage wholly white; primaries black; tertiaries white, much lengthened and reaching to or beyond the end of the tail; nude parts of the face and legs red; hind head subcrested. In the young Mr. Hume (*Game Birds of India*) says: "There is no bare space about the face, the whole head and upper half of the neck are of a somewhat rusty buff, which is deepest on the head and cheeks, and pale on the chin and throat."

Length, Male.—53 to 56 inches; wing 23 to 26; expanse 90 to 99·5; tarsi 11 to 12; bill from gape 7·75 to 8. *Females* are smaller; irides pale yellow; bill brown; nasal membrane red.

Hab.—A winter migrant to India; occurs in the N.-W. Provinces, Punjab, Sind, parts of the Central Provinces and the Himalayas; also in Afghanistan,

Eastern Turkistan and Siberia. Uncommon in Sind. I have never met with it. Mr. Hume has however seen and recorded it.


CALCUTTA
HOME DEPT
LIBRARY

Grus cinerea.

1279. Grus cinerea (*Bechst.*), *Bodd. Pl. En.* 769; *Gould, B. Eur.* pl. 270; *Jerd., B. Ind.* iii. p. 865; *Str. F.* i. p. 235; iv. p. 15; *Murray, Hdbk., Zool., &c., Sind*, p. 213; *id., Vert. Zool. Sind*, p. 237; *Hume and Marsh., Game Birds* ii. p. 92 (*Koonj*, Sind; *Kulling*, N. India).—The Common Crane.

Forehead to the middle of the crown covered with black hairy down, through which the red skin shows; behind this nearly bare and entirely so for about two inches on the nape, which is ash grey; chin, throat and foreneck black; a broad white streak from behind the eye, extending along the back of the neck from below the nape and partly on the sides; lores and cheeks black; upper and lower surface of the body dark bluish ashy; greater wing coverts dull black; secondaries and tertiaries grey and tipped with black, the latter in texture resembling the plumes of the ostrich, narrowing to a point, forming an elegant tuft of loose feathers, curled at the ends and falling grace-

fully over the tail; legs and bare part of the thighs black; bill greenish brown at the base, tinged blackish in the middle, with the tip dark horny; irides yellowish, orange red or reddish brown in some.

Length.—43 to 46 inches; wing about 24; tail 7.; tarsus 8·75 to 9; bill 4·3 to 4·8.

Hab.—Europe, India, N. Africa. In India it is a winter visitant everywhere. Besides occurring in Sind, it is recorded from Rajputana, Kutch, Kattiawar, Deccan, N. Guzerat, Rajputana, Central India, Khandeish, Punjab, N.-W. Provinces, Oudh and Bengal. It has also been found in Afghanistan, Beloochistan and Persia.

When feeding the Common Crane has always a sentinel posted to give the alarm of danger, and hence it is extremely difficult to get within gunshot of the flock. The ordinary procedure is to walk alongside a bullock or horse, as if passing by them, and to fire immediately they rise; a duck gun with large shot usually brings down 2 or 4 out of a flock. In Sind and probably in other parts of India too, the food of this Crane consists of grain of all kinds; when in large parties they commit great havoc in wheat fields.

Gen. **Anthropoides.**—*Vieill.*

Bill shorter than in *Grus;* head and neck feathered; breast feathers lanceolate and hackled; tarsi long.

1280. Anthropoides virgo (*Linn.*), *Bodd. Tab. Pl. Enl.* 241; *Edw. B.* pl. 134; *Jerd., B. Ind.* iii. p. 666; *Murray, Hdbk., Zool. &c., Sind*; *Hume, Str. F.* iv. p. 15; *Murray, Vert. Zool. Sind*, p. 237.—The Demoiselle Crane.

Forehead, lores, sides of the face, chin, throat, neck in front, and breast plumes deep black; ear tufts white, issuing from behind the eye; primaries black; secondaries grey, black tipped; back, scapulars, tertials, upper tail coverts and entire lower surface pale blue grey; tertials elongated and drooping over the primaries and tail feathers; most of them with a broad black tip.

Length.—31 to 35 inches; wing 19 to 20 or more; tail 6 to 7·5; tarsus 7; bill from gape 2·7 to 3·05; tertiaries project about 6 inches beyond the primaries.

Hab.—Throughout the greater part of India; rare in Sind. Occurs in Rajputana, Kutch, Kattiawar, N. Guzerat, Deccan, the Nizam's dominions, where it is rare; also in Assam, N.-W. and Central Provinces, Central India, Khandeish and Oudh. Occurs also in Afghanistan and Beluchistan and probably also in Persia. In the Deccan, about the Satara and Belgaum districts, as well as in the Concan and South India, it is said to be fairly common,

Tribe. LONGIROSTRES.—*Cuv.*

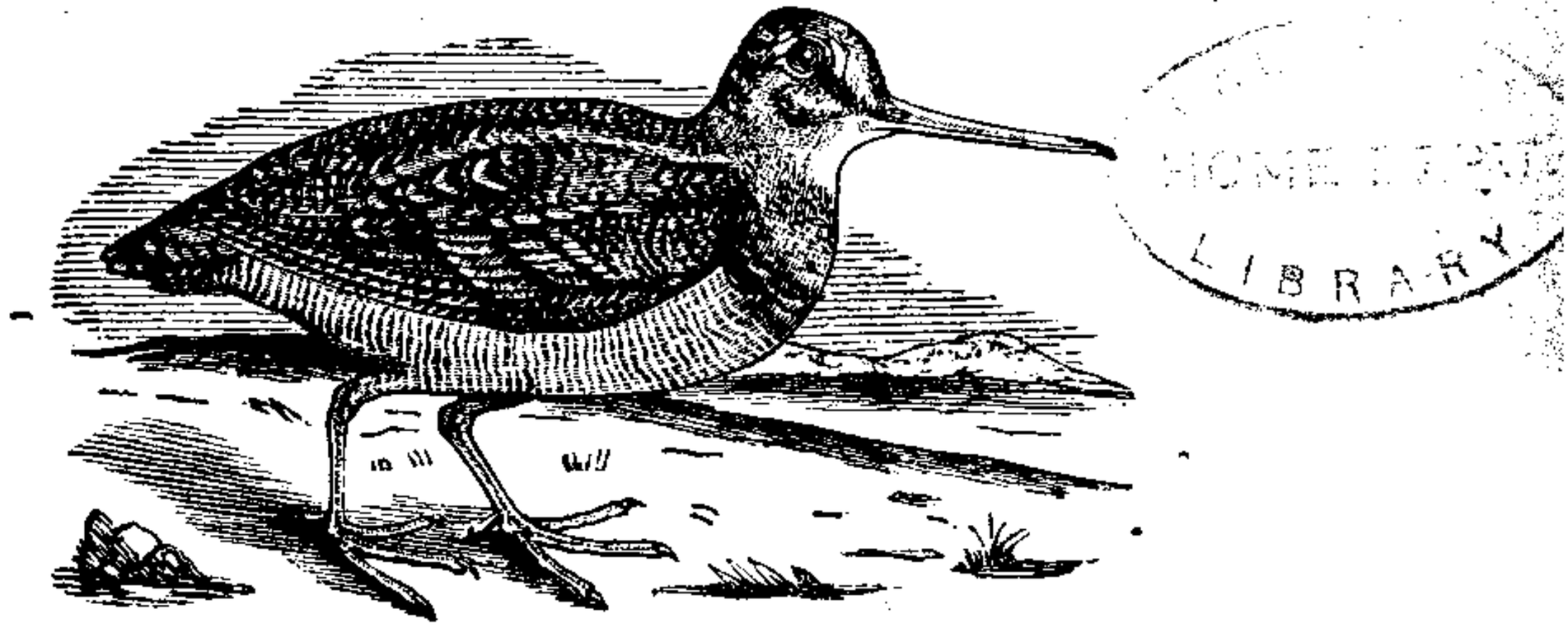
A family of wading birds, in which Cuvier includes the snipe, godwits ibises, curlews, phalaropes, &c., at the end of which come the avocets. These are nearly all migratory birds, and associate in flocks during winter. The characters by which this tribe is chiefly distinguished are the long slender bill, and long and pointed wings; the hind toe is usually present but wanting in some.

Family, SCOLOPACIDÆ.

Bill long, straight, compressed, soft, the point enlarged; the mandibles furrowed for half their length; upper mandible slightly longer than the lower; nostrils lateral, situated basally in a groove and covered by membrane; feet moderate, slender, three toed, not webbed; hind toe present; plumage varied and rich.

Gen. Scolopax.—*Linn.*

Characters same as those of the Family; lower mandible channelled only to the middle; wings long, 1st quill longest; tibia feathered to the knee.



1281. Scolopax rusticola *Linn., Syst. Nat.* i. p. 243; *Jerd., B. Ind.* iii. p. 670; *Blyth, B. Burm.* p. 157; *Anders., Str. F.* iii. p. 356; *Dresser, B. Eur.* vii. p. 615, pl.; *Hume and Dav., Str. F.* vi. p. 458; *Hume, Str. F.* viii. p. 112; *Bingham, Str. F.* viii. p. 196; *Hume and Marsh., Game Birds* iii. p. 311, pl. Scolopax rusticula. *Dav. et Oust. Ois. Chine*; *Legge B. Ceylon*, p. 806; *Oates, B. Br. Burm.* p. 380; *Murray, Vert. Zool., Sind*, p. 238.—The Woodcock.

The peculiar shape of the head of this esteemed bird is almost a sufficient character to identify it among others. The head is more obtusely triangular than round; the eyes are placed above its middle, near the top, and the ears are nearly on a level with the corner of the mouth. Crown of the head ashy, or ashy grey; the nape and back part of the head with four transverse alternate bands of black and rusty red or chestnut brown; a dark streak from the

gape to the eye; the orbital feather pale buff; back, scapulars, wing coverts; and upper tail coverts, marbled, spotted, barred, streaked and variegated with black, white, grey, red, brown, rufous and yellow, that it is not possible to describe them with accuracy; chin pale yellowish brown, or nearly white; throat and breast pale brown, barred transversely with dark brown; primaries blackish, with triangular spots of pale reddish brown on both webs; secondaries and tertiaries blackish, but with the markings more elongated and reaching to the shaft. The whole under parts are yellowish white, numerously barred with transverse dark undulating lines; tail black, with spots and bars on both webs, the tips ashy grey above and silvery white below; tibia feathered to the knee. The female is larger, and only differs from the male in this respect and its duller tints.

Length.—14 to 16 inches; wing 8 to 8·25; tail 3·25; bill at front 3 to 3·2 (upper mandible); tarsi 1·5 to 1·8; irides dark brown; legs livid fleshy, as also is the bill with a tinge of grey.

Hab.—Europe, Egypt, India, including Burmah, Ceylon and Java. In India it is a summer resident on the wooded ranges of the Himalayas, and a winter visitant to the Neilgherries and the higher ranges of Southern India, parts of the Punjab, Nepaul, Sylhet and Bengal, frequenting damp situations, and feeding on worms, snails, slugs, &c. In Sind it is extremely rare, and is known only by two specimens obtained at Kurrachee. It is also said to occur in North Canara and the Concan, also in Persia, Beloochistan and Afghanistan. It breeds in the Himalayas during June, laying buff-coloured eggs blotched with reddish brown.

Gen. **Gallinago**.—*Steph.*

Characters the same as in *Scolopax*. Tibia not feathered to the knee; tail of 16—18 feathers.

1282. Gallinago nemoricola (*Hodgs*), *Jerd., Ill. Ind. Orn.* pl. 9; *id., B. Ind.* iii. p 672; *Hume, Str. F.* vi. p. 459; *id. and Marsh., Game Birds*, p. 325.—The Wood Snipe.

Top of the head black, with rufous yellow longish markings; upper part of the back black, the feathers margined with pale rufous yellow and often smeared bluish; scapulars the same, some of them with zigzag markings; long dorsal plumes black with zigzag marks of rufous grey, as are most of the wing coverts; winglet and primary coverts dusky black, faintly edged whitish; quills dusky; lower back and upper tail coverts barred reddish and dusky; tail with the centre feathers black at the base and chestnut, with dusky bars towards the tip; laterals dusky with whitish bars; beneath the chin white; the sides of the neck ashy, smeared with buff and blackish; breast ashy, smeared with buff and obscurely barred; the rest of the lower plumage,

with the thigh coverts, whitish, with numerous dusky bars; lower tail coverts rufescent, with dusky marks, and the under wing coverts barred black and whitish. Bill reddish brown, paler at base beneath; irides dusky brown; legs plumbeous green. (*Jerd.*)

Length.—12·5 to 13 inches; wing 5·75; tail 2·5; bill at front 2·6; tarsus 1·75.

Hab.—The Himalayas, Neilgherries, Coorg, Wynaad and other elevated regions in Southern India, affecting brushwood in swampy ground.

1283. Gallinago solitaria (*Hodgs.*), *J. A. S. B.* vi. p. 491; *Jerd.*, *B. Ind.* iii. p. 673, No. 869; *Hume and Marsh.*, *Game Birds* iii. p. 333.—The Eastern Solitary Snipe.

Head above brown, with pale mesial and superciliary lines; a dark band from the base of the bill extending towards the ear coverts; upper plumage as in *G. scolopacinus*, except that the feathers are more spotted and barred with rufous; a pale buff stripe along scapulars and inner edge of the wing; primaries brown, with a narrow pale edging externally and the innermost tipped with white; secondaries and tertiaries broadly barred with dark brown and pale rufous; tail deep black at base, with a broad subterminal band of bright ashy rufous, tipped brown, and the extreme tip pale; outermost rectrices finely barred; breast olive brown, with white dashes of white and brown bars, passing into white on the abdomen and vent, with some olivaceous bands on the upper belly and flanks; sides of the vent and under tail coverts whitish. Bill reddish brown; irides dark; feet greenish yellow.

Length.—12·5 inches; wing 6·25; tail 3·2; bill at front 2·75; tarsus 1·2.

Hab.—Throughout the Himalayas from Gilgit to Central Bhootan. During the summer it is said to be confined to the higher ranges from elevations of 9,000 feet and upwards to at least 15,000 feet, where they breed during May and June.

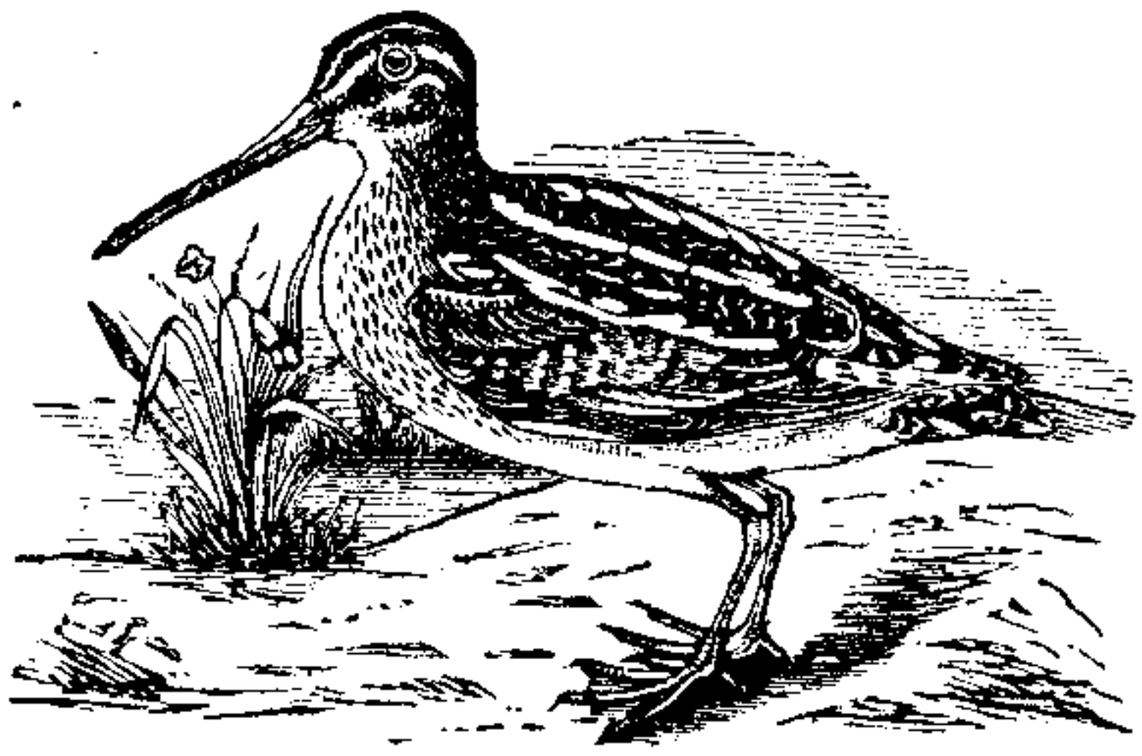
1284. Gallinago stenura (*Kuhl.*), *Jerd.*, *B. Ind.* iii. p. 674; *G. F. L. Marshall*, *Str. F.* i. p. 423; *Cripps*, *Str. F.* i. p. 496; *Hume*, *Str. F.* ii. p. 294; *Hume and Dav.*, *Str. F.* vi. p. 459; *Murray*, *Vert. Zool. Sind*, p. 239; *Legge*, *B. Ceylon*, p. 816; *Oates*, *B. Br. Burm.* ii. p. 383. Scolopax stenura *Kuhl.*, *Bonap. Osserv. Sulla, sec. Ediz. Regn. Anim. Cuv. Monog. Scolopax*, p. 121.—The Pin-tail Snipe.

Crown dark brown or black, with a mesial longitudinal pale line; face white, divided by a dark line from the nostrils to the eye and extending to the ear coverts; there is also in some specimens a faint line from the ear coverts to in front of the neck on each side, but not meeting; chin and throat white; neck in front and behind pale fawn brown, barred, streaked or spotted with brown or dark brown; sides of the abdomen like the breast, and transversely barred; middle of abdomen white, barred in some specimens; upper back,

scapulars and wing coverts brown, darker on the mantle and scapulars, the feathers of which are broadly edged with yellow and spotted and streaked with rusty; the scapulars, tertials and wing coverts barred with the same; lower back, rump and upper tail coverts rufescent brown, barred with dusky; under wing lining and axillaries white, distinctly and richly barred with blackish brown; tail basally dark brown, followed by a large oval rufous or rufous buff patch, and a narrow subterminal dark band, tipped pale rufous or the colour of the oval patch; primaries and their coverts, also the secondaries, pale brown or dusky, narrowly margined at the tip with white, both webs unicolorous.

Length.—9·75 to 10 inches; wing 4·8 to 5·4; tail 2 to 2·5; tarsus 1·12 to 1·25. Females are larger. Legs and feet plumbeous with a greenish tinge; irides deep brown; bill 2·2 to 2·6; gape and base of bill greenish; rest of bill pale horny, with a dusky tip for about one-third its terminal length. In the females the bills average from 2·45 to 2·7.

Hab.—Nearly throughout India, rare in the Punjab, N.-W. Provinces and Sind, also in Rajputana, Kutch and Kattiawar; fairly common in N. Guzerat, Central India and Khandeish. In Bombay, Concan generally, and the Deccan, as well in the Nizam's Provinces, it is plentiful, also in Lower Bengal, east and west of the Brahmapootra. It is recorded from Arracan, Pegu, Tenasserim, the Andamans and Nicobars, where it is most commonly met with. This snipe is a migrant; arrives in Sind about the middle of August, and leaves about the end of March or middle of April. Rice fields, mud swamps, and the vicinity of large rivers, jheels and tanks, where there are sedges and rushes, are the selected spots of the Pin-tail, at least in Sind.



1285. Gallinago scolopacina, *Bonap., Comp. list, B. Eur. and N. Amer.* p. 52; *Jerd., B. Ind.* iii. p. 674, No. 871; *Hume, Nests and Eggs Ind. B.* p. 586; *Hume and Dav., Str. F.* vi. p. 459; *Legge, B. Ceylon*, p. 820; *Murray, Vert. Zool., Sind*, p. 240. Scolopax gallinago, *Linn., Syst. Nat.* i. p. 244. Scolopax cœlestis, *Frenzl., Beschr. der Vogel und ihrer Eier in der*

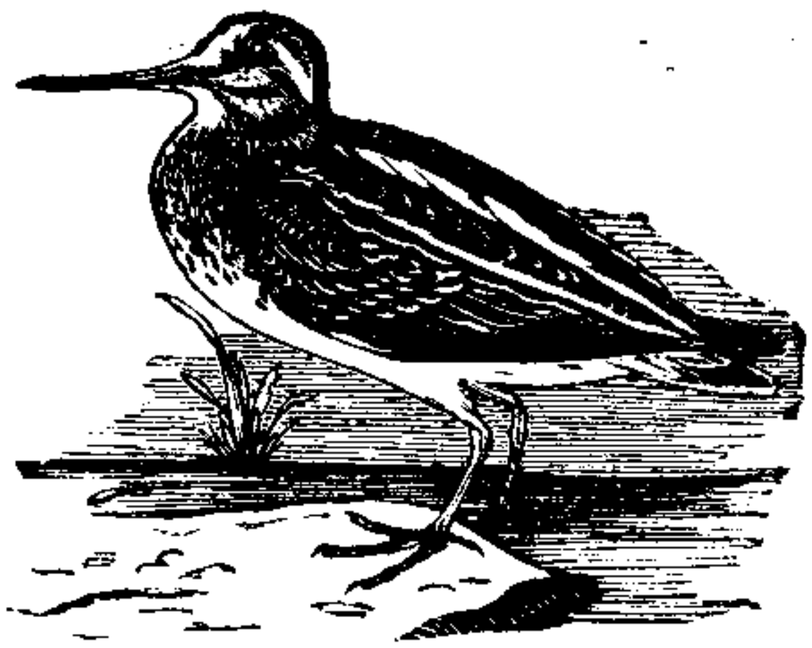
Gegend Von Willenberg p. 58. Gallinago gallinaria (*Gm.*), *Cripps*, *Str. F.* vii. p. 302; *Hume*, *Str. F.* viii. p. 112; *Bingham*, *Str. F.* viii. p. 112. Gallinago cœlestis, *Dresser*, *B. Eur.* vii. p. 641, pl.; *Hume and Marsh.*, *Game Birds* iii. p. 359; *Oates*, *B. Br. Burmah*, p. 381.—The Common Snipe.

Crown of the head black, with a mesiial longitudinal white, yellowish, or rusty white line; a superciliary on each side from the base of the upper mandible of the same colour, and a dark streak below it to the eye; sides of the head spotted with dusky grey, tinged ferruginous brown; chin and throat white, or nearly white; neck on the sides and in front yellowish white, spotted with brown; breast white, brown, pale yellowish or ferruginous on the upper part, and spotted with dusky; the sides greyish white, barred with dark brown; back and scapulars velvetty black, the feathers broadly edged with yellow, and barred and spotted with chestnut brown; the yellow edges to the feathers forming four conspicuous lines on the back; upper tail coverts barred with alternate bars of dusky black and pale yellowish brown, somewhat rufescent; the under tail coverts pale yellowish fawn, also barred with dusky or dark brown; the middle of the abdomen is white, in some specimens tinged with pale buffy fawn; axillaries and flanks white, barred with dusky or dark brown, but not so broadly, close and numerous as in *Stenura*; under wing lining white, a few bars only on the edge of the wing; a white patch always conspicuous in the centre of the wing; greater and lesser wing coverts dusky or dark brown, barred with rufescent, and edged and tipped with pale white or cream colour; primaries dusky or dark brown, *the first with its outer web white;* secondaries dusky or dark brown, broadly tipped with white; the outer edges of their inner webs white, and treated with dusky; the inner webs of the primaries also whitish basally and mottled minutely with dusky; tertiaries rufescent, barred with dark brown; tail black at the base, with an oval patch of rusty orange or ferruginous, then a subterminal narrow band, and tipped with buffy or pale reddish yellow, in some specimens white; legs pale green; bill terminally for one-third or more of its length deep brown, the rest basally horny brown with a green and yellowish tinge; its length from gape, of males 2·39 to 2·7; at front 2·43 to 2·75; of females 2·62 to 3·0 at front, rather flat at the tip.

Length, Male.—9 to 11 inches; wing 4·9 to 5·5; tail 2·5 to 2·8. *Females* larger.

Hab.—Throughout India and Burmah as a winter visitant, also Persia, Beloochistan and Afghanistan. Arrives in Sind about the beginning of September and leaves in April, and with the Jack Snipe is tolerably abundant everywhere. It is a very vigilant bird, and in consequence difficult to shoot, especially in bogs and moist localities where rushes are present. In such retreats, three, four or half-a-dozen may be seen at a time, walking leisurely, with head erect, and constantly on the alert; and at the first note of alarm,

they rise, and soon get out of gunshot. This species, it need hardly be mentioned, is held in much esteem for the table.



Gallinago gallinula. The Jud-Cock.

1286. Gallinago gallinula (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 676; *Hume*, *Str. F.* iii. 182; *Blyth*, *B. Burm.* p. 157; *Dav. et Oust. Ois Chine*, p. 479; *Dresser*, *B. Eur.* vii. p. 653; *Hume and Dav.*, *Str. F.* vi. p. 459; *Cripps*, *Str. F.* vii. p. 302; *Hume*, *Str. F.* viii. p. 112; *Legge*, *B. Ceylon* p. 828; *Hume and Marsh.*, *Game Birds* iii. p 373, pl.; *Hume*, *Str. F.* x. p. 239 (note); *Oates*, *B. Br. Burm.* ii. p. 384; *Murray*, *Vert. Zool.*, *Sind*, p. 241. Scolopax gallinula, *Linn.*, *Syst. Nat.* i. p. 244.—The Jack Snipe or Jud-Cock.

Crown of the head with a mesial longitudinal black streak from the top of the upper mandible; on each side of this a yellowish or cream-coloured streak extending above the eye as a superciliary, and in some specimens separated from the orbital region by a dark streak; a dusky line from the gape to the eye, and another from below it curving downwards to the ear coverts; the space between the two streaks white or cream colour; chin and throat white, greyish, or pale brown; sides of the head greyish, greyish white, or brownish white, spotted with brown and pale red; neck behind and nape ferruginous or greyish brown, streaked or spotted with dusky; breast pale yellowish brown or dusky, spotted or dashed with darker brown; abdomen white; flanks dashed with brown and pale ferruginous; axillaries pure white, with faint, almost obsolete dusky markings; back and scapulars rich black, with bronze green and purple reflections, the feathers of the upper back and scapulars edged on their outer webs broadly with rich cream yellow, forming two conspicuous longitudinal bands along each side; lower back and rump glossy blue black (specimens in August very narrowly margined with albescent); primaries dusky, the basal half of the first paler, *not white*; inner primaries narrowly margined at the tip with albescent; secondaries dusky,

streaked with reddish or yellowish brown on their outer webs; tail dusky or dark brown, edged near the tips with pale ferruginous; under tail coverts white; legs and feet pale greenish; irides deep brown.

Length.—8·5 inches; bill dark brown at the tip, 1·6 to 1·8 inches in length at front; wing 4 to 4·6 inches; tail 1·8 to 2·2.

Hab.—Everywhere in India, and more plentiful than the common snipe, with which it is generally associated. In Sind small parties begin to arrive about the 26th August, or a few days earlier than the common snipe. It is a difficult bird to flush, seldom rising until nearly trampled upon. It prefers deep cover at all times, but I have often seen them on the oozy, simi-fluid mud of back waters, where there was not even a stubble for cover.

Gen. **Rhynchæa**.—*Cuv.*

Bill shorter than in *Gallinago*, curved downwards at the tip; wings rounded; tarsi long; tibia nearly entirely bare.

1287. Rhynchæa capensis, *Linn., Syst. Nat.* 1, p. 246. Rhynchæa Bengalensis, *Jerd., B. Ind.* ii. p. 677; *Hume, Nests and Eggs Ind. B.* p. 586; *Salvad., Ucc. Born.* p. 335; *Blyth, B. Burm.* p. 157; *Butler, Str. F.* iv. p. 15; v. p. 223; *Dav. et Oust. Ois. Chine.* p. 480; *Wardlaw-Ramsay, Ibis*, 1877, p. 469; *Hume and Dav., Str. F.* vi. p. 459; *Cripps, Str. F.* vii. p. 302; *Hume, Str. F.* viii. p. 112; *Legge, B. Ceylon* p. 800; *Bingham, Str. F.* ix. p. 197; *Hume and Marsh., Game Birds* iii. p. 381, pl.; *Oates, Str. F.* x. p. 239; *Murray, Vert. Zool., Sind*, p. 242; *Oates, B. Br. Burm.* ii. p. 386.—The Painted Snipe.

Crown of the head with a broad mesial longitudinal line, bordered by dark brown, nearly black feathers, which form a line from the sides of the upper mandible to the nape, where it is broader than in front; a yellowish buff circle round the eye, and a line behind it; chin and throat whitish, the feathers with some faint dusky spots; neck in front and breast olive brown, the feathers with white spots and bars; the feathers on the lower part of the sides and middle of the breast nearly dark brown, forming a dark pectoral band, another similar band below this with a white interspace, but not meeting on the breast; hind neck olivaceous, finely marked with dark transverse striæ; mantle and scapulars dark brown, with dark margined buffy yellow and white bars; wing coverts and tertiaries pale olive, with black margined transverse bands or bars of rufous buff, broader and more conspicuous on the tertiaries; outer web of the first primary grey brown, the rest paler, and all with 5—6 buff or rufous buff ocelli; the interspaces between the basal three ocelli deep black, and between the terminal ones greyish brown; inner webs of primaries with white bars and dark wavy lines and marblings; secondaries ashy grey, ocellated with buff on their outer webs, the interspaces basally black, and terminally with dark brown wavy lines; their inner webs, like the

primaries, with white bars and wavy lines, and the tips margined with white, the patterns showing through paler on the under side of the wing; tail ashy grey, with buff ocelli on both webs, and tipped with buff; abdomen, vent and under tail coverts white. The female has the lores, sides of the face, upper breast and back of neck chestnut, the feathers edged whitish on the upper breast; back, scapulars and wing coverts, also the tertiaries, dark olive with narrow, close, black striæ, the outermost tertials white, otherwise as in the male. Bill reddish brown; irides deep brown; legs and feet greenish.

Length.—9 to 10 inches; wing 4·9 to 5·2; tail 1·5 to 1·8; bill at front 1·8 to 2 inches.

Hab.—Sind, Kutch, Kattiawar, Rajputana, Central India, Punjab, N.-W. Provinces, British Burmah and Ceylon. Breeds in Sind during May and June, and in nearly all localities where it occurs.

Gen. **Limicola**.—*Koch*.

Characters same as *Rhynchæa;* bill broad and depressed.

1288. Limicola platyrhyncha (*Temm.*), *Salvad., Ucc. Born.* p. 322; *Dresser, B. Eur.* viii. p. 3, pl.; *Hume and Dav., Str. F.* vi. p. 461; *Hume, Str. F.* viii. p. 113; *Legge, B. Ceylon*, p. 896; *Oates, Str. F.* x. p. 240; *id., B. Br. Burm.* ii. p. 387; *Murray, Vert. Zool., Sind*, p. 252. Tringa platyrhyncha, *Temm., Man d'Orn.* p. 398; *Jerd., B. Ind.* ii. p. 692, No. 886; *Blyth, B. Burm.* p. 156.—The Broad-billed Sandpiper.

In winter, the crown of the head, back, scapulars and wing coverts are ashy brown, tinged with rufous; neck and cheeks white, spotted with brown; primaries and tail brown, the latter edged with pale reddish ashy; lower parts white; the flanks, breast and under tail coverts tinged with rufous. In summer dress the Broad-billed Sandpiper has the crown of the head brownish black, varied with greyish; the neck on the sides and in front greyish white, with black spots, and tinged with buffy; chin white, with a few dark spots; lower back black, with fulvous white or rufous margins to the feathers.

Length.—6·5 to 6·75 inches; wing 3·9 to 4·32; bill at front 1·27 to 1·37; tarsi 0·94; irides deep brown; legs and feet dusky black.

Hab.—The Indian Coast generally. Occurs commonly at Kurrachee and along the Mekran Coast, also at Kutch and in Bengal. Recorded from Arracan, also from Pegu, and Amherst in Tenasserim. Frequents sea-coasts and tidal rivers.

Sub-Family, TRINGINÆ,—Stints, &c.

Bill rather long, flat and wide, keeled near the tip, somewhat flexible; nostrils in a groove, extending two-thirds the length of the bill; wings long; toes divided or narrowly webbed.

Gen. **Eurynorhynchus**.—*Nilsson.*

Bill much depressed, broad, flat, ridged in the centre at the base, and ending in a flat somewhat obcordate, expanded tip, which terminates in a deflected point; nostrils basal; toes cleft, with a small web between the outer and middle toes. (*Jerd.*)

1289. Eurynorhynchus pygmæus (*Linn.*), *Harting, Ibis,* 1869, p. 427, pl. xii.; *Blyth, B. Burm.* p. 156; *Dav. et Oust. Ois. Chine,* p. 474; *Hume and Dav., Str. F.* vi. p. 463; *Hume, Str. F.* viii. p. 113; *Oates, B. Br. Burm.* ii. p. 395. Platalea pygmæa, *Linn., Syst. Nat.* i. p. 231. Eurynorhynchus griseus (*Nilss.*), *Temm., Man d'Orn.* ii. p. 594; *Jerd., B. Ind.* iii. p. 693, No. 887.—The Spoon-billed Stint.

In summer the head and upper parts are ferruginous, the feathers with dark brown centres; breast ferruginous; throat and breast margined with white; under surface of the body from below the breast becoming whiter towards the tail; primaries dark brown; legs and feet black; bill black; irides deep brown.

Length.—6·5 to 6·7 inches; wing 4·1; tail 1·7; tarsus 0·8; bill from gape 1.

In winter plumage the forehead, crown and hind neck, white; back and scapulars are hair brown, each feather with a darker shaft streak; lores ashy white; cheeks, ear coverts and sides of the neck whitish, streaked with brown; rump and upper tail coverts dusky brown, the feathers edged paler; tail brown, the inner webs of all the feathers except the central pair white; shafts of the lateral feathers whitish; lesser wing coverts uniform hair brown; median and greater coverts dark brown, broadly edged with white; quills dark brown, with white shafts; under surface of the body, including the axiliaries and under wing coverts, white; the sides of the breast streaked with brown.

Length.—6·5 inches; wing 3·7; tail 1·5.

Hab.—Arracan, Pegu, Tenasserim, and the mouth of the Ganges, usually found in the company of other Stints.

Gen. **Tringa**.—*Linn.*

Toes edged by membrane; wings with the first quill longest; bill straight or slightly bent and obtuse at the extremity.

1290. Tringa minuta, *Leisl. Nacht., zu Bechst. Naturg. Deutsch* i. p. 74; *Jerd., B. Ind.* ii. p. 690, No. 884; *Dresser, B. Eur.* viii. p. 29, pl.; *Hume, Str. F.* i. p. 242; *Legge, Str. F.* i. p. 491; *id., B. Ceylon,* p. 884; *Murray, Vert. Zool., Sind,* p. 257; *Oates, B. Br. Burm.* ii. p. 389.—The Little Stint.

In winter the upper parts are ashy or pale earthy brown, the feathers of the back, scapulars, tertials and lesser and median wing coverts mesially dusky or dark brown, and in some very narrowly edged with whitish. There is a

dark spot in front of the eye, and a pale white supercilium; the chin, throat, centre of the breast and rest of the under surface, including the vent, axillaries and under tail coverts, are white; sides of the breast ashy brown; primaries mostly white shafted, dusky brown, slightly paler on their inner webs; secondaries white, basally and also narrowly tipped with white; greater wing coverts tipped with white, forming a conspicuous wing band; rump, upper tail coverts and two central tail feathers dusky or dark brown; lateral tail feathers pale ashy.

Length.—6·6 inches; expanse 13·1; tail 2·3; tarsus 0·9; wing 3·8; bill at front 0·6; irides deep brown; legs black.

Hab.—Nearly throughout Europe and India, also Java, Formosa, Australia and China. In Sind, along the coast; also in the Kurrachee harbour; inland on the large pieces of water and on the Munchur Lake, this Little Stint is extremely common, also on the Mekran Coast, the Punjab, N.-W. Provinces, Oudh, Bengal, Burmah, and Ceylon. Occurs in Persia, Beloochistan (Quetta), Afghanistan, and in fact has a very wide distribution. In the Concan, Deccan and Southern India generally it is equally abundant.

1291. Tringa subminuta, *Midd., Sib. Reise. Vog.* p. 222. *Taf.*, xix. p. 6; *Legge, B. Ceylon*, p. 889; *Oates, B. Br. Burm.* ii. p. 391. Tringa damacensis (*Horsf.*), *apud Hume, Str. F.* i. p. 243. Tringa salina (*Pall.*), *apud Legge, Str. F.* i. p. 491; *Dresser, B. Eur.* viii. p. 33; *Blyth and Wald., B. Burm.*, p. 156. Tringa ruficollis (*Pall.*), *apud Wald. Trans. Zool. Soc.* ix. p. 234; *Hume, Str. F.* viii. p. 113; *Oates, Str. F.* x. p. 240.—The Long-toed Stint.

Summer Plumage.—Forehead, top of head and nape dark brown, each feather with an edging of rich rufous on the terminal half; lores, cheek and ear coverts the same; an albescent patch in front of the eye above the lores; upper part of the throat pure white; lower throat streaked with small marks of pale rufous brown; sides of throat, neck, upper breast and sides of body pale rufous brown, each feather with a central dark brown streak; lower breast, abdomen and vent pure white; under tail coverts white, each feather with a long, narrow central brown streak; thighs rufescent; upper neck mixed brown and pale rufous; whole upper plumage, including the scapulars and tertiaries, rich blackish brown, each feather broadly tipped with bright rufous; rump and upper tail coverts glossy black, few of the feathers of the latter obsoletely tipped white; centre tail feathers black, edged with rufous, the others pale brown, tipped and margined internally with white; axillaries white, a little brown at their bases; under wing coverts pale brown, edged with white; shaft of first quill sordid whity brown, those of the others dark hair brown; primaries and secondaries dark brown, all tipped with white except the first six primaries; all the primaries except the first three with a

more or less tipped and margined with dull white. In winter it resembles *T. minuta* in general appearance, but the upper plumage is darker; the forehead and face where white in *T. minuta* are streaked with brown in *T. subminuta*; the greater wing coverts and secondaries are very narrowly tipped with white, and the sides of the neck and the chest are thickly marked with brown streaks. Iris brown; bill olive-brown; legs and toes pale brown; claws nearly black.

Length.—6·2 inches; tail 1·4; wing 3·7; tarsus 0·8; middle toe and claw nearly an inch; bill from gape 7·5. The female is of the same size. This Stint may be recognized by the great length of its toes, the middle one, including its claw, measuring frequently little short of an inch in length. It resembles *T. minuta* in having the outer tail feathers brown, but differs in having the shafts of all the primaries brown, except that of the first quill, which is dull white. From *T. Temmincki* it may be separated by the colour of its outer tail feathers as well as by its long toes. (*Oates.*)

Hab.—Arracan, Pegu and Tenasserim. Found also seasonally in N.-E. Siberia through China and Mongolia to Burmah, extending on the west to Bengal, the Eastern Coast of India and Ceylon, and ranging southwards to the Malay Peninsula, Java, Borneo, Celebes, and the Phillipines.

1292. Tringa Temmincki, *Leisler, Nacht. zu Bechst. Naturg. Deutsch.* i. p. 63; *Jerd., B. Ind.* iii. p. 691; *Dresser, B. Eur.* viii. p. 45, pl.; *Hume, Str. F.* i. p. 244; iii. p. 183; *Blyth, B. Burm.* p. 156; *David et Oust. Ois. Chine*, p. 43; *Hume and Dav., Str. F.* vi. p. 461; *Hume, Str. F.* viii. p. 113; *Legge, B. Ceylon*, p. 892; *Murray, Vert. Zool., Sind*, p. 251; *Oates, B. Br. Burm.* ii. p. 392.—Temminck's, or the White-tailed Stint.

Upper parts as in *minuta*; chin, throat and supercilia white; a dark spot in front of the eye; breast and lower neck ashy brown; belly, vent and under tail coverts white; four central tail feathers dusky brown, the rest white; legs pale horny green, or greenish olive.

Length.—6 to 6·25; inches; wing 3·8; bill at front 0·7; irides deep brown.

Hab.—As the last and associated with it everywhere.

1293. Tringa crassirostris, *Temm. et Schleg., Faun. Jap., Aves*, p. 107, pl. lxiv.; *Hume, Str. F.* i. p. 240; *Salvad., Ucc. Born.* p. 325; *Wald., Ibis*, 1874, p. 147; *Armstrong, Str. F.* iv. p. 341; *David et Oust. Ois. Chine*, p. 468; *Hume, Str. F.* viii. p. 113; *Murray, Vert. Zool. Sind*, p. 249; *Oates, Str. F.* x. p. 240; *id., B. Br. Burm.* ii. p. 393.—The Thick-billed Stint.

The following is Mr. Hume's description of the species.

"In the winter plumage the upper surface reminds one not a little of that of *Totanus stagnatilis*. The whole lower parts are white, but the base of the neck in front and the sides are marked with numerous small brown striæ, and

the upper breast, besides having more or less of these striations, is mottled with larger pale brown spots, here and there interspersed with conspicuous heart-shaped blackish brown spots, which are the first traces of the coming summer plumage. Lores, top, back and sides of the head and neck very pale greyish brown, all the feathers narrowly streaked along the shaft with dark brown; the upper back and whole mantle is a mixture of pale brown and ashy, most of the feathers with blackish shafts, more or less darkly centred, and all conspicuously, though narrowly, margined and tipped with white. Lower back and rump brown, the feathers narrowly and regularly margined with white; upper tail coverts similar, but the white margins much broader, and the brown more or less obsolete on many of them. Tail feathers greyish brown, greyer and somewhat darker on the central ones, and paler and browner on the external ones; all are excessively, narrowly, in fact almost obsoletely, bordered with white. The primaries and their greater coverts are hair brown, most of the latter tipped white; the secondaries and their greater coverts are a pale, somewhat greyish brown, all of them narrowly, but the coverts less narrowly of the two, margined with white. The wing lining, except just at the margin of the wing, which is mottled with brown, pure white; the axillaries white with traces of irregular, wavy pale brown bars. There are a few elongated triangular pale brown dashes on the flanks, and in some specimens one or two larger blackish brown spots pertaining to the summer plumage."

According to Schlegel, the summer plumage is as follows:—

"Feathers of the head and neck each with a large dark brown longitudinal streak or spot on an albescent ground, which is tinged with brownish rufous on the nape. Feathers of the breast and nape brownish black, each with a whitish transverse band, often tinged with brownish red towards the middle. The rest of the lower parts and the rump pure white, spotted, except towards the middle of the abdomen, with broader or narrower dark spots. Back and wings brownish black, lighter on the wing coverts; all the feathers spotted and bordered with a bright brownish rufous, gradually disappearing towards the edge of the wing. Lower wing coverts white, becoming black at the base.

"Bill black, sometimes paler at the base of lower mandible; legs and feet dusky, greenish dusky, yellowish plumbeous or pale plumbeous, according, I suppose, to age or seasonal progress.

"*Length.*—11·35 to 12 inches; expanse 23·5 to 24; tail from vent 2·7 to 2·8; wing 7·1 to 7·3; bill at front 1·6 to 1·85; tarsus 1·4 to 1·55; wings when closed reach from 0·3 to 0·4 beyond end of tail."

Hab.—Kurrachee (Sind) and the Beloochistan Coast. Common during winter in the Kurrachee harbour and along the Mekran Coast. In Arracan and the delta of the Irrawaddy, as well at the Andamans. Recorded also from Australia and Java.

1294. Tringa subarquata, *Gould, Nov. Comm. Petrop.* xix. p. 471, t. xviii.; *Jerd., B. Ind.* ii. p. 689; *Blyth, B. Burm.*, p. 156; *Dresser, B. Eur.* viii. p. 59; *Hume and Dav., Str. F.* vi. p. 460; *Legge, B. Ceylon*, p. 879; *Oates, Str. F.* x. p. 240. Pelidna subarquata, *Oates, B. Br. Burm.* ii. p. 394; *Salvad., Ucc. Born.* p. 322.—The CURLEW STINT.

Winter Plumage.—Bill curved downwards. Head, on the crown and sides, back of the neck and nape light greyish brown, streaked with darker brown and dusky black, with an olivaceous gloss; face and supercilia white, and a dark streak from the gape to the eye; sides of the neck and in front greyish, streaked with brown; breast the same; abdomen and upper and lower tail coverts white; back, scapulars and wing coverts ashy brown, the shafts darker; tail ashy grey, edged with white; primaries dusky brown, also the secondaries, which are tipped with white; axillaries white; lesser coverts grey, the shafts darker. Bill black; irides brown; legs dusky grey.

Length.—8 to 10 inches; wing 5; tail 1·75; bill at front 1·6. In summer plumage the forehead is whitish, mixed with pale reddish brown; supercilia pale yellowish white; chin white; head, neck and nape ferruginous with dark margins; throat, breast and upper abdomen chestnut; in a specimen obtained on 20th May the feathers are all narrowly edged with white; back, scapulars and tertiaries black; also the lesser coverts, the feathers edged with chestnut.

Hab.—India generally, and Ceylon, also Beloochistan, Persia and Afghanistan. Recorded from Cashmere and Egypt, also from Australia and Java. Common also in the low tidal portions of the plains between the Pegu and Sittang rivers and in the Irrawady delta. Recorded also from Arracan and the Tenasserim Coast. Found commonly along the Sind and Mekran Coasts and on the large dhunds, not far inland. It occurs in Kutch and Kattiawar and on the Bombay Coast in some numbers, also in the Kurrachee harbour.

1295. Tringa cinclus, *Linn., Syst Nat.* p. 246; *Bodd., Tab. Pl. Enl.* 852; *Gould, B. Eur.* pl. 329; *Jerd., B. Ind.* iii. 690; *Str. F.* i. p. 242; *Dresser, B. Eur.* viii. p. 86, pl.; *Murray, Hdbk., Zool., &c., Sind*, p. 220; *id., Vert. Zool. Sind*, p. 247. Tringa alpina, *L.*—The DUNLIN.

Crown of the head, lores and cheeks ashy brown; a pale white supercilium from the base of the bill over each eye; back and scapulars pale ashy brown, the feathers dark shafted and edged paler; lesser and median coverts brown, edged paler, tipped with whitish; throat, breast, belly, vent and under tail coverts pure white, the breast with a few brown streaks; tail with the two central feathers dusky or deep brown, the rest ashy and edged whitish.

Length.—6·5 to 7·5 inches; wing 4·5; tail 1·87; bill at front 1·25, black; legs greenish dusky; irides brown.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Guzerat, Kutch and Kattiawar Coast. A winter visitant, arriving about the middle of September.

In the Kurrachee harbour the Dunlin is simply numerous, also on the Mekran Coast, where they may be seen running nimbly near the edges of the sea or skimming along near the surface in fairly large flocks.

Gen. **Machetes**—*Cuv.*

Bill straight; first and second quills of wing longest; outer toe united as far as the first joint; hind toe short and elevated.

1296. Machetes pugnax (*Linn.*), *Dresser, B. Eur.* viii. p. 87, pl.; *Hume and Dav., Str. F.* vi. p 460; *Hume, Str. F.* viii. p. 112; *Scully, Str. F.* viii. p. 357; *Legge, B. Ceylon* p. 873; *Oates, Str. F.* x. p. 240. Tringa pugnax, *Linn., Syst. Nat.* 1, p. 247. Philomachus pugnax, *Jerd., B. Ind.* ii. p. 687; *Murray, Vert. Zool., Sind*, p. 248.—The Ruff.

In winter the plumage of these birds is very variable, the upper parts are from pale earthy to rich brown, the feathers with black or dark brown central spots and fulvous edges; the head, nape and neck behind paler; chin and throat white; neck in front and breast pale earthy or grey brown, the feathers margined at the tip with white; abdomen, vent and under tail coverts white; primaries dark brown; secondaries paler, edged and margined at the tip with white; greater coverts tipped white, forming a wing band; the lesser and median ones black, edged with rufous or reddish brown, also the greater coverts in some stages. The plumage is so variable, that out of 50 skins or more, no two birds would be found alike. During summer or in their breeding plumage the males acquire a ruff, which is very variously coloured and stands erect behind the head, the face is covered with reddish tubercles and the upper parts and breast marked with transverse bars. Bill dusky; irides brown; legs fleshy yellow.

Length.—12 to 12·5, inches; wing 7·25; tail 2·5; bill at front 1·3; tarsus 2.

Hab.—Throughout India and Ceylon, and in great numbers during winter. Occurs also in Beloochistan, Persia and Afghanistan. Breeds in Europe. During spring on their return to the breeding grounds, generally the fens, they become very pugnacious, the females being "*causa terrima belli.*" Being polygamous, the Ruffs, on hearing the cry of a female or seeing one, immediately rouses itself, and begins a fight with others; their combats are described as being both desperate and long; at the end of the fight the female, it is said, becomes the mate or prize of the victor. Buffon says—"They not only contend with each other in a single rencounter, but they advance to combat in marshalled ranks." "Their actions in fighting," according to Selby, "are very similar to those of a game cock, with the head lowered, and the beak held in a horizontal position; the ruff and every feather distended, the former sweeping the ground as a shield;" and he adds "that in such feuds their contests are often attended by fatal consequences."

Gen. **Calidris.**—*Cuv.*

Hind toe wanting, otherwise as in *Tringa*.

1297. Calidris arenaria (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 694; *Hume*, *Str. F.* i. p. 244; *Salvad.*, *Ucc. Born.* p. 322; *Armstrong*, *Str. F.* iv. p. 343; *Hume*, *Str. F.* iv. p. 465; *Dresser*, *B. Eur.* viii. p. 101, pl.; *Hume*, *Str. F.* viii. p. 113; *Legge*, *B. Ceylon*, p. 1220; *Oates*, *Str. F.* x. p. 240; *Murray*, *Vert. Zool.*, *Sind*, p. 252; *Oates*, *B. Br. Burm.* ii. p. 398.—The SANDERLING.

In winter the forehead, lores, cheeks, chin, throat, breast, neck in front, belly, thighs, vent and under tail coverts white; crown of the head, sides of the neck and breast, back and scapulars cinereous or ashy brown, the feathers with dark shafts; shoulders and edge of the wing dark brown; median and greater coverts like the back, dark shafted and tipped white; primaries dark brown, all white shafted; their inner webs ashy, and the four middle ones white on their outer webs, forming in the closed wing a wedge-shaped spot; secondaries brown or dusky, tipped with white; rump and upper tail coverts brown, edged with white; tail brownish ash, edged with white, the two central feathers darker than the rest; bill black, 0·93 to 1 inch in length.

Length.—7·5; wing 4·75; tail 2; tarsus 0·92; irides deep brown; legs black.

Hab.—Kurrachee (Sind), Beloochistan Coast, Persia, Ceylon, Kutch, Guzerat, Concan and South India, also the Laccadives, the West Coast, and the Irrawaddy delta. In the Kurrachee harbour extremely abundant, associated with the Stints on the sea-shore.

Sub-Family PHALAROPINÆ.

Bill straight, curved at the tip; tarsi short; toes lobed on the sides, united at the base; hind toe edged with narrow membrane.

Gen. **Phalaropus.**—*Briss.*

Bill long; 1st and 2nd quills of wing longest.

1298. Phalaropus hyperboreus (*Linn.*), *Edw. B.* pl. 143; *Bodd.*, *Tab. P. E.* 766; *Gould*, *B. Eur.* pl. 336; *Jerd.*, *B. Ind.* iii. p. 696; *Str. F.* i. 246; ii. 338; v. 290; vii. 487; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 221; *id.*, *Vert. Zool.*, *Sind*, p. 253.—The LESSER COOT-FOOTED STINT or the RED-NECKED PHALAROPE.

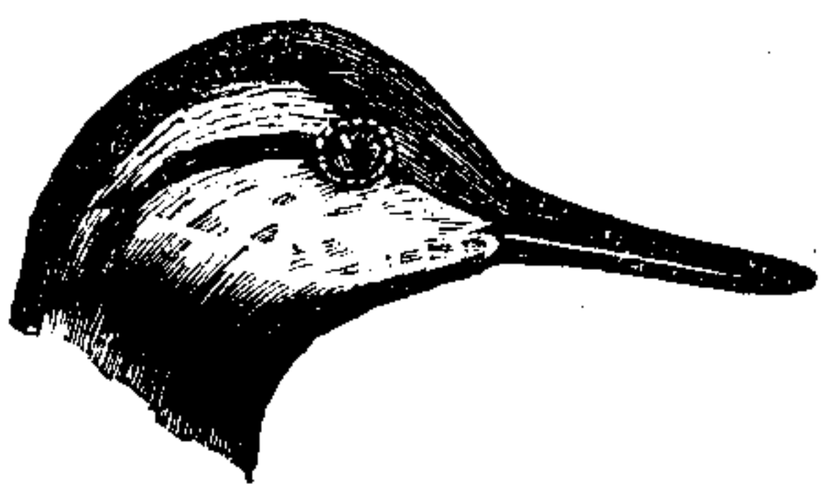
Crown, back of neck and nape dark lead or slaty; in winter the forehead is white, tinged with grey; the streak over the eye, and the crown and nape are blackish grey; the neck on the sides is fine yellowish red, which in winter wears away into white, with sometimes a tinge of purple; in front dark grey

with a white edging; chin white; throat fine yellowish red, and in winter white, with a slight tinge of pink; breast white, with some streaks below on the sides of a pale ash colour, and in winter with a faint blush of purple red; back dark or blackish lead colour, the feathers with a margin of ash grey and brownish yellow; greater wing coverts dark lead colour, tipped with white, forming a distinct bar across the wing in winter; lesser wing coverts dark lead colour; primaries very dark brown, black in winter; secondaries margined with reddish yellow on the outer web, which in the winter plumage is white; tail brownish grey margined with white, the two middle feathers darkest, nearly black; under tail coverts white; legs and toes dusky greenish grey; claws black; lores dusky greenish.

Length.—7·25; wing 4·25; expanse 14·0; tail 2·19; bill at front 0·81.

Hab.—Kurrachee, Mekran Coast and Persian Gulf, also Afghanistan. On the Continent of Europe it occurs in France, Holland, Germany, Italy and Sweden.

1299. Phalaropus fulicarius, *Linn.*, *Syst. Nat.* I. p. 737; *Jerd.*, *B. Ind.* iii. p. 695; *Str. F.* i. p. 245; vii. p. 487.—The Coot-footed Stint.



Head of Phalaropus fulicarius.

Winter Plumage.—Forehead and crown white; occiput, ear coverts, and a streak from the nape of the neck, dusky grey; back, scapulars and rump bluish ashy, the shafts of the feathers dusky; wing coverts tipped with white, forming two bars across the wing; tail dusky grey, the feathers edged with cinereous; throat, sides of the neck, middle of breast and all the under parts white; the sides of the breast ashy; a black patch under the eye. Bill yellowish red at base, dusky brown at tip; irides reddish yellow; legs greenish grey.

Length.—8·5 inches; wing 5; tail 2·5; bill at front 0·8; tarsus 0·8.

In Summer the crown of the head and throat are black, the sides of the head white, a black streak behind the eye, neck, breast and belly, also the vent, ferruginous, with vinous reflections; back dusky, with reddish yellow webs; lesser wing coverts dark ash, slightly edged with white; greater coverts the

same, broadly tipped with white, forming an oblique double bar across the wing; tertiaries black, with pale edges; primaries and tip of tail black; legs and toes dingy yellow.

Hab.—Europe and Asia. In India only found as yet in Bengal along the coast.

Sub-Family, TOTANINÆ.—Sand-Pipers.

Bill grooved as far as, or beyond, the middle, moderately long, the tip hard and pointed; nostrils narrow; hind toe long and slender, barely reaching the the ground.

Gen. **Actitis**.—*Ill.*

Groove of the bill extending quite to the tip; 1st quill of wing longest.

1300. Actitis hypoleucos (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 699, No. 893; *Blyth*, *B. Burm.* p. 155; *Murray*, *Vert. Zool.*, *Sind*, p. 253. Tringa hypoleucos, *Linn.*, *Syst. Nat.* i. p. 250. Tringoides hypoleucos, *Hume*, *Nests and Eggs Ind. B.* p. 588; *id.*, *Str. F.* ii. p. 299; iii. p. 183; *Salvad.*, *Ucc. Born.* p. 326; *Hume*, *Str. F.* viii. p. 113; *Legge*, *B. Ceylon*, p. 867; *Oates*, *Str. F.* x. p. 241. Totanus hypoleucos, *Dresser*, *B. Eur.* viii. p. 127; *Bingham*, *Str. F.* ix. p. 197.—The Common Sand-Piper.

Forehead, crown, nape and back of the head ashy brown, streaked with dark narrow lines; supercilium white, also the orbital ring, chin and throat; sides of the face pale ashy with brown streaks; middle of the breast white, the sides mottled or streaked with brown, or entirely brown; back, scapulars, tertiaries and lesser wing coverts ashy brown, glossed with green, and with fine transverse dark lines; greater wing coverts ashy brown, tipped with white, which with the white bases of the secondaries form a conspicuous wing band; primaries and their coverts dark brown, the latter tipped with white, and all, except the first primary, and sometimes the second also, with a large white spot on their inner webs; lower back, rump and upper tail coverts ashy brown, with dark transverse bars; four central feathers of the tail like the back, the rest tipped with white and with dark spots along their edges; beneath white. Bill dusky; irides brown; legs pale green.

Length.—7 to 8 inches; wing 4·5; tail 2·4; tarsus 0·97 to 1; bill 0·97.

Hab.—Less common than the two preceding; affects the sea coast as well as lakes, &c., inland. Occurs throughout India, Burmah, Malacca, Ceylon, &c.; also Beloochistan, Persia and Afghanistan.

1301. Actitis ochropus (*Linn.*), *Jerd.*, *B. Ind*, iii. p. 698, No. 892; *Blyth*, *B. Burm.* p. 155; *Murray*, *Vert. Zool.*, *Sind*, p. 254. Tringa ocrophus, *Linn.*, *Syst. Nat.* i. p. 250. Totanus ochropus, *Hume*, *Str. F.* iii. p. 183; *Dresser*, *B. Eur.* viii. p. 135, pl.; *David et Oust. Ois. Chine*, p. 465; *Hume and Dav.*, *Str. F.* vi. p. 462; *Legge*, *B. Ceylon* p. 862. Helodromas

ochropus, *List.*, *Br. B. Brit. Orn. Union.*; *Oates, B. Br. Burm.* ii. p. 400.—The Green Sand-Piper.

In winter plumage the forehead, crown, nape and back of the neck are deep or dusky brown, the feathers streaked with white; a dark streak from the base of the bill to the eye and a white one above it; chin and throat white; back and scapulars olive brown, or brown glossed with greenish, each feather edged with small roundish spots, the spots on the scapulars distinctly margined behind with deep brown; primaries and their coverts and secondaries deep brown, none of them white-shafted; wing coverts dusky brown; *axillaries dusky or dark brown, with narrow oblique white bars*; abdomen, vent and upper and under tail coverts white; tail white, broadly barred with deep brown, the middle feathers having four bars, and those next to them decreasing in number, the outer feathers on each side being pure white with sometimes a dusky subterminal spot on the outer web; legs and feet greenish grey; bill black; irides brown.

Length.—9·5 to 10 inches; wing 5·5 to 6; tail 3; bill 1·37; tarsus nearly 1·5.

Hab.—Throughout India, Ceylon, Beloochistan, Persia and Afghanistan, frequenting the banks of rivers, edges of lakes and large sheets of water; a winter visitant, seldom seen along the sea coast. Occurs throughout Europe, Asia and Africa, extending to Burmah and the Malay Peninsula.

Gen. **Totanus**.—*Bech.*

Bill slightly curved at tip, groove half the length of the bill; tarsi with narrow scales in front, otherwise as in *Actitis*.

1302. Totanus glareola (*Gm.*), *Salvad.*, *Ucc. Born.* p. 327; *Hume, Str. F.* iii. p. 183; *Dresser, B. Eur.* viii. p. 143, pl.; *Legge, B. Ceylon* p. 857. Tringa glareola, *Gm.*, *Syst. Nat.* i. p. 677. Actitis glareola, *Jerd.*, *B. Ind.* iii. p. 697; *Blyth, B. Burm.* p. 155. Rhyacophila glareola, *Hume and Dav.*, *Str. F.* vi. p. 462; *Hume, Str. F.* vii. p. 488; viii. p. 113; *Oates, Str. F.* x. p. 240.—The Wood Sand-Piper.

Winter Plumage.—Crown of the head, forehead, nape and back of the neck dusky brown, the feathers with narrow white or greyish edgings; a dark streak from the base of the bill to the eye, and a white one above it; chin and throat rather sullied; foreneck and breast the same, but suffused with ashy brown, darker on the sides, where the feathers are indistinctly dark shafted; back, scapulars and tertials dusky, the feathers edged with white or greyish white spots; axillaries white, with transverse oblique dusky brown spots; primaries, secondaries and their coverts dusky brown, the shaft of the first quill and the tips of the later inner ones white; the greater wing coverts margined and tipped with white; rump, upper and lower tail coverts and abdomen white; tail with the central feathers longest and barred with black and white alternately,

the barrings oblique, the rest less broadly barred and decreasing on the outer ones to dusky markings on the outer webs only; legs pale olive green; irides deep brown.

Length.—8·5 to 9 inches; wing 5; tail 2; bill at front 1·2; tarsus 1·5.

Hab.—Common nearly throughout India and Ceylon, also in Beloochistan, Persian Gulf, and Afghanistan during winter.

1303. Totanus canescens (*Gmel.*), *Dresser, B. Eur.* viii. p. 173, pl.; *Hume, Str. F.* i. p. 247; iii. p. 183; *Armstrong, Str. F.* iv. p. 344; *Oates, B. Br. Burm.* ii. p. 402. Scolopax totanus, *Linn., Syst. Nat.* i. p. 245. Scolopax canescens, *Gmel., Syst. Nat.* i. p. 668. Totanus glottis (*Linn.*), *Jerd., B. Ind.* iii. p. 700; *Blyth, B. Burm.* p. 155; *Legge, B. Ceylon,* p. 840; *Murray, Vert. Zool. Sind,* p. 255.—The GREEN SHANKS.

In winter the forehead, except a few brown streaks in the middle, sides of the face, chin, throat, neck in front, and entire lower parts, including the under tail coverts, are white, also the lower back, rump and upper tail coverts; a dark streak from the base of the bill to the eye; crown of the head, sides of the neck and nape dusky, the feathers streaked whitish or greyish white; sides of the breast white, mottled with ashy brown; upper back and scapulars brown, the feathers edged whitish; scapulars distinctly dark shafted, also the tertiaries; primaries dark brown, the shaft of the first quill white, and the edges and tips of the inner ones also white; secondaries ashy brown, tipped white; tail white with narrow transverse dark bars, the outer ones nearly pure white; bill slightly curved upwards, dusky greenish, 2·2 in length; irides brown.

Length.—14 to 14·5 inches; wing 2·2; tail 3·75; tarsus 2·75.

Hab.—India generally during winter, also Burmah and Ceylon, along the sea coast, lakes, rivers, &c. Widely distributed. Recorded from N.-E. Europe, Red Sea, Africa and Australia. Like all the *Totaninæ* it is excellent eating.

1304. Totanus stagnatilis, *Bechst., Orn. Taschenb.* ii. p. 292; *Jerd., B. Ind.* iii. p. 701; *Dresser, B. Eur.* viii. p. 151, pl.; *Blyth, B. Burm.* p. 155; *Hume, Str. F.* viii. p. 113; *Murray, Vert. Zool. Sind,* p. 255; *Legge, B. Ceylon* p. 844; *Oates, B. Br. Burm.* ii. p. 403.—The LITTLE GREEN SHANK.

In winter the plumage of the upper parts are the same as *Totanus glottis*; shoulder of the wing black; entire under parts white; sides of the breast not so much spotted or streaked with dark brown; bill not curved upwards as in *glottis*; tail banded white and dusky.

Length.—10·5 inches; wing 5·25; tail 2; bill 1·62; tarsus 2·25; legs pale green; irides brown.

Hab.—The same as *glottis* and usually associated with it.

1305. Totanus calidris (*Linn.*), *Jerdon, B. Ind.* ii. p. 702; *Hume, Str. F.* i. p. 248; ii. p. 299; *Blyth, B. Burm.* p. 155; *Dresser, B. Eur.* viii. p. 157, pl.; *Hume, Str. F.* viii. p. 113; *Legge, B. Ceylon* p. 852; *Murray, Vert. Zool. Sind*, p. 256; *Oates, B. Br. Burm.* ii. p. 404. Scolopax calidris, *Linn., Syst. Nat.* i. p. 245.—The Red Shank.

Winter Plumage.—Forehead, crown, nape, back of the neck, upper back and scapulars cinereous or glossy olive brown, the feathers on the back and scapulars dark shafted; supercilium and orbital ring white; chin and throat white; sides of the face greyish white, with narrow brown streaks; neck in front and breast greyish white, with dusky or greyish brown linear markings; primaries dusky, their inner webs white; the first quill white shafted, and some of the inner ones white tipped; secondaries white; tertials like the back; wing coverts olive brown, the greater ones tipped with white; axillaries, under wing coverts, abdomen, vent and under tail coverts white; lower back white; upper tail coverts and tail white, barred with dusky.

Length.—11·5 inches; tail 2·7; wing 6·45; bill at front 1·7 to 1·9, reddish at the base, its terminal half dark brown; tarsus 2; irides brown; legs red.

Hab.—India generally and Ceylon during winter. Sind, Persia, Beloochistan and Afghanistan, Southern and Western India, N.-W. Provinces, Oudh, and Burmah generally. Breeds in the North of Europe.

1306. Totanus fuscus (*Linn.*), *Jerd., B. Ind.* iii. p. 702, No. 896; *Hume, Str. F.* i. p. 248; *Dresser, B. Eur.* viii. p. 165, pl.; *Cockburn, Str. F.* iv. p. 509; *Hume, Str. F.* viii. p. 113; *Legge, B. Ceylon* p. 848; *Murray, Vert. Zool. Sind*, pp. 255, 256.—The Spotted Red Shank.

In winter the forehead, crown, nape, back of neck and upper back ashy grey, finely streaked with dusky; supercilium white, and a dusky streak from the base of the bill to the eye; chin and throat white, sides of face white with some fine dusky streaks; breast and under parts mottled and barred with dingy ash brown and dull fulvous, or greyish white; upper back, scapulars, shoulder of wing and lesser coverts a glossy olive brown, darker on the upper back and tertiaries, all the feathers spotted on the edges with white; the wing coverts also tipped with white; lower back white; rump barred with undulating lines of ashy brown and white; tail also barred the same; primaries dark brown, the inner ones pale brown, tipped and mottled with white; secondaries barred white and pale brown; legs deep orange red; bill blackish, orange at the base beneath.

Length.—13 inches; wing 6·75; tail 2·5; tarsus 2·8; bill 2·4.

Hab.—Throughout India during winter, also the Province of Burmah and Ceylon; usually solitary or in very small parties. It is a sea shore bird, but is also found on the edges of rivers, lakes, mud banks, &c. It is said to swim well, and also to dive when in danger.

1307. Totanus Haughtoni, *Str. F.* iv. p. 344; *Hume and Dav., Str. F.* vi. p. 463; *Harting, Ibis*, 1883, p. 133, pl.; *Oates, B. Br. Burm.* ii. p. 466. Pseudototanus Haughtoni, *Hume, Str. F.* vii. p. 113; *Hume and Marsh., Game Birds* iii. p. 404 pl.; *Oates, Str. F.* x. p. 241.—ARMSTRONG'S YELLOW SHANK.

In winter plumage, resembles generally *Totanus canescens*, but has a much broader and more massive bill, a much stronger tarsus (male 1·85; female 1·65), and the webs between the three anterior toes very much more developed. It differs from *T. canescens* in its smaller size, more robust bill, with the lateral groove slightly more prolonged in proportion to the length of the bill, and in having a palmation on both sides of the middle toe instead of on one side only; the tail does not extend beyond the end of the closed primaries. (*Hume and Harting.*)

Hab.—Sea coast near Elephant Point and at Amherst in Tenasserim. One was seen in the Calcutta market.

1308. Totanus dubius, *Murray, Vert. Zool. Sind*, p. 256.—The ALLIED YELLOW SHANK.

Female.—Frontal zone greyish white, the feathers with mesial narrow brown streaks; crown of the head cinereous, the feathers edged with greyish white; an indistinct dusky spot between the base of the bill and the eye, and a white supercilium; chin and throat white; neck in front and on the sides greyish white, the feathers with narrow mesial dusky streaks; back of the neck ashy grey, also with mesial narrow dusky streaks; breast greyish white with dusky spots, which become linear lower down and on the sides and flanks, forming interrupted lines; abdomen and under tail coverts white; upper back, scapulars and tertials ashy brown, the feathers dark shafted; the tertials reach beyond the fourth quill, and are edged and tipped with fulvous white; *primaries dark brown, nearly black, paler on their inner webs, and all white shafted, except at their tips;* secondaries ashy grey, white-shafted and margined and tipped with white; greater, median and lesser coverts ashy grey, the feathers dark-shafted and edged and tipped with white, more broadly on the median and lesser wing coverts; first two rows of feathers on the shoulder earthy brown, edged rufescent; axillaries and thigh coverts white; lower back and rump dusky brown, the feathers edged and tipped with white; upper tail coverts the same, but the brown very much paler; tail pale earthy brown, the feathers with distinct pale margins and tips, the central feathers very slightly darker; tarsi short, 1·37 inches; toes slender, fringed on the sides and webbed

about $\frac{1}{8}$ inch; mid-toe and claw 1·12; tail from vent 2·62; bill at front 1·62; upper mandible slightly the longer and bent over at the tip; wing 7·12, 1st quill longest; irides dark brown.

Length.—About 11·5 inches (mounted specimen); legs and feet greenish yellow. This is either a new species or an aberrant form of *Totanus*. It is quite unlike any of the other species, except *Totanus Haughtoni*, with the figure of which in the April number of the *Ibis*, 1883, pl. iv., it agrees in a few characters. The markings of the breast and upper parts agree very well, but the lower back, rump and upper tail coverts are not white as in that species or form. These are dusky with whitish edges and tips. Again in the webbing of the toes, this Kurrachee specimen differs from *T. Haughtoni* in having only one-eighth inch of a web, the fringe however is quite apparent. The palatal recurved horny papillæ referred to by Mr. Hume are also present.

In measurements however there is a wide difference. Mr. Hume gives:—

	Length.	Expanse.	Wing.	Tail.	Tarsus.	Bill at gape.	Bill at front.
Male	13·2	22·25	7·3	3·0	1·85	2·5	2· 1
Female	12·9	22· 3	7·0	3·0	1·65	2·2	1·92

The Kurrachee specimen is a female and measures—

11·5	.....	7·12	2·6	2·37	1·75.	1·62

These measurements, it will be seen, will not fit any of the other species of the genus.

Hab.—Kurrachee (Sind) in the harbour during winter. The single specimen was obtained in November 1882.

Gen. **Terekia**.—*Bonap.*

Bill recurved, long, slender; tarsi short; toes narrowly webbed; hind toe less than half the size of the outer one.

1309. Terekia cinerea, *Guldenst., N. Comm. Soc. Imp. Petrop.* xix. p. 473, t. xix; *Jerd., B. Ind.* iii. p. 682, No. 876; *Dresser, B. Eur.* viii. p. 195, pl.; *Hume, Str. F.* i. p. 237; ii. p. 296; *Armstrong, Str. F.* iv. p. 341; *Hume and Dav., Str. F.* vi. p. 460; *Legge, B. Ceylon* p. 836; *Murray, Vert. Zool., Sind*, p. 246.—The Terek Sand-Piper or Pigmy Curlew.

Forehead, chin, throat, sides of the head and neck in front greyish white with ashy striæ; back, scapulars, tertials, rump and upper tail coverts ashy brown, the feathers with dark shafts; feathers of the median wing coverts narrowly tipped with white; primaries dark brown, the 1st quill with a white shaft; secondaries dusky, broadly terminated with white; shoulder and edge of the wing dark brown; tail concolorous with the back, the tips bordered with white; sides of the breast ashy grey, the feathers mesially darker; lower breast, abdomen, vent and under tail coverts white. In an advanced stage of plumage—March—the entire upper parts are darker, the scapulars are

terminated with black, the chin and throat become pale ashy grey, and there is a distinct fulvous orbital ring, the forehead and face become fulvescent, and the inner primaries tipped with white.

Length.—10 inches; wing 5 to 5·2; bill at front 1·9 to 2, orange at the base, the rest dusky or dark brown; tail 2 to 2·5; legs and feet pale orange; irides brown.

Hab.—Sind, the Mekran Coast, Kutch, Kattiawar, N. Guzerat, Northern and Southern India, Burmah and Ceylon generally, affecting the sea coast, creeks and channels during winter, found also in N.-E. Europe and New South Wales. According to Jerdon it breeds in Northern Asia, and is extensively distributed over Europe, Asia and Australia.

Sub-Family, LIMOSINÆ.—Godwits.

Bill much lengthened, curved or straight from the base, or turned upwards; tail short and even; toes long, united at the base.

Gen. Pseudoscolopax.

Bill much lengthened, soft at the tip, straight or slightly turned upwards, mostly of large size; a distinct web between the toes; lower part of tibia bare; scapulars long; tail moderate.

1310. Pseudoscolopax semipalmatus (*Jerd.*), *Swinh., P. Z. S.* 1863, p. 313; 1871, p. 407; *David et Oust. Ois Chine*, p. 474, pl. 121; *Hume, Str. F.* viii. p. 112; *Hume and Marsh., Game Birds* iii. p. 395. pl.; *Oates, Str. F.* x. p. 239; *id., B. Br. Burm.* ii. p. 408. Macroramphus semipalmatus (*Jerd.*), *Blyth, J. A. S. B.* xvii. p. 252; *Jerd., B. Ind.* iii. p. 679, No. 874; *Hume, Str. F.* vii. p. 484.—The Snipe-billed Godwit.

Forehead, crown, nape, hind neck, sides of the neck, back, scapulars and tertiaries brown, each feather margined with greyish white; lores brown; supercilium white; sides of the head, chin, throat, foreneck and breast white, densely marked with short brown streaks; upper wing coverts dark brown, broadly edged with white; primary coverts brown; primaries brown, the tips darker, the shafts white and the outer webs narrowly margined with white; secondaries brown, broadly margined with white and irregularly barred with the same; rump, upper tail coverts and tail white, broadly barred with brown; abdomen and vent white; under tail coverts white, marked with V-shaped brown marks; sides of the body white, irregularly barred with brown; under wing coverts white; axillaries white, with a few irregular short brown bars.

In Summer, according to Messrs. David and Oustalet, the upper plumage is bright rufous with brown streaks on the nape, lores and hind neck, and with

large brown spots on the dorsal feathers; lower plumage more uniform rufous, with a little white on the edges of the feathers of the abdomen and some irregular brown streaks on the flanks and under tail coverts; wing coverts, secondaries and tertiaries greyish brown bordered with white; primaries brown with the shafts white; tail brown, transversely banded with white.

Bill black, turning to plumbeous at base; irides dark brown; legs and toes dark plumbeous.

Length.—13·5 inches; tail 2·5 to 2·9; wing 6·8 to 7; tarsus 2·05; bill from gape 2·9 to 3·25.

Hab.—Burmah, where it was procured at Rangoon and in Pegu.

Gen. **Limosa**, *Briss.*

Bill sub-curved at the tip, inclined upwards; 1st quill longest; outer toe united to the middle as far as the first joint; tibia bare for more than two-thirds its length; tarsi long; hind toe half the length of the outermost.

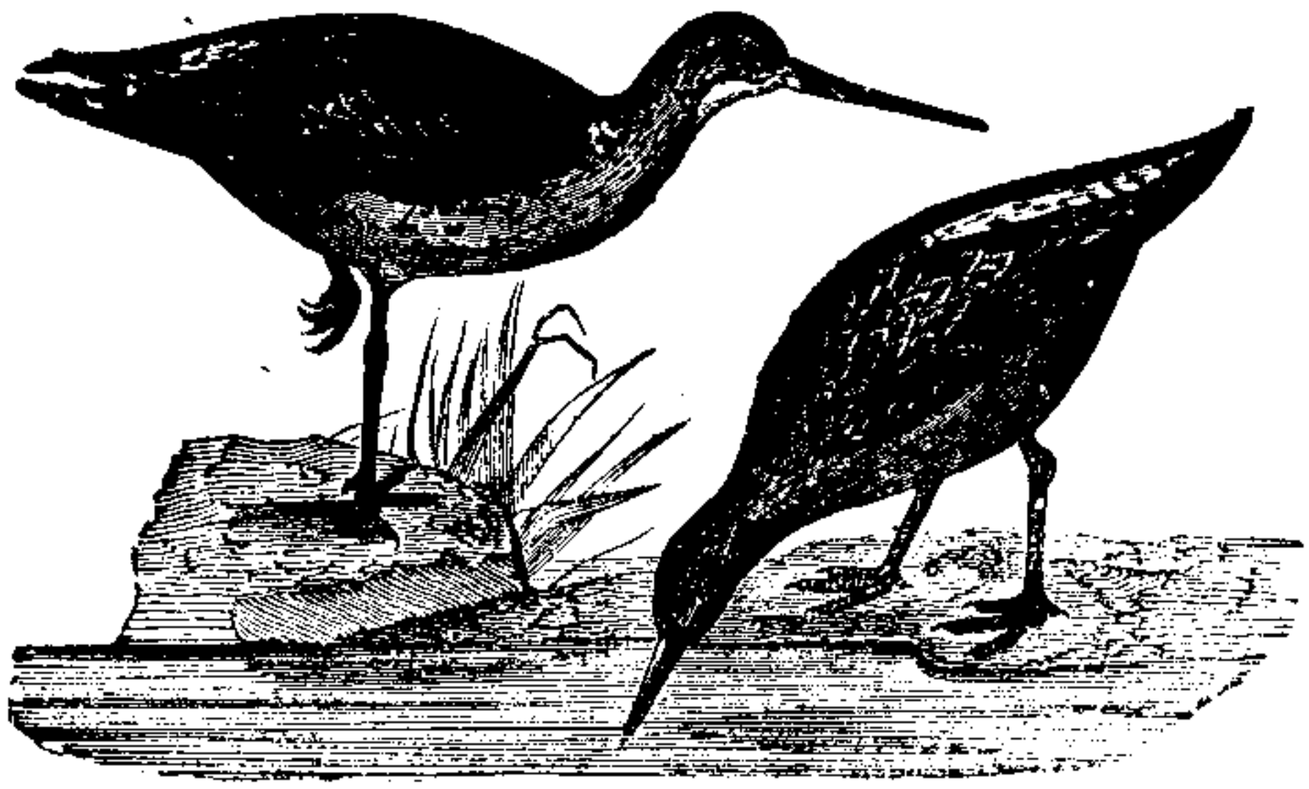
1311. Limosa ægocephala (*Linn.*), *Jerd.*, *B. Ind.* ii. p. 681; *Dresser*, *B. Eur.* viii. p. 211; *Blyth*, *B. Burm.* p. 155; *Hume*, *Str. F.* vii. p. 356; *Legge*, *B. Ceylon*, p. 832; *Hume and Marsh.*, *Game Birds* iii. p. 409, pl.; *Oates*, *Str. F.* x. p. 239; *Murray*, *Vert. Zool. Sind*, p. 243; *Oates*, *B. Br. Burm.* ii. p. 409.—The Black-tailed Godwit.

In winter plumage, the entire head, back of the neck, back, scapulars and breast pale earthy grey; darker on the scapulars and back, where each feather is dark shafted; superciliary stripe, chin, throat, also the abdomen and under tail coverts white; rump white, the feathers of the upper tail coverts black for their terminal half; tail white at the base, the terminal two-thirds tipped black, the outer feathers for their terminal third only, and all more or less narrowly tipped white; primaries and their coverts dusky brown, the inner primaries basally white, and all white on their inner webs; secondaries dusky terminally, white basally, and some of the tertials with their outer webs white; greater wing coverts broadly edged with white, also some of the hinder primary coverts; shoulder of wing dusky brown, also the lower back; neck in front and flanks greyish white.

Length.—16 to 18 inches; wing 7·75 to 8·75; tail 3·12 to 3·5; bill at front 3·7 to 4·5, of a dull reddish colour at base and dusky at the tip; legs dusky greenish; irides dark brown.

Hab.—Nearly throughout India and Ceylon during winter. Rare in Southern India, the Concan and the Deccan. Common in Kutch, Kattiawar and Rajputana, also in Beloochistan, Persia and Afghanistan. In Sind this

species is numerous, everywhere behind the tall grass, along the edges of the Munchur Lake, in the shallow pools, wading up to their body, and often swimming across deeper spots if beyond its standing depth. It is held in much esteem for the table, being equal to Jack and the Common Snipe, especially those which have been feeding in rice fields.



Limosa lapponica.

1312. Limosa lapponica (*Linn.*), *Bodd.*, *P. E.* 900; *Gould*, *B. Eur.* pl. 306; *Hume*, *Str. F.* i. p. 236; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 216; *id.*, *Vert. Zool. Sind*, p. 244; *Hume and Marsh.*, *Game B.* p. 47, pl.—THE BAR-TAILED GODWIT.

"In the winter plumage there is a broad indistinct white superciliary band, and the feathers immediately below the eye are also white; the chin and throat are pure white; forehead, the whole top, back and sides of the head, and the neck all round brownish white, closely streaked with darker brown, the streaks very minute on the sides of the head, somewhat larger on the front of the neck, and darker and stronger on the head and back of the neck, where but little of the white remains visible; upper back pale earthy brown, each feather with a narrow dark brown central shaft-stripe and mostly margined somewhat paler; breast pale greyish brown, more or less obscured by the albescent tippings to the feathers, and some of the feathers with inconspicuous darker shafts; the feathers of the central portion of the breast, if raised, will be found to be not merely tipped whitish, but to be also obscurely barred with white; abdomen, vent, and lower tail coverts pure white, as are also the axillaries and wing lining; the rump is white with a few cuneiform or heart-shaped blackish brown spots; upper tail coverts white, with narrow irregular arrow-head bars; tail feathers grey brown with

dark shafts, tipped white and mottled with white on the inner webs of the exterior ones, in some with traces of darker transverse bars; the primaries and their greater coverts black; the shafts of the first two or three white, subsequent ones brownish white; scapulars and tertiaries pale brown, darker shafted, margined paler, and many of them more or less tinged with ashy; the lesser and median coverts like the scapulars, but margined whitish; secondaries brown, paler on their inner webs, and margined on both webs and on the tips with white, as indeed are also, so far as the tips are concerned, the later primaries, though less conspicuously so; the greater secondary coverts are more ashy brown, narrowly margined with white. In one specimen, which appears to be further advanced, the lateral tail feathers are distinctly barred blackish brown and white; the cuneiform barrings on the rump and upper tail coverts are more marked; the axillaries are all strongly barred; the feathers of the sides and flanks, and also the lower tail coverts, exhibit numerous arrow-head bars; and one or two rufous or chestnut feathers with black bars have begun to show themselves on the breast."

The summer plumage is thus described by Temminck:—

"*Male.*—Upper part of the head and occiput blackish brown, mixed with streaks of reddish yellow; a band of the latter colour over the eyes; lores blackish brown; cheeks and throat of a yellowish red; all the lower parts of the body including the under tail coverts pale yellowish red; upper part of the back and scapulars blackish brown, marbled with reddish yellow and whitish grey; lower part of the back and rump white, marked with longitudinal yellowish red spots; the tail marked with brown and white bars, those of the latter tint irregularly distributed, and disposed more or less longitudinally; quills black at their tips, the remaining part towards the bases blackish brown, with their inner webs whitish grey, marbled with pale brown; the secondaries grey, with the shafts and margins white.

"*Female.*—The head and lores as in the male; the throat white, marked with reddish grey; cheeks and neck very light reddish, with numerous brown streaks, which become broader, and form small transverse brown and white bars on the sides of the breast; the latter and the belly marbled with white and very pale reddish; the abdominal part white; the lower tail coverts reddish white, with light brown bars.

"*Length of Male.*—14·5 to 14·8 inches; expanse 27 to 27·75; tail from vent 2·7 to 3·3; wing 7·8 to 8·4; tarsus 2; bill at front 2·8 to 3·1; weight 8 oz.

"*Length of Female.*—15·75 inches; expanse 28; tarsus 2; tail 3; wing 8·4; bill at front 3·65; weight 9 oz.

"The legs and feet are black, in some dusky plumbeous; irides brown; bill pinkish for about the basal half, black or dusky on the terminal half."—(*Hume, Str. F.*, vol. i. p. 236.)

Affects the same situations as the last, but is less restricted in its range, being found in Sind, Beloochistan, Mekran Coast and the Persian Gulf.

Sub-Family, NUMENINÆ.

Bill very long, slender, arcuate and compressed, with the tip hard and rather obtuse.

Gen. **Numenius**.—*Linn.*

Characters same as those of the Sub-Family; bill curved from the base; upper mandible slightly the longer; tarsi narrowly scutate transversely; hind toe slender with a rudimentary nail.

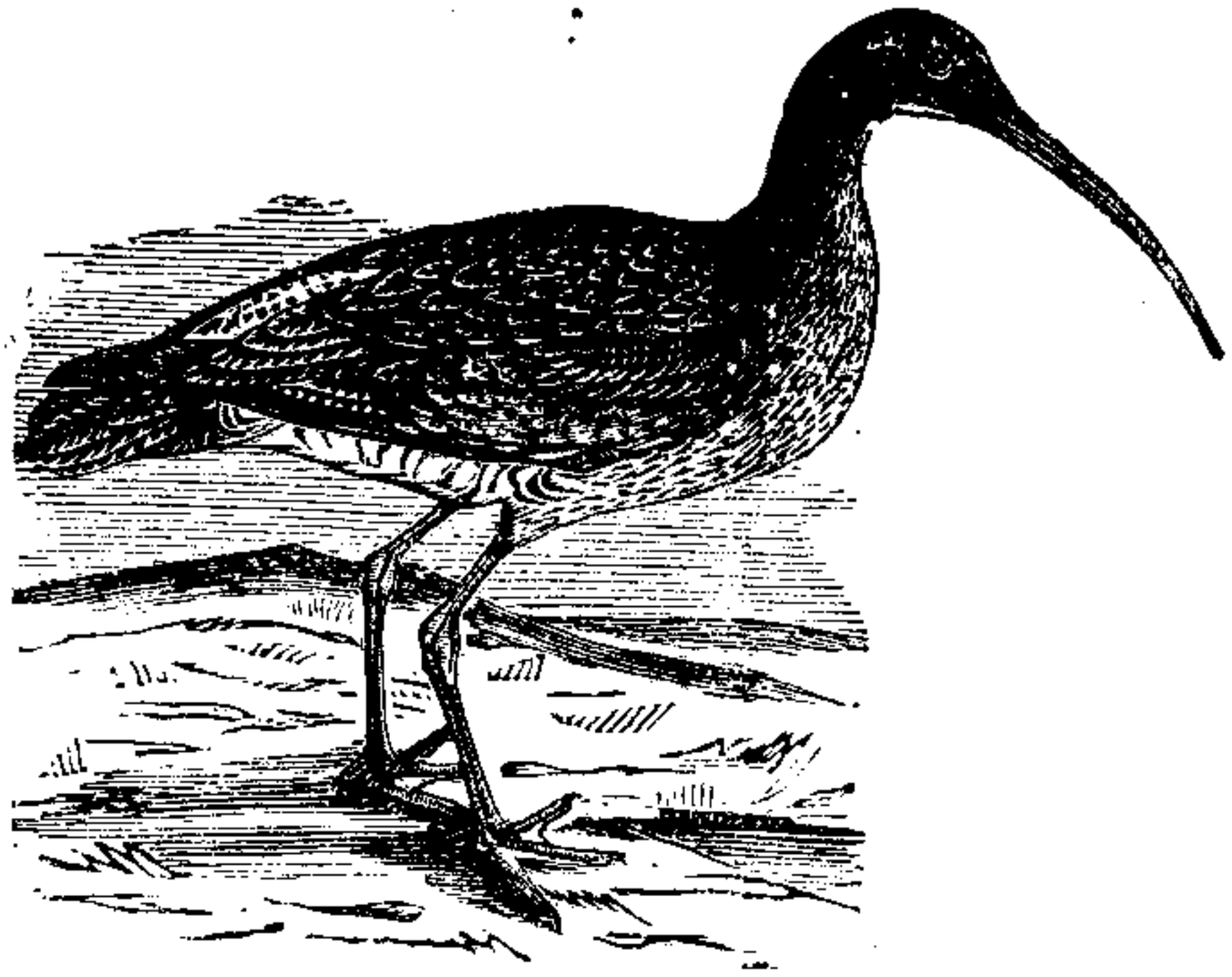
1313. Numenius phæopus (*Linn.*), *Jerd., B. Ind.* iii. p. 684; *Dresser, B. Eur.* viii. p. 227, pl.; *Hume, Str. F.* ii. p. 297; iii. p. 182; *Blyth, B. Burm.* p. 155; *Hume, Str. F.* viii. p. 112; *Legge, Birds Ceylon*, p. 910; *Oates, Str. F.* x. p. 240; *Murray, Vert. Zool. Sind.*, p. 247; *Oates, B. Br. Burm.* ii. p. 411. Scolopax phæopus, *Linn., Syst. Nat.* p. 243.—The WHIMBREL.

Forehead and crown dusky brown with a mesial longitudinal streak; lores dark brown; superciliary stripe white, extending from the upper side of the upper mandible; orbital feathers white; chin and throat white; neck in front and behind, and breast, ochreous white, the feathers with a dark central longitudinal streak; flanks, axillaries and under wing coverts white, barred with pale brown, as also are the rump and upper tail coverts; tail brown, brownish white or grey brown, with 6—7 bars of dark brown; lower back white; upper back, scapulars and wing coverts dusky or deep brown, the feathers edged pale white or dirty fulvous; primaries dusky or dark brown, their inner webs as well as both webs of the secondaries with white bars, not reaching the shaft.

Hab.—Throughout most parts of India, Burmah and Ceylon; also Europe, N. Africa, Egypt and Abyssinia.

Affects the same situations as the Curlew, in small flocks. In the Kurrachee harbour it is oftener seen than the Curlew, and is more shy and difficult to approach, but unlike the Curlew it is often seen on open barren tracts, or sandy flats, far inland, in flocks of 3, 4 or half-a-dozen. It is common all along the sea coast, mud banks and sandy islands of estuaries of rivers, or of the sea, and like the Curlew is a fine bird for the table; Jerdon says it is

perhaps better than the Curlew, and has been called the "Woodcock" of Bengal.



Numenius arquatus. The Curlew.

1314. Numenius arquatus (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 683, No. 877; *Dresser*, *B. Eur.* viii. p. 243, pl.; *Hume*, *Str. F.* iii. p. 182; *Murray*, *Vert. Zool.*, *Sind.* p. 247; *Oates*, *B. Br. Burm.* ii. p. 412. Scolopax arquata, *Linn.*, *Syst. Nat.* 1, p. 242. Numenius lineatus, *Cuv.*, *Regn. Anim.* 1, p. 521; *Blyth*, *B. Burm.* 1, p. 155; *Legge*, *B. Ceylon* p. 906.—The Curlew.

Head, neck behind and in front, also the breast, rufescent ashy, or rufescent grey brown, the feathers with dark mesial longitudinal shaft-streaks; upper back and scapulars varying from dusky to dark brown, the feathers broadly edged fulvous or pale rufous; upper abdomen white, the feathers with dusky shaft-streaks; lower abdomen, vent and under tail coverts pure white; lower back white; rump and upper tail coverts also white, with dark shafts; tail fulvous white with transverse brown bars; chin and throat white, also a small space above the eye in some specimens; first five primaries and edge of wing dark brown, their inner webs mottled with white; secondaries dusky brown, with transverse white bars on both webs half across only, the dark markings forming a rude saw, the edges and tips of the feathers white.

Length.—21 to 26 inches; wing 12 to 12·5; tail 4·5; bill at front 5 to 7·25; irides dark brown; legs and feet bluish grey.

Hab.—Throughout most parts of Europe, India, Burmah, Ceylon, N. Africa, Egypt, Abyssinia and Palestine. Common along the sea coast and back-

waters in great numbers during winter; also along the banks of the Indus and Punjab rivers, and on all large inland sheets of water.

Gen. **Ibidorhynchus**,—*Vigors.*

Bill long, slender, well curved, scarcely dilated at tip, upper mandible grooved, tomiœ inflexed and denticulated; nostrils wide, linear, basal; wings long, 1st quill longest; tail short, of 12 feathers; tarsi short, bare; hind toe wanting.

1315. Ibidorhynchus Struthersii (*Vigors*), *Gould, Cent. Him. B.* pl. 19.; *Hodgs., J. A. S. B.* iv. p. 459; *Jerd., B. Ind.* iii. p. 685, No. 879; *Hume, Str. F.* iii. p. 257. Clorhynchus strophiatus, *Hodgs. J. A. S. B.* iv. p. 761.—The Red-billed Curlew.

Whole head as far as the eyes black, the feathers of the forehead edged with greyish white; rest of the upper plumage, including the nape, wings and tail bluish ashy; winglet and primaries slaty blue; a bar of white across the wings; upper tail coverts nearly ashy brown; tail with the feathers barred with dusky black, all except the two central feathers largely tipped with black; outer web of outermost feather white; chin and throat black; neck ashy; a gorget of black on the breast; under surface of body, under wing and tail coverts white.

Bill deep crimson; irides red; legs blood red. (*Jerd.*)

Length.—16·5 inches; wing 9·25; tail 4·5; tarsus 2·2; bill 3·75.

Hab.—The Himalayas, on the banks of sandy streams in Nepaul and in Sikkim on the Great Runjeet; also in Ladak.

Sub-Family RECURVIROSTRINÆ.—*Bp.*

Nostrils narrow, membranous; tail short and rounded; tarsi long, covered with reticulated scales; bill long and slender, recurved in one genus.

Gen **Recurvirostra.**—*Linn.*

Bill long, thin, the keel flattened, the tips turned upwards; toes united by webs; hind toe short.

1316. Recurvirostra avocetta (*Linn.*), *Bodd., P. E.* 353; *Gould, B. Eur.* pl. 289; *Jerd., B. Ind.* iii. p. 248; *Murray, Hdbk., Zool., &c., Sind,* p. 222; *id., Vert. Zool. Sind,* p. 258.—The Avocet, Scooper or Crooked-bill.

Forehead in some specimens faintly white, otherwise black; crown, lores, nape and back of the neck black; scapulars, lesser wing coverts and upper tertials black; primaries black, some of the inner ones with their inner webs white; secondaries and some of the tertials white; chin, throat, neck in front, lower neck behind, lower back, rump, upper tail coverts and entire under surface white.

Length.—17 to 18 inches; bill 3·5, curved upwards, black; wing 8·5; tail 3; tarsus 3·62; irides red brown; legs pale bluish grey.

Hab.—Throughout India during winter; S.-E. Europe, Lower Egypt, Senegal and Persia. Common in Sind, in large flocks inland, on almost every large sheet of water, especially on the Munchur Lake and along the edges of tanks, &c. Occasionally affects the sea coast and Kurrachee harbour, but by preference the inland waters. Breeds probably in Persia. In Upper India the Avocet is less common; in Kutch, Jodhpore and N. Guzerat rather rare.

Gen. **Himantopus**.—*Briss.*

Bill long and straight; toes webbed only at the base; nostrils linear; hind toe wanting.

1317. Himantopus candidus (*Linn.*), *Bonnat. Tabl. Encyl. et Meth., Orn.* 1, p. 24; *Jerd., B. Ind.* ii. p. 704; *Hume, Ibis,* 1870, p. 146; *Dresser, B. Eur.* vii. p. 587, pl.; *Hume and Dav., Str. F.* vi. p. 464; viii. p. 113; *Legge, B. Ceylon* p. 919. Himantopus intermedius, *Hume, Nests and Eggs Ind. B.* p. 589. Charadrius himantopus, *Linn., Syst. Nat.* 1, p. 255.—The Stilt.

In winter plumage, the forehead, lores, chin, throat, entire lower parts, lower back and rump white; crown of the head dusky or dark ash; neck behind ashy grey, the feathers tipped with white; upper back and scapulars brown; the feathers with pale tippings; primaries dark brown, the inner ones tipped white; secondaries also with white tips; central tail feathers very pale grey, the rest white. In the breeding plumage the primaries, secondaries, scapulars, tertiaries and upper back are rich glossy black, with greenish reflections; the crown of the head dusky or dark brown, spreading over and below the eyes.

Length.—15 to 16 inches; wing 8·5 to 9; tail 3; bill black, reddish at the base, 2·75 inches in length; tarsi 4·5 to 5·5; irides blood red; legs and feet lake red.

Hab.—India generally, also Burmah and Ceylon, in large flocks during winter, frequenting margins of lakes and ponds, also banks of rivers. Breeds in Sind during June in the Narra Districts. Eggs 2—4 in number, of a pale blue colour, spotted and speckled with dark brown and olive green. Incubation 18 to 20 days. The young are said to leave the nest immediately they are hatched, and hide themselves among very scanty cover. Found also in Beloochistan, Afghanistan, Persia, and probably Mesopotamia.

Family, PARRIDÆ.

Bill long, one and a half or twice the length of the head; nostrils lateral; wing spurred or with a tubercle; tarsi long; toes long with long claws.

Gen. **Metopodius.**—*Wagl.*

Bill moderate, stout, compressed, thick at the base, the culmen curved at the tip; forehead with a carbuncle; tail short; nostrils small, ovate; 2nd and 3rd quills of wing longest; feet very large; toes slender and long; claws very long, especially of the hind toe.

1318. Metopodius Indicus (*Lath.*), *Jerd., B. Ind.* iii. p. 708; *Hume, Nests and Eggs Ind. B.* p. 591; *id., Str. F.* iii. p. 183; *Blyth, B. Burm.* p. 157; *Butler, Str. F.* iv. p. 19; *Armstrong, t. c.* p. 348; *Oates, B. Br. Burm.* ii. p. 358. Parra indica, *Lath., Ind. Orn.* ii. p. 765; *Salvad., Ucc. Born.* p. 342; *Oates, Str. F.* vi. p. 165; *Hume and Dav., t. c.* p. 464; *Hume, Str. F.* viii. p. 113; *Oates, Str. F.* x. p. 241.—The Bronze-Winged Jacana.

Whole head, neck all round, upper back, and whole lower plumage black glossed with green, the upper back glossed with purplish; lower back, scapulars, tertiaries and wing coverts glossy bronze; rump and upper tail coverts, also the flanks, tail and under tail coverts maroon; vent and thigh coverts brown, tinged with maroon and streaked with white; primaries and secondaries black, the later ones bronze on their outer webs; chin and throat whity brown; supercilium reaching to the nape white; bill with the basal half of upper mandible and frontal shield livid blue; rest of upper mandible and whole of the lower one green; irides brown; legs and feet slaty colour.

Length—10·5 inches; tail 2; wing 6·2; tarsus 2·6; bill from gape 1·3. Females are slightly larger.

Hab.—India generally, also the Indo-Burmese Countries, but not in the drier northern parts as Sind, Punjab, and Rajpootana. Affects jheels marshes, large swamps and weedy tanks. Breeds during the monsoon, making a floating nest in some sequestered part of a jheel or marsh. Eggs 6—7 in number, moderately broad ovals, a good deal pointed towards one end; the ground colour varies from a pale stone colour to a reddish olive brown, highly polished, marked with fine lines of blackish brown.

Sub-Family, PARRINÆ.

General characters of the Family; feet large; toes and claws very long and thin, to enable the species to walk on marshy or oozy ground and aquatic plants.

Gen. **Hydrophasianus.**—*Wagl.*

1st and 2nd quill of wing equal and longest; primaries with lanceolate appendage to the tips; bill more slender than in *Metopidius*; forehead without a frontal shield; tail long; central feathers much elongated in the breeding season.

1319. Hydrophasianus chirurgus (*Scop.*), *Jerd.*, *B. Ind.* iii. p. 709; *Hume, Nests and Eggs Ind. B.* p. 592; *id.*, *Str. F.* iii. p. 185; *Salvad., Ucc. Born.* p. 343; *David et Oust. Ois. Chine*, p. 483; *Legge, B. Ceylon*, p. 914; *Oates, B. Br. Burm.* ii. p. 369; *Murray, Vert. Zool., Sind*, p. 259. Tringa chirurgus, *Scop.*, *Del. Flor. et Faun. Insubr.* ii. p. 92. Parra sinensis (*Gm.*), *Syst. Nat.* i, p. 709. Hydrophasianus sinensis, *Blyth and Wald.*, *B. Burm.* p. 157.—The Pheasant-tailed Jacana.

In winter plumage, the forehead, crown, a streak from the base of the bill through the eye, extending down each side of the neck on to the breast and forming a pectoral gorget; also the back of the neck dusky or pale hair brown, the feathers on the forehead and crown tipped with white; supercilium white, and a pale golden yellow line from behind the eye; back, scapulars, tertials and lesser wing coverts glossy olive, or pale hair brown; the lower back, rump, upper tail coverts and central tail feathers slightly darker, and the lesser wing coverts mottled and barred transversely with white. Shoulder of wing spurred. First primary with an appendage, the shaft of 2nd, 3rd and 4th in some specimens hair like at the tip, all dark brown, and, except the first and second, broadly white on their inner and outer webs; greater coverts and secondaries, chin, throat, neck in front, abdomen, vent and under tail coverts white; tail 3·5 to 4 inches. In breeding plumage the forehead, crown, entire face, chin, throat and neck in front white. There is a black patch on the nape; and the neck behind is shining golden yellow, edged on the sides with black; back, scapulars and tertiaries dark olive brown, with purplish reflections; rump and upper tail coverts bronzed dark brown; tail black; breast and entire lower parts dark or deep dusky brown; shoulder of wing spurred; wing coverts white; primaries as in the winter plumage.

Length.—18 to 20 inches; irides dark brown; bill plumbeous at the base and tipped greenish, 1·25 in length; tail 10 to 11 inches; wing 8 to 8·5; tarsus 2·12; middle toe and claw 3 inches; hind toe and claw 2 inches.

Hab.—Throughout India, Ceylon and British Burmah. Common in Sind on the Munchur and other Lakes, also in the Punjab and N.-W. Provinces. Breeds in the Province from May to September, making a large floating nest. Eggs, pear-shaped, of a beautiful bronze colour.

Family, RALLIDÆ.

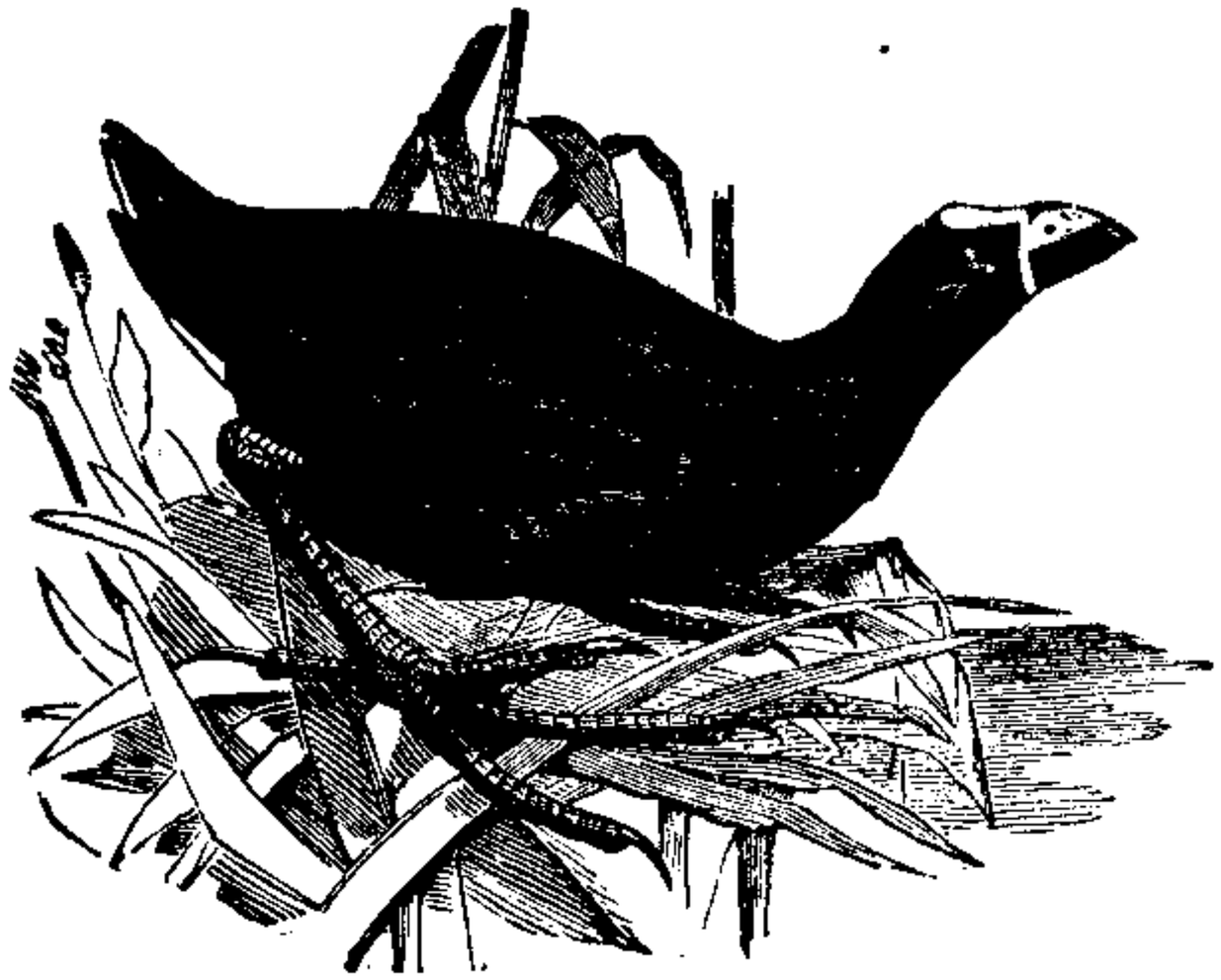
Bill compressed, short, pointed, thick, wedge-shaped; nostrils in a short groove; legs stout; toes long; tarsi moderate; tail short.

Sub-Family, GALLINULINÆ.—Water-Hens.

Bill with the keel advancing on the forehead, where there is usually a casque; toes long and slender or bordered by a scolloped web; wings short and rounded; hind toe long.

Gen. **Porphyrio**.—*Briss.*

Bill very thick; casque large; mid-toe as long as tarsi, slender, not fringed with web.



Porphyrio poliocephalus. The Purple Coot.

1320. Porphyrio poliocephalus (*Lath.*), *Jerd.*, *B. Ind.* iii. p. 713; *Blyth*, *B. Burm.* p. 161; *Butler*, *Str. F.* iv. p. 20; *Oates*, *Str. F.* vi. p. 165; *Elliot*, *Str. F.* vii. p. 22; *Legge*, *B. Ceylon* p. 795; *Murray*, *Vert. Zool., Sind*, p. 260; *Oates*, *B. Br. Burm.* ii. p. 351. Gallinula poliocephala, *Lath.*, *Ind. Orn. Suppl.* p. lxviii. Porphyrio neglectus, *Scheg. Mus. P. B.*, *Ralli*, p. 53; *Hume*, *Str. F.* i. p. 249; *Hume*, *Nests and Eggs* p. 594; *id.*, *Str. F.* iii. p. 185.—The Purple Coot.

Occiput and nape, lores, and round the eyes greyish, clouded with purple; cheeks, chin and throat the same, but with more of a purple tinge; neck in front and breast pale bluish; lower breast, abdomen, flanks, vent and thigh coverts dark purplish blue; under tail coverts white; back of neck, back, rump, and upper tail coverts purplish blue; scapulars, wing coverts and outer webs of primaries pale greenish blue, the inner webs of primaries, secondaries and tertials dark brown or black; tail black, the feathers on the outer web edged with bluish.

Length.—18 inches; wing 10 to 10·2; tail 4·5; bill at gape 1·62; tarsi 3·62; mid-toe 3·62; casque and spot at base of bill cherry red; bill red; irides red; legs crimson.

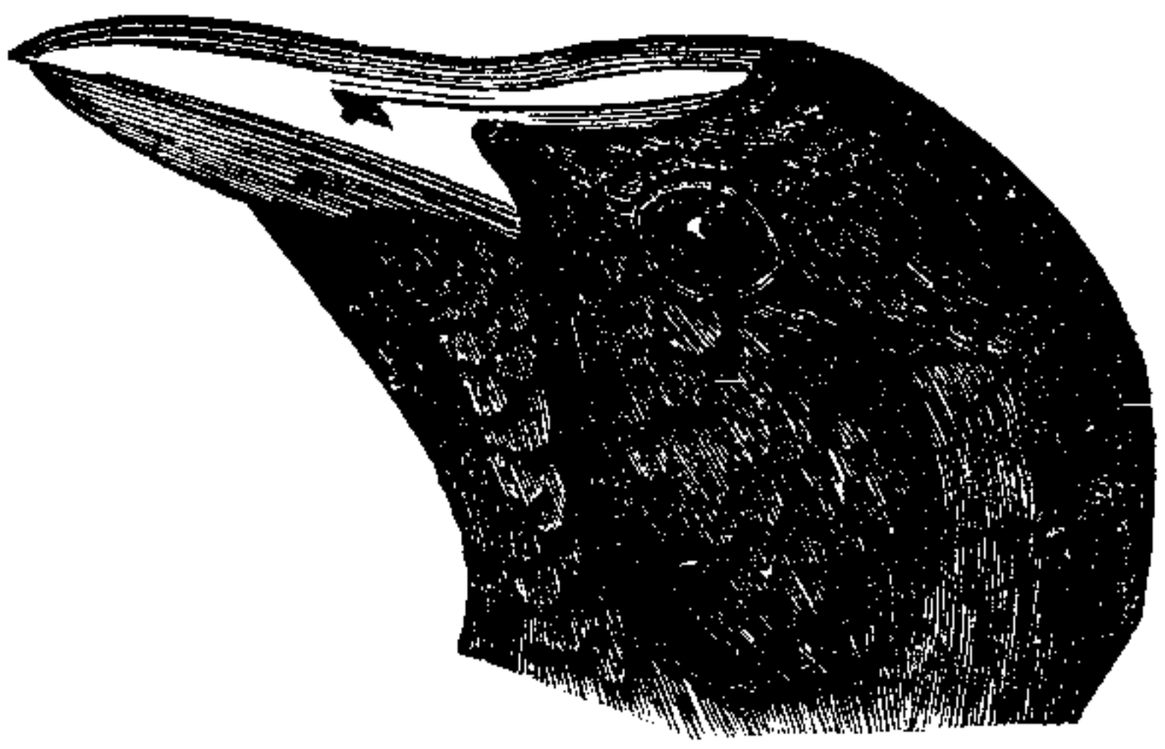
Hab.—Throughout India, Ceylon and British Burmah; also in Persia, Beloochistan and Afghanistan. Common in Sind in suitable localities, but I do

not believe they are anywhere as numerous as on the Munchur Lake, where among the rushes, they are with the Bald Coot simply innumerable.

Breeds in the Province from May to September, making a nest of rushes, &c., in the reedy grass. Eggs prettily marked on a greenish ground with spots, blotches and streaks of a reddish colour, lake red or rich red.

Gen. **Fulica.**

Bill moderate; nostrils lateral; casque small; wing with a tubercle at the shoulder; tail short; toes with lobate membrane.



Fulica atra.

1321. Fulica atra, *Linn., Syst. Nat.* I, p. 257; *Jerd., B. Ind.* iii. p. 715; *Hume, Str. F.* i. p. 249; *id., Nests and Eggs* p. 595; *Blyth, B. Burm.* p. 162; *Ward!aw-Ramsay, Ibis*, 1887, p. 472; *Dresser, B. Eur.* vii. p. 327; *Murray, Vert. Zool., Sind*, p. 261; *Oates, B. Br. Burm.* ii. p. 352.—The Bald Coot.

Upper plumage black; hoary, dark ash, lead colour or dusky brown below; a spot below the eye, and the outer edge of the wings white; frontal disc or casque white; also the bill, which in the breeding season is tinged pale red; irides blood red; legs dull green, with a yellow, green, and red garter in the breeding season.

Length.—15 to 16 inches; wing 7·5 to 7·75; tail 2; bill at gape 1·41.

Hab.—Throughout India, Ceylon and British Burmah; also Europe (central and south), Egypt, Assam, Nepaul, Persia, Beloochistan and Afghanistan. In Sind it is numerous in suitable localities, but on the Munchur Lake, as Mr. Hume says (*Str. F.* vol. i. 249) "they would have to be counted not by thousands, but by hundreds of thousands. * * * You can shoot nothing without knocking over some of these wretched coots." He also adds "that

in no part of the world has he even seen such incredible multitudes of coot as are met with in Sind; in the Munchur Lake *par excellence*."

Gen. **Podica**.—*Less.*

General characters of *Fulica*; bill rail-like; neck more lengthened; toes lengthened and webbed.

1322. Podica personata, *G. R. Gray, P. Z. S.* 1848, p. 90; *Aves*, pl. 4; *Hume, Str. F.* iii. p. 185; *Blyth, B. Burm.* p. 162; *Hume and Dav., Str. F.* vi. p 465; *Hume, Str. F.* viii. p. 113; *Oates, Str. F.* x. p. 241; *id., B. Br. Burm.* ii. p. 353.—The Masked Finfoot.

Forehead, lores, a supercilium extending to the nape, cheeks, anterior part of ear coverts, chin, throat and front of the neck black; this black patch bordered by a white line, terminating on either side at the posterior corner of the eye; crown, nape and upper neck dark ashy; sides of neck olive brown; back, rump, scapulars, upper tail coverts and the whole of the wing brown, tinged with green; sides of the breast and of the body brown; breast and abdomen white, the latter barred with brown; vent and under tail coverts brown, closely barred with whitish, the longer feathers of the coverts almost wholly brown; wing coverts sooty brown; tail plain brown, tipped paler. (*Oates.*)

The female has the chin, throat, and front of the neck white, with a black margin all round, which extends a little over the lores, and has the same outer border and has the black mask of the males. (*Tickell* ex *Oates.*) Iris hazel brown; tarsus and toes light green; bill orange yellow, paler at the tips; edges of eyelids yellow.

Length.—22 inches; tail 5·8; wing 10; tarsus 2·1; bill from gape 2·3.

Hab.—Tenasserim. Oates says it is an excessively rare bird, of which very few specimens have been procured. Lieut. Lloyd shot a specimen in some part of Karenne. Col. Tickell observed it in Tenasserim, and Mr. Davison procured it at Amherst, Mergui and Bankasoon. It is said to be known to occur in Cachar and Assam.

Gen. **Hypotænidia**.—*Reich.*

Bill moderately long, straight or slightly arched, compressed at the base, cylindrical at the tip; upper mandible grooved for two-thirds of its length; nostrils lateral, linear, and situated in the groove; lower part of tibia naked; tarsi long and robust; toes long and slender, three before and one behind; anterior toes entirely divided; wings short and rounded; 3rd and 4th quills longest.

1323. Hypotænidia striata (*Linn.*), *Wald., Trans. Zool. Soc.* viii. p. 95; *Hume, Nests and Eggs Ind. B.* p. 605; *Blyth, B. Burm.* p. 161;

Hume, Str. F iii. p. 189; *Hume and Dav., Str. F.* vi. p. 468; *Legge, B. Ceylon*, p. 775; *Hume and Marsh., Game Birds* ii. p. 245, pl.; *Oates, Br. Burm.* ii. p. 339. Rallus striatus, *Linn., Syst. Nat.* i. p. 262.—The Blue-breasted Banded Rail.

Top of head, nape and hind neck chestnut; upper plumage, including the wing coverts and tertiaries, blackish brown, each feather broadly edged with olive brown and barred with white; primaries, secondaries and tail dark brown, barred with white; lores, cheeks, ear coverts, sides of the neck, foreneck and breast bluish grey, tinged somewhat with rufescent; sides of the body, lower abdomen, vent, under tail and thigh coverts, also the under wing coverts, dark brown, barred with white; centre of abdomen dull white; bill rosy pink on the basal half; remainder horn colour or yellowish green; irides red; legs and feet dull greenish or olive brown. The young has not the chestnut head and bluish breast.

Length.—9·8 to 11·5 inches; wing 4·5 to 5; tail 1·5 to 2·25; tarsus 1·35 to 1·62; bill from gape 1·32 to 1·82.

Hab.—Southern India, along the bases of the Neilgherries, the Wynaad, Malabar Coast, Southern Konkan, in the Rutnagherry districts and Southern Ceylon. It also occurs in Lower Bengal in the deltaic districts, in the neighbourhood of Calcutta too, as well as in Sylhet, Cachar, Khasia Hills, and the Assam Valley to Sadiya. In Arracan it is said to be fairly common, while in Burmah, Oates says, it is found throughout the whole province, Tenasserim included. It breeds in all localities where they occur, from May to October, making a small nest of grass on the ground near water, surrounded by thick vegetation. Eggs, seven in number, of a pinkish stone colour blotched with pale purple. In length they vary from 1·28 to 1·41 inches, and from 0·98 to 1·13 in width.

Hypotænidia obscuriora, Hume, Str. F. ii. p. 302; iv. p. 294; *id. and Marsh., Game Birds* 253, pl., is recorded from the Andamans as a separate race, but to my mind it can scarcely stand as a species, and hence it is suppressed.

Gen. **Rallus**.—*Linn.*

Bill moderately long, straight or slightly curved at tip; shoulder with a small spur; other characters as in *Hypotænidia*.

1324. Rallus indicus, *Blyth, J. A. S. B.* xviii. p. 820; *Jerd., B. Ind.* iii. p. 726; *Hume, Str. F.* iii. p. 416; *Blyth, B. Burm.* p. 162; *David et Oust. Ois. Chine* p. 489; *Legge, B. Ceylon* p. 778; *Hume, Str. F.* viii. p. 113; *Hume and Marsh., Game Birds* ii. p. 257, pl.; *Oates, B. Br. Burm.* ii. p. 342.—The Indian Water Rail.

Above, including the sides of the neck, scapulars and tertiaries olive brown, sometimes with a ruddy tinge, each feather with a broad black mesial streak;

a dark streak from the lores continued under the eye to the ear coverts; a broad white supercilium from above this to the nape; wing coverts dark olive brown, some of them tipped with whitish, and all broadly edged with ruddy; primaries and secondaries brown, some of the inner ones margined with ruddy; chin and throat plumbeous; cheeks, foreneck, breast and centre of abdomen plumbeous ashy, the feathers more or less fringed with ruddy; sides of the abdomen and of the body, axillaries and vent blackish, barred with white; under tail coverts white, each feather with a large black central patch; under wing coverts black, with white margins. Bill dull red, dusky on the culmen and tip; irides red brown; legs and feet dirty pale green.

Length.—10 to 10·5 inches; tail 2·2; wing 5·2; tarsus 1·6; bill from gape 1·6.

Hab.—From Bengal to Nepaul. Recorded from Arracan by Blyth. Frequents patches of rush and grass at the edges of swamps and ditches. A migrant to India. According to Jerdon it is a rare bird in Central and Southern India, and has chiefly been found in the cold season.

Gen. **Rallina**.—*Reich.*

Base of bill not prolonged over the forehead, feet shorter than in the Rails.

1325. Rallina euryzonoides (*Lafresn.*), *Tweedd., P. Z. S.* 1877, p. 767; *Legge, B. Ceylon*, p. 772; *Hume, Str. F.* viii. p. 113; *Hume and Marsh., Game Birds* ii. p. 237, pl.; *Oates, Str. F.* x. p. 242; *Oates, B. Br. Burm.* ii. p. 340. Gallinula euryzonoides, *Lafresn., Rev. Zool.* 1845, p. 368. Rallus zeylanicus, *Gm., Syst. Nat.* 1, p. 716. Porzana ceylonica, *Blyth, Cat. B. Mus. As. Soc. Beng.* p. 285; *Jerd., B. Ind.* ii. p 725; *Hume, Str. F.* i. p. 440; iii. p. 188; *Bourdillon in Blyth's B. Burm.* p. 162. Rallina ceylonica, *Wald. in Blyth's B. Burm.*, p. 162.—The Banded Crake.

Whole head, neck all round and breast chestnut; upper plumage, wings and tail rich olive brown with a ruddy tinge on the back, rump, scapulars and tertiaries; quills with white bars on the inner webs; chin and throat whitish; abdomen, vent, under tail coverts, sides of the body and under wing coverts broadly barred with dark brown and white. Bill with the base of the upper mandible and the greater portion of the lower green; remainder of bill dark brown; irides blood red; eyelids grey; legs black. (*Oates.*)

Length.—10 inches; tail 2·2; wing 5·5; tarsus 1·75; bill from gape 1·3.

Hab.—Thayetmyo in British Burmah, where Oates had a live specimen sent to him by Colonel Horace Browne. In Ceylon it arrives in October in considerable numbers, coming to that island in an exhausted condition. It remains there till February.

It has been found in Sikkim, Bhootan, Nepaul and in Goomsoor in the Ganjam Districts. Mr. Hume got a specimen from the Assamboo Hills, and

Mr. Brooks in Cawnpore. It has also been got near Cuttack and in Mainpuri near Lucknow. About Calcutta, and also near Madras, it has also been obtained, but all these were apparently stragglers during severe winter.

1326. Rallina fasciata, *Raffl., Trans. Linn. Soc.* xiii. p. 328; *Salvad., Ucc. Born.* p. 337; *Wald. in Blyth's B. Burm.* p. 162; *id., Trans. Zool. Soc.* ix. p. 231; *Hume, Str. F.* iii. p. 188; *Hume and Dav., Str. F.* vi. p. 467; *Hume, Str. F.* viii. p. 113; *Hume and Marsh., Game Birds* ii. p. 235, pl.; *Oates, B. Br. Burm.* ii. p. 341.—The Malay Banded Rail.

Whole head, neck all round and breast deep chestnut, rather paler on the chin and throat; back, rump, upper tail coverts and tail ruddy brown; scapulars and tertiaries ruddy brown, with a few obsolete ferruginous bars near the tips of some of the feathers; lesser wing coverts ruddy brown, with a ferruginous spot in the centre of each feather, the remaining coverts and all the quills brown, with rufous white bars on both webs; abdomen, vent, sides of the body, under wing coverts, axillaries, and under wing coverts broadly barred with black and white, the latter part tinged with ferruginous; legs, feet and bare portion of tibia coral red; bill black, dark horny blue or plumbeous blue; irides dull red, cinnabar red or red brown; orbital skin and gape bright vermilion. (*Davison.*)

Length.—10 inches; tail 2·3; wing 5·1; tarsus 1·7; bill from gape 1.

Hab.—Tenasserim, about Amherst and Tavoy. Extends down the Malay Peninsula, and in the Islands of Sumatra, Java and Borneo. Mr. Davison found it frequenting rice fields surrounded by low brushwood.

1327. Rallina Canningi (*Tytler*), *Hume, Str. F.* i. p. 86; ii. p. 500; *Hume and Marsh., Game Birds* ii. p. 241, pl.—The Andamanese Banded Crake.

Head, neck, breast, wings and tail dark maroon; primaries and secondaries olivaceous brown on the outer webs, but strongly tinged with rufous; inner webs black or blackish brown, with numerous moderately narrow, oblique, transverse rufous white bars, 3 on the 1st primary, 4 on the next, and 5 or 6 on the others; abdomen and flanks, also the sides of the body, black, transversely banded with white; edges of the wing coverts and quills dusky; under tail coverts maroon. Legs and feet olive green; bill delicate pale chrysoprase green; irides red.

Length.—13 to 14·5 inches; wing 5·95 to 6·4; tail 3·25 to 3·6; tarsus 2·05 to 2·3; bill at front 1·1 to 1·22.

Hab.—The Andamans, to which Island it is confined, as far as present knowledge extends. Hume says it is chiefly a woodland Rail, haunting the neighborhood of streams and pools, bordered by dense forests. According

hard pressed, and feeds on insects and fresh-water fish. Breeds in the island during July. Eggs, 6 in number, broad, very regular ovals; in colour varying from pinky white to a rich pinky stone colour, or even warm *café au lait* boldly streaked with maroon red and purple.

Sub-Family, RALLINÆ.—Rails.

Forehead with a nude shield; bill compressed, slender; toes shorter than in the *Gallinules;* shoulder of wing with a tubercle or short spur.

Gen. Porzana.—*Vieill.*

Wings moderate, rounded; tail short; toes long, about the length of the tarsus.

1328. Porzana Bailloni (*Vieill.*), *Dresser, B. Eur.* vii. p. 275, pl.; *Legge, B. Ceylon,* p. 766; *Hume and Dav., Str. F.* vi. p. 467; *Scully, Str. F.* viii. p. 358; *Hume and Marsh., Game Birds* ii. p. 203, pl.; *Oates, B. Br. Burm.* ii. p. 344. Rallus Bailloni, *Nouv. Dict. d'Hist. Nat.* xxviii. p. 548. Crex pygmæa, *Naum. Naturg. Vog. Deutschl.* ix. p. 567. Porzana pygmæa, *Jerd., B. Ind.* iii. p. 723, No. 910; *Murray, Vert. Zool., Sind,* p. 264. Zaporna pygmæa, *Hume, Nests and Eggs Ind. B.* p. 603.—The Pigmy Rail or Baillon's Crake.

Head and hind neck wood brown; back, scapulars and wing coverts yellowish brown with an olive tinge, the feathers with numerous irregular, white, black-edged spots; supercilium, cheeks, chin and throat grey; breast and upper abdomen bluish grey; the sides, vent and under tail coverts black, with transverse white bars; primaries dusky brown; outer web of 1st quill yellowish white; secondaries with zigzag white lines bordered with black; tertiaries yellowish brown, with a tinge of olive, spotted or streaked irregularly with white, which have edgings of black; tail dusky brown; bill dark green; irides reddish; legs fleshy brown.

Length,—7 to 7·75 inches; wing 3·67; tail 1·75 to 2; bill at front 0·62; tarsus 1·0; mid-toe and claw 1·5.

Hab.—Sind, Punjab, N.-W. Provinces and Oudh, also Bengal, Nepaul, Rajputana, Kutch, Guzerat, Concan and Deccan, and generally throughout India and Burmah, also Ceylon. It is also an inhabitant of Beloochistan and Afghanistan, and probably Persia also. In Central and Southern India it is said to be not uncommon.

Breeds during July and August in the plains of Upper India and in the lower ranges of the Himalayas about rice swamps and marshy pools. Eggs, six in number, oval, slightly pointed towards one end; a pale olive stone colour or greenish drab, thickly freckled and mottled with faint dusky clouds and streaks. In length they vary from 1·1 to 1·22 and in width from 0·83 to 0·91 inch.

The habits of this species is not unlike the other Rails, but as a rule it is more shy and retiring, and when disturbed, runs with great speed on the lotus leaves or other aquatic herbage, and conceals itself among the thickest of the coverts it frequents.

1329. Porzana maruetta (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 722, No. 906; *Blyth, B. Burm.* p. 161; *Dresser, B. Eur.* vii. p. 267, pl.; *Hume, Str. F.* viii. p. 113; *Hume and Marsh., Game Birds* ii. p. 213, pl.; *Murray, Vert. Zool., Sind*, p. 264. Rallus porzana, *Linn., Syst. Nat.* i. p. 262. Ortygometra maruetta, *Leach, Syst. Cat. Mamm. H. B. Brit Mus.* p. 34.—The SPOTTED CRAKE.

Forehead ashy brown; crown and nape dusky, streaked with ferruginous; superciliary streak extending behind the eye ashy grey, spotted with white; hind neck dusky, minutely freckled with black and white. Upper back and scapulars dark brown, almost black, the feathers broadly margined and tipped with ochreous olive, and usually the margins of one or both webs with linear spots and streaks of white; lower back and rump dusky brown, the feathers narrowly barred with white; wing coverts like the back, the outer margin of both webs with two pairs of white black-edged spots; tertiaries dark brown on their outer webs, and with 6—7 narrow, oblique white bars; their inner webs rufescent brown; primaries and secondaries pale hair brown, the outer web of the first quill and bastard primary, also the edge of the wing, white; the margins of the outer webs of the other primaries tinged with pale rufescent; axillaries dark brown with transverse white bars; chin and throat greyish white; breast olive brown, the feathers barred with white; abdomen ashy white; flanks olive brown, barred transversely with black and white; tail rufescent brown, mesially dark brown; vent and under tail coverts rufescent white; bill greenish yellow, orange at the base; irides reddish brown; legs bright yellowish green.

Length.—8·8 to 9 inches; wing 4·5 to 4·8; tail 1·82 to 2; bill at front 0·75 to 0·9; tarsus 1·4; mid-toe and claw 1·6.

Hab.—Sind, Punjab, N.-W. Provinces and Oudh, the Himalayas, Bengal, Rajputana, Guzerat, Kutch, Concan, Deccan and Mysore; also Arabia, Beloochistan, Persia, Afghanistan, and Eastern Turkestan. Occurs all over Europe and North Africa. Affects the reedy swamps and feeds on aquatic insects, larvæ, snails and grass seeds.

1330. Porzana fusca (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 724, No. 911; *Blyth, B. Burm.* p. 161; *Legge, B. Ceylon* p. 769; *Hume and Marsh., Game Birds* ii. p. 217; *Oates, B. Br. Burm.* ii. p. 346. Rallus fuscus, *Linn*, *Syst. Nat.* i. p. 262. Rallina fusca, *Hume, Nests and Eggs Ind. B.* p. 604; *Hume, Str. F.* viii. p. 113.—The RUDDY CRAKE.

Forehead as far back as the eyes, the sides of the head and neck, the foreneck, breast and upper abdomen rich ferruginous; chin and throat whitish;

sides of the body and lower abdomen olivaceous; flanks, vent and under tail coverts dark brown, irregularly and indistinctly barred with white; the whole upper plumage, wings and tail olive brown; under wing coverts brown edged with white. The female has the ferruginous of the lower parts paler and the white of the throat extends lower down; irides crimson; eyelids plumbeous, the edges red; bill greenish brown; legs and toes red; hinder parts of leg fuscous. (*Oates.*)

Length.—8·5 inches; tail 1·75; wing 3·8; tarsus 1·4; bill from gape 1·0.

Hab.—Southern and Central India, Punjab, N.-W. Provinces, and Rajpootana (rare). Common in Lower and Eastern Bengal, also in British Burmah. Breeds during July and August on the Woolar Lake in Cashmere, also in Burmah, where, according to Oates, it is a permanent resident. It is also recorded from Arracan, Ceylon and the Malay Peninsula.

1331. Porzana minuta (*Pall.*), *Naum. Vog. t.* 239; *Gould, B. Eur.* pl. 345; *Hume, Str. F.* i. p. 251; *Murray, Hdbk., Zool., &c., Sind*, p. 224. Porzana parvus, *Scop.*—The Little Crake.

Crown of the head deep brown; sides of the head, both above and below the eye, ash or slate colour; chin and throat dull or greyish white, the forepart of the neck pale ash; under parts ashy or grey blue in the males, light rufous buff in females; lower abdomen and vent deep or olive brown, spotted with white; neck behind and shoulder of the wing olive brown; back deep olive brown, the feathers with broad mesial dark stripes, their inner margins pale, with some white linear spots and streaks; primaries and secondaries deep brown with pale edges; lesser wing coverts plain dull olive brown; tail dusky olive brown; under tail coverts slaty grey with spots and bars of white.

Length.—7 to 8 inches; bill 0·7; wing 3·8; tail 1·5 to 1·75; irides red; bill and legs yellowish green.

Mr. Hume in *Str. F.* i. p. 251, says:—"*Bailloni* (pygmæa) may always be distinguished at a glance from *minuta* by its smaller size, shorter, and in proportion deeper bill, and by having the back, scapulars and greater wing coverts all more or less profusely variegated with bluish white, whereas in *minuta* the white markings, which are somewhat broader and purer white, are confined as a rule to the centre of the back, though occasionally some of the longer scapulars are also faintly edged with bluish white. In *minuta* the wing varies from 3·75 to 4·1; the bill at front 0·7 to 0·76; in *Bailloni* (pygmæa) the wing varies from about 3·45; to 3·62, and the bill 0·6 to 0·62.

Hab.—Sind, Eastern Turkistan and Cashmere. Not known to occur anywhere else in India. It is abundant in all the large inland pieces of water or dhunds.

1332. Porzana akool (*Sykes*), *Jerd., B. Ind.* iii. p. 722, No. 908; *Hume, Str. F.* iv. p. 21; *id. and Marsh., Game Birds, Ind.* ii. p. 226.—The Brown and Ashy Crake.

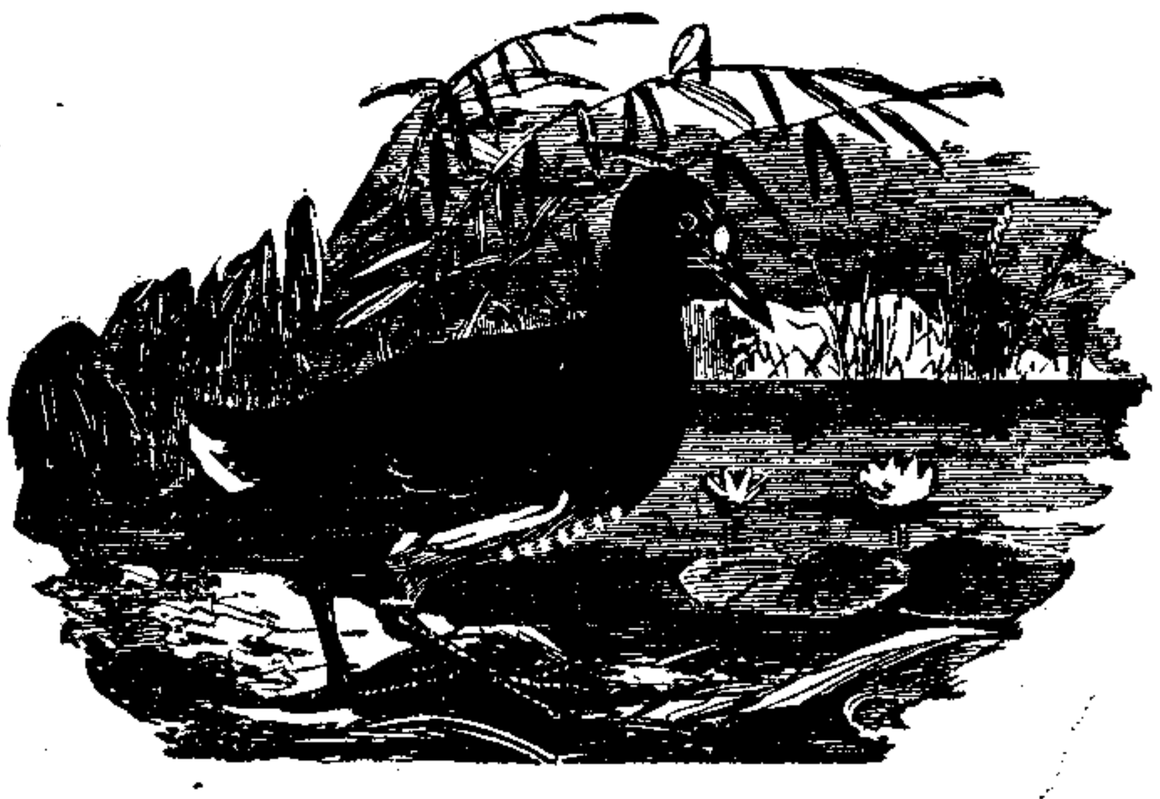
Above olive brown; the rump ashy brown; wings and tail dusky; wing and lower tail coverts deep brown; chin white; throat, breast, and belly ashy brown; flanks olive brown. Bill greenish; irides red brown; legs and feet livid purple.

Length.—11 inches; wing 7; tail 3·5; bill at front 1·75; tarsus 2.

Hab.—Central Provinces, in Sumbalpoor and Raipoor; also Guzerat, Chota Nagpoor, Bengal, N.-W. Provinces, Oudh and the Punjab Cis-Sutlej. It also occurs in the south-eastern portions of Rajputana (Bhurtpore), the Sambhar Lake, Ajmere, and Mount Abu. In Upper India, Hume says, it is common in the Duns, Terais and Bhabars that skirt the mountain bases of the Himalayas. It is less aquatic in its habits than any of the other Crakes, being often seen on stony ground in the open, though not very far from water; does not affect swamps so much as it does thin grass along the margins of clear water streams. Breeds from May to August, nesting in bushes, grass, or bulrushes, along the margins of small streams or ditches. Eggs, 6—8 in number, a pale salmon white ground covered with blotches, spots and specks of reddish brown. They average from 1·4 to 1·6 inches in length and 0·99 to 1·15 in width.

Gen. **Gallinula**.—*Briss.*

Bill moderate, curved slightly at the tip; nostrils in a groove, placed about the middle of the upper mandible; bill extending on to the forehead and forming a small shield; shoulder of wing with a tubercle or spur; toes very narrowly edged by membrane.



Gallinula chloropus. The Water or Moor Hen.

1333. Gallinula chloropus (*Linn.*), *Ferd., B. Ind.* iii. p. 716, No. 905; *Hume, Nests and Eggs Ind. B.* p. 397; *id., Str. F.* i. p. 250; iii.

p. 187; *Blyth, B. Burm.* p. 162; *Dresser, B. Eur.* vii. p. 313, pl.; *Hume and Dav., Str. F.* vi. p. 466; *Legge, B. Ceylon* p. 781; *Murray, Vert. Zool., Sind,* p. 262; *Oates, B. Br. Burm.* ii. p. 347. Gallinula Burnesi, *Blyth, J. A. S. B.* xiii. p. 736.—The Moor Hen

Top of head, nape and back of neck dusky olive brown; back, scapulars, tertiaries, wing coverts and upper tail coverts shining olive brown; primaries, secondaries and tail dusky brown, the outer web of the 1st quill white; a pale fulvous brown streak from behind the nostril on each side to the eye, and a patch of the same colour on the side of the head including the ear coverts; under each eye a white spot; chin and throat white; breast dark bluish ashy, the feathers tipped with pale or dirty fulvous; lower abdomen white; vent feathers black; under tail coverts white; feathers on the flanks long and lax, those falling on the thighs pale brown with a mesial white streak; bill reddish at base, greenish yellow at tip; irides red; an orange garter above the knee.

Length.—12 to 13 inches; wing 6·75; tail 3; bill at gape 1·1. In mature plumage the entire head and neck are dark brown, almost black, and the upper plumage darker olive brown.

Hab.—Diffused throughout India and parts of Burmah, Central and South Europe, Africa and Java. Occurs also in Beloochistan, Persia, Afghanistan, Eastern Turkistan, Nepaul and Cashmere, affecting small rivers and marshes. In the dhunds and jheels in Sind, also in the Deccan, Guzerat and Rajputana, it is extremely common, swimming about freely. During the day, on retreating to the edges of the tanks or dhunds, it lives concealed among the reeds and rushes. It is less shy towards evening when it creeps along the margins of the waters among the long reeds in quest of aquatic insects, worms and seeds; breeds from June to August. The nest is a large structure of withered reeds and rushes, placed near the brink of the water; the female lays from 4 to 6 eggs; in shape they are long, oval or ovate pyriform, of a stone colour, with a pinkish tinge, speckled, spotted and blotched with reddish brown or red. It is said that the female never quits its nest without covering her eggs with the leaves of the surrounding herbage. The young are able to swim immediately they are hatched.

1334. Gallinula phœnicura (*Penn*)., *Jerd., B. Ind.* ii. p. 720, No. 907; *Hume, Nests and Eggs Ind. B.* p. 599; *Murray, Vert. Zool. Sind,* p. 263. Rallus phœnicurus, *Pennant in Forst. Zool. Ind.* p. 19, pl. ix. Erythra phœnicura, *Wald., Trans. Zool. Soc.* viii. p. 94; *Salvad., Ucc. Born.* p. 340; *Legge, B. Ceylon,* p. 786; *Oates, B. Br. Burm.* ii. p. 348.—The White-breasted Water Hen.

Forehead, lores, entire face, chin, cheeks, throat, neck, breast and abdomen white; crown of the head, nape, neck behind, back, scapulars, wings, flanks and tail black, with greenish reflections; outer web of first quill white; lower

abdomen, vent and under tail coverts deep chestnut; bill yellow with a tinge of green; irides blood red.

Length.—12 to 13 inches; wing 6·5; tail 2·5; bill at front 1·5.

Hab.—Sind and throughout the Indian Peninsula, Ceylon and Burmah. In Sind not uncommon along the canals and the Indus. Breeds from May to August. Eggs greyish, with a light reddish tinge, spotted and blotched with various shades of red and bluish grey; affects generally the heavy undergrowth along the edges of canals.

Gen. **Gallicrex.**—*Blyth.*

Bill as in *Gallinula*, with the base of the bill extending on to the forehead and forming a fleshy protuberance; toes long; hind toe and claws about half the length of the mid-toe; claws curved.

1335. Gallicrex cinereus (*Gm.*), *Hume, Nests and Eggs Ind. B.* p. 596; *Wald., Trans. Zool. Soc.* ix. p. 229; *Oates, Str. F.* v. p. 165; *Wardlaw-Ramsay, Ibis,* 1877, p. 477; *Legge, B. Ceylon,* p. 791; *Murray, Vert. Zool. Sind,* p. 261; *Oates, B. Br. Burm.* ii. p. 349. Fulica cinerea, *Gmel., Syst. Nat.* i. p. 702. Gallinula cristata, *Lath., Ind. Orn.* ii. p. 779. Gallicrex cristatus, *Jerd., B. Ind.* iii. p. 716; *Blyth and Wald., B. Burm.* p. 161.—The Water Cock.

Male in Breeding Plumage.—Dull black, the feathers of the back, wing coverts, rump and upper tail coverts more or less edged with light brown; tertials dark brown, edged with pale whitey brown; edge of the wing white; quills dusky, the shaft of the 1st quill white; tail blackish brown, the outer feathers edged with pale brown; lower wing coverts dusky with whitish edges; bill greenish yellow, fine red at the base; the crest about one inch long, fleshy red; irides red; legs dull red.

Length.—16 to 17 inches; extent 23; wing 8·5; tail 3·5; tarsus 3. (*Jerd.*)

Female.—Top of head dull black or dusky brown; back of neck, back, scapulars, wing coverts and tertiaries the same, the feathers edged with fulvous, more broadly on the back and wings; tail the same; sides of the face including a broad supercilium fulvous, in some with a rufescent tinge; chin and throat fulvous white; neck in front, breast and entire under parts brownish fulvous, the feathers with narrow transverse bars; thigh-coverts the same; primaries and secondaries dusky brown; outer web of first quill fulvous.

Length.—13 to 14 inches; wing 7; tail 2·5; bill at gape 1·25; tarsus 2·5.

Hab.—Sind, Lower Bengal, Tennaserim, South and Central India, Burmah and Malayana. Affects large swamps and marshes, also the vicinity of rivers. On the Aaral, at Sehwan, several may be seen in the early morning, issuing from the thick cover of tamarisk, fringing the banks, and running along the edge of the water.

ORDER, HERODIONES.

Bill large, long, stout and strong, pointed and in some slightly curved; tarsi generally long and scutellate; tail short; tibia bare for a considerable space. The Order comprises the Storks, Herons and Ibises.

Family, CICONIDÆ.—Storks.

Bill long and stout, compressed to the tip; nostrils narrow, pierced through the bill and situated near the base of the culmen; tail moderate; front toes united at the base.

Gen. **Leptoptilos**.—*Less.*

Bill very large, high at base, much thickened; keel straight; head and neck more or less naked. Under tail coverts composed of long, lax, decomposed feathers, known as *marabou*.

1336. Leptoptilos argala (*Lath.*), *Jerd.*, *B. Ind.* iii. p. 730, No. 915; *Blyth and Wald.*, *B. Br. Burm.* p. 158; *Murray*, *Vert. Zool.*, *Sind*, p. 266; *Oates*, *B. Br. Burm* ii. p. 262. Ardea argala, *Lath.*, *Ind. Orn.* ii. p. 676. Leptoptilos dubius, *Salvad.*, *Ucc. Born.* p. 357; *Hume*, *Nests and Eggs Ind. B.* p. 605. Leptoptilus giganteus (*Forst.*), *Oates*, *Str. F.* vii. p. 50.—The Adjutant.

In Breeding Plumage.—Head, neck and gular pouch bare, except a few short scattered hair-like feathers varying in colour from yellowish red to fleshy red; ruff white; back, lesser and median wing coverts, primaries and secondaries black with a greenish gloss; the greater coverts and tertiaries silvery grey, forming a wing band; under parts white. In non-breeding plumage the white wing band is absent and the black plumage much duller.

Bill pale dirty greenish; irides greyish white.

Length.—60 inches; wing 30; tail 11; bill at front 12 inches; tarsus 11; pouch 16 to 18 inches in length.

Hab.—Sind and throughout the greater part of India; rare in the South; absent in Malabar, where it is replaced by *L. javanicus*; spread throughout North and N.-E. India to Burmah and the Malayan Peninsula. In the Deccan, also in Guzerat and Bengal, it is of much service as a scavenger. Its food is very various. Lizards and frogs, and insects too; refuse from dung heaps also does not come amiss to it. From the craw of three specimens collected about 80 miles east of Kurrachee, lizards (*Uromastix hardwickii*) were extracted. In each an entire animal in four pieces was found which had evidently not been long swallowed. The pieces were very neatly cut; the head making one, the body in two longitudinal halves, and the tail entire being the fourth piece.

Breeds in inaccessible places in parts of Bengal and Burmah, constructing a large nest of sticks, and laying 2—3 whitish eggs, not unlike those of the Vultures; huge broad ovals, in size from 2·87 to 3·3 in length, and from 2·1 to 2·55 in breadth.

1337. Leptoptilus Javanicus (*Horsf.*), *Jerd.*, *B. Ind.* iii. p. 732; *Salvad.*, *Ucc. Born.* p. 358; *Blyth*, *B. Burm.* p. 159; *Legge*, *B. Ceylon* p. 113; *Sharpe*, *Ibis*, 1819, p. 72; *Oates*, *Str. F.* x. p. 242; *id.*, *B. Br. Burm.* ii. p. 263. Ciconia javanica, *Horsf.*, *Trans. Linn. Soc.* xiii. p. 188.—The Lesser Adjutant.

Head and neck covered with a few soft decomposed feathers; crown of head bony and perfectly bare; ruff and lower plumage white; upper plumage, wings and tail dark brown with a slightly greenish gloss. Bill dirty yellowish; top of head dirty green; nude parts and neck tinged with yellow, seasonally red; irides whitish; legs dusky black.

Length.—52 to 55 inches; tail 10; wing 25; tarsus 9; bill from gape 10·5.

Hab.—Over nearly the whole of India in small numbers, frequenting marshes, paddy fields and edges of lakes and rivers. Common in Southern India and the Malabar Coast; rare in Central India and the Upper Provinces. Occurs in Bengal, Assam, Sylhet, and Burmah, extending from the latter down the Malay Peninsula. Habits same as the last.

Gen. **Xenorhynchus**.—*Bp.*

Bill very large, stout and solid, the tip turned up; 2nd and 3rd quills longest.

1338. Xenorhynchus asiaticus, *Lath.*, *Ind. Orn.* ii. p. 670; *Murray*, *Vert. Zool. Sind*, p. 266; *Oates*, *B. Br. Burm.* ii. p. 364. Ardea Indica, *Lath.*, *Ind. Orn.* ii. p. 701. Myeteria australis, *Shaw*, *Trans. Linn. Soc.* v. p. 34; *Jerd. B. Ind.* iii. p. 734. Mycteria indica, *Hume*, *Nests and Eggs Ind. B.* p. 607; *id.*, *Str. F.* iii. p. 189. Xenorhynchus australis, *Blyth and Wald.*, *B. Burm.* p. 158; *Legge*, *B. Ceylon*, p. 1117; *Oates*, *Str. F.* x. p. 242.—The Black-necked Stork.

Head and neck rich dark glossy green, glossed on the hind head with purple; lesser, median and greater coverts and scapulars, also the interscapulars and tail dark brown, mixed with rich bluish green with a golden tinge; rest of plumage white; bill black; legs reddish.

Length.—52 to 56 inches; wing 24; tail 9; bill at front 12·5 inches.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, Concan, Deccan and the greater part of India, extending to Malayana; also Burmah and Ceylon. In Central and North India it is, as in Sind, extremely common along the banks of rivers and on the edges of tanks and marshes.

Breeds nearly all over India in well-watered tracts, where lakes, jheels, swamps and marshes abound, and from September to December. The site for building is generally the higher branches of peepul or seesum trees. Nest very large and composed of twigs and sticks. Eggs, 4 in number, pure white and not unlike those of the last. Size 2·65 to 3·13 × 1·98 to 2·3 inch.

Gen. **Ciconia**.—*Linn.*

Keel of bill straight; 3rd and 4th quills longest; hind toe elevated.

1339. Ciconia nigra (*Linn.*), *Bodd., Tab. Pl. En.* 399; *Gould, B. Eur.* pl. 284; *Jerd, B. Ind.* iii p. 735; *Str. F.* iv. p. 22; *Murray, Hdbk., Zool., &c., Sind,* p. 225; *id., Vert. Zool. Sind*, p. 267.—The Black Stork.

Head, neck, nape, chin, throat, breast, back and greater and lesser wing coverts glossy black with blue, green and coppery reflections; primaries black; tail black; under tail coverts and under parts from below the breast white; legs orange red; nude orbitar area reddish brown; bill blood red; irides dark brown.

Length.—44 inches; wing 24; tail 10; bill at front 8 inches.

Hab.—Sind, Punjab, N.-W. and Central Provinces, Oudh, Bengal, Kutch, Concan, the Deccan, Guzerat and Rajputana, also Afghanistan. A winter visitant to India.

1340. Ciconia alba (*Belon.*), *Bodd., Tab. Pl. En.* 866; *Gould, B. Eur.* pl. 283; *Jerd., B. Ind.* iii. p. 736, No. 919; *Str. F.* iv. p. 22; *Murray, Hdbk., Zool., &c., Sind,* 225; *id., Vert. Zool., Sind.* p. 267.—The White Stork.

Head, crown, nape, chin, throat, breast and back pure white; greater wing coverts glossy black, shaded with grey towards the shafts; primaries, secondaries and tertiaries black; nude orbitar area black; legs red; irides brown.

Length.—44 inches; wing 23 to 25; tail 10; bill at front 7·5 to 7·75.

Hab.—Sind, the Deccan, Concan, Rajputana, Kutch, Guzerat and Central India; also the Punjab, N.-W. Provinces, Oudh, and Bengal. Along the banks of the Indus and the edges of lakes and swamps; in Sind it is not uncommon during winter. Feeds on lizards, molluscs, &c.

1341. Ciconia leucocephala (*Gm.*), *Bodd., Tab. Pl. Enl.* 906; *Jerd., B. Ind.* iii. p. 737, No. 920; *Murray, Hdbk., Zool., &c., Sind,* p. 226; *id., Vert. Zool., Sind,* p. 267. Ardea leucocephala, *Gmel., Syst. Nat.* i. p. 642. Melanopelargus episcopus, *Hume and Henders., Lah. to Yark.,* p. 295; *Hume, Nests and Eggs Ind. B.* p. 609. Dissura episcopus, *Hume, Str. F.* viii. p. 114; *Legge, B. Ceylon* p. 1119; *Oates, B. Br. Burm.* ii. p. 265. Dissura episcopus, *Bodd., Str. F.* vi. p. 469.—The White-necked Stork.

Head black; back of neck glossed with purple, also the upper back, breast and upper abdomen; neck white; primaries and upper tail coverts glossed with green, also the lower back; tail white; irides crimson; eyelids and nude orbitar area plumbeous; throat purplish; bill black, reddish on the anterior half; feet red.

Length.—36 to 37 inches; extent 70; wing 20; tail 7; bill at front 6.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Kutch (?), Rajputana (?), Guzerat, Concan, Deccan, South and Central India; also British Burmah and Ceylon.

Family, ARDEIDÆ.—Herons.

All the members of the *Ardeidæ* family swarm throughout India in suitable localities. All are permanent residents and breed from May to September. Their nests are generally loose structures, some more or less compact, and built of twigs, &c., on trees, standing in the vicinity of water, and particularly on those in the middle of large sheets of water. Eggs, 3 to 4, glossless, and in colour from pale sea green to bluish green, but it is not uncommon to find single nests containing from 8 to 10 eggs, differing in shape, size and colour.

The following, from Hume's *Nests and Eggs*, gives the average size of the eggs of the different species:—

Ardea cinerea	2·27 × 1·66
Ardea purpurea	2·17 × 1·56
Herodias alba	2·11 × 1·55
Herodias garzetta	1·73 × 1·22
Demiegretta gularis	1· 7 × 1· 3
Bubulcus coromanda	1·71 × 1·32
Ardeola grayi	1·48 × 1·17
Butorides javanica	1·64 × 1·23

An account by Layard of the breeding of *Herodias garzetta* and kindred species in Ceylon, conveys exactly what is observable in the breeding season of the *Ardeidæ* in India generally, and along the canals, &c., in the Narra Districts, and other large sheets of water in Sind.

During this season almost all the large pieces of water in India, unfrequented and distant from human habitation, in which trees are standing out of reach, except by boats, large colonies of ibises, spoonbills, cormorants, snake-birds, night-herons, &c., may be seen. During the day, except by the droppings of the birds, which coat the branches so thickly with lime, little suspicion would be excited of the spot being a heronry, as most of the birds, except a few sitting close, are away feeding, but towards eve, hundreds would be seen coming to roost, amid a continuous cackling. The report of a gun amongst them would present a scene scarcely describable. If disturbed before they have begun to lay, they are said to entirely desert the spot, and carry away

almost every stick they had used in building and to begin operations afresh in a distant locality.

Gen. **Ardea**—*Linn.*

Bill slender, the tip scooped; upper mandible with a groove from the nostril, but not extending to the tip; nostril covered partially by membrane; 2nd and 3rd quills longest; tarsi long and scutellate in front.

1342. Ardea goliath, *Temm., Pl. Col.* 474; *Rupp., Faun. Abyss.* pl. 26; *Jerd., B. Ind.* iii. p. 739; *Hume, Nests and Eggs Ind. B.* p. 610, No. 621; *id., Str. F.* i. p. 105; vii. p. 490.—The Giant Heron.

Upper plumage dark blue grey; short occipital crest and rest of head dark brown; sides of the head and entire neck chestnut brown; chin and throat white; neck in front white with black streaks; breast and abdomen dark chestnut brown. The young bird is dull grey above, the head, ear coverts and back of neck are pale rufous cinnamon. Bill dusky above, beneath and tip greenish; irides pale yellow; legs blackish (*Jerd.*)

Length.—55 to 65 inches; wing 24; tail 10; bill at front 8; tarsus 9; standing height nearly 4 feet.

Hab.—Bengal, near Calcutta and the Khasia hills. Nothing certain appears to be known of its nidification.

1343. Ardea sumatrana, *Raffles, Trans. Linn. Soc.* xiii. p. 325; *Jerd., B. Ind.* ii. p. 740 (part); *Hume, Nests and Eggs*, p. 610 (part); *Salvad., Ucc. Born.* p. 344; *Blyth, B. Burm.* p. 159; *Hume and Dav., Str. F.* vi. p. 469; *id., Str. F.* viii. p. 114. Ardea typhon, *Temm., Pl. Col.* 745. Ardea tectirostris, *Gould, P. Z. S.* 1843, p. 22; *id., B. Austr.* vi. pl. 54.—The Great Slaty Heron.

Entire upper surface deep slaty; scapulars and feathers of the interscapulary region linear, lanceolate, and elongated, with the terminal portions greyish white; those of the base of the neck similar but less elongated; crown with a dull purplish shade, also on the occiput, crown, back and sides of the neck; occipital crest long, linear and greyish white, about 9 inches long; orbital region, a band above and below the eye to the commissure bare; ear coverts and sides of the occiput light ashy brown, sometimes faintly rufescent; chin, upper part of throat, and feathers on either side of the base of the lower mandible white; rest of the throat and foreneck mingled ashy brown and slaty, with here and there a slightly ruddy tinge; feathers of the base and sides and front of the neck elongated, some of them fully seven inches in length, linear lanceolate, and the terminal portions pearl grey; rest of entire lower surface ash grey; wing lining, axillaries and under surface of the wing pure blue slate colour. (*Hume.*)

Length.—50 inches; tail 6; wing 18·5; tarsus 7; bill at front 6·5 (*Hume*); irides bright yellow; facial skin dirty green; upper mandible horny black; lower one whitish horny, yellowish towards the tip.

Hab.—Southern Tenasserim from Mergui to Bankasoon, Recorded also from Arracan.

1344. Ardea insignis (*Hodgson*), *Jerd., B. Ind.* iii. p. 740; *Hume, Nests and Eggs Ind. B.* p. 160; *id., Sr. F.* vi. p. 471. Ardea fusca, *Blyth, J. A. S. B.* xviii. p. 73.—The Dusky Grey Heron.

General plumage dusky cinereous, with a crest of a few narrow ashy feathers, the longest about 7·8 inches; quills and tail dark slaty; sides of the nead and neck slightly tinged with rufous; elongated breast plumes fine silvery grey, edged with dusky at the base; rest of lower parts mingled ashy and rufous; scapulars elongated, lanceolate and tipped with silvery grey. Bill dusky above, yellow at the gape and bottom of lower mandible; feet dark greenish grey.

Length.—46 inches; wing 19; tail 6·5; bill at front 7; tarsus 7; standing height about 42 inches; hind toe and claw 4·5 inches.

Hab.—N.-E. Bengal, the Sikkim Terai, Assam, and Arracan, extending to Malayana.

1345. Ardea cinerea, *Linn., Syst. Nat.* i. p. 235; *Naum, Vogt.* t. 220; *Gould, B. Eur.* pl. 274; *Jerd., B. Ind.* iii. p. 741; *Hume, Str. F.* i. p. 253; *Murray, Hdbk., Zool., &c., Sind*, p. 226; *Hume, Nests and Eggs Ind. B.* p. 610; *Dresser, B. Eur.* vi. p. 217, pl.; *Oates, B. Br. Burm.* ii. p. 245.—The Common Heron.



Ardea cinerea.

Forehead, sides of the head and crown white; a narrow streak from the base of the upper mandible over each eye, and another above it merging into the long occipital feathers, black; neck behind bluish ashy; in front white, with two rows of black elongate spots; breast and under surface white; back and wing coverts bluish ashy grey; primaries black; scapulars silvery grey; tail bluish ashy; bill dark yellow, brown on the upper mandible; irides yellow; nude oribitar area greenish.

Length.—39 inches; wing 18; tail 8; bill at front 5.

Hab.—Throughout India and Europe. In Sind the Mohannas or fishermen use this species as a decoy in the capture of wild fowl. Each boat has usually from 5 to 10 birds, Their eyelids are sewn up, and they stand motionless on the cross bar of the rudder gear or perched along the edges of the boat. They are fed daily, and during summer, when the occupation of wild fowl catching has ceased, serve the fishermen as food in the absence of anything better. Breeds throughout India from April to July, building nests on trees in small parties; colour of eggs sea green; size from 2·08 to 2·48 in length and 1·48 to 1·79 in breadth.

1346. Ardea purpurea, *Linn., Syst. Nat.* i. p. 236; *Jerd., B. Ind.* iii. p. 743; *Hume, Nests and Eggs Ind. B.* p. 611; *Salvad., Ucc. Born.* p. 345; *Blyth, B. Br. Burm.* p. 159; *Dresser, B. Eur.* vi. p. 217, pl.; *Legge, B. Ceylon* p. 1132; *Oates, Str. F.* x. p. 243; *id., B. Br. Burm.* ii. p. 245; *Murray, Vert. Zool., Sind*, p. 269.—The Blue Heron.

Head glossy black, with a lengthened black crest, the two middle feathers of which extend 3—4 inches beyond the rest; sides of the head rusty yellow, with three longitudinal narrow black lines, one extends behind the head, and is continued down the neck, and two lateral ones from the eyes to the breast; chin and throat white; neck in front variegated with rufous black and purple, the feathers on the top of the breast long and acuminated, purplish white; back, wings, and tail reddish ash; scapulars purple, long, forming a brilliant plume on each side; breast and flanks deep brownish red, rest of under parts a little paler. Bill deep yellow; orbitar skin greenish yellow; tarsus reddish brown.

Length.—36 to 42 inches; wing 15·5; tail 5·75; bill at front 5·37; tarsus 5·25.

Hab.—Throughout India and Ceylon, extending into Burmah. Habits and nidification the same as those of the Common Heron.

Gen. **Herodias.**—*Boie.*

Bill moderately long, slender, straight and compressed to the tip; plumage white. In breeding plumage with a long dorsal train composed of lax decomposed feathers, and pectoral plumes in some. The following is a key given by Mr. Hume to the Indian species of the genus:

Species.	Non-breeding plumage.	Breeding plumage.				Dimensions.				
	Bill.	Bill.	Crest.	Dorsal train.	Pectoral plumes.	Bill at front.	Wing.	Tarsus.	Nude portion of tibia.	Mid-toe and claw.
H. alba, *Linn. Ferd., B. Ind.* iii. 744.	Yellow.	Black...	None.....	Long; extending 5 inches beyond tail.	None.....	5·0	17·2	7·91	5·2	4·7
* H. eulophotes.	Yellow.	Yellow.	Of numerous straight feathers, 4 inches long.	Not exceeding the tail.	3 inches long	3·8	9·3	3·9	...	...
H. intermedia, *V. Haselt. Ferd., B. Ind.* iii. 745.	Yellow.	Black...	None.....	Long; about 7—8 inches beyond tail.	Of long decomposed feathers.	2·68 to 3·09	11·15 to 12·65	4·1 to 4·6	2·8 to 3·1	3·62 to 4·05
H. garzetta, *Linn. Ferd. B. Ind.* iii. 746.	Black...	Black...	Of 2 narrow feathers, 5-6 inches long.	Long; curling up at point scarcely extending beyond the tail.	Of long, narrow, ordinary feathers.	3·1 to 3·6	9·8 to 11·4	3·7 to 4·6	1·8 to 2·75	2·75 to 3·15

* *Hab.*—Tenasserim and Southern Pegu.

1347. Herodias alba (*Linn.*), *Jerd.*, *B. Ind.* ii. p. 744; *Blyth*, *B. Burm.* p. 159; *Legge*, *B. Ceylon* p. 1138; *Murray*, *Vert. Zool.*, *Sind*, p. 270. Ardea alba *Linn.*, *Syst. Nat.* i. p. 239; *Dresser*, *B. Eur.* vi. p. 231, pl. Ardea torra (*Buch.*), *Frankl. P. Z. S.* 1831, p. 123. Herodias torra, *Salvad.*, *Ucc. Born.* p. 347; *Scully*, *Str. F.* viii. p. 360. Ardea egretta, *apud Hume*, *Nests and Eggs Ind. B.* p. 613.—The Large White Heron.

In Breeding Plumage.—Whole plumage pure white; dorsal train of decomposed feathers extending about 4—5 inches beyond the tail; no crest, nor pectoral plumes. No dorsal train in non-breeding plumage. Bill yellow in winter, black in summer; irides pale yellow.

Length.—34 to 36 inches; tail 6; wing 13·5 to 17; tarsus 5·2 to 6·1; bill at front 4 to 5; from gape 5·5.

Hab.—Throughout India, Ceylon, and Burmah; nidificates on trees in small parties; eggs pale bluish green.

1348. Herodias intermedia (*Von Hasselt*), *Salvad.*, *Ucc. Born.* p. 348; *Blyth*, *B. Burm.* p. 159; *Legge*, *B. Ceylon*, p. 1141; *Murray*, *Vert. Zool.*, *Sind*, p. 270; *Oates*, *B. Br. Burm.* ii. p. 247. Ardea nigrirostris (*Gray*), *Hardw. Ill. Ind. Zool.*, pl. Herodias plumifera, *Gould*, *B. Austr.* vi. pl. 57. Ardea intermedia, *Von. Hass.*, *Wagler*, *Ibis*, 1829, p. 659; *Hume*, *Nests and Eggs Ind. B.* p. 615. Herodias egrettoides, *Jerd.*, *B. Ind.* ii. p. 745.—The Lesser White Heron.

Breeding Plumage.—Whole plumage pure white, dorsal train exceeding the tail by 7—8 inches; a long soft tuft of pectoral feathers; no crest, no dorsal nor pectoral plumes in winter. Bill black in summer, yellow with a black tip in winter; facial skin green; irides yellow.

Length.—26 to 28 inches; tail 5·5; wing 11·5 to 12·5; tarsus 4·3; bill at front 2·68 to 3·09.

Hab.—Generally distributed throughout India, Ceylon and Burma, but rare in the latter and in Southern India. Breeds during July and part of August, in colonies and generally in company of other kinds of Herons, Ibises, &c. The nest is not unlike that of its congeners, composed of thin twigs, lined or not with coarse sedge, but generally more closely packed. Eggs, 4 in number, broad ovals, rather pointed towards one end; pale sea or bluish sea-green, 1·68 to 2·08 in length, and 1·3 to 1·52 in breadth.

1349. Herodias garzetta (*Linn.*), *Jerd.*, *B. Ind.* ii. p. 746; *Hume*, *Str. F.* iii. p. 190; *Legge*, *B. Ceylon* p. 1144; *Murray*, *Vert. Zool.*, *Sind*, p. 270; *Oates*, *B. Br. Burm.* ii. p. 248. Ardea garzetta, *Linn.*, *Syst. Nat.* i. p. 237; *Hume*, *Nests and Eggs Ind. B.* p. 616; *Dresser*, *B. Eur.* vii. p. 239. —The Little Black-billed White Heron.

Breeding Plumage.—Whole plumage white; crest of 2—3 narrow feathers about five inches long; dorsal train scarcely extending beyond the tail and curled upwards at tip; pectoral plumes long and pointed. In *non-breeding plumage* there is neither a crest nor a dorsal train. Bill always black; base of lower mandible yellowish; irides yellow; facial skin greenish yellow; tarsus black.

Length.—25 inches; tail 4; wing 9·6 to 11·4; bill from gape about 4; at front 3·1 to 3·6.

Hab.—India, Ceylon and Burmah. Breeds in June, July, and part of August. Nidification similar to *H. intermedia*; eggs of the same colour, but from 1·6 to 1·8 in length, and 1·25 to 1·38 in breadth.

1350. Herodias eulophotes, *Swinh., Ibis*, 1860, p. 64; *Blyth, Ibis*, 1865, p. 37; *Blyth, B. Br. Burm.* p. 159; *Hume and Dav., Str. F.* vi. pp. 478, 480; *Hume, Str. F.* viii. p. 114; *Oates, B. Br. Burm.* ii. p. 249.—The Little Yellow-billed White Heron.

In Breeding Plumage.—The whole plumage is white; crest of numerous straight feathers, four inches in length; dorsal train not exceeding the tail; pectoral plumes about 3 inches long; bill yellow; legs black.

Length.—20 to 22 inches; tail 3·1 to 3·7; wing 9·3 to 10; tarsus 2·9; bill from gape 3·8 to 3·9.

Hab.—Tenasserim, at Mergui, also at Amherst. Inhabits Formosa and South China.

Gen. **Demi-egretta**.—*Blyth.*

Bill long and more slender than in *Herodias*; adult plumage dark, otherwise as in *Herodias*.

1351. Demi-egretta gularis, *Bosc., Act. Soc. H. N.* i. t. 2; *Meyer, Zool. Ann.* i. t. 1; *Hume, Str. F.* i. p. 254. Demi-egretta schistacea (*Licht.*), *Hemp. and Ehr. Sym. Phys.* t. 6. Demi-egretta asha, *Sykes, Cat.* 171; *Jerd., B. Ind.* iii. p. 747, No. 928; *Murray, Hdbk., Zool., &c., Sind*, p. 227.—The Ashy Egret.

Adult.—In breeding season, deep slaty blue; chin, throat, sides of the head, nearly to the gape and the base of the ear coverts, white; an occipital crest and dorsal train of decomposed feathers, concolorous with the upper parts, and not reaching quite to the end of the tail; pectoral plumes narrow and pointed; bill reddish yellow, dusky above; nude orbitar skin yellowish green; legs blackish; feet and lower part of tarsus yellowish.

Length.—24 to 27 inches; wing 10 to 11·4; tail 3 to 3·8; irides yellow; bare portion of tibia 2·2 to 2·9; bill 3·5 to 4·1; tarsus 3·9 to 4·4; mid-toe and claw 2·3 to 2·6. Affects the mud flats in the Kurrachee harbour.

The young or intermediate stage of plumage is white throughout, some of the wing coverts being greyish.

Hab.—Sind, Mekran, Arabian and Western Coasts, also the Eastern Coast to Ceylon. Nidification the same as of the Herons. Eggs, a rounded oval, pale blue, 4—6 in number, 1·83 × 1·42 inch.

1352. Demi-egretta sacra, *Gmel.*, *Syst. Nat.* i. p. 640; *Hume, Nests and Eggs Ind. B.* p. 618; *Salvad., Ucc. Born.* p. 346; *Wald., Ibis*, 1873, p. 318; *Hume, Str. F.* i. p. 254; ii. p. 304; *Hume and Dav., Str. F.* vi. p. 481; *Hume, Str. F.* viii. p. 114; *Oates, B. Br. Burm.* ii. p. 250. Ardea jugularis (*Forst.*), *Wagler, Syst. Av. Ardea, Sp.* 18. Herodias concolor, *Blyth, B. Burm.* p. 160.—The Blue Reef Heron or Egret.

Breeding Plumage.—Whole plumage deep blackish slate colour; head with occipital crest nearly black; pectoral plumes and dorsal train much elongated, the former about 3·5 inches in length; the latter, reaching to the tip of the tail; abdomen and vent tinged with brownish ashy in some; chin with or without a small white streak down the throat. Young and adolescent birds are pure white, with dorsal and pectoral plumes fully developed. In both stages there are no dorsal and pectoral plumes in winter.

Length.—21 to 24 inches; tail 3 to 4·25; wing 9·85 to 11·75; tarsus 2·7 to 3·1; bill at front 2·65 to 3·5.

Hab.—The whole coast of British Burmah, the Andamans, and the Nicobars, and spread along the shores of the whole of Eastern Asia. Breeds from April to June. Eggs pale green.

Bubulcus.—*Pucher.*

Bill shorter than in the *Demi-egretta*; legs longer; plumes during the breeding season yellow.

1353. Bubulcus coromandus (*Bodd.*), *Salvad., Ucc. Born.* p. 350; *Legge, B. Ceylon*, p. 1147, *Oates, Str. F.* x. p. 243; *id., B. Br. Burm.* ii. p. 251; *Murray, Vert. Zool., Sind*, p. 271. Cancroma coromanda, *Bodd., Tabl. Pl. Enl.* p. 54. Buphus coromanda, *Jerd., B. Ind.* iii. p. 749; *Blyth, B. Burm.* p. 160; *Bingham, Str. F.* ix. p. 197. Ardea coromanda, *Hume, Nests and Eggs Ind. B.* p. 618.—The Cattle Egret.

In breeding plumage the head, sides of the face, neck in front (except a narrow mesial line, which is white) nape and part of the hind neck, and the decomposed elongate feathers brilliant orange, the filamentose feathers of the back reaching to the end of the closed wings, rest of the plumage pure white; legs yellowish green, the joints tinged plumbeous; bill deep orange yellow; orbitar skin yellowish, with a pinkish tinge; irides pale yellow; mid-claw serrated.

Length.—21 inches; wing 10·25; tail 4; bill at front 2·5; tarsus 3·5. In winter the plumage is entirely white.

Hab.—Sind and throughout India, Burmah and Ceylon. It has gained the name of the Cattle Egret from its being always found amongst cattle when grazing, usually perched on their heads or backs. It is seldom, like the other species, seen wading in water. Feeds chiefly on insects, small frogs or tadpoles. Breeds from April to July. Eggs, 4—5, pale sea-green.

Gen. **Ardeola**.—*Boie*.

Tibia feathered nearly to the knee; tarsus shorter than in *Bubulcus*; toes also shorter.

1354. Ardeola grayi (*Sykes*), *Hume, Nests and Eggs Ind. Birds* p. 619; *Blyth, B. Burm.* p. 160; *Legge, B. Ceylon*, p. 1150; *Scully, Str. F.* viii. p. 361. Ardea grayi, *Sykes, P. Z. S.*, 1832, p. 158. Ardeola leucoptera, *apud Jerd., B. Ind.* iii. p. 751.—The Pond Heron or Paddy Bird.

In summer dress the head is greyish or buffy yellow with an elongate white crest; neck in front, except a fulvous mesial line, back of the neck, and also breast, with the elongated feathers a little paler than the head; scapulars pale greyish brown; elongated dorsal feathers dark maroon; rest of the plumage white; tarsal plumes fulvous or pale buff; bill yellowish, bluish at the base and tipped black; orbitar skin greenish yellow; irides bright yellow; legs and feet dull greenish.

In winter the crown of the head and nape are dark brown, the feathers with narrow mesial shaft-streaks; neck behind, on the sides and breast fulvous or pale buff, the feathers edged with dusky brown; back and scapulars grey brown or pale ashy brown; lower back, rump, upper and under tail coverts, also the tail and abdomen, pure white; thigh coverts fulvous; primaries white, dark shafted, the outer webs of the first three quills and also their tips greyish brown; secondaries pure white; wing coverts white, tinged very slightly in some specimens with greyish.

Length.—18 to 19 inches; wing 8 to 8·5; tail 3; bill at front 2·5.

Hab.—Sind and throughout India, Ceylon, and the Burmese countries. Breeds from May to August nesting in trees. Eggs, 4—6, pale bluish green, elongated ovals, 1·35 to 1·62 in length by 1·1 to 1·25 in breadth. Abundant in all moist localities, at the edges of ponds, ditches, marshes, and lakes, and especially in rice fields.

1355. Ardeola prasinoceles, *Swinh., Ibis*, 1860, p. 64; *id., P. Z. S.* 1871, p. 413; *Hume, Str. F.* ii. p. 483; *Blyth, B. Burm.* p. 160; *Anders., Yunnan Exped.* p. 689; *Hume and Dav., Str. F.* vi. p. 481; *Hume, Str.*

F. viii. p. 114. Ardea leucoptera, *apud Hume, Str. F.* viii. p. 161.—The Chinese Pond Heron.

In Breeding Plumage.—Whole head with long pointed occipital crest and entire neck rich vinous chestnut; pectoral plumes long and soft, deep chestnut tinged with purple; dorsal train black, tinged with purple; chin, throat, wings, tail, rump and upper tail coverts, also the lower plumage, white. In winter both sexes resemble *A. grayi*, except that the back, scapulars, and tertiaries are a richer brown, tinged with chocolate or rufous; irides bright yellow; base of upper mandible bluish, rest black; feet pale orange. (*Oates.*)

Length.—17 to 18 inches; tail 3·1; wing 8·6; tarsus 2·2; bill from gape 3·4; crest 4 inches long.

Hab.—Southern Tenasserim and the Malay Peninsula. Occurs also in S. China and Cochin-China.

Gen. **Butorides.**—*Blyth.*

Bill moderately long and stout; tibia feathered nearly to the knee; inner toe short; head crested.

1356. Butorides javanica (*Horsf.*), *Jerd., B. Ind.* iii. p. 752; *Wald., Trans. Zool. Soc.* viii. p. 100; *Hume, Nests and Eggs Ind. B.* p. 620; *Blyth, B. Burm.* p. 160; *Legge, B. Ceylon* p. 1153; *Murray, Vert. Zool., Sind*, p. 272; *Oates, B. Br. Burm.* ii. p. 254. Ardea javanica, *Horsf., Trans. Linn. Soc.* xiii. p. 190.—The Little Green Bittern.

Forehead and crown glossy black, also the long occiptal crest; a streak from behind the eye including the ear coverts white, in some with a fulvescent tinge; another streak, which is black, below the eye; back and sides of the neck, also the breast and abdomen, greyish brown, ashy brown in some; chin and a streak down the front of the neck white; back and scapulars green, the feathers lengthened, lanceolate and white-shafted; the tertials white edged; wing coverts glossy green, edged with pale buff or fulvous; secondaries margined round their tips with yellowish white; tail dark slaty; under tail coverts greyish; quills dark slaty, narrowly tipped with white; bill black above, pale yellow beneath; legs yellowish green.

Length.—16 to 16·75 inches; wing 6·75; tail 2·5; bare part of tibia 0·5; irides bright yellow; nude orbitar skin dull green.

The young bird—or bird of the year—is very differently marked. The head is black, with the feathers narrowly striated mesially with rufescent; sides of the neck and breast and lower parts fulvescent white, the feathers edged with dark brown; chin, throat and a line down the neck white; back and scapulars brown with a greenish tinge; the scapulars with a minute triangular white spot at the tip. Primaries and secondaries dusky brown, each with a

triangular white or fulvous white spot at the tip; primary coverts the same; wing coverts brown, broadly edged with rufescent, each feather with a rufescent or white triangular spot at the tip; edge of the wing fulvescent white.

Hab.—Sind and throughout the greater part of India, extending to Ceylon and Burmah; also the Malay Peninsula and islands as far as Australia, affecting water courses, wooded streams, nullahs and large open lakes. Habits nocturnal, generally issuing from its retreat at about sunset. Breeds in June and July, making nests in small companies on low trees or bushes. Eggs 4—6 in number, greenish white.

Gen. **Ardetta**.—*Gray*.

Bill rather slender and straight; toes and claws long; tarsus short, otherwise as in *Butorides*. Habit nocturnal.

1357. Ardetta flavicollis (*Lath.*), *Jerd.*, *B. Ind.* iii. p. 753; *Blyth*, *B. Burm.* p. 160; *Wald.*, *Trans. Zool. Soc.* ix. p. 236; *Hume*, *Str. F.* viii. p. 114. Ardea flavicollis, *Lath.*, *Ind. Orn.* ii. p. 701; *Hume*, *Nests and Eggs Ind. B.* p. 621. Ardeiralla flavicollis, *Salvad.*, *Ucc. Born.* p. 353; *Legge*, *B. Ceylon* p. 1159; *Oates*, *B. Br. Burm.* ii. p. 255.—The Blue Bittern.

"In the breeding season the plumage is dull cinereous black; chin and throat with the feathers tipped white, or with red brown; the larger feathers of the neck are mixed with white, red brown and dusky black, each feather having some black at the base and tip, and more or less red brown on one web only; a stripe of golden yellow down the side of the neck, widening inferiorly; feathers of the back forming the dorsal plume, lengthened, but not decomposed; the feathers of the breast dark ashy, slightly lengthened; abdomen dusky, mixed with whitish; inner wing coverts dusky reddish. The young bird has the feathers slightly edged with rufous, and the throat and neck less richly coloured than in the adult; bill livid red, dusky on the culmen; cere livid purple; irides yellow, in some with an outer circle of red; legs pale brown, with a tinge of green in some, reddish brown in others."

Length.—23 to 24 inches; wing 8·5; tail 3; bill at front 3·5; tarsus 2·5. (*Jerdon.*)

Hab.—Sind, Punjab, N.-W. Provinces, Deccan, Concan, and nearly throughout India, extending to Ceylon and Burmah. Affects swamps, rice fields and beds of rushes and reeds. Breeds in Sind. Mr. Doig obtained the eggs of a colony of these birds in the month of May on the Narra Canal. He says—"Once the sun is well up, they are seldom seen, unless actually beaten out of the dense tamarisk and reed jungle in which they lie hid." They are nocturnal feeders; the nests are formed of tamarisk twigs, with sometimes a few aquatic weeds on which the eggs are laid; always four in number, broad ovals, sharp at both ends, and nearly white in colour; size from 1·5 to 1·85 × 1·15 to 1·30 inches.

1358. Ardetta cinnamomea (*Gmel.*), *Jerd., B. Ind.* iii. p. 755; *Hume, Nests and Eggs Ind. B.* p. 622; *Salvad., Ucc. Born.* p. 354; *Blyth, B. Burm.* p. 160; *Hume and Dav., Str. F.* vi. p. 483; *Cripps, Str. F.* vi. p. 308; *Hume, Str. F.* viii. p. 114; *Oates, Str. F.* x. p. 243; *id., B. Br. Burm.* ii. p. 256; *Murray, Vert. Zool., Sind*, p. 274. Ardea cinnamomea *Gmel., Syst. Nat.* i, p. 643. Ardeiralla cinnamomea, *Legge, B. Ceylon*, p. 1162.—The CHESTNUT BITTERN.

Top of head, back and scapulars chestnut, the feathers centred slightly darker; chin and throat white, with a median chestnut line; foreneck and breast chestnut, the feathers slightly darker mesially, and the edges of those on the breast fulvous; a median fulvous line on the foreneck; thigh coverts also chestnut; primaries, secondaries and tail dark brown; wing coverts like the back, but more fulvous; flanks buffy, the feathers mesially streaked with dusky; abdomen, vent and under tail coverts white with a fulvous tinge in some; bill yellow, dusky superiorly; orbitar skin yellow; irides yellow; legs yellowish with a greenish tinge.

Length.—15 to 16 inches; wing 6; tail 1·75; bill at front 1·8 to 2; tarsus 1·9 to 2.

In immature plumage the upper parts, wing coverts, scapulars, neck in front and breast, also the thigh coverts reddish brown, or slightly darker, the feathers of the back and breast margined from ferruginous buff to fulvous.

Hab.—Sind, and nearly throughout India, Ceylon and Burmah and Malayana. Breeds in July and August, nesting on the ground at the edges of swamps or on the small embankments between the paddy fields. Eggs, generally six in number, dull white in colour.

1359. Ardetta sinensis, *Gmel., Syst. Nat.* i. p. 642; *Jerd., B. Ind.* ii. p. 755; *Hume, Nests and Eggs*, p. 623; *id., Str. F.* i. p. 308; ii. p. 311; iii. p. 193; *Salvad., Ucc. Born.* p. 354; *Blyth, B. Burm.* p. 160; *Legge, B. Ceylon* p. 1156; *Oates, Str. F.* x. p. 243; *Kelham, Ibis*, 1882, p. 196; *Murray, Vert. Zool., Sind*, p. 274; *Oates, B. Br. Burm.* ii. p. 257.—The LITTLE YELLOW BITTERN.

Top of head cinnamon rufous, the feathers centred broadly with black, giving it quite a black appearance; neck behind, back, scapulars, tertiaries and wing coverts deep cinnamon-rufous, the feathers margined with fulvous or bright buff; primaries and secondaries, greater wing coverts and tail black; edge of wing and under wing coverts fulvous white; chin and throat white, with a median buff line; sides of the breast deep brown, margined with buff; breast bright buff, margined paler; abdomen, vent and under tail coverts buffy white; legs yellowish green; bill pale yellow, brownish superiorly.

Length.—13 inches; wing 5·25; tail 1·75; bill at front 2; tarsus 1·7 to 1·8; mid-toe 1 inch.

Hab.—Sind, Bengal, Kutch, Deccan, and nearly throughout India; also Ceylon and Burmah generally, extending to the Malay Peninsula and Islands of Java, Borneo and Sumatra. It is less common than the last, and frequents similar situations, *i.e.*, high reeds and thickets. All the species are nocturnal feeders, and remain hid during the day in dense cover. Breeds during July and August in similar situations as the last. Eggs, four in number, pale green.

1330. Ardetta minuta, *Linn., Syst. Nat.* i. p. 670; *Hardw., Ill. Ind. Zool.* pl.; *Bodd., Tabl. Pl. Enl.* 323; *Naum., Vogt.* t. 227; *Gould, B. Eur.* pl. 282; *Jerd., B. Ind.* iii. p. 756, No. 935; *Hume, Str. F.* i. p. 256; *Hume, Nests and Eggs Ind. B.* p. 624.—The Little Bittern.

Top of the head, back, scapulars and tail black, with greenish reflections; hind-neck nearly bare of feathers, those of the foreneck falling back and covering it; cheeks, chin, neck and all the lower parts of the body reddish buff or inclining to chestnut; the feathers on the sides of the breast are black, edged with buff; those of the flanks long, and narrowly striped mesially with pale brown; primaries and secondaries black or greyish black; greater and lesser wing coverts dull yellowish buff; bill bright yellow, dusky above; orbitar skin and irides yellow; feet greenish with a yellow tinge.

Length.—15 inches; wing 5·75; tail 2; bill at front 1·75.

Hab.—Sind, Bengal, Punjab, Beloochistan, Persia, Arabia and the Himalayas are the only known localities where this species has been found outside of Europe. It breeds in the Narra Districts in Sind, where Mr. S. Doig took its eggs. (*Str. F.* viii. 372, 379.) Each nest contained 4—6 eggs, elongate ovals, and pure white, with a very slight tinge of sea green not perceptible in the blown egg.

Gen. **Botaurus**.—*Briss.*

Bill rather short, stout and rounded; tip scooped; the upper mandible curved to the tip, and longer than the lower; tarsi short; nostrils narrow, situated near the base of the bill; 1st to 3rd quills of wing longest.

1331. Botaurus stellaris, *Linn., Syst. Nat.* i. p. 230; *Jerd., B. Ind.* iii. p. 757; *Hume, Nests and Eggs Ind. B.* p. 624; *Dresser, B. Eur.* vi. p. 281, pl.; *Murray, Vert. Zool., &c., Sind*, p. 275; *Oates, B. Br. Burm.* ii. p. 258.—The Common European Bittern.

Forehead, crown and nape glossy black, also a moustachial stripe; sides of the face and ear coverts buff, with narrow dusky streaks; feathers of the sides of the neck long and lax, bright buff, and with irregular black transverse bars; hind neck bare, covered by the feathers of the foreneck; chin and throat fulvous, with a median rufescent line; foreneck and breast the same, each feather with irregular dark brown, nearly black bars and spots; lower breast

with long, lax, feathers, which are buff, with broad longitudinal black stripes; flanks the same; abdomen rufous buff, with narrow dark mesial streaks; back and scapulars black, the feathers edged, barred and mottled with buff; tail buff, thickly mottled and with zigzag markings of dusky; primaries and secondaries dark brown barred with rufous; wing coverts buff, barred and mottled with dusky brown; bill pale yellow, dusky above; orbits yellow; irides gamboge yellow; legs greenish yellow.

Length.—30 inches; wing 13·5; tail 4·5; tarsus 3·75 to 3·9.

Hab.—Sind, the Deccan, Punjab, N.-W. Provinces, Oudh, Bengal, and nearly all India, Burmah, and Ceylon; Central and Southern Europe, Persia, Nubia, Beloochistan and S. Afghanistan.

The Bittern is a shy solitary bird; it is never seen on the wing during the day, but sits hid among the reeds, rushes and other rank vegetation that prevail in the marsh, or bog where it may have taken up its abode. It is said to defend itself fiercely against a dog or falcon, with both its bill and claws, the bill with its extremely sharp point being however chiefly made use of. It is said to have been esteemed in falconry, owing to its habit, when flown at, of ascending in spiral circles, high up in the air, to keep above its enemy. Selby adds—"Should this manœuvre fail, it then prepares for the descent of the hawk, by setting its sharp bill perpendicularly upwards, upon which its antagonist frequently transfixes itself." Its boom or note is said to resemble the bellowing of a bull. It is also often uttered while the bird is soaring in the air, but the sound is feeble, compared with the hollow booming noise which it makes at night during the breeding season. Jerdon says it is excellent eating, not fishy in the smallest degree, and has a high game flavour.

Gen. **Nycticorax.**—*Steph.*

Bill long, sharp, the gape extending below the eyes; nostrils in a lateral groove covered by membranous scale; wings with the 2nd and 3rd quills longest; claw of mid-toe serrated; tarsi irregularly scaled.

1362. Nycticorax griseus (*Linn.*), *Bodd.*, *Tab. P. E.* 758, 759; *Naum.*, *Vogt.* t. 225; *Gould*, *B. Eur.* pl. 279; *Jerd.*, *B. Ind.* iii. 758, No. 937; *Dresser*, *B. Eur.* vi. p. 299, pl.; *Hume*, *Str. F.* viii. p. 114; *Murray*, *Vert. Zool.*, *Sind*, p. 276; *Legge*, *B. Ceylon*, p. 1165. Nyctiardea nycticorax, *Hume*, *Nests and Eggs Ind. B.* p. 624. Ardea grisea, *Linn.*, *Syst Nat.* i. p. 235; *Str. F.* vi. p. 415; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 228. (*Gadri*, Sind).—The Night Heron.

Forehead and supercilium, also the chin, throat and a narrow mesial line on the foreneck white; under tail coverts, breast and abdomen white, with a creamy tinge; top of head and nape, also the back and scapulars black, gloss-

tipped with brown; hind neck, wing coverts, tail and sides of the body ashy grey; first three quills emarginate near the tip; bill black, yellow at base of lower mandible; orbitar skin yellowish green; irides blood red.

Length.—22 to 23 inches; wing 12·5; tail 3·75; bill at front 2·8; tarsus 3.

Hab.—Sind, Beloochistan, Persia, Afghanistan and throughout India, Ceylon, and Burmah. It is a permanent resident in India, and breeds from May to September in societies. The nest is a loose structure of twigs. Eggs 3—4, glossless pale sea-green; size 1·92 × 1·35.

Gen. **Gorsachius**,—*Pucher*.

Bill moderate, higher than broad at base; tarsus moderate; tibia feathered for the greater portion of its length; feet and toes long; neck thick.

1363. Gorsachius melanolophus (*Raffles*), *Salvad.*, *Ucc. Born.* p. 355; *Blyth*, *B. Burm.* p. 160; *Legge*, *B. Ceylon*, p. 1169. Ardea melanolopha, *Raffles*, *Trans. Linn. Soc.* xiii. p. 326. Botaurus limnophilax, *Salvad.*, *Ucc. Born.* p. 355. Gorsachius melanolophus, *Hume*, *Str. F.* ii. p. 312; *Bourdillon*, *Str. F.* iii. p. 524; *Hume*, *Str. F.* viii. p. 114.—The Malayan Tiger Bittern.

Forehead, crown and a long occipital crest purplish black; sides of the head and back of the neck chestnut, as are also the back, rump, wing coverts, scapulars and tertiaries, but these parts are closely barred with undulating narrow bars of black; winglet black, broadly tipped with white; the first two or three primary coverts black, tipped with white; the others chestnut and also white tipped; primaries slaty black, tipped with white and with a subterminal patch of chestnut; secondaries also tipped with white; upper tail coverts and tail slaty brown; chin and throat whitish; front and sides of the neck and breast dull rufous grey; the centre of the throat and middle line of the neck and breast streaked with black, light buff and chestnut; under surface of the body dull chestnut, marked irregularly with black lines and white patches; under tail coverts white. Facial skin green; legs and feet greenish olive; irides greenish yellow.

Length.—19 inches; tail 3·5; wing 10·3; tarsus 2·5; bill from gape 2·3.

Hab.—Southern India and Ceylon; also Tenasserim, Arracan, and the Nicobars.

Family, TANTALIDÆ.

Bill long, stout, rounded, curving downwards in many, flat in others; wings long; tail rather short; toes webbed at the base.

Sub-Family, TANTALINÆ.

Bill long, slender and curved; sides compressed to the tip, or thick and

Gen. **Tantalus.**—*Linn.*

Bill rounded, long and curved downwards; nostrils at the base of the bill; head and cheeks bare; tibia naked for half its length.

1364. Tantalus leucocephalus, *Penn. in Forst. Ind. Zool.* p. 20, pl. 10; *Gmel., Syst. Nat.* i. p. 649; *Jerd., B. Ind.* ii. p. 761, No. 938; *Hume, Nests and Eggs Ind. B.* p. 626; *Blyth, B. Burm.* p. 158; *Hume and Dav., Str. F.* v. p. 484; *Newton, Str. F.* viii. p. 415; *Legge, B. Ceylon,* p. 1100; *Oates, Str. F.* x. p. 244; *id., B. Br. Burm.* ii. p. 267; *Murray, Vert. Zool., Sind,* p. 276.—The Pelican Ibis.

Plumage white; quills and tail richly glossed greenish black; tertiaries white, tinged with rosy, with a dark band near the end and a white tip, the feathers lax and decomposed; lesser and median coverts glossy green, edged with white; greater coverts white; bill yellow, the tip greenish, as are the naked orbits, head and gular skin; irides pale yellow brown grey in some; legs fleshy red.

Length.—40 to 42 inches; expanse 71; wing 20; tail 6·25; tarsus 8 10.

The young have the cheeks and ear coverts grey; head and neck brown; lower plumage smoky white, darker across the abdomen and on the sides of the body.

Hab.—Extremely common throughout India, Burmah and Ceylōn, frequenting rivers, tanks, marshes, &c., generally in small parties of 10 or a dozen. Breeds from May to August on high trees. Eggs, 3—4, glossless, dull white with a thick compact shell.

Sub-Family PLATALÆINÆ,—Spoonbills.

Bill flat, spathulate, long and rounded at the tip.

Gen. **Platalea.**—*Lin.*

Bill thin, flat, dilated and rounded at the tip (spathulate) otherwise as in *Tantalus*; toes connected by a small membrane extending as far as the second joint of the outer and the first joint of the inner one.

1365. Platalea leucorodia (*Linn.*), *Bodd. Tab. Pl. En.* 405; *Gould, B. Eur.* pl. 286; *Jerd., B. Ind.* iii. p. 763; *Murray, Hdbk., Zool., &c., Sind,* p. 229; *Murray, Vert. Zool., Sind,* p. 227.—The Spoonbill.

Plumage pure white, except a buffy yellow patch on the upper breast, extending sometimes on to the back; orbitar skin orange yellow, also the skin of the gullet; head crested; bill and legs black, spotted or barred with yellowish; the tip yellowish during winter; irides blood red; legs black; nude facial skin and gular pouch orange yellow.

Length.—31 to 36 inches; wing 14 to 16; tail 6·25 to 6·5; bill at front 7 to 8·5.

The young have the shafts and tips of the primaries black.

Hab.—Sind, Beloochistan, Persia, Afghanistan and throughout India, frequenting rivers, lakes, &c.

Breeds throughout India nearly. Especially common in Sind and Ceylon. Nests made in trees; eggs white, chalky, broad ovals, and elongated 2·4 to 2·95 inch in length and 1·65 to 1·95 in breadth.

Sub-Family ANASTOMINÆ.

Bill thick, stout, gaping in the middle.

Gen. Anastomous.—*Illiger.*

Bill long, curved, thick, solid, gaping in the middle, compressed at the sides; tail nearly even; nostrils basal, at the edge of the upper mandible; tarsi reticulated; tibia naked for half its length; toes webbed at the base.

1366. Anastomous oscitans (*Bodd.*), *Jerd., B. Ind.* iii. p. 765; *Hume, Nests and Eggs Ind. B.* p. 630; *Blyth, B. Burm.* p. 158; *Hume, Str. F.* iii. p. 192; *Hume, Str. F.* viii. p. 114; *Legge, B. Ceylon*, p. 1103; *Oates, Str. F.* x. p. 244; *Murray, Vert. Zool., Sind*, p. 277.—The Shell Ibis.

Young.—Plumage light grey, darker on the head and neck, the feathers on the latter hair-like; upper back, scapulars, primaries and secondaries, also the winglet and tail black, with purple reflections; nude skin of the chin and front of the eyes greenish black; in a later stage of plumage the head, sides of the face, nape and neck behind are dusky brown, the feathers short; neck in front, breast, lower parts, back, wing coverts and tail pure white, the primaries and secondaries also, their shafts black, also the shafts of the winglet; the first three primaries broadly margined with black on their outer and inner webs, their tips black; the inner webs of the primaries margined only to the notch; tertials white, also black-shafted; the upper series slaty grey, with their webs lax and disunited. In the breeding plumage the bird is entirely white; bill greenish black; nude orbitar and gular skin blackish; irides grey or pale brown; legs blackish.

Length.—25 to 30 inches; wings 15 to 16; tail 7; bill at front 6·5 to 8; tarsus 5·25 to 5·5.

Hab.—Sind, Beloochistan, Persia, Punjab, N.-W. Provinces, Oudh, Bengal, Guzerat, and the Deccan; abundant in Bengal and Central India, also Burmah and Ceylon; chiefly found in the vicinity of rivers, lakes and marshes; resident in Sind. Breeds from July to September in company with *Threskiornis melanocephalus*. Eggs, creamy white, from 2 to 2·52 inches in length and from 1·48 to 1·82 in breadth.

Sub-Family, IBIDINÆ.

Bill more slender, long and curved, as in *Anastomous.*

Gen. Threskiornis, *Gray.*

Bill nearly square at base, curved; upper mandible with a lateral groove extending to the tip; nostrils situated at its base; tail short; hind toe half as long as the mid-toe; head and neck nude; scapulars and tertials lengthened and decomposed; feathers of the breast elongated; plumage white.

1367. Threskiornis melanocephalus (*Lath.*), *Jerd.*, *B. Ind.* iii. p. 768; *Hume, Nests and Eggs Ind. B.* p. 632; *Murray, Vert. Zool., Sind*, p. 278. Tantalus melanocephalus, *Lath., Ind. Orn.* ii. p. 709. Ibis melanocephalus, *Salvad., Ucc. Born.* p. 359; *Blyth, B. Burm.* p. 158; *Legge, B. Ceylon*, p. 1106; *Oates, B. Br. Burm.* p. 268.—The WHITE IBIS.

Head and neck nude; lower neck, back, wings and their coverts, primaries, secondaries, entire under surface from the breast and also the tail, white; scapulars and tertials lengthened, their outer webs disunited, and of a greyish colour. In another stage of plumage the quills are black with green reflections; bill and legs black; irides blood red.

Length.—29 to 30 inches; wing 14; tail 5·75; bill at front 6; tarsus 4.

Hab.—Sind, Mekran Coast, Persia, Rajputana, Kutch, Guzerat, Concan, Deccan, and nearly throughout India, Ceylon and Burmah. A resident wherever found; breeds from July to September. Eggs, 4—6, white, or dingy white, with a slight bluish tinge when fresh; size 2·5 × 1·75.

Gen. **Geronticus.**

Bill more slender and longer than in *Ibidinæ*; plumage black.

1368. Geronticus papillosus, *Tem., Pl. Col.* 304; *Jerd., B. Ind.* iii. p. 769; *Hume, Nests and Eggs Ind. B.* p. 633; *Murray, Vert. Zool., Sind*, p. 278; *Legge, B. Ceylon*, p. 1107; *Murray, Hdbk., Zool., &c., Sind*, p. 229.—The WARTY-HEADED IBIS.

Head, nape, chin and throat nude, black; crown with a triangular patch of bright red papillæ extending in front in line with the eyes, and behind to the back of the head; neck and entire under surface fuscous brown, unglossed; back, scapulars and tertials the same, but glossed with purplish; upper tail coverts dark brown, slightly glossed with steel blue; under tail coverts glossed with bluish; wings glossy steel blue, mixed with purple; a large patch of white on the wing above the shoulder formed by the white of the innermost lesser wing coverts; bill plumbeous with a greenish tinge; irides orange red; legs and feet brick red.

Length.—30 inches; wing 15; tail 7·5; bill 6 to 7; tarsus 3.

Hab.—Sind, Beloochistan, Persia, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Central India, Khandeish, Guzerat, Concan and Deccan. Occurs on the Western Coast generally. A resident in Sind; breeds from July to September.

Gen. **Graptocephalus**,—*Elliot.*

No warts on the back of the head.

1369. Graptocephalus Davisoni (*Hume*), *Elliot, P. Z. S.* 1877, p. 490; *Hume and Dav., Str. F.* vi. p. 485; *Hume, Str. F.* viii. p. 114; *Oates, Str. F.* ix. p. 300; x. p. 244; *Oates, B. Br. Burm.* ii. p. 269. Geronticus Davisoni, *Hume, Str. F.* iii. p. 300. Geronticus papillosus, *apud*

Oates, Str. F. iii. p. 347. Inocotis papillosus, *apud Oates, Str. F.* v. p. 169. Ibis Harmondi, *Oust., Bull. Soc. Philom.*, 1877, p. 28.—Davison's Black Ibis.

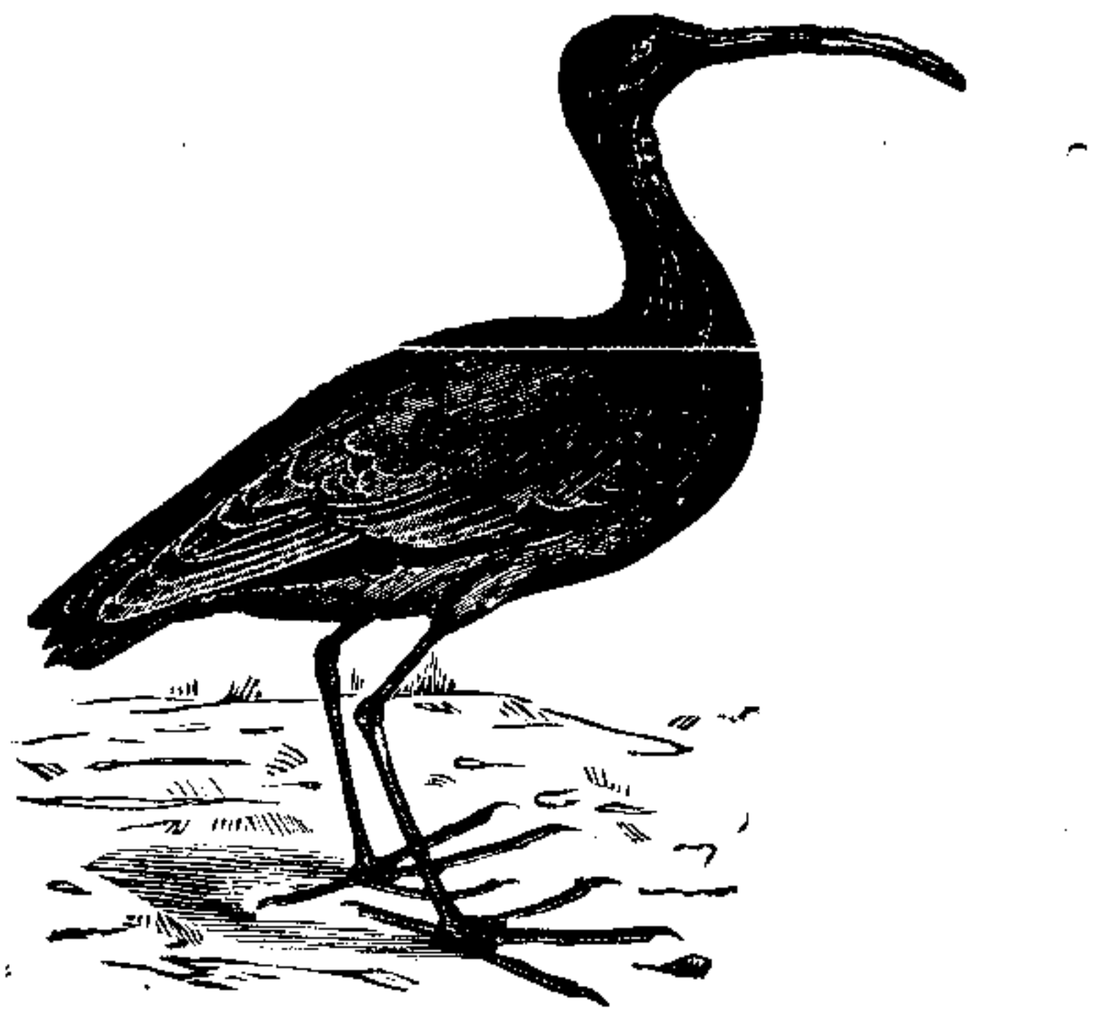
Head and a portion of the neck naked, the front of the head covered with small warts; remainder of neck, whole lower plumage, back, scapulars, and tertiaries dark brown; rump and upper tail coverts darker, with a greenish lustre; quills and tail glossy bluish black; lesser wing coverts next the body white, forming a wing spot; nude parts blackish brown; a white band round the neck; irides orange red; bill bluish; legs pale coral red. (*Oates.*)

Length.—30 inches; tail 7·7; wings 15·2; tarsus 3·2; bill from gape 6·2.

Hab.—The plains of Southern Pegu, between the Pegu and Sittang rivers, where it appears, as Oates says, to be a constant resident. It has also been observed in the southernmost parts of Tenasserim. Extends to the Malay peninsula, and is said to be found in Siam and Cochin-China. Occurs singly or in pairs; feeds on the banks of muddy streams and in marshes. Breeds in Pegu. Eggs, two in number, pale blue.

Gen. **Falcinellus**.—*Bech.*

Bill long and slender, more so than in *Threskiornis*: tarsus longer; 2nd and 3rd quills longest.



Falcinellus igneus. The Glossy Ibis.

1870. Falcinellus igneus (*Linn.*), *Jerd., B. Ind.* iii. p. 770; *Hume, Nests and Eggs, Ind. B.* p. 635; *Blyth, B. Burm.*, p. 158; *Elliot, P. Z. S.* 1877, p. 503; *Hume, Str. F.* viii. p. 114; *Doig, Str. F.* viii. p. 377;

Oates, Str. F. x. p. 245; *Murray, Vert. Zool. Sind*, p. 279. Tantalus falcinellus, *Linn., Syst. Nat.* i. p. 241. Scolopax rufa, *Scop. Ann.* i. p. 93. Numenius igneus, *S. G. Gmel., Nov. Comm. Petrop.* xv. p. 460, t. 18. Plegadis falcinellus, *Dresser, B. Eur.* vi. p. 335. pl.; *Legge, B. Ceylon*, p. 1109; *Oates, B. Br. Burm.* ii. p. 271.—The Glossy Ibis.

Head, on the crown and sides, deep greenish dark brown, glossed with metallic purple, the feathers lanceolate; neck, nape, chin and throat, also the back and breast, deep rich reddish brown or chestnut red; lower back, rump, wing coverts and tail dark green, with bronze and purple reflections; primaries dark brownsih black, tinged with green; tertiaries dark red brown; legs blackish green, with a blue garter above the knee; claw of mid-toe scooped or hollow below, and forming a sharp edge on one side; irides brown; lores nude.

Length.—22 to 23 inches; wing 10·5 to 11; bill at front 6 to 6·5; tarsus 4·5. Birds of the year are dark brown, the feathers of the head, chin and throat margined with white or lineated; back greenish brown, very little glossed; under parts dusky.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. Porvinces, Oudh, Bengal, Rajputana, Kutch, Central India, Guzerat and the Deccan; also Ceylon and Burmah. Recorded also from Arracan. It is not known from the Concan, but possibly occurs there, being a bird essentially affecting paddy fields, marshes and jheels. Breeds in Sind.

ORDER.—NATATORES.

Feet more or less fully webbed; tarsi compressed, generally short, except in the *Phœnicopteridæ;* bill various; wings also variously developed. The first tribe of the order is *Lamellirostres*, or birds with thick depressed bills, usually covered with soft skin, the tip commonly called the "nail," above being horny; the edges of the bill are serrated, forming lamellar teeth, which serve as a sieve.

Family, PHŒNICOPTERIDÆ.

Bill thick, rounded, rather compressed on the sides, suddenly bent downwards in the middle: tarsi and thighs long, the latter naked; tarsi scutellate.

Gen. **Phœnicopterus.**—*Linn.*

Margin of bill lamellate and dentate; nostrils in a groove covered by membrane; neck very long; 1st and 2nd quill of wing longest; other characters as in the Family.

1371. Phœnicopterus antiquorum (*Tem.*), *Bodd., Tab. P. E.* 63; *Naum. Vogt.* t. 233; *Gould., B. Eur.* pl. 287. Phœnicopterus roseus (*Pall.*), *Jerd., B. Ind.* iii. p. 775, No. 944; *Hume, Str. F.* i. p. 257; *Murray, Hdbk., Zool., &c., Sind*, p. 230.—The Flamingo.

Plumage throughout of a rosy white in the adult bird; primaries and secondaries black; primary and greater wing coverts white, dark shafted and broadly tipped with black, rest of the wing coverts and tertiaries rosy red; axillaries and under wing coverts rosy red; bill rosy, broadly black at the tip; legs and feet rosy red.

Length.—48 to 54 inches; wing 16 to 16·5; tail 6; bill 4 to 4·12. Birds of the year have scarcely any rosy tinge, and the plumage, especially of the upper parts, is mixed with dusky.

Hab.—Beloochistan, Persia, Afghanistan, Punjab, N.-W. Provinces, Oudh, Bengal, Central India, Rajputana, Kutch, Guzerat, Concan, Deccan, South India and Ceylon. Everywhere in flocks of thousands on all the lakes, rivers, &c., especially in Sind. Mr. Hume (*Str. F.* i. p. 257) truly describes them "as occurring in countless myriads, seen either massed upon the water, as huge rosy islands, or floating above it like a sunset cloud in all the large lakes of Sind. On taking flight, the exposure of the rosy upper and under wing coverts turns the mass into a gigantic brilliant rosy scarf, waving to and fro in mighty folds as it floats away." They are also common about the Kurrachee harbour, chiefly on the mud flats and in Clifton Bay; usually they are in large parties drawn up in line. When feeding they have their necks and heads bent down in such a position, that the upper mandible rests on the ground; with it they stir up the limpid ooze in search of animalculæ, minute crustacea, fish, &c., on which they live. Like the Cranes the Flamingoes also have sentinels posted to give warning of danger; their flesh is not considered good, but the Mohannas or fishermen caste on the Indus consider it palatable, the fishy taste being lost on their palates, owing to their principal diet being fish. The ancients considered it choice food, and the Egyptians, at the present day, are partial to the flesh. From the tongue they are said to extract an oil which they use for flavouring certain viands.

They have been found breeding at Fao in Mesopotamia; the nest is as curious as the structure of the bird, being a truncated cone, built entirely of stiff clayey mud, on which the parent bird sits either astride or with its long legs folded under it. Eggs, 2 in number, white, and very chalky.

1372. Phœnicopterus minor, (*Geoff. St. Hil.*) *Tem., P. C.* 419; *Schleg., De Dier.* fig. 276; *Ibis*, 1869, pl. 15, 8; *Hume, Str. F.* i. p. 31; ii. p. 339; *Murray, Hdbk., Zool., &c., Sind*, p. 230; *id. Vert., Zool. Sind.*, p. 280.—The Lesser Flamingo.

"In winter plumage the head, neck and the whole body above and below is a delicate pale rose colour; on the back little more than white, tinged with rosy; scapulars are almost white, with a pale rosy streak down the centre; quills black, except the tertials, which are like the scapulars, but slightly pinker; wing coverts pale rosy white, the lesser and median broadly centred at the tip with a bright rather pale cerise, and the legs and feet are a bright

throat is *bright* rose colour, each of the feathers of the breast is broadly centred towards the tip with bright cerise; feathers of the upper portion of the back similarly centred, and over the broad rosy white scapulars a number of comparatively narrow, elongated, intensely cherry-coloured plumes have been thrown out; the whole visible portion of the secondary, lesser and median coverts have become the most brilliant cherry colour with only narrow white tips; lower tail coverts, flanks and vent feathers are bright rosy tinged with cherry colour, with only narrow white tips; the legs and feet too have become a deep but brilliant red; the basal portion of bill deep vinous red, the tip black, the intermediate portion bright crimson lake."

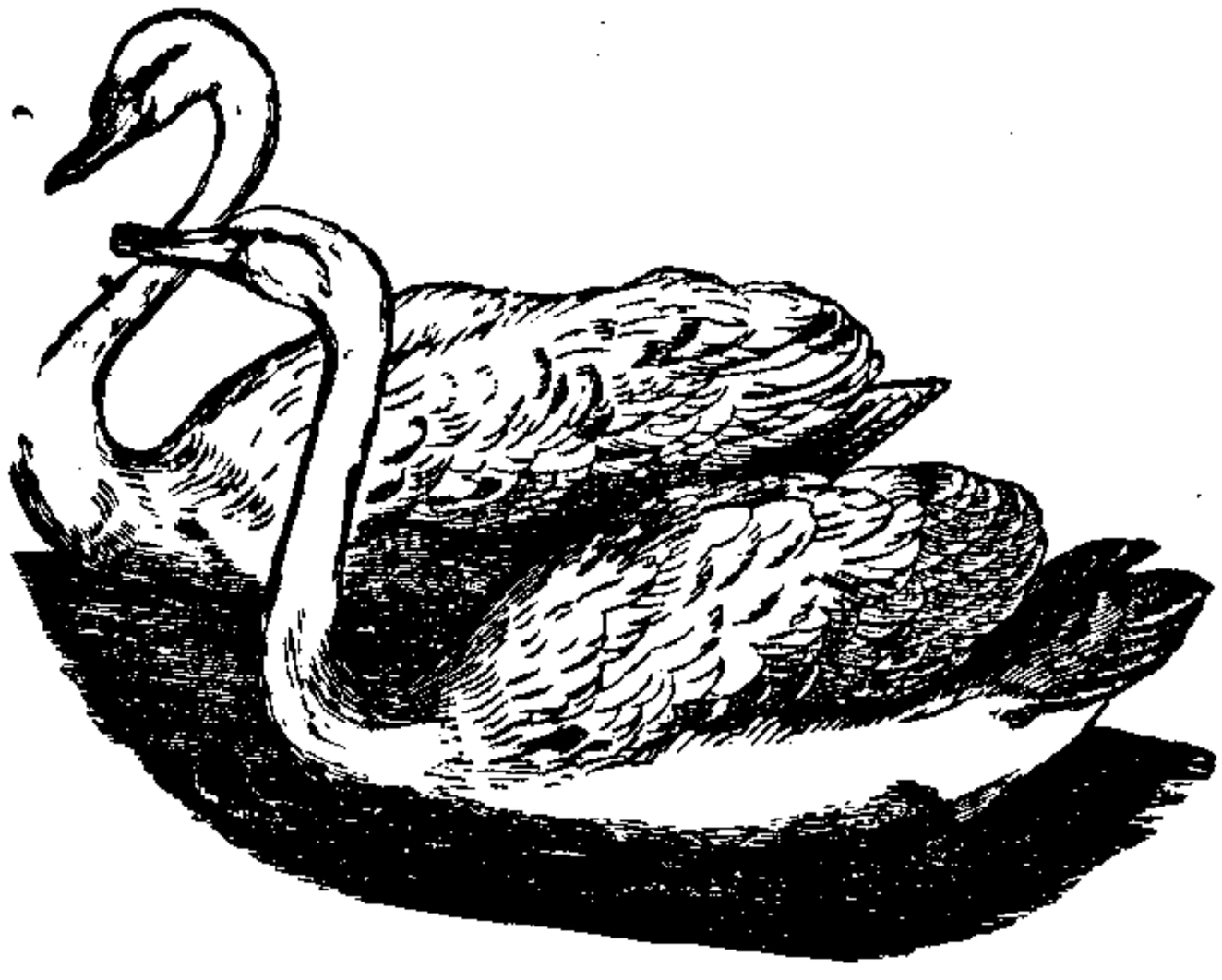
Length.—33 to 35 inches; wing 12·5 to 13·75; bill from gape 3.5 to 3·6; tail 4·5 to 4·75; tarsus 7·5 to 8·5.—(*Hume, Str. F.* i. 33.34.)

Hab.—Sind, Persia, Punjab, N.-W. Provinces, Rajputana, Guzerat and the Deccan.

Gray, in his *Handlist of Birds in the Br. Mus.*, gives West Africa, Cape of Good Hope and the Coast of the Red Sea as its other habitats. Occurs associated with *P. antiquorum*.

Family, CYGNIDÆ.—*Bp.*

Neck very long; legs moderate; front toes broadly webbed; hind toe not lobed; keel long; bill high at the base, with a fleshy or callous tubercle; cere extending to the eye; 2nd and 3rd quills of wing longest; tail short, rounded.



Cygnus olor. The Mute Swan.

1373. Cygnus olor (*Gm.*), *Bodd., Tab. P. E.* 913; *Naum. Vogt.* t. 29; *Gould, B. Eur.* pl. 354; *Str. F.* vii. pp. 99, 101, 106; *Murray, Hdbk., Zool., &c., Sind*, p. 231; *id., Vert., Zool. Sind*, p. 282.—The Mute Swan.

Entire plumage white; callous tubercle at base of upper mandible; legs, feet and cere black; bill reddish orange, the edges and tip black; irides dark brown.

Length.—48 to 52 inches. The following are the measurements of the three specimens obtained by Mr. H. E. Watson given in Mr. Blanford's paper on Wild Swans in Sind (*Str. F.* vii 101):—

	No. 1.	No. 2.	No. 3.
Length from tip of bill to end of tail...	58· 5″	62·″	60·″
Expanse	78·	84·	82·
Closed wing...	22·	23·	...
Tail from vent	9·75	10·25	9·75
Bill from gape	3·75	3· 8	...
Tarsus measured on inner side.....	3· 8	4· 2	...

The female resembles the male in every particular, except that the callous tubercle is smaller.

This species was obtained on the Munchur Lake during an unusually severe winter in Sind, by Mr. H. E. Watson, Deputy Collector of Sehwan, shortly after I left the Lake in the same year (1878). In every instance, where the species has occurred, it was during an unusually severe winter. Mr. Hume, in his *Game Birds*, says—"It may be considered a pretty regular, though somewhat rare, cold weather visitant to the Peshawar and Hazara Districts, and an occasional straggler to the Kohat and Rawul Pindee Districts, and to the Trans-Indus portions of Sind.

It has occurred near Peshawar in 1857. In 1871, Captain Unwin obtained a specimen in the Rawul Pindee District. Dr. Stolickza in *J. A. S. B.*, 1872, p. 229, says—"While crossing the Runn of Cutch he noticed several swans but at too great a distance for it to be possible to form an idea as to the species the birds belonged to," "and from its occurrence in Sind," Mr. Hume says, "renders it not improbable that Dr. Stolickza was right."

Outside our limits this species has been seen in the Kabul river, near Jellalabad, and is known to visit Northern Afghanistan pretty regularly. Breeds in Western Turkistan.

Mr. Hume in his Tentative List and in *Str. F.* vii. pp. 107, 464, enters *Cygnus Bewicki*, in the List of the Birds of India, but as this entry as well as of *Cygnus musicus* and *Anser segetum* have been made on certain drawings by Hodgson and others, and there are no veritable records of their having been killed within our limits, I omit them from the Avifauna.

Family, ANSERIDÆ.

Bill moderate, narrower in front than behind; keel elevated at the base, sloping to the tip; nail at point of bill horny and hard; legs moderate; knee bare; hind toe partially lobed; laminar teeth present.

Sub-Family ANSERINÆ.

Characters same as those of the Family.

Gen. **Anser**.—*Briss.*

Bill high at the base, rather long; lamina at edge wide and visible externally; nostrils in the nude cere, longitudinal.

1374. Anser cinereus, *Meyer, Naum. Vogt.* t. 285; *Gould, B. Eur.* pl. 347; *Jerd., B. Ind.* iii. p. 779; *Str. F.* i. p. 258; iv. pp. 26, 197; vii. p. 494; viii. p. 421; *Hume and Marsh., Game Birds of Ind.* iii. p. 55; *Murray, Hdbk., Zool., &c., Sind*, p. 233; *id., Vert. Zool., Sind*, p. 283. (*Hans*, Sind.)—The Grey Lag Goose.

Head, hind neck and nape greyish brown, the feathers of the latter slightly darker, and forming a conspicuous line on the neck behind, in some uniform grey brown; chin, throat and breast on the upper part pale greyish brown; the breast below whitish, and barred on the sides with greyish; back and scapulars brown, the feathers margined at the tips with fulvous white, forming regular bars; greater wing coverts greyish brown, lesser slightly paler, both bordered with whitish; primaries white-shafted, the first three pale grey, the rest nearly dark brown; tail greyish, tipped with white. The plumage of this Goose is very variable. Of specimens I have, no two are alike. Mr. Hume also notices this fact and says—"In some the head and neck vary from pale ashy or earthy brown to dark clove brown; in most there is a mingled white and orange patch on the forehead; in some there is a similar spot at the base of the upper mandible on each side, the feathers of the head and cheeks are tinged wite orange or rusty, and in most there is a small spot of white on the chin. In some specimens the breast and abdomen are closely blotched and mottled with black or blackish brown and pale rusty buff; in others the cap and back of the upper neck are conspicuously darker, as in the specimen before me, which has the entire breast a fulvous or soiled white, also the middle of the belly, while the flanks are brown and barred with fulvous."

Bill pinkish flesh colour, sometimes with an orange tinge; nail greyish white; irides greyish brown; legs livid fleshy.

Length.—30 to 32 inches; wing 17 to 18·5; tail 6; bill at front 2·4 to 2·8; tarsus 3 to 3·12.

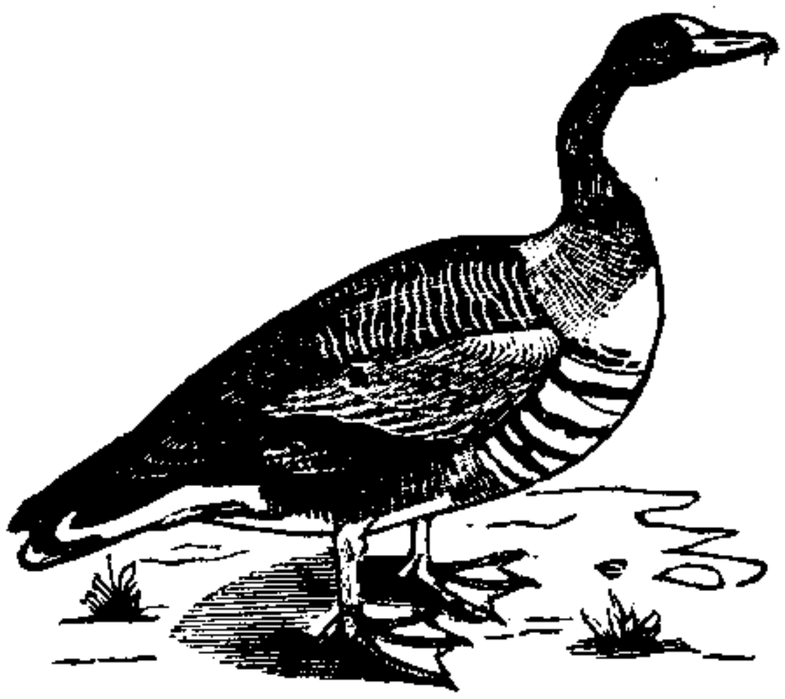
Hab.—Sind, Afghanistan, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputna, Kutch and Guzerat. Occurs throughout Europe. About the Munchur Lake in Sind they are met with in large parties, also along the canals, and especially the river.

1375. Anser brachyrrhynchus (*Baillon*), *Jerd., B. Ind.* iii. p 780; *Hume and Marsh., Game Birds* iii. p. 71.—The Pink-footed Goose.

Head and upper part of neck brown; lower part of neck reddish ashy, body above brownish cinereous with white undulations; longest scapulars edged with white; upper tail coverts black; lesser and median coverts bluish ashy, edged with white; two first primaries bluish, others black; tail black; breast and upper abdomen ashy whitish; lower abdomen and under tail coverts pure white. Bill much smaller than in the last, fleshy red or purplish, the base and the nail black; feet pinkish red. (*Jerd.*)

Length.—27 to 29 inches; wing 15·9 to 17; tail 5·5; bill at front 1·75; tarsus 3; middle toe 3.

Hab.—This is an extremely rare bird in India. Hume records a picture of one which was got in the Punjab, and also a statement that Colonel Irby killed one at Alumbagh near Lucknow. He has seen a pair among Grey Lags on a sandbank in the Jumna, and an assurance has been given him by Col. Graham that it is not uncommon on the Brahmaputra in Assam. This is all we know of its occurrence in India. In Northern Europe it is common, and probably also Central Europe and Northern Asia.



Anser albifrons. The White-fronted Goose.

1376. Anser albifrons, *Gm., Naum. Vogt.* t. 289; *Jerd., B. Ind.* iii. p. 780; *Str. F.* i. p. 259; viii. p. 431; *Murray, Hdbk., Zool., &c., Sind*; *Hume and Marsh, Game Birds, Ind.* p. 73; *Murray, Vert. Zool., Sind,* p. 284.—The White-fronted or Laughing Goose.

Forehead white or yellowish white, followed by a narrow dark band; chin the same; head, hind neck and nape brownish grey, shaded in some specimens with reddish; throat pale greyish white, darker in some; breast and flanks pale brownish, with cross bars of black, paler and whitish on the lower breast, with broader black bars; back dark greyish brown, the feathers with pale reddish brown edges; upper and under tail coverts white; tail with the middle feathers dark grey, tipped with white; the lateral ones entirely white;

primaries ashy grey, dark at the tip; secondaries bluish black; tertiaries margined with dull white; greater and lesser wing coverts grey, edged with rufous; abdomen white; bill livid fleshy or purplish red, the middle of the upper mandible with an orange tinge; nail at tip white or yellowish white; legs and feet orange.

Length.—27 to 28 inches; wing 16 to 17; bill at front 1·7 to 1·9; tarsus 3.

Hab.—Sind, Beloochistan (Quetta), Persian Gulf (Bussorah), Afghanistan (Arghandab), Punjab, N.-W. Provinces and Oudh.

In Sind the White-fronted Goose is much more rare than the Grey Lag. Mr. Hume says "that about one bird of this species visits this empire, for every thousand of Grey Lags, or every five thousand of the Barred-headed Geese." In Egypt it is most abundant, also at Fao in Mesopotamia, and on the Caspian.

1377. Anser erythropus (*Linn.*), *Newton, Ibis*, 2, p. 406; *Jerd., B. Ind.* iii. p. 781; *Hume and Marsh., Game Birds* iii. p. 77. A. minutus, *Naum. Vogt*, i. ?—The Dwarf Goose.

Top of head, forehead, throat, front of cheeks and the under and upper tail coverts white; rest of head, neck and crop grey; scapulars and back dark brown grey, with transverse lighter bands; primaries and upper wing coverts blue grey, lower the same as the back and edged with white; secondaries black; tail grey, margined with white at the tip and white at the base; abdomen black, bordered with white; flanks dark grey brown, each feather *margined* lighter. Bill orange; feet and legs red. (*Jerd.*)

Length.—22 inches; wing 15; tail 4·5.

Hab.—N.-W. Provinces and Oudh as a rare winter visitor. Outside our limits it is found in Northern and Central Europe.

1378. Anser indicus (*Lath.*), *Gould, C. B.* pl. 80; *Jerd., B. Ind.* iii. p. 782; *Str. F.* iv. p. 499; vii. p. 491; viii p. 421; *Murray, Hdbk., Zool., &c., Sind*, p. 234; *Hume and Marsh., Game Birds, Ind.* p. 81; *Murray, Vert. Zool., Sind*, p. 285. (*Raj-hans*, Hind, Sind).—The Barred-headed Goose.

Head and a broad line continued down the sides of the neck white, with a broad black band from behind the eye across the occiput, and a second one on the nape; chin and throat white; back of neck dark hair brown; front of neck the same, but rather paler and gradually passing into the ashy grey of the breast; upper back, scapulars, breast, upper abdomen and flanks in front ashy grey, the feathers margined with white and forming lunules of that colour; lower back, rump and wing coverts pale ashy grey; upper tail coverts, tip of tail feathers, lower abdomen, vent and under tail coverts white; axillaries pure ashy grey, feathers of the flanks behind the legs dark rufescent or snuff brown, margined at the tip with white; primaries white-shafted, the first four and all the primary coverts greyish, the rest and the tips of the first four

well as all the secondaries dark brown; wing coverts like the lower back and rump; bill orange, with a greenish tinge at the base; nail at the tip black; legs bright orange; bill at front 1·8 to 2.

Length.—27 to 28 inches; wing 16·5 to 18·5; tarsus 2·8.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Central Provinces, and Bengal. A winter visitant.

This is certainly the most abundant Goose in Sind, and during the winter may be met in flocks of thousands on the large lakes, and on the Indus. On the Munchur it simply swarms, and not unlike the two other species, *albifrons* and *cinereus*, feeds during the night and in the early morning till about 9 or 10 o'clock. They feed exclusively on tender shoots of grass, and do much damage to the sprouting corn crops, especially in the neighbourhood of the Munchur, also in Lower Sind. Taking Upper India (including Sind), Hume says—"This species enormously outnumbers all the other species of Geese put together." I think at least five of the Barred-heads visit India to every one of the Grey Lags, and as for all the rest of the Geese, they are apparently so rare, that when one comes to consider numbers, they are not worth speaking about. * * * Their habits are similar to those of the Grey Lags. Where frequently disturbed they feed inland only at night; where rarely molested they will be found feeding up to eight or nine in the morning and again long before sunset. Preferentially they feed in fields in the neighbourhood of the larger rivers, browsing on the young wheat, vetches, lentils, &c. They are not difficult to bag, especially in localities where they are not disturbed by shooting. Walking besides a pony, or bullock, one can always get within 35 or 40 yards of a flock, and bag at least a dozen birds with a couple of effective shots. In localities which have been frequently shot over the birds are very wary, and unless there is plenty of cover a buffalo or pony becomes a necessity." In such cases," as Mr. Hume says, "it is best to make sure of your one or two birds on the ground with the first shot, as you will seldom have time for more than one shot after they rise." Mr. Hume, in his *Game Birds of India*, gives many hints as to shooting geese and wild fowl generally. The habits of the Duck tribe and the various methods adopted for netting them are very interesting, and of much value to sportsmen generally.

Family, ANATIDÆ.—*Vigors.*

Bill flat and broad, laminated at the sides; food insects and tender aquatic plants, which they obtain in shallow muddy places.

Sub-Family, PLECTROPTERINÆ.—*G. R. Gray.*

Bill long and broad, tip horny; knee and above bare; tarsi with squarish scales; hind toe long; wing with one or more spurs on the shoulder; a fleshy

Gen. **Sarkidiornis**.—*Eyton*.

Characters those of the Sub-Family; 1st and 2nd primaries sub-equal and longest.

1379. Sarkidiornis melanonotus, *Penn. in Forst. Ind. Zool.* p. 21, pl. 11; *Newton, Str. F.* viii. p. 415. Sarcidiornis melanonota, *Jerd., B. Ind.* iii. p. 785; *Hume, Nests and Eggs Ind. B.* p. 636; *Blyth, B. Burm.* p. 165; *Hume and Marsh., Game Birds* iii. p. 91, pl.; *Legge, B. Ceylon*, p. 1063; *Oates, B. Br. Burm.* iii. p. 275; *Murray, Vert. Zool., Sind*, p. 286.—The Comb Duck.

Top of the head and back of neck black, spotted with white, more so on the back of the neck; cheeks, sides and front of the neck white, with a few black spots; breast and entire under parts white; chin and throat white; back, scapulars, tertiaries and wing coverts glossy black, glossed with purple; upper tail coverts glossed greenish; primaries and secondaries black; the lesser wing coverts glossed with purplish green; tail black; bill of male with a fleshy protuberance; irides dark brown; bill black.

Length.—28 to 30 inches; wing 13 to 15; tail 6. Female is smaller, and less brightly coloured.

Hab.—Sind, Punjab, N.-W. Provinces, Oudh, Bengal, Rajputana, Kutch, Kattiawar, Guzerat, Concan and Deccan, South India and Ceylon; also British Burmah.

A straggler in Sind. Breeds in the N.-W. Provinces during July and August. In Ceylon it is said to breed from January to March, usually on trees in the proximity of large sheets of water.

1380. Nettapus coromandelianus (*Gmel.*), *Jerd., B. Ind.* iii. p. 786; *Blyth, B. Burm.* p. 165; *David et Oust. Ois. Chine.* p. 501; *Legge, B. Ceylon*, p. 1066; *Hume and Marsh., Game Birds* iii. p. 101, pl.; *Oates, B. Br. Burm.* ii. p. 272. Anser coromandeliana, *Gmel., Syst. Nat.* i. p. 522. Nettapus coromandelicus (*L.*), *Hume, Nests and Eggs, Ind. B.* p. 638. Nettapus coromandus (*L.*), *Hume, Str. F.* iii. p. 192.—The Cotton Teal.

Forehead, crown and nape hair brown, remainder of the head, whole neck and lower plumage white; collar round the neck black in front, glossy green on hind neck; a second demi-collar from the breast upwards below this; under tail coverts dark brown mottled with white; upper plumage glossy green; the secondaries are broadly tipped with white and the primaries also, their basal halves are dark brown; upper tail coverts white, freckled with brown; tail brown; under wing coverts greenish black. The female has a line from the lores through the eye dusky black, surmounted by a dirty white

mottled with brown; lower plumage dull white; upper tail coverts white, freckled with brown. In winter the male is like the female, but has always the white patch on the primaries. Bill black; irides red.

Length.—13 inches; tail 3; wing 6·5; tarsus 1.; bill from gape 1·1.

Hab.—Nearly throughout India, also Ceylon and Burmah, except the drier regions as Sind, Kutch, Rajputana. Breeds in July and August, in the holes of trees, laying from 8 to 10 eggs, of a delicate ivory white colour. They generally affect swamps, marshes, and inundated ponds and ditches.

Sub-Family, TADORNINÆ (Anatinæ, *Sw.*)

Plumage rufous; bill flattened towards the tip, with horny termination; hind toe long and slighty lobed.

Dendrocygna, *Sw.*—Whistling Ducks.

Bill rather large, of uniform width; secondaries long, also the tarsi; 2nd, 3rd and 4th primaries sub-equal and longest.

1381. Dendrocygna Javanica (*Horsf.*), *Hume and Dav., Str. F.* vi. p. 486; *Legge, B. Ceylon*, p. 1069; *Hume and Marsh., Game Birds* iii. p. 109, pl.; *Oates, B. Br. Burm.* ii. p. 273; *Murray, Vert. Zool., Sind*, p. 287. Anas javanica, *Horsf., Trans. Linn. Soc.* xiii. p. 199. Dendrocygna aswuree, *Jerd., B. Ind.* iii. p. 789. Dendrocygna arcuata (*Cuv.*), *apud Hume, Nests and Eggs Ind B.* p. 639; *Oates, Str. F.* v. p. 169.—The Lesser Whistling Teal.

Top of head and occiput dull wood brown, and a narrow streak of the same continued down the middle of the back of the neck from behind the nape; sides of the face and neck fulvous brown; chin and throat albescent; lower neck and breast yellowish chestnut, gradually passing into the light chestnut of the under surface of the body; vent and under tail coverts albescent; back and scapulars dusky brown, the feathers edged with dingy fulvous chestnut, forming lunules; upper tail coverts chestnut; tail brown, tipped slightly paler; primaries and secondaries black; greater coverts and tertiaries dusky brown; lesser and median coverts deep maroon; axillaries black; bill dusky brown, darker at the tip; irides deep brown; eyelids bright yellow to pale golden; legs plumbeous.

Length.—17·5 to 18 inches; wing 8 to 8·5; tail 2 to 2·12; bill at front 1·5; tarsus 1·75.

Hab.—Sind, Punjab, N.-W. Provinces and the Indian Peninsula generally, but not in the more arid tracts, where water is not abundant, as in the interior of Rajputana. According to Hume, there is scarcely any suitable locality within the limits of the Indian empire, including Burmah, Ceylon, the Andamans and Nicobars, in which this species does not occur either as a perma-

nent resident or a seasonal visitant. It is essentially a tree duck, and in the breeding season especially affects the larger pieces of water, in the vicinity of trees. At other times it is found in nearly every suitable piece of water. It nidificates on trees, making a nest of twigs, &c., or occupying old nests of Herons and Ibises. In Sind it has been found breeding in great numbers on the Eastern Narra, and I have taken a nest of 11 eggs at the One Tree Tank, six miles from Kurrachee. Mr. Doig, who took its eggs in the Narra, found 10 as the greatest number from any one nest. "The nests," he says, "were composed of green twigs, and in some instances of leaves of the large bulrush trodden down to make a platform." Mr. Hume (*Game Birds*) records instances of the curious fact of this species carrying its young in its feet from the nest to the water. Mr. Kemp in the Futtehpore District adds his testimony to the fact, having obtained an egg from off a narrow ridge where the bird was seen to carry it just before he shot it. Mr. Hume says—"He heard of their being seen flying down to the water with ducklings on their backs, and that twice he saw them carrying these in their claws. On one of these occasions, between 8 and 9 A. M., he saw a duck carry down her whole brood of seven, one at a time, from a hole in a huge mango tree to the water, she passing each time within three yards of his face.

1382. Dendrocygna fulva (*Gmel.*), *Sclater and Salv., P. Z. S.* 1876, p. 372; *Hume and Marsh., Game Birds* iii. p. 119, pl.; *Oates, B. Br. Burm.* ii. p. 274. Anas fulva, *Gmel., Syst. Nat.* i. p. 530. Dendrocygna major, *Jerd., Madras Journal*, 1840, p. 218; *id., Ill. Ind. Orn.* pl. xxiii.; *Hume, Str. F.* iii. p. 193.—The LARGER WHISTLING TEAL.

Top of head and sides of the face rufescent brown, slightly paler on the cheeks; chin and throat albescent, a broad ring or patch of white in the middle of the neck; a broad black line down the back of the neck from below the nape; back, scapulars, primaries, secondaries, tertials and greater wing coverts dark brown, the feathers of the back with rufescent or chestnut edging, forming lunules; lesser wing coverts dark maroon; breast yellowish chestnut, gradually passing into the light chestnut of the under parts of the body; vent, under and upper tail coverts white or fulvous white; tail dark brown; bill plumbeous; irides brown; legs and feet plumbeous.

Length.—20·5 to 21 inches; wing 9·25; tail 2·5 to 2·8; bill from gape 2 to 2·4; tarsus 2·25.

Hab.—Sind, Punjab, N.-W. and Central Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, Concan and Deccan, also S. India and Ceylon in suitable localities; also Burmah.

Gen. **Casarca**.—*Bp*

Bill moderate; culmen with a knob at the base; nail at tip large; hind toe lobed; wing spurred; plumage from

1383. Casarca rutila, *Pall., Hist. d' Egypt.* t. x. p. 1; *Gould, B. Eur.* pl. 358; *Jerd., B. Ind.* iii. p. 791; *Str. F.* i. 260; iv. 198; *Murray, Hdbk., Zool., &c., Sind*; *Hume, Game Birds. Ind.* p. 123. Tadorna casarca, *Dresser, B. Eur.* vi. p. 461, pl.; *Legge, B. Ceylon*, p. 1070; *Oates, B. Br. Burm.* ii. p. 277. (Vern. *Mungh*, Sind).—The Ruddy Shelldrake or Brahminy Duck.

Male.—Head, on the crown and sides buff, darkening on the nape and hind neck, and gradually passing into deep orange or orange fulvous on the upper back and breast; a seasonal glossy black band round the middle of the neck in males (not present in all specimens); chin buff; upper back, scapulars and breast in front deep orange brown, orange fulvous, or rufescent, the colour being variable; in some specimens the feathers are edged paler; lower back ochreous, the feathers finely vermiculated with black; rump black, also the upper tail coverts and tail, which have a greenish gloss; lower abdomen and under tail coverts deep chestnut; in females and in males out of season, and without the black neck collar, the entire under surface from the breast is pale chestnut or fulvous chestnut, sometimes with the feathers round the vent darkening into deeper chestnut; wing spurred at the bend; primaries dark brown; greater coverts and outer webs of secondaries glossy purplish green, forming a broad speculum; lesser and median covers white, sometimes with a buffish tinge; tertials like the back, some of the feathers finely vermiculated with brown at the tips; under wing coverts and axillaries white, also the edge of the wing.

The *female* wants the black collar at all seasons, and is generally duller in colour, the head being very pale buffy white; the crown and neck in some mouse grey; bill black; irides dark brown; legs black.

Length.—Males, 24·5 to 27 inches; wing 14·5 to 15·5; tail 5·5 to 6; tarsus 2 to 2·4; bill at gape 2.

Hab.—Sind, Persia, Beloochistan, Afghanistan, E. Turkistan, Punjab, N.-W. Provinces, Oudh, Nepaul, Bengal, Rajputana, Central India, Kutch, Guzerat, the Concans, Deccan and Southern India.

The Ruddy Shelldrake is a winter visitant to India. In Sind it is found on all the large lakes and brooks and along the Indus river in great numbers; and on the Munchur especially; like geese, large parties resort to the fields of sprouting wheat in the early morning and at night-fall, and do much damage.

They are extremely shy and wary birds, and as Mr. Reid, in *Game Birds*, remarks—"It will not only keep a sharp look-out on its own account, but will fly along the Jheel side before the gunner, uttering its warning note and put every bird on the *qui vive*."

1384. Casarca scutulata (*P. L. Mull*), *Schlege, Mus. P. B. Anseres*, p. 64. Sarcidiornis leucopterus, *Blyth, J. A. S. B.* xviii. p. 820. Casarca

leucoptera, *Jard.*, *Contr. Orn.* p. 141, pl. 64; *Jerd.*, *B. Ind.* iii. p. 793; *Blyth*, *B. Burm.* p. 165. Anas scutulata, *Hume and Marsh.*, *Game Birds* iii. pp. 147. Anas leucoptera, *Oates*, *B. Br. Burm.* ii. p. 281.—The White-winged Wood Duck.

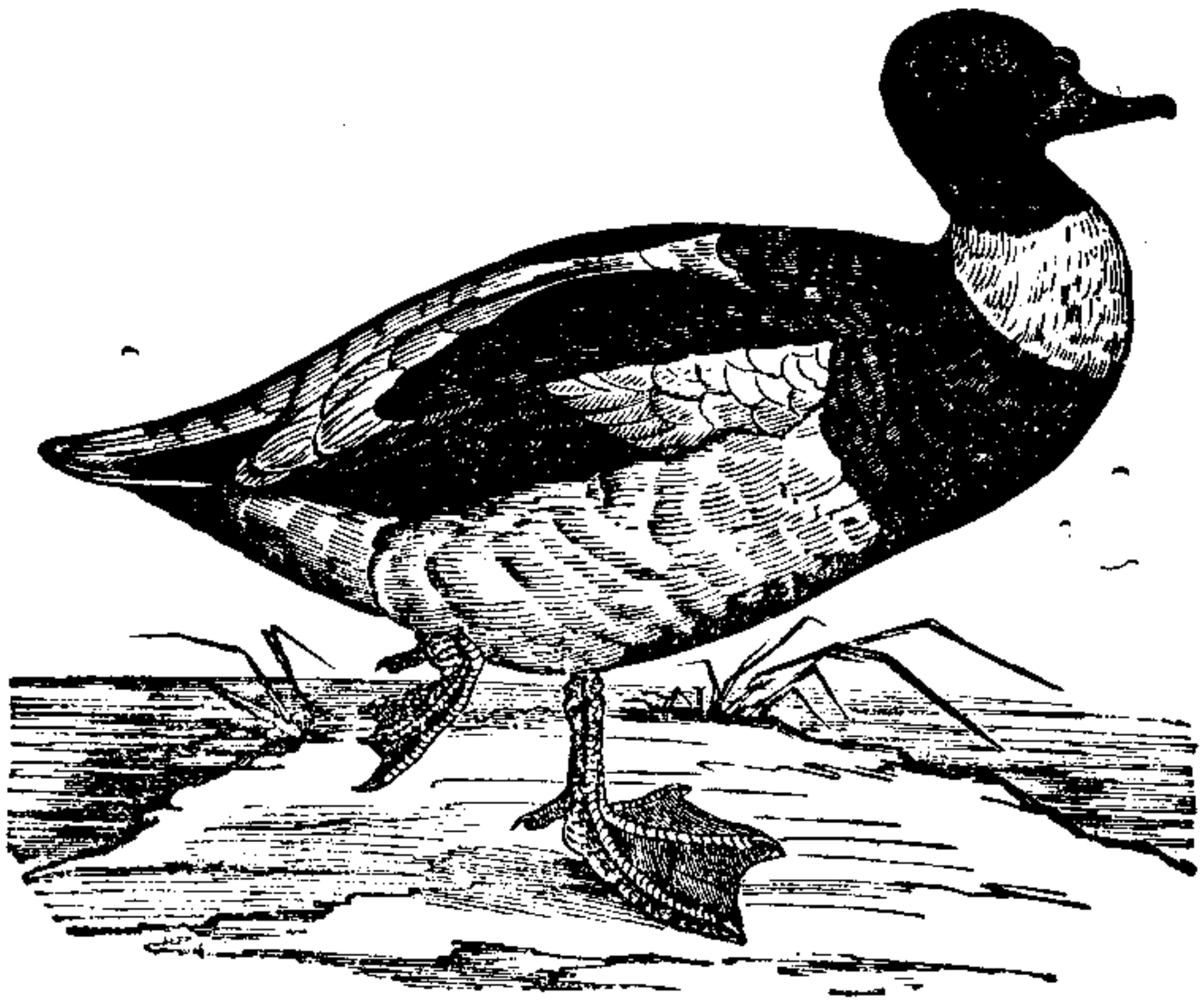
Head and neck white, profusely mottled with black; hind neck glossy black; remainder of the upper plumage blackish brown; shoulders and wing coverts white; greater coverts black; primaries dusky; secondaries slaty; tertiaries dusky, the outermost ones bordered with white and forming a white longitudinal line in the closed wing; breast glossy black; lower plumage dusky castaneous, dark brown on the flanks and under tail coverts; bill and legs black. (*Jerd.*)

Length.—28 inches; wing 15; tail 6; bill at front 3; tarsus 2·5; mid-toe 3·25

Hab.—Tenasserim at Tavoy and at Mergui. Oates says it occurs in Assam and in the hill tracts of Eastern Bengal, in the northern part of the Malay Peninsula and in Java.

Gen. **Tadorna**,—*Leach*.

Bill short, high at the base, and with a knob; wing tuberculated; nail at tip of bill rather hooked.



Tadorna cornuta, *Gm.* The Shelldrake.

1385. Tadorna cornuta (*Gm.*), *Syst. Nat.* i. p. 524; *Bodd.*, *Tab. P. E.* 53; *Naum. Vogt.* t. 298; *Gould*, *B. Eur.* pl. 357; *Hume*, *Game Birds*, p. 136; *Murray*, *Vert. Zool.*, *Sind*, pp. 289, 290. Tadorna vulpanser (*Fleming*), *Jerd.*, *B. Ind.* iii. p. 794; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 235.—The Shelldrake or Burrow Duck.

Head, sides of the face, chin, throat, and about one-half of the neck all round deep black, with glossy green reflections; below this the neck all round is white, as are also the back, wing coverts, rump, upper tail coverts and tail, the latter tipped with black; a broad band of ferruginous or orange chestnut across the breast, meeting above on the foreback; under surface white, except a mesial band in the middle of the abdomen; primaries black; greater coverts forming the speculum, and outer webs of the secondaries glossy golden green; upper secondaries chestnut on their outer webs; tertiaries and scapulars black; bill blood-red, with a knob at the base of the upper mandible; nail black; bill deep red; irides brown; legs fleshy red.

Length.—23·25 inches; wing 12 to 13·5; tail 4·75 to 5·5; tarsus 2 to 2·3. Females average 20 to 22 inches in length, and are much duller in colour.

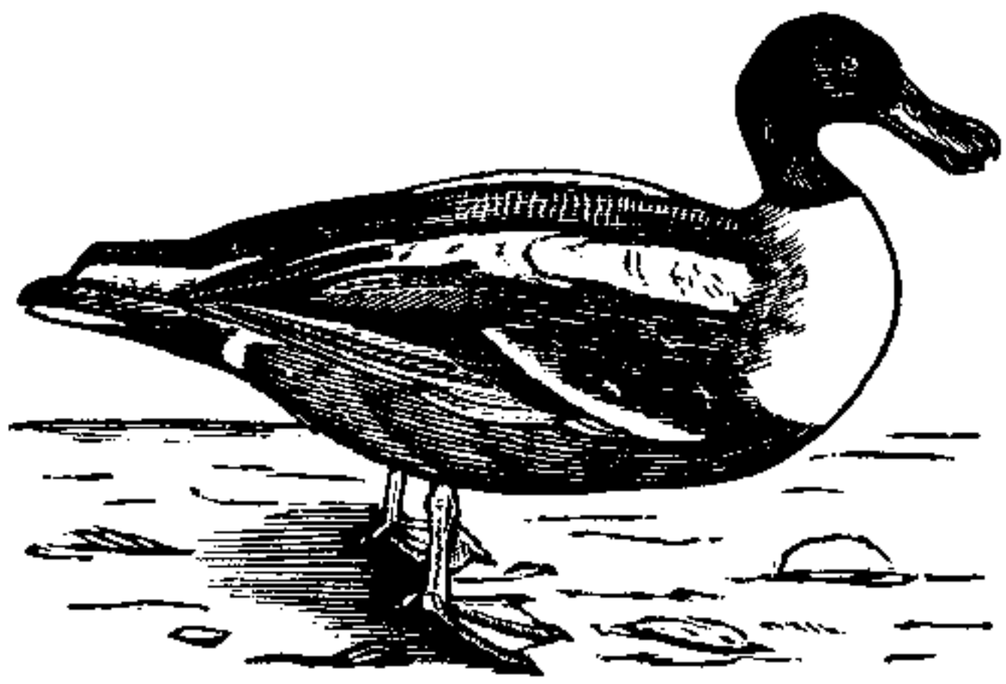
Hab.—Sind, Beloochistan, Persia, Afghanistan, E. Turkestan, Punjab, N.-W. Provinces, Oudh, Bengal, Kutch and Kattiawar Coast. Except in large lakes, the Shelldrake is only found on the sea-coast in the neighbourhood of the sea, which is its proper home.

Sub-Family, ANATINÆ.

Hind toe small, not bordered by a membrane; bill even in width throughout, or wider at the tip; lamellæ numerous, fine and bristly.

Gen. Spatula,—*Boie.*

Bill longer than the head, narrow at the base, broad at the tip, shovel-like; nail small; lamellæ fine and bristly.



Spatula clypeata. The Shoveller.

1386. Spatula clypeata (*Linn.*), *Bodd. Tab. P. E.* pp. 971, 972; *Gould, B. Eur.* pl. 300; *Jerd., B. Ind.* iii. p. 796; *Str. F.* iv. p. 199; *Murray, Hdbk., Zool., &c., Sind*, p. 235; *id., Vert. Zool. Sind*, p. 290; *Hume and Marsh., Game Birds Ind.* p. 141. (*Vern., Alipat*, Sind.)—The Shoveller.

Male.—Head and neck all round deep or dark brown with glossy green reflections; back brown; scapulars and breast white; rump and upper tail coverts glossy brown black; sides of the rump white; tail brown, the outer feathers white, the rest edged with white; primaries dusky brown, white

shafted; secondaries the same, their outer webs rich bright green and forming the speculum; lesser wing coverts pale blue; greater wing coverts dusky brown, tipped with white, forming a bar across the wing; tertials long and pointed, pale blue on their outer webs, purplish black on the inner ones, the tips of some of the elongated ones white; abdomen rich chestnut brown or brownish red; lower tail coverts black, glossed greenish; flanks chestnut brown, the feathers finely vermiculated with dark brown; bill black; legs orange; irides yellow.

Length.—19 to 20 inches; wing 9 to 10; tail 3·5 to 4; tarsus 1·2 to 1·4; bill from gape 2·9 to 3.

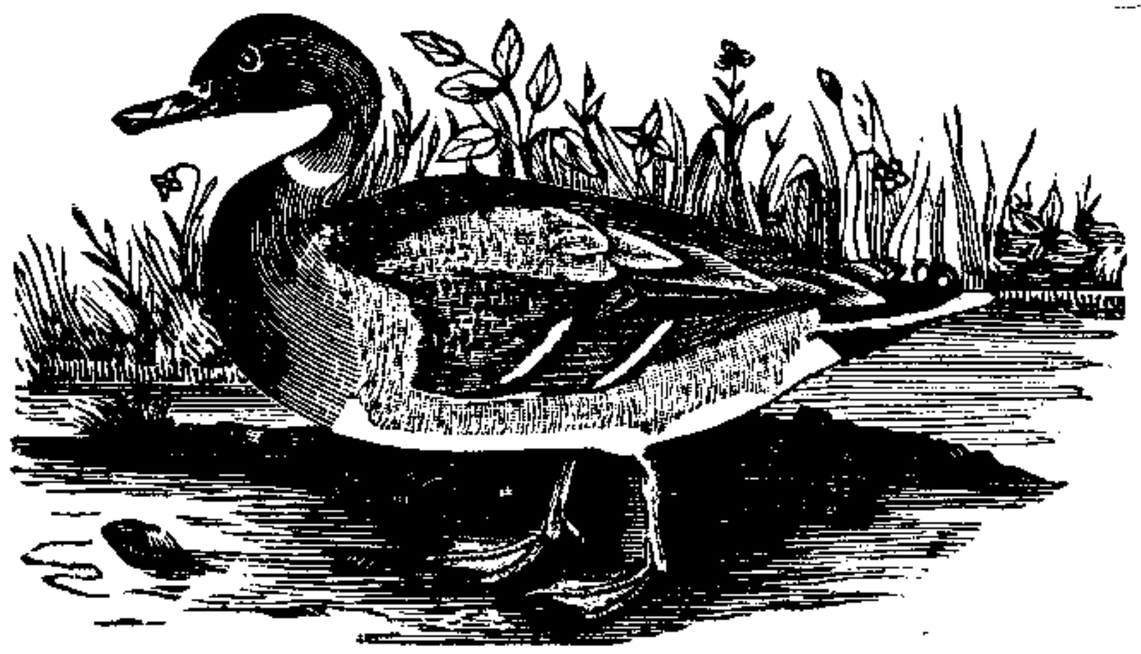
The *female* is slightly smaller, averaging 19 inches in length at the outside; wing 8 to 9. The head is pale reddish brown, with dusky shaft-streaks; breast pale brownish rufous, with dusky brown spots; back dusky brown, the edges and tips of the feathers paler and rufous white; lesser wing coverts tinged with pale blue; speculum green, and a white bar across the wing as in the male.

Hab.—Sind, Belochistan, Persia, Afghanistan, Nepaul, Cashmere, Eastern Turkestan, Punjab, N.-W. Provinces and Oudh, Bengal, Central India, Rajputana, Kutch, Guzerat, Concan, Deccan, South India, and Ceylon.

Winter visitors to India, affecting all the lakes, marshes, ponds, &c., feeding on worms, larvæ, tadpoles, seeds, and young shoots of aquatic plants. They are not naturally shy, as in village ponds they are frequently seen dabbling about, or standing in the shallow edge of ponds, while the inhabitants are drawing water or bathing.

Gen. **Anas**, *Linn.*

Bill slightly longer than the head, of nearly uniform width throughout; tertials long and pointed; tail wedge-shaped; nostrils near the base of the bill; middle tail feather curled.



Anas boscas. The Mallard.

1387. Anas boscas (*Linn.*), *Bodd. P. E.* pp. 776, 777; *Gould, B. Eur.* pl. 361; *Jerd., B. Ind.* iii. p. 798; *Str. F.* i. p. 261; iv. p. 199; *Murray*

Hadbk. Zool., &c., Sind, p. 235; *id., Vert. Zool. Sind*, pp. 291, 292; *Hume and Marsh., Game Birds Ind.* p. 151. (*Vern. Niroji*, Sind).—The MALLARD.

Male.—Head and upper half of neck rich dark metallic glossy green, succeeded by a white ring; lower down on the back of the neck greyish chestnut brown, with fine transverse greyish waved lines; back above or mantle chestnut brown, the feathers margined slightly paler; scapulars greyish white, the feathers finely marked with transverse wavy brown lines, the outermost ones chestnut; rump and upper tail coverts blackish green, the sides of the former greyish white, finely vermiculated with brownish; primaries greyish brown, also the secondaries, the outer webs of which are rich shining purple, margined by a velvetty black band and tipped with white, the speculum formed by the shining metallic purple patch is bounded on each side with a bar of black and white; tail with the four middle feathers velvetty black, glossed with greenish, and curled upwards, the rest greyish brown, bordered with white; lower neck and breast deep chestnut; rest of lower parts greyish white, tinged in some specimens with dull yellowish, and marked with close-set transverse undulating brown lines, indistinct in many, and in others strongly marked; under tail coverts velvetty black; bill dingy olive, greenish at the tip; nail at the tip black; irides brown; legs and feet reddish orange to vermilion.

Length.—22·5 to 24·5 inches; wing 10·75 to 11; tail 4·2 to 4·8; tarsus 1·6 to 1·9. The *female* is smaller, averaging 21 inches in length.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. and Central Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, the Concans, and a straggler in the Deccan.

1388. Anas pœcilorhyncha, *Forst., Ind. Zool.* p. 23, pl. 13; *Jerd., B. Ind.* iii. p. 799; *Hume, Nests and Eggs Ind. B.* p. 643; *Blyth, B. Burm.* p. 165; *Hume and Marsh., Game Birds* iii. p. 165, pl.; *Legge, B. Ceylon* p. 1073; *Murray, Vert. Zool. Sind*, p. 292; *Oates, B. Br. Burm.* ii. p. 282.—The SPOTTED BILLED DUCK.

Top of head to the nape behind dark sepia brown, also a line from the base of the upper mandible through the eye, ending in a point behind; supercilium, sides of the face and neck dingy fulvous, minutely speckled with brown; lower neck, breast and abdomen the same, the brown spots larger than on the upper neck, and increasing in size on the breast, abdomen and flanks; chin and throat unspotted fulvous; upper back, scapulars and lesser and median wing coverts hair brown; lower back and rump black; primaries deep brown; secondaries brown on their inner webs; speculum on their outer webs, rich emerald glossy green, tipped with black, the black tips of the

innermost narrowly edged with white; greater wing coverts sepia brown at base, with a subterminal white band and tipped with black; tertiaries white on their outer webs and hair brown on their inner; tail deep brown, the central feathers darker; vent and under tail coverts nearly black; under wing coverts white; bill black, with a spot of red at the base, and yellow at the tip; legs and feet vermilion red; irides deep brown.

Length.—23·5 to 25·9; wing 10·5 to 11; tail 4·75 to 5·75; tarsus 1·85 to 1·93; bill from gape 2·5 to 2·75. Females are slightly smaller.

Hab.—A permanent resident in India. Breeds in Sind and the Punjab. Found in large numbers in Sind, Beloochistan, Persia, the drier parts of the Punjab and Rajputana, also in the N.-W. and Central Provinces, Oudh, Kutch, Guzerat and the Deccan.

Affects large lakes, ponds, brushy or weedy tanks, and often the banks of rivers, feeding on worms, molluscs, insects, larvæ, young shoots of grass, &c. Mr. Hume says (*Game B.* iii. p. 168) "that the breeding season of this duck varies a great deal with locality;" in the N.-W. Provinces and Oudh, also the eastern portions of Rajputana and the Punjab, July, August and September are the months; in Guzerat, October. In Sind Mr. Doig obtained eggs at the latter end of April and May on a small island covered with long grass in the middle of the Narra.

1389. Anas caryophyllacea, *Lath., Ind. Orn.* ii. p. 866; *Jerd., B. Ind.* ii. p. 800; *Hume, Nests and Eggs Ind. B.* p. 644; *Blyth, B. Burm.* p. 165. Rhodonessa caryophyllacea, *Hume, Str. F.* viii. p. 115; *Hume and Marsh., Game Birds* iii. p. 173, pl.; *Oates, B. Br. Burm.* ii. p. 284.—The Pink-headed Duck.

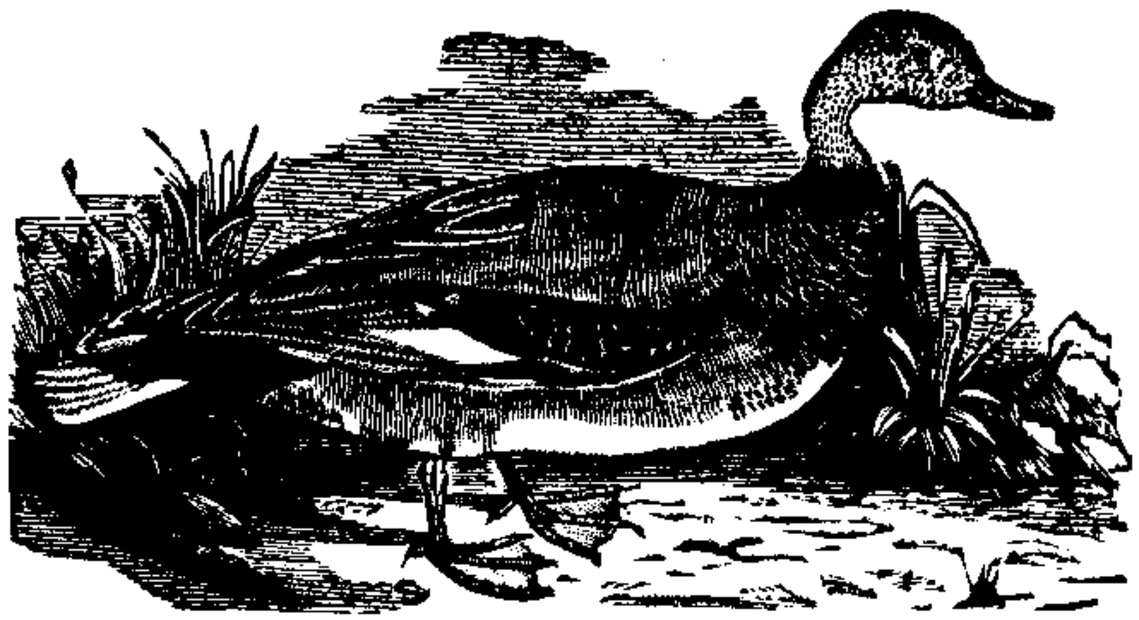
Whole head, sides and back of the neck rosy pink; entire front of neck, lower plumage, back, rump, upper tail coverts, tail, upper wing coverts, scapulars and tertiaries dark glossy brown; secondaries salmon colour, forming a speculum; primaries brownish salmon colour, paler on the inner webs; edge of wing broadly whitish; under wing coverts pinkish white. Bill reddish white rosy at base and faintly bluish at tip; irides orange red; legs and feet blackish, tinged with red.

Length.—23 inches; tail 4·5; wing 11; tarsus 2; bill at front 2·3.

Hab.—Arracan, part of the Indian Peninsula and Assam. Breeds during June and July in swampy places. Eggs 5 to 10.

Gen. **Chaulelasmus.**—*Gray.*

Bill as long as the head, of uniform width, except towards the tip, where it is slightly narrowed; nail small; lamellæ projecting and delicate; wings and tail long; central tail feathers rather elongate.



Chaulelasmus streperus. The Gadwall.

1390. Chaulelasmus streperus (*Linn.*), *Bodd., Tab. Pl. Enl.* p. 958; *Gould, B. Eur.* pl. 366; *Jerd., B. Ind.* iii. p. 802; *Dresser, B. Eur.* vi. p. 487, pl.; *Hume, Str. F.* viii. p. 115; *Scully, t. c.*, p. 362; *Hume and Marsh., Game Birds* iii. p. 181, pl.; *Murray, Vert. Zool. Sind*, p. 293; *Oates, B. Br. Burm.* ii. p. 283. Anas strepera, *Linn., Syst. Nat.* i. p. 200; *Blyth, B. Burm.* p. 166.—The GADWALL.

Male.—Head and neck fulvous or greyish white, freckled with brown; crown of the head with a slight yellowish tinge; chin and throat greyish white finely speckled with brown; breast brown, with white crescent-shaped lines, on each feather; abdomen white, minutely speckled with greyish brown; the flanks variegated with undulations of brown and white; back above clove brown, with narrow crescentic undulations; scapulars with narrow undulations of brown and white; rump and upper tail coverts bluish black, with a purplish gloss; lower tail coverts glossy black, tinged with green; tail brownish grey, the edge of the feathers paler or fulvous, the two central feathers pointed; primaries dark brown; secondaries nearly black; the speculum a tri-coloured bar of purple red, black and white, except the four first feathers, which are grey at base and black at the tip; tertials brownish grey; greater wing coverts glossy black; lesser wing coverts grey, marbled with yellowish or fulvous white; median coverts rich chestnut brown, varied in some with orange brown, the tips of the feathers nearest to the speculum broadly bordered with black; bill brownish black or dusky leaden, tinged with reddish beneath; irides dark brown; legs pale orange.

Length.—19·5 to 21·5; wing 10·75 to 11·5; tail 3·9 to 4·2.

The *female* is smaller, has a light superciliary streak; the head on the crown is black mixed with greyish white; sides of the face fulvous white with brownish streaks; neck in front spotted with dark brown, and marked on the breast with crescentic bands of dark and pale brown; chin and throat white; abdomen white; back deep dusky brown, the feathers edged with buff; lesser wing coverts greyish brown, edged paler; speculum dull white; tail dark

Hab.—Central and South Europe, and nearly throughout India; found in Sind, Beloochistan, Afghanistan, and Persia; also in the Punjab, N.-W. and Central Provinces, Oudh, Bengal, Central India, Kutch, Guzerat, the Concans and Deccan; recorded also from Nepaul, Gilgit, and E. Turkestan; it is also met with on the Continent of Europe, in Spain and Italy, also in Iceland and Siberia, as well as in the northern parts of Africa and India generally. In Sind it is numerous on the lakes, dhunds, &c., during winter, and especially on the Munchur, arriving about the middle of November.

Gadwall are considered excellent for the table, especially during the first two months of their arrival, when they usually feed on rice and young shoots of the sprouting wheat crops. Later on they affect the jheels and feed on crustaceans and fry of fish, and though then rather fishy in taste, the flesh is not despised when better game is not to be had. The localities preferred by the Gadwall after dusk are generally lakes, jheels and ponds covered with long herbage, but during the day it frequents open water, as the broads of the Indus.

1391. Chaulelasmus rufiventris, *Sp. Nov.*

Male.—General colour and markings of *C. streperus*, but the head is a dark rufous brown, and has a short silky occipital crest; sides of the head glossed with a dull metallic green; middle of abdomen everywhere to the vent covered with transverse undulations continuous with those on the flanks and sides, leaving no albescent space along the middle as in *streperus*; thighs with similar, but faint undulating lines; vent and under tail coverts rich rufous brown tinged with purplish. Bill as in *C. streperus*, but tinged yellowish on the lower mandible; irides reddish brown; legs and feet dull orange.

Length of two Males.—18·7 and 19 inches respectively; wing 10·6 and 10·7; tarsus 1·4; bill at gape 1·87.

Hab.—Nari Base (Beloochistan) and Sylhet. (*Pennock.*)

These specimens were sent to me by Mr. Francis Pennock in January 1886 for identification. They were compared with the skins of 13 males, but in none of them is there a trace or even a tinge of rufous on the vent, which is the chief characteristic of this species, which I provisionally name as above. The female is not known.

1392. Chaulelasmus angustirostris (*Menetries*), *Bp. F. Ital.* t. 47, i., 2; *Gould, B. Eur.* pl. 373; *Str. F.* i. p. 262; iii. p. 273; vii. pp. 493, 523; *Murray, Hdbk., Zool., &c., Sind*, p. 235; *Hume, Game B. Ind.* p. 237; *Murray, Vert. Zool. Sind*, p. 294.—The Marbled Teal.

"The male has the forehead, crown, occiput, and nape brownish white, with numerous narrow, close-set, wavy, irregular, dark brown bars, which become more speckly on the occiput, where also the ground colour is a more rufescent

gular stripe over the eye, and a large patch on the side of the head behind the eyes, moderately dark brown, shading into the very dark brown immediately surrounding the eyes; the whole space between the sides of the upper mandible and the dark feathers surrounding the eye, the whole sides of the head below the dark eye and ear patch, the whole chin, throat and front of the neck, slight greyish or brownish white, very narrowly, regularly and closely streaked with brown; the lower parts a slightly brownish white; the breast feathers with greyish brown subterminal transverse bars, mostly more or less concealed by the pale tippings of the superincumbent feathers, and only clearly seen when the feathers are lifted; the sides and flanks similar, but the subterminal bars much broader, and some of the flank feathers with several bars; the vent feathers and lower tail coverts, generally, with a slightly more rufescent tinge, and with two or more narrow, widely separated transverse brown bars; the tibial plumes browner, and with numerous narrow closely-set but ill-marked transverse brown bars; the abdomen more or less obsoletely mottled with very pale grey brown, which on lifting the feathers is found to arise from more or less faint, irregular, transverse, subterminal, brownish bars.

"The barrings above described are very much more marked in some specimens than in others; in some in fact they are almost entirely obsolete on the abdomen, and can hardly be traced.

"The upper back greyish brown, the feathers with a subterminal richer brown bar; scapulars brown, each feather with a yellowish white terminal spot, and of a much richer brown, the longer ones especially, just above the spot; the tertiaries and secondary greater coverts are greyish brown, the former obsoletely barred paler; the secondaries are pale grey; the primaries, their greater coverts, and the winglet pale slaty, the primaries with a silvery grey tinge on the outer webs towards the tips; the inner webs pale grey brown, except towards the tips, where they are much darker, and where the shafts also are conspicuously darker; the middle back, rump, and upper tail coverts the same grey brown as the upper part of the back; the feathers of the middle back narrowly and obscurely tipped with yellowish white, those of the rump and upper tail coverts more broadly and conspicuously so, and with a subterminal dark brown spot; the longest of the upper tail coverts are very broadly and conspicuously so tipped, and have a subterminal dark band; the tail feathers pale grey brown, broadly tipped, and narrowly margined with yellowish white; the two central tail feathers darker on the inner webs and dark shafted, and the lateral tail feathers paling as they recede from the centre.

"The female is similar, but smaller, with the eye patch and generally all the markings and tints duller and less conspicuous.

"The legs and feet are dusky olive or dark horny brown; bill bluish grey, black on culmen and tip, or dusky, bounded at the margins of the feathers of

margin of both mandibles to near the tip, and a spot of the same colour just above the nail; the irides are brown.

"The dimensions of this species are as follows:—

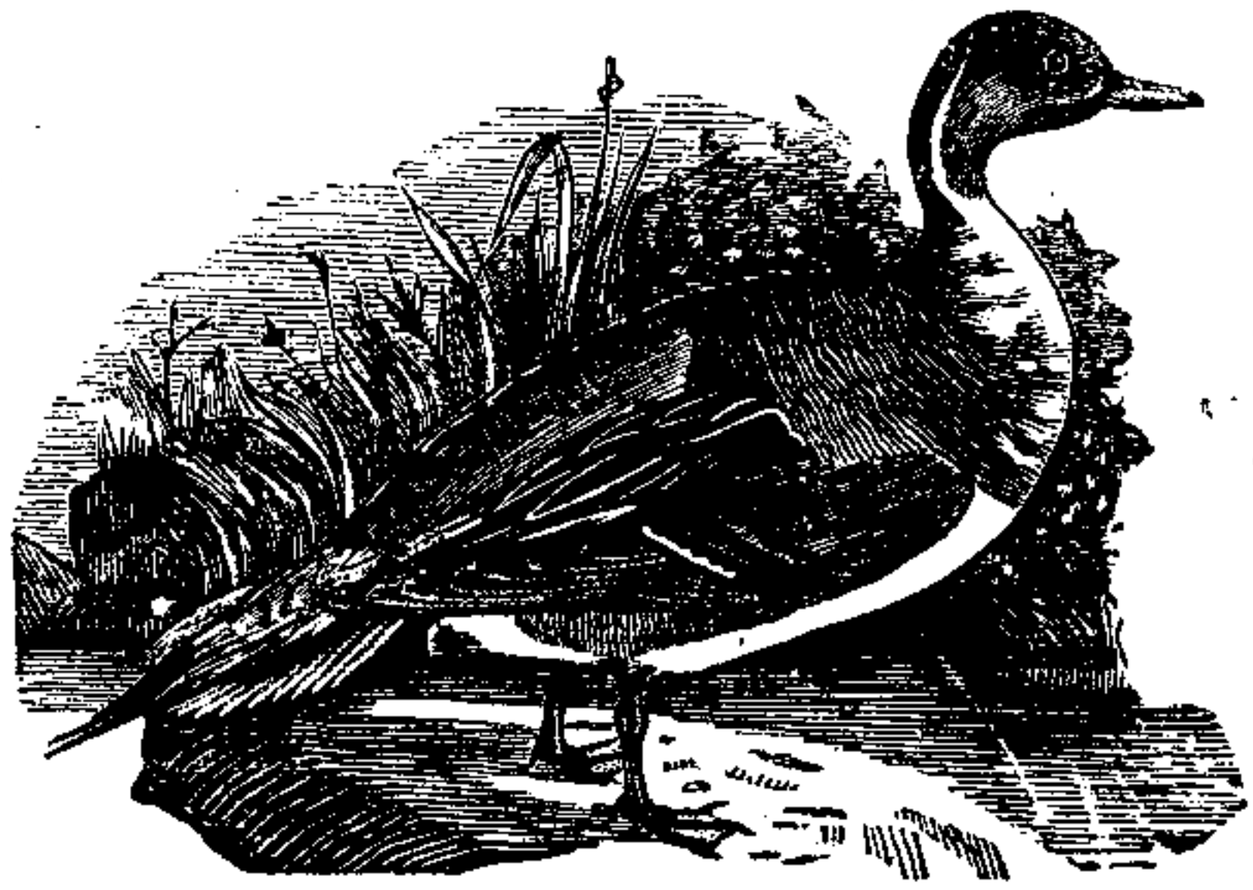
"*Male.—Length* 18·3 to 19; expanse 28·5 to 29·5; tail from vent 3·6 to 4; wing 8·1 to 8·5; wings when closed reach to within 0·7 to 1·5 of end of tail; bill at front, including nail, 1·77 to 1·85; tarsus 1·44 to 1·52; weight 1·3 oz. to 1·5 oz.

"*Female.—Length*, 16·9 to 17·5; expanse 27 to 28; tail from vent 2·8 to 3·7; wing 7·9 to 8·1; wings when closed reach to within from 0·5 to 1 of end of tail; bill at front 0·6 to 0·75; tarsus 1·4 to 1·5; weight 1 lb. to 1 lb. 3 oz." —(*Str. F.* i. p. 562.)

Hab.—Sind, Beloochistan, Persia, S. Afghanistan, Lower Punjab, N.-W. Provinces, Oudh and Bengal; extremely abundant after October; much sought for the table. Feeds chiefly on leaves, roots, fresh water molluscs, &c.

Gen. **Dafila** (*Leach*), *Gray, Gen. Birds*, iii. p. 615.

Tail with the central feathers narrow and much lengthened beyond the rest; neck long; bill elevated at the base, of nearly uniform width; 1st primary of wing longest.



Dafila acuta. The Pintail.

1393. Dafila acuta (*Linn.*), *Ferd., B. Ind.* iii. p. 803; *Dresser, B. Eur.* vi. p. 531, pl.; *Hume, Str. F.* iii. p. 193; *Scully, Str. F.* iv. p. 200; *id., Str. F.* viii. p. 363; *Hume and Marsh., Game Birds* iii. p. 189, pl.; *Oates, Str. F.* x. p. 245; *Murray, Vert. Zool., Sind*, p. 297; *Oates, B. Br. Burm.* ii. p. 279; *Linn., Syst. Nat.* i. p. 202; *Blyth, B. Burm.* p. 166; *Legge, B. Ceylon*, p. 1076.—The Pintail.

Male.—Entire head, face, chin and throat umber brown, the feathers on the crown slightly darker and with a ferruginous tinge; back of the neck dark brown, nearly black; lower neck, breast and abdomen white; a white line running up on each side of the neck to the occiput; back, sides of the breast and flanks marked with transverse undulations of black and white; upper tail coverts cinereous or pale fulvous brown; under tail coverts deep velvet black; tail with the central feathers black, much elongated, and glossed with greenish, the others dusky brown and margined with white; primaries dusky greyish brown, the shafts much paler; secondaries dusky brown on their inner webs, their outer webs forming the speculum, dark greenish bronze, edged with black and tipped broadly white; upper part of the speculum edged with pale ferruginous; tips of the greater coverts, like the lesser and median coverts, are dusky brown; scapulars black, edged with yellowish; tertiaries long and pointed, deep black and edged with whitish; bill black, with a bluish tinge on the sides of the upper mandible; legs and feet slaty or blackish grey; irides dark brown.

Length.—22 to 29 inches; wing 10·3 to 11·75; tail 7·5 to 8; bill 2 to 2·45.

Females.—Smaller. *Length.*—20 to 22·5; wing 9·3 to 10.

Female.—Forehead and crown, also back of the head, nape and neck dark brown, the feathers with fulvous edgings; sides of the face, chin, throat and foreneck fulvous with brown spots and streaks, which become longer and darker on the lower neck; breast and the lower parts fulvous with obscure crescentic brownish markings on the breast, flanks and sides of the rump and large spots on the lower abdomen; back and scapulars dark brown, with lunate or crescentic markings of white and pale buff about the middle of each feather, and edged with whitish; greater and lesser wing coverts dusky brown, with margins and tips of white; primaries a shade lighter; speculum brownish bronze, unglossed, the tips of the feathers white; tertiaries dusky brown, margined with white; tail long, pointed, dark brown, with imperfect bars and streaks of white or yellowish white; under tail coverts fulvous white, with brown spots.

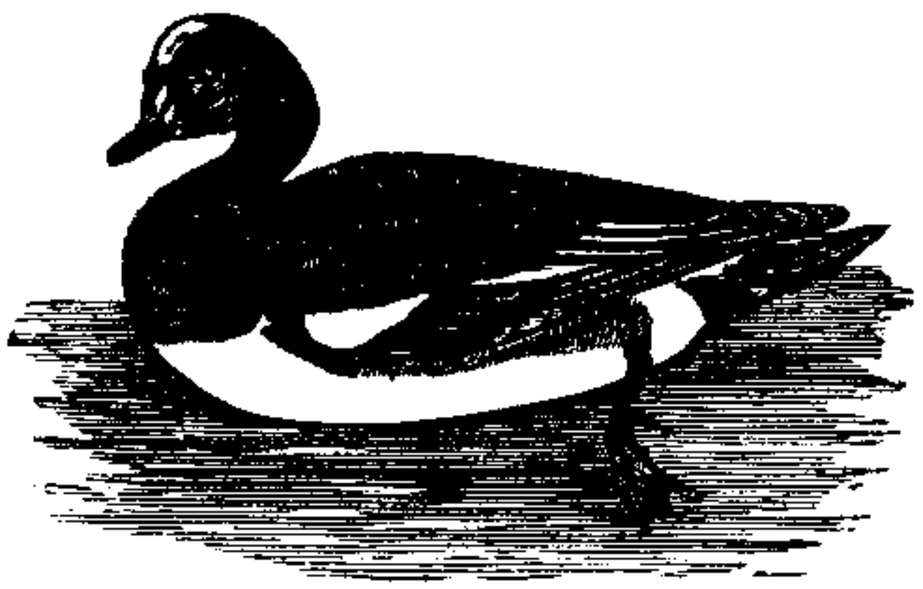
Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. and Central Provinces, Oudh, Bengal, Kutch, Concan, Deccan, Guzerat, Central and Southern India and Ceylon. Hume says—"There is no district in the Empire, from Ceylon to Kashmir, and from Kashmir to Sadya, Munipoor and Moulmein, where the Pintail does not occur in greater or less abundance except in south Tenasserim."

The Pintail affects the large broads or dhunds and lakes, and is seldom seen except in large parties. It is held in much esteem for the table, and for this purpose is netted in great numbers with the Gadwall and other water birds. On the Munchur Lake the fowlers net from 100 to 200 daily, and a sportsman in suitable localities could obtain two or three dozens at least as a

good day's sport, besides other game. Hume, like myself, thinks that on the whole, next to the Mallard, the Pintail is the best duck for the table in India, the Gadwall ranking third.

Gen. **Mareca**, *Steph.*, *Gray*, *Gen. B.* iii. p. 614.

Bill uniform in width; laminæ prominent; first and second quills of wing longest; tail short, cuneate; hind toe small.



Mareca penelope. The Wigeon.

1394. Mareca penelope (*Linn.*), *Bodd. Tab. Pl. Enl.* p. 825; *Gould, B. Eur.* pl. 359; *Jerd., B. Ind.* iii. p. 804; *Dresser, B. Eur.* vi. p. 541, pl.; *Hume, Str. F.* i. p. 61; iv. p. 30; vii. p. 494; *Hume and Marsh., Game Birds*, iii. p. 198, pl.; *Hume, Str. F.* viii. p. 115; x. p. 245 (note); *Murray, Vert. Zool., Sind*, p. 299; *Oates, B. Br. Burm.* p. 278. Anas penelope, *Linn., Syst. Nat.* i. p. 202; *Blyth, B. Burm.* p. 166.—The Wigeon.

Male.—Forehead and crown creamy yellow, remainder of head and neck rich chestnut; cheeks speckled with black, also a speckled band down the middle of the throat in some; nape narrowly barred with black and pale reddish white; chin and throat black; lower neck and breast vinaceous red, lightest in front, darkest on the sides; abdomen white, the flanks with transverse undulating lines of black and white; under tail coverts black, with a greenish gloss; tail blackish grey; back minutely barred with transverse undulating lines of black and white; scapulars black, edged with white; wing coverts white, the greater ones with velvet black tips; speculum glossy green, bounded above and below with black; bill plumbeous, the base black; legs and feet plumebous or brown; irides red brown.

Length.—19 to 19·5; wing 10 to 10·5; tail 4 to 4·5; bill 1·7 to 1·82. *Females* are smaller; *length* 17·5 to 19; wing 9·3 to 8·0 inches; tail 3·5 to 5. In colouring the female has the head and neck fulvous brown, speckled with dusky; upper parts dusky or deep brown the feathers with reddish edges; speculum without the green gloss; feathers of the flanks rufous brown, tipped with ashy.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. and Central Provinces, Oudh, Bengal and throughout Western and Central India, rare in Southern India and Burmah, and not yet recorded from Ceylon. In Kattiawar, Rajputana, the Deccan and Concan it is not uncommon during the winter months. It is considered excellent eating for the first two months after arrival, but after this the flesh is said to become of a muddy flavour and unpalatable.

Gen. **Querquedula**, *Steph.*, *Gray*, *Gen. B.* iii. p. 616.

Bill of uniform width, as long as the head, and slightly raised at the base; nail horny, hooked and narrow; lamellæ not apparent; wings long, second quill longest; secondaries long and pointed; tail wedge-shaped.

1395. Querquedula crecca (*Linn.*), *Bod. Tab. P. E.* p. 946; *Gould*, *B. Eur.* pl. 364; *Jerd.*, *B. Ind.* iii. p. 806; *Dresser*, *B. Eur.* vi. p. 507, pl.; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 235; *Oates*, *B. Br. Burm.* ii. p. 285. Anas crecca, *Linn.*, *Syst. Nat.* i. p. 204; *Legge*, *B. Ceylon*, p. 1083; *Hume*, *Game Birds Ind.* iii. p. 206. (*Kardo*, Sind; *Moorghabi*,-Hind.)—The Common Teal.

Forehead, crown, face, cheeks, throat and upper neck in front rich chestnut brown; chin black; a narrow dark line round the base of the bill, followed by a white or buffy one on the side, which meets a similar coloured superciliary stripe, and another under the eye; behind the eye, between the hind superciliary and lower eye-streak is a broad glossy green, or dark green patch, which meets on the back of the neck; breast rufescent or white, tinged with reddish and spotted with black; upper abdomen white; lower abdomen in some minutely barred with brownish; flanks barred with brown or blackish brown; upper back and scapulars marked with undulating white and black transverse bars; lower back dark brown, with faint traces only of paler transverse bars; tail hair brown or dusky brown, the feathers edged with white; under tail coverts black, the feathers on the sides creamy yellow; primaries dusky brown, edged on their outer webs and tipped darker; first six secondaries velvet black on their outer webs; next four or five forming the speculum glossy green, and followed by the black outer web of the first tertial; lesser and median coverts dusky or greenish brown; greater coverts the same and tipped with white or yellowish white, forming a border to the speculum above; bill black, or brownish black; irides brown; legs and feet greyish or plumbeous.

Length.—14·5 to 15·75 inches; wing 7 to 8; tail 2·9 to 3·5.

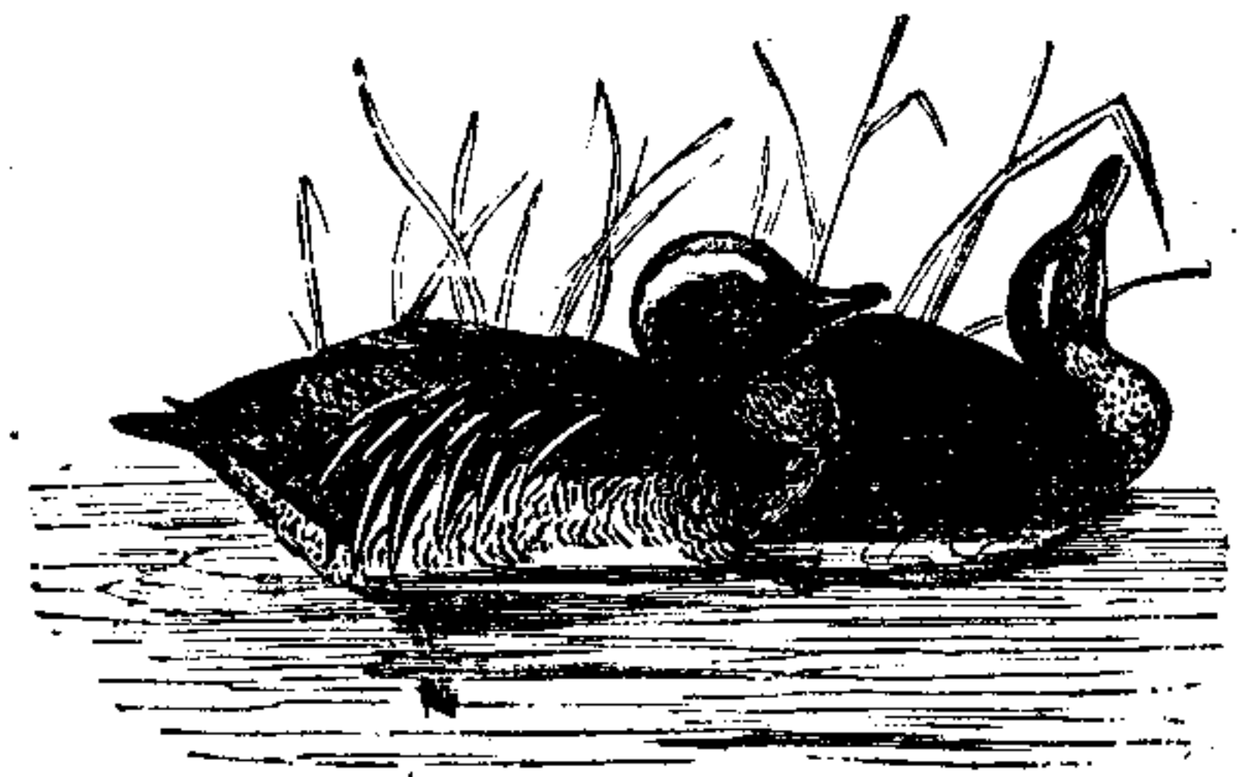
The female has the head, neck and upper part dusky brown; the feathers edged with white or fulvous white on the head and neck and lunated on the back; speculum as in the male, but slightly duller; chin and throat white, with black spots; breast and flanks white and spotted with dark brown; abdomen white; under tail coverts with brown streaks.

Length.—13·5 to 14·7 inches; with a wing of 6·5 to 7·5.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N. W and Central Provinces, Rajputana, Kutch and throughout India and Burmah.

Abundant wherever it occurs, frequenting tanks, rivers, ponds and jheels, &c.

1396. Querquedula circia (*Linn.*), *Jerd.*, *B. Ind.* iii. p. 807; *Dresser*, *B. Eur.* vi. p. 513, pl.; *Hume*, *Nests and Eggs*, p. 644; *Scully*, *Str. F.* iv. p. 201; *Hume and Marsh.*, *Game Birds* iii. p. 215, pl.; *Bingham*, *Str. F.* ix. p. 198; *Murray*, *Vert. Zool.*, *Sind*, p. 301; *Oates*, *B. Br. Burm.* ii. p. 286. Anas circia, *Linn.*, *Syst. Nat.* i. p. 204; *Blyth*, *B. Burm.*, p. 166; *Legge*, *B. Ceylon*, p. 1080.—The Garganey Teal.



Querquedula circia. The Garganey or Blue-winged Teal.

Male.—Forehead purplish brown, finely streaked with white; crown of the head, occiput, nape and a line half way down the back of the neck dark umber or blackish brown, bounded on each side by a white superciliary streak, which extends to the sides of the neck; face, sides of the neck, cheeks, throat and neck chestnut brown, the feathers with white mesial streaks; chin black; breast and upper abdomen yellowish brown, tinged in some specimens with ferruginous, and with broad crescentic dark brown markings; lower abdomen white or yellowish white, with, in some specimens, transverse, dusky striæ behind; flanks with transverse undulations of black and white; axillaries white with black bases; back brownish black, the feathers edged with yellowish brown; primaries dark brown on their outer webs and tips, pale wood brown on their inner webs, in some specimens narrowly edged with whitish; wing spot on outer web of secondaries dull green, slightly glossed and tipped with white, the white tips forming the second bar across the wing; greater coverts ashy grey or bluish ashy, broadly tipped with white; lesser and median coverts ashy grey, or bluish ashy; scapulars long and lanceolate, black, with a mesial white shaft, and narrowly edged greyish white or white; tertiaries dusky brown, edged with white on their outer webs; rump and upper tail coverts dark brown, with bars of yellowish white; tail dark brown, the feathers edged

with yellowish or fulvous white; under tail coverts yellowish white with black spots; bill black above, brownish on the lower mandible; irides brown; legs and feet greenish grey or plumbeous.

Length.—15·5 to 16·5 inches; wing 7·2 to 8; tail 3·2 to 3·5; bill 1·75 to 1·85.

The *female* has the chin and throat white; head on the crown brown with spots and streaks of a darker shade; back of neck brown, the feathers edged with white; eye-streak faint; speculum dull and indistinct, bordered above and below with white; breasts and abdomen greyish white, spotted with brown.

Length.—14·5 to 15 inches, with a wing of from 7 to 7·5.

Hab.—The same as *Q. crecca*.

Not found in as great numbers as *Q. crecca*, affects the same situations, and is considered excellent for the table. It is chiefly a nocturnal feeder, concealing itself in the jheels and dhunds, among the high grass, during the day; when disturbed it usually returns to the same spot. Hume says "that at nights they come in some parts of the country in such crowds into paddy fields as to destroy acres of crop at one visit; their food, like *Q. crecca*, is chiefly vegetable, as tender shoots and leaves of water plants, seeds, bulbs, &c., but on the sea coasts, especially the Sind and Mekran Coast, where they are frequently found in some numbers, crustacea, slugs, fry of fish and algæ form their diet."



Querquedula formosa. The Clucking Teal.

1397. Querquedula formosa, *Georgi., Act. Stockl.* 1779, t. i.; *Schl. J.* t. 82, *B.* Querquedula glocitans (*Pall.*), *Jerd., B. Ind.* iii. p. 808; *Hume, Game Birds Ind.* iii. p. 225.—The CLUCKING TEAL.

"*Male.*—Forehead, top of head and occiput rich purple brown, bounded by a narrow white line from the eye; face, cheeks and side of neck fawn

colour; a black streak from below the eye meeting a black patch on the throat; nape and hind neck glossy green, ending in a black stripe down the back of the neck, separated from the fawn colour of the sides of the neck by a narrow white line; upper plumage finely marbled grey, edged with rufous on the back; upper wing coverts hair brown, the median coverts the same, with an edging of rufous, forming the anterior margin of the speculum, which is glossy green, ending in velvet black and bordered posteriorly with silvery white; primaries brown; scapulars lengthened, deep black in the centre, white on their upper side, and rufous externally; upper tail coverts brown, white on either side; tail of 16 feathers, dark brown; beneath the throat black; neck and breast vinaceous purple, paling below with black spots; abdomen white; flanks mottled grey; under tail coverts black; bill dusky; legs dusky.

"*Length.*—15·5 inches; wing 8·5; tail 3; bill at front 1·5."—(*Ferd., B. Ind.*)

The *female* (of which the Kurrachee Museum has a specimen) wants the rich markings on the head and face, which are mottled grey; there is a distinct white superciliary streak and a brown streak behind the eye, also a patch of white above the angle of the upper mandible; chin and throat white; cheeks and sides of the neck white, the feathers with mesial linear streaks; breast rufescent, spotted with dark brown; belly white; lower abdomen and under tail coverts white, with linear brown spots; back dark brown, the feathers edged with rufous brown; flanks dusky rufescent brown, some of the feathers with whitish edgings; bill 1·62 × 0·62 at its widest part; tarsus 1·6.

Hab.—Sind, N.-W. Provinces at Delhi (*Hume*), Oudh and Bengal.

According to Mr. Hume, this is a rare straggler within the limits of India. Blyth obtained a single specimen (a male) in the Calcutta Bazaar in 1844. Mr. James, C.S., who was for some time in Sind, had a water-colour drawing of the head of a Teal, which Mr. Hume regards as the male of this species, and, besides a female in the Kurrachee Museum, a male was obtained by Mr. Chill at Delhi in 1879.

1398. Querquedula falcata, *Georgi. Act. Stockl.*, 1779, t. 1; *Hume, Str. F.* vii. p. 494; *id.*, *Game Birds* iii. p. 231. Anas javana, *Bodd.*, *Pl. Enl.* p. 930.—The Bronze Capped Teal.

A frontal spot ending in a point on the culmen, about 0·4 long and 0·3 wide, pure white. The lores, forehead, crown and lower portion of cheeks a rich ruddy purple or chocolate bronze; the rest of the cheeks, sides of the head, and occiput emerald green in most lights, in a few ruddy, or even rosy bronze; the feathers of the hinder crown, occiput and nape are lengthened so as to form a considerable mane-like crest; the chin and entire throat snow white, then a black ring all round the neck, with dark green or greenish

blue reflections ; the white of the throat runs into a little point into this ring and half divides it ; then a white ring ; then the front and sides of the neck, breast and abdomen white, each feather with a broad subterminal black bar following the curve of the end of the feather ; those of the neck with these bars very perfect and strongly marked, those of the breast and upper three-fourths of the abdomen with only a single bar, more or less imperfect ; back of the neck (below the white ring), interscapulary region, smaller scapulars, sides of the breast, sides, flanks, lower portion of abdomen and feathers about vent closely barred, in some places almost vermiculated, black, or dusky, and white or greyish white in varying degrees of fineness and intensity ; entire wings and larger scapulars dove or grey brown, darker on the quills, the outer webs of all the secondaries black, with dull metallic green lustre, their greater coverts broadly tipped white ; middle and lower back and rump dark, rather glossy hair brown ; a few of the feathers with traces of fine pale vermiculations ; shorter central upper tail coverts similar, but a paler greyer brown ; rest of the upper tail coverts jet black, with a subdued green lustre ; tail a delicate, somewhat silvery grey brown, almost completely covered by the long black upper tail coverts ; entire wing lining and axillaries pure white ; the lowest flank feathers on each side with broad, pure white, unbarred tips ; most of the lower tail coverts black, with a faint greenish lustre ; shorter lateral lower tail coverts on each side pure creamy buff. In the breeding season the tertiaries are said to be greatly elongated, sickle-shaped, and reaching to the end of the primaries ; the shaft and external edges of these feathers whitish, the outer ones being entirely velvetty black, but the inner ones less black, and finely vermiculated.

Male.—Length, 19·75 ; expanse 32·5 ; wing 9·5 ; tail from vent 3·2 ; tarsus 1·5 ; bill from gape 2·1 ; weight 1 lb. 6 ozs. ; irides deep brown ; bill perfectly black ; legs and feet drab, with an olive tinge.

Adult Female.—Head striped with purplish brown, each feather margined with fulvous ; sides of the face and neck dotted with small brown points and stripes ; throat paler, varied, with small brown markings ; general colour of the back rufous, more or less broadly and irregularly varied with brown ; lower portion of the back brown, with a few obsolete fulvous edgings, being coloured as in the male, but the sickle-shaped feathers are developed, these being represented by a few elongated and slightly curved feathers, for the most part brown, the outer webs inclining to grey at the base, the outer margins white ; upper part of the breast deep rufous, with a few purplish brown cross markings, these being thickest on the lower part of the neck and sides of the throat ; rest of the under surface of the body fulvous, covered everywhere with very indistinct brown mottlings ; sides of the body and under tail coverts rather deeper rufous, with plainer longitudinal brown stripes and irregular mottlings ; under wing coverts and axillary plumes pure white. Total length—16 inches ; culmen 1·8 ; wing 9·0 ; tail 3·4 ; tarsus, 1·2.

Hab.—Punjab and N.-W. Provinces. As yet only recorded from near Lucknow and Delhi, also at Sultanpoor. The specimen from the Calcutta market must have been obtained from some part of the Coast.

Querquedula gibberifrons is a species only as yet known from South Andamans, where it is a permanent resident. Hume has excellent figures of both male and female in his *Game Birds*. It is a very peculiarly coloured species, the whole upper and lower surface being a sort of a pale rusty ferruginous, each feather with a mesial crescentic or sub-crescentic patch of brown towards the tips, which are slightly paler rusty ferruginous than the bases; orbital ring white; cheeks and throat white; secondary greater coverts, the outer webs of a few secondaries and their tips white; rest of outer webs of secondaries velvetty black, with a brilliant green longitudinal band.

Sub-Family, FULIGULINÆ, *Sw.*—Diving Ducks.

Bill elevated at base, flat and broad towards the tip; nail strong, broad and horny; tarsi short, rather compressed; toes long, webbed to the end; hind toe short; tail short and rounded.

Gen. **Fuligula**, *Steph.*; Branta, *Boie.*; *Gray, Gen. B.* iii p. 620.

Bill nearly as long as the head, moderately wide, tip depressed; nail large; lamellæ distant; wings moderate, 1st quill longest.

1399. Fuligula rufina, *Pall., Zoogr. t.* 79; *Bodd. Tab. P. E.* 928; *Gould, B. Eur.* pl. 369; *Jerd., B. Ind.* iii. p. 811; *Str. F.* iv. p. 201; *Murray, Hdbk., Zool., &c. Sind*, p. 238; *Hume, Game Birds Ind.* iii. p. 253. (*Rattoba*, Sind; *Lall-seeree*, Punjab.)—The Red-crested Pochard.

Male.—Crown of the head, with an elongated crest of a silky texture and dull yellow colour; head on the sides, cheeks, chin and throat rich chestnut, with a tinge of rose red or reddish bay; nape and a line continued down the back of the neck black; lower neck, breast, sides of the breast and abdomen black, in some specimens the abdomen is a chocolate brown; flanks white; back pale brown, or yellowish brown; the scapulars with a fulvous tinge; end of the wing and a large spot on the sides of the back white; primaries brown on their outer webs and at their tips, white on their inner webs; secondaries white, with sub-terminal dark tips; tertiaries pale brown; rump and upper tail coverts nearly black; tail dark brown; bill bright vermilion; legs and feet vermilion or reddish orange; irides reddish brown.

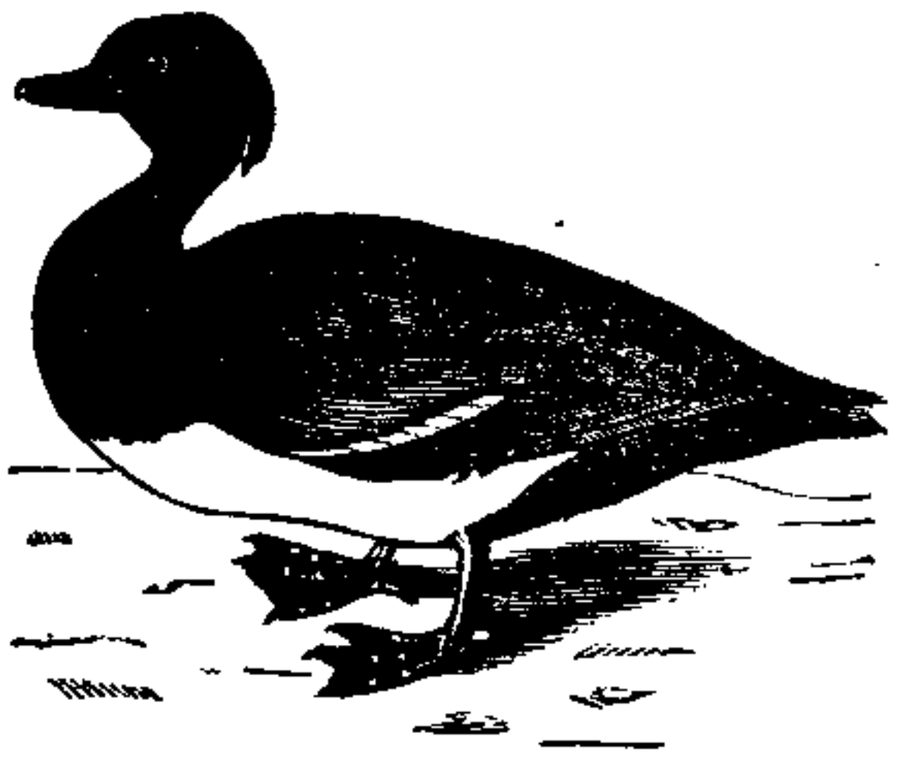
Length.—20·5 to 22 inches; wing 10 to 10·75; tail 3·0 to 4·0; bill 2·3 to 2·5.

Females are not much smaller, and average from 20 to 21 inches. Forehead and crown dark brown; the neck on the back and nape slightly paler;

crest much less developed; sides of the face and neck brownish white; speculum greyish white; breast and flanks yellowish brown, some of the feathers edged paler; shoulder of wing greyish white; tail yellowish brown; legs and feet reddish brown; back rufous or yellowish brown, some of the feathers edged paler.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. Provinces, Bengal, Guzerat, Kutch, Rajputana, the Deccan and throughout India generally, except in Southern India and Ceylon.

It is said to breed in parts of Persia. Occurs everywhere in large numbers during winter from the latter end of October to about the middle of April; a few, however, remain beyond the 10th of April. They are not very shy in their wild state, except in well-shot districts, and usually large bags may be made of this duck in a single day; they swim well and dive equally well, remaining a long while under water. Large lakes and rivers, and situations where there is much deep water, are the natural resorts of this duck.



Fuligula cristata. The Tufted Pochard.

1400. Fuligula cristata (*Linn.*), *Bodd. Tab. P. E.* 1101; *Gould, B. Eur.* pl. 370; *Jerd., B. Ind.* iii. p. 815, No. 971; *Murray, Hdbk., Zool., &c., Sind*, p. 338; *Hume, Game Birds, Ind.* iii. p. 277. (*Turando*, Sind; *Abluk*, Punjab.)—The Tufted Pochard.

Head, neck, long pendent crest and nape glossy black, with purple and green reflections; on the chin a white triangular spot; throat and breast black; back dusky olive brown, or black brown, tinged with violet; under parts white; vent and under tail coverts black; greater wing coverts white, the tips broadly black; lesser wing coverts like the back; tertials glossy green; bill plumbeous; irides golden yellow; legs and feet dusky.

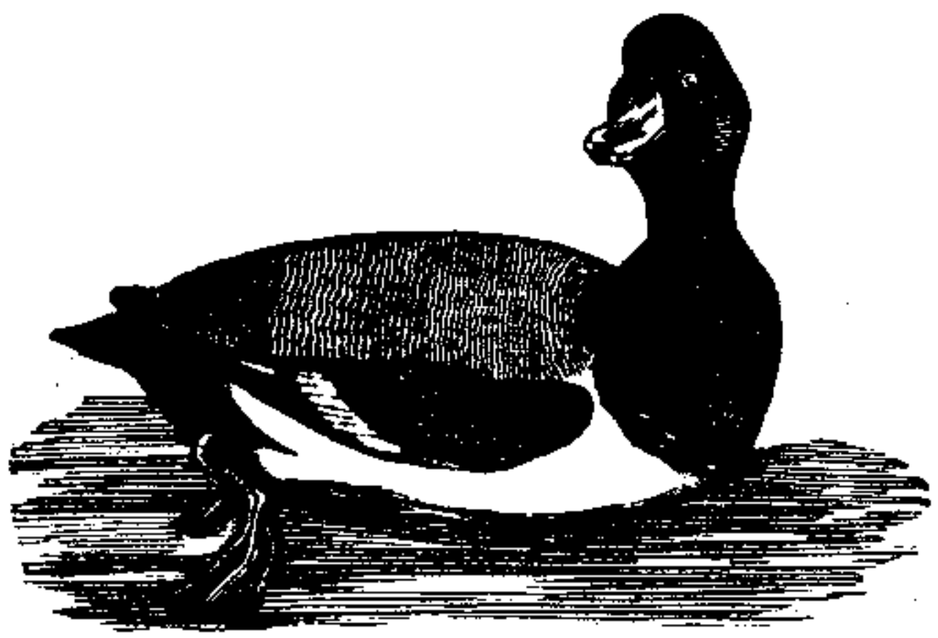
Length.—16 to 17 inches; wing 7·5 to 8·5; tail 2·5 to 3·0; bill 1·8 to 2·0.

Female.—*Length*—15 to 16 inches, with a wing of 7·5 to 8.

The female is dull rufous brown above, with palere dges to the feathers, the crest is less developed and deep rufous brown in colour; feathers about the bill pale yellowish white; breast on the centre yellowish or fulvous white, tinged with greenish; under parts white, with faint dusky bars of brown; speculum white; the under tail coverts white, with a few spots of pale brown.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. and Central Provinces, Oudh, Bengal, Rajputana, Kutch, Guzerat, Concan, Deccan, Central and Southern India.

This duck frequents chiefly open tanks, jheels and small dhunds overgrown with weeds. It feeds chiefly on small molluscs and insects. In the stomachs of a few obtained by me at Sehwan were species of *Nepidæ*, a species of *Ranatra* being the most common. They dive and swim well, and remain for some time under water in search of minute molluscs, roots and seeds. They are said to be good eating, but after January the flesh has a peculiar flavour, which renders it unpalatable.



Fuligula marila. The Scaup Pochard.

1401. Fuligula marila (*Linn.*), *Bodd. Tab. P. E.* 1002; *Gould, B. Eur.* pl. 371; *Jerd., B. Ind.* iii. p. 814, No. 970; *Murray, Hdbk., Zool., &c., Sind*, p. 239; *id., Vert. Zool., Sind*, p. 305; *Hume, Game Birds Ind.* iii. p. 271.—The Scaup Pochard.

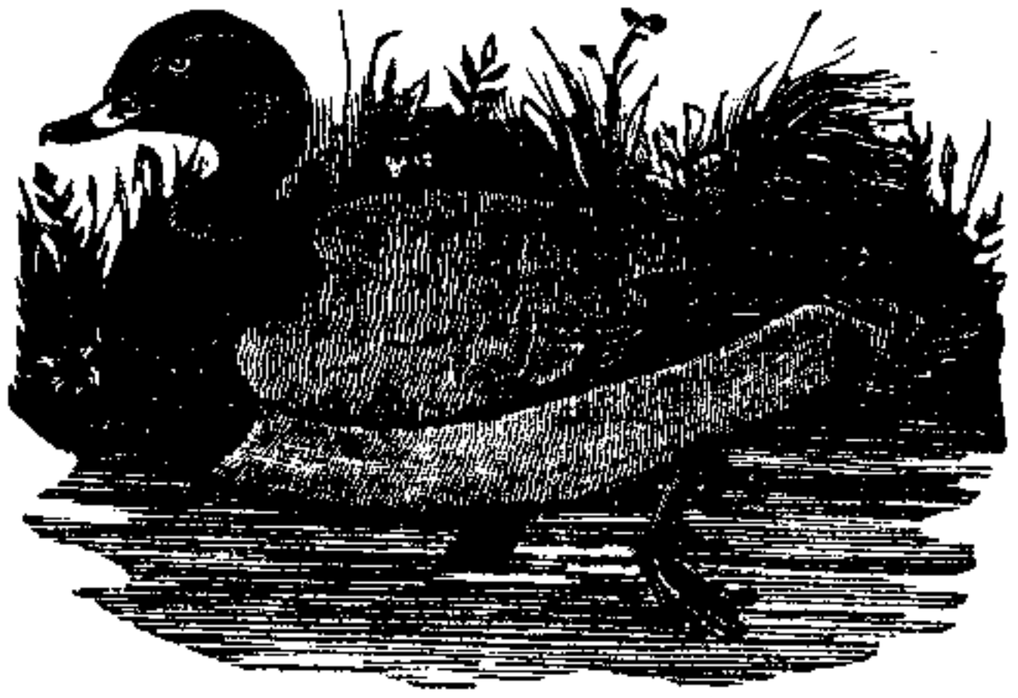
"*Male.*—Head and neck black, glossed with green; top of the back and scapulars whitish, with zigzag black lines; lower back and upper tail coverts black; tail brown; wing coverts black, marbled with ashy; speculum white; quills brown; lower neck and breast deep black; abdomen and sides pure white, with brown zigzag markings on the lower portion; under tail coverts black; bill clear bluish above, dusky below, the tip black; irides brilliant yellow; legs bluish ashy; webs blackish." (*Jerdon.*)

Length.—19 to 20 inches; wing 9 inches; tail 2·5; bill at front nearly 2; tarsus 1·5. The measurements of a female given by Mr. Hume are—*Length*,

A specimen of a female in the Kurrachee Museum measures—*Length*, 17·75 inches, wing 7·5, tail 2·8, bill at front 1·62, greatest width 0·81 The forehead, crown and nape are chocolate brown, with a faint gloss; a band of white (loreal) at the base of the bill 0·43 wide, tinged with rufous; chin rufescent white; throat slightly paler than the head; lower neck and breast pale brown, the feathers edged with pale rufescent or earthy brown; abdomen satin white; sides of the vent brownish, with a few white spots; back, scapulars, tertials, wing coverts and rump and upper tail coverts dark brown, with a slight gloss; the feathers of the upper back very narrowly edged paler; primaries dark brown on their outer webs and tips, earthy brown on their inner webs; secondaries white, broadly tipped with dark brown and narrowly edged the same on their outer webs; tail dark brown; irides yellow.

Hab.—Sind, Cashmere and Nepaul.

It was not till I took up the Scaups for examination in connection with this work, that I detected this species; like Mr. Hume I had it ticketed as *nyroca*. Mr. Hume's plate of the female of this species, and his description of the specimens in his museum puts its occurrence in Sind beyond doubt. The female specimen described was obtained in 1879 at the "*One Tree Tank*," about six miles north of Kurrachee, on the road to Muggur Peer. I believe now that I had the male also, but just at present it is nowhere to be found.



Fuligula ferina. The Pochard.

1402. Fuligula ferina (*Linn.*), *Bodd. Tab. P. E.* 803; *Gould, B. Eur.* pl. 367. Athya ferina, *Jerd., B. Ind.* iii. p. 812; *Murray, Hdbk., Zool., &c., Sind*, p. 239; *id., Vert. Zool., Sind*, p. 307; *Hume, Game Birds Ind.* iii. p. 249.—The Pochard, Dun-Bird or Great-headed Wigeon.

Head and neck rich or very deep chestnut, glossed with purple in some lights; breast black; back, scapulars and wing coverts marked with undulating transverse striæ of black and white; rump, upper tail coverts and vent black; rest of under parts from below the breast covered with delicate zigzag transverse striæ as on the back; primaries dusky brown, with dusky tips; secon-

daries leaden or bluish grey, tinged with brown, and slightly tipped with dull white; tail dark brownish ash.

The female has the head, neck and nape chestnut or reddish brown; the breast of deeper chestnut; the wing coverts ashy; upper parts as in the male, but the lines less distinct; throat and forepart of the neck reddish white; abdomen ashy or greyish white; bill dark plumbeous; irides orange yellow; legs and feet slaty grey or plumbeous.

Length.—18·0 to 18·5 inches; wing 8·0 to 8·5; tail 2·35 to 3·0; bill 2·15 to 2·25.

Hab.—Sind, Beloochistan, Persia, Afghanistan, Punjab, N.-W. and Central Provinces, Oudh, Rajputana, Kutch, Guzerat, Kattiawar, Central India, Nothern parts of Southern India, and the Deccan. In the Concan it occurs but only as a straggler; it is not recorded from Ceylon, nor from Nepaul.

The Pochard makes it appearance in Sind about the end of October, and in the Punjab during November. It is usually found in large flocks, affecting the sea as well as inland creeks and fresh waters; its chief food is molluscs, seeds, flower buds of aquatic plants and algæ also when on the sea, probably such algæ as are detached and found drifting in fresh waters. The Pochards affect deep weedy jheels, keeping well under cover during the day, and feeding chiefly by night; they fly with greater rapidity than the Mallards, and unless their haunts have not been shot over, they are very wary and difficult to approach.

1403. Fuligula nyroca (*Gould*), *Bodd. Tab. P. E.* 1000; *Gould, B. Eur.* pl. 367; *Naum., Vogt.* t. 309; *Jerd., B. Ind.* iii. p. 813; *Murray, Hdbk., Zool. &c., Sind*, p. 239; *id., Vert. Zool., Sind*, p. 307; *Hume, Game Birds Ind. iii.* p. 293. (*Burnoo*, Sind; *Karcheeya*, Punjab.)—The White-eyed Pochard or Ferruginous Duck.

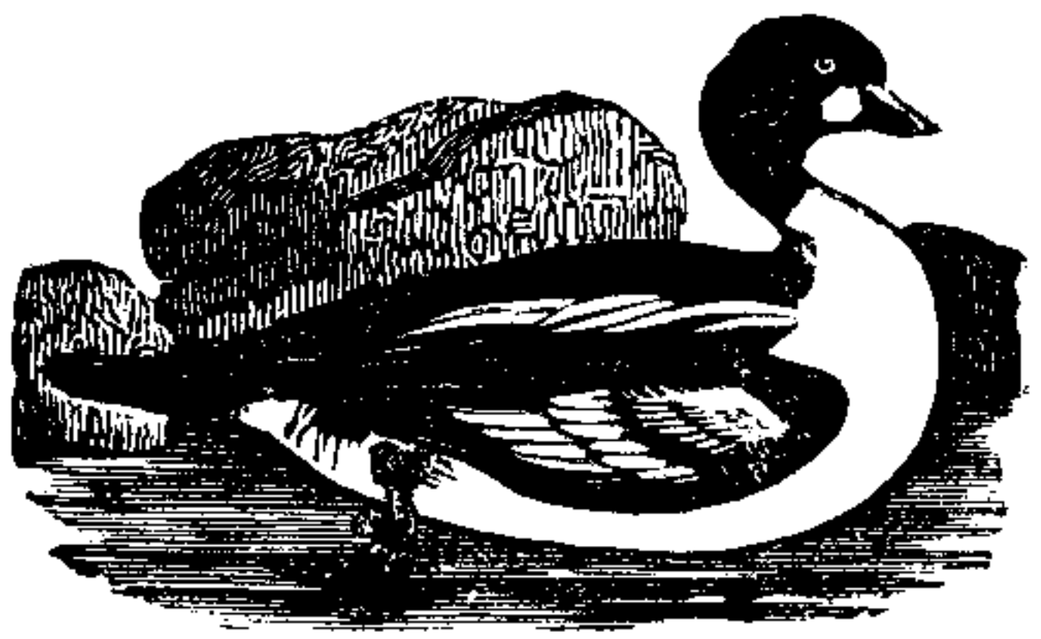
Forehead, crown, nape, sides of the face, throat and upper neck all round deep ferruginous; breast and sides of the breast the same; chin with a triangular patch of white; a black collar on the lower part of the neck, which behind runs into the purplish glossed dark brown of the back; scapulars and tertials dark brown, also the rump and upper tail coverts; abdomen pure white; flanks ferruginous; lower abdomen and vent ferruginous brown, with white specklings; lower tail coverts white; tail dusky brown; lesser, median and greater wing coverts dusky brown; secondaries white, broadly tipped with dark brown; end of the wing white, also the bases of the inner primaries and their inner webs; outer webs dusky blackish brown; axillaries white; bill bluish; irides white.

Length.—15·5 to 16·0 inches; wing 7·5 to 7·75; tail 2·0; bill at front 1·9 to 2·0.

The female has the head and neck brown, the feathers edged with ferruginous; chin white, but less extended; breast brown, the feathers margined with pale chestnut brown; abdomen dull white; edge of the wing white; secondaries white, tipped with black.

Length.—14 to 15 inches; wing 7·72.

Hab.—Sind, Beloochistan, Persia, Afganistan and throughout India, except South India and Ceylon. Occurs in Nepaul, Gilgit and Eastern and Western Turkistan, in which latter it breeds. "In the lakes of Cashmere," Hume says, "they breed most abundantly, and that boat-loads of their eggs are brought to market at Srinuggar." The White Eye affects chiefly jheels with thick cover, where they sport about in the early morning, afternoon and at night, retiring during the middle of day. It is not sought for by sportsmen, being very indifferent eating at the best of times.



Clangula glaucion. The Golden Eye.

1404. Clangula glaucion (*Linn.*), *P. E.* 802; *Gould, B. Eur.* pl. 329; *Murray, Hdbk., Zool., &c., Sind*, p. 238; *id., Vert. Zool., Sind*, p. 296; *Hume, Game Birds*, iii. p. 285.—The Golden Eye or Garrot.

Head and upper part of the neck glossy deep green when seen in a light reflected at a small angle, otherwise purple; throat brownish black; between the lateral basal sinus of the upper mandible and the cheek is an ovate patch of white, ten-twelfths across in its greatest diameter; the lower neck all round, the breast, forepart of the abdomen, sides, and lower tail coverts white; but the axillary feathers and lower wing coverts are blackish brown, and the edges of the posterior elongated feathers on the sides black; the back and the inner and posterior scapulars are black; the outer scapulars white with the margins black; the tail is deep brown, tinged with grey; the sides of the rump and tibiæ dusky-grey, and the feathers on the hind part of the abdomen dusky at the base; wing brownish black, with a large patch of white, which includes many of the small coverts, several of the secondary coverts, and eight of the secondary quills; these white secondary coverts have their basal half black, but that colour is not apparent when the feathers are laid down.

"*Male.*—The bill is black; the iris yellow; the feet orange yellow with the webs dusky; the claws brownish black.

"*Length.*—To end of tail 19 inches; extent of wings 32; wing from flexure 9; tail 4; bill along the edge 1·42; tarsus 1·42.

"*Female.*—The female is much smaller, and has the bill less stout; the feathers of the head less elongated, and less glossy, as are the scapulars and the feathers of the sides; the bill is light brown, yellowish on the ridge towards the end, with the upper unguis dusky; the lower yellowish brown; the tarsi and toes are of a dingy yellowish brown; the inter-digital membranes dusky; the claws brown; the head and upper neck are umber brown; the lower neck all round dull ash grey, the feathers terminally edged with paler; the lower parts are white, but the sides of the body and rump with part of the abdomen, are grey; the axillary and lower wing covert brownish grey; the back and scapulars are deep ash grey, but on the hind part of back that colour shades into black; the tail dark brown, tinged with grey; the smaller wing coverts are deep grey, many of them tipped with pale grey; the primaries, their coverts, four outer secondaries, and five inner, with their coverts, brownish black; the seven other secondaries pure white, as are their coverts, unless at the base.

"*Length.*—To end of tail 16 inches; expanse 28; wing 8·25; tail 3·25; bill along the ridge 1·25; tarsus 1·25."—(*MacGillivray, Br. B. ex Str. F.* vii. p. 441.)

Hab.—Sind, Lucknow (*Bonavia*), North Afghanistan.

This species has not to my knowledge been obtained in Sind during the last thirteen years. "Sir A. Burnes obtained a specimen on the Indus, which is figured among his drawings in the possession of the Asiatic Society."

Gen. **Erismatura.**

Tail of 18, stiff feathers, bare at the tips, and the webs much disunited.

1405. **Erismatura leucocephala** (*Scop.*), *Hume, Game Birds Ind.* iii. pp. 290, 436.—The STIFF-TAILED WHITE-FACED DUCK.

Crown black; forehead, sides of the head, including the space above the eye, chin and nape pure white; below this white the neck is black with a few buffy brown dots on the forepart; lower neck to the forepart of the back except in the centre, chestnut red, which extends to the foreneck and upper breast, where it is delicately marked with buffy white; back and scapulars ochreous or reddish buff; rump darker, brownish or finely vermiculated with blackish; lower rump and upper tail coverts chestnut red; quills greyish black, the secondaries externally and the larger wing coverts greyish buff, vermiculated with blackish grey; lesser coverts dull ashy, but slightly vermiculated; tail long and stiff and blackish in colour, under parts buffy white, obscurely

marked with reddish brown; flanks dull chestnut brown, tinged with warm buff and vermiculated with darker brown; bill much swollen at the base, pale ultramarine blue in colour; irides dark brown; legs dull blackish plumbeous.

Length.—17·5 inches; wing 6·3; tail 4·3; tarsus 1·35; culmen 1·9; gape 1·82.

The adult female differs from the male in wanting the clear white on the head and in being much richer in plumage; crown and nape blackish brown with a chestnut tinge; sides of the head similarly coloured but marked with white; a streak of white passes below the eye nearly to the nape; and the chin and upper throat are white slightly dotted with blackish brown. General colour of the upper parts darker than in the male, being deep chestnut red; under parts as in the male. Bill dull plumbeous; irides dark brown; legs plumbeous black.

Family, MERGIDÆ.

Bill straight, much compressed, narrow, convex towards the tip; edges of the mandibles strongly toothed; nostrils median, longitudinal; front toes well webbed, hind toe lobed; tarsus short; wings pointed; tail short, wedge-shaped; head sub-crested.

Mergus, *Linn.*

Bill slender, tip hooked; first and second quills longest.

1406. Mergus serrator (*Linn.*), *P. E.* 207; *Naum. Vogt.* t. 325; *Gould, B. Eur.* pl. 385; *Str. F.* ix. p. 268; *Hume, Game Birds*, iii. p. 305; *Murray, Vert. Zool., Sind*, p. 308.—The Red-breasted Merganser.

Adult Male.—The whole head, chin, throat and the neck all round, for about one inch black, glossed with metallic green on the sides of the head and a bluer sheen elsewhere; along the middle of the crown and occiput runs a comparatively narrow line of excessively narrow, more or less disintegrated-webbed, elongate feathers, of which the longest are over three inches in length, forming a conspicuous crest; the rest of the neck all round, to just the base, pure white, with a conspicuous narrow black line down the centre of its hinder aspect; at the base of the neck a light brownish rufous, or pale brownish chestnut band, extends all round, narrower behind and broadening into a crop-patch. This band is streaked longitudinally with blackish brown. The interscapulary region and upper back, the extreme sides of the breast and scapulars velvet black; outside the scapulars and between these and the wing there is a conspicuous patch of long white feathers; the primaries and their coverts (which latter are darkest), the shoulder of the wing and lesser coverts just above the carpus blackish brown, the rest of the lesser and median coverts pure white; the secondary greater coverts black, all, except the first three, very broadly tipped with white, but leaving a portion of their black bases visible below

the white median coverts, thus forming the first black bar across the white of the wing; the secondaries are black, all, except the first three, very broadly tipped with white; tertiaries white, conspicuously margined with black, except the last three, which are black; axillaries pure white; rest of the lower parts white, with, in life, a beautiful salmon or buffy tinge which disappears in the skin; flanks white, vermiculated with greyish black; middle and lower back, rump and upper tail coverts white, with very delicate and close vermiculations of dull black, producing a grey effect; tail dull brown; lower wing coverts white.

The *female* has the entire crown, occiput and crest brown with more or less of a dull rufous or chestnut tinge, and rather ashy towards the forehead; sides of the head and neck all round pale dull brownish chestnut; chin white; throat albescent; breast and entire lower parts white or pinkish white in life, only at the base of the throat and crop the grey brown bases of the feathers show through to a certain extent like hidden bars; interscapulary region, mantle, lower back, rump and upper tail coverts brown, most of the feathers with paler margins; quills dusky black; secondaries and their greater coverts black, all, but the first three, broadly tipped with white; tertiaries dusky blackish, paling anteriorly, whitish towards the tip, the innermost mostly white, with a black outer margin; tail like the back.

Both sexes from the above description resemble the Goosander, but may be distinguished by their small size, and in proportion to their length much thinner bills. (*Hume, Str. F.* ix. p. 268.)

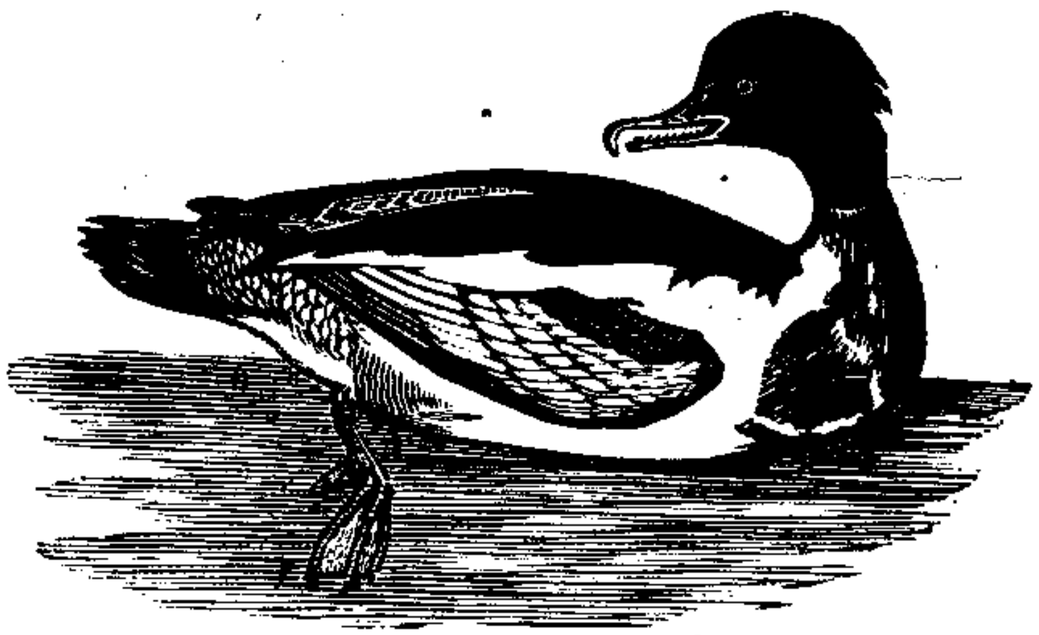
In the male the bill varies from orange red to deep vermilion, is more or less dusky on the edge, and has the nail varying from pale yellowish grey to almost black. In young females there is more dusky on the upper mandible, where the red is often only a lateral band.

Length.—Males, 24·0 to 26·0 inches; expanse 29·0 to 32·5; wing 9·0 to 10·0; tail from insertion of feathers 3·1 to 4·2; tarsus 1·8 to 2·05; bill at front along culmen 2·4 to 2·5.

Length.—Females, 22·0 to 23·5; expanse 28·0 to 31·0; wing 8·5 to 9·3; tail 2·7 to 3·6; tarsus 1·66 to 1·83; bill at front 2·1 to 2·3. (*Str. F.* ix. p. 268.)

In a second specimen (the first obtained by Capt. Bishop at Manora, and sent by me to Mr. Hume) now in the Kurrachee Museum—male, the bill at front is exactly 2·0 inches, tarsus 1·6, wing 8·37, tail 3·7, length 23·2, agrees exactly with Mr. Hume's description as given above.

Hab.—Sind. Mr. Hume says there is no other instance of its occurrence in India. China, Mongolia, S. and S.-E. Siberia, Palestine and throughout Europe; Scotland, Shetland, Sweden and Norway are given as localities outside of India.



Mergus merganser. The Goosander.

1407. Mergus merganser (*Linn.*), *Gould, B. Eur.* pl. 384; *Hume and Marsh., Game Birds* iii. p. 299. Mergus castor, *Jerd., B. Ind.* iii. p. 817; *Str. F.* i. p. 422; ii. pp. 336, 439; iv. pp. 202, 496; v. p. 323; vii. p. 149; *Murray, Vert. Zool., Sind,* p. 309.—The GOOSANDER or MERGANSER.

Head with a short thick crest, and upper part of the neck glossy blackish green; lower neck white; breast, abdomen and under tail coverts white, tinged with orange buff; upper back and scapulars black; lower back and upper tail coverts ashy; tail ashy grey; wing coverts and outermost scapulars rich orange buff, the latter edged with black. The female and young male have the head and neck reddish brown, the upper plumage ashy, the throat white, and a white speculum on the wing. Bill blood red; black on the culmen; irides and feet red.

Length.—25 to 28 inches; wing 10·9 to 12; tail 4·8 to 5·9; tarsus 1·8 to 2·03; bill from gape 2·7 to 2·9. Females average 22·9 to 25 inches in length.

Hab.—This species, although not yet reported from Sind, will no doubt be found to occur. It is said to occur in the Punjab, N.-W. Provinces, and Bengal, and also in Ajmere, and to breed in the higher valleys of the Himalayas, and in Beloochistan and Persia. A woodcut of the species is given to aid identification.

Mergellus.—*Selby.*

Bill shorter and wider than in *Mergus*; tip broad and much less hooked; mandible toothed.

1408. Mergellus albellus (*Linn.*), *Bodd. P. E.* 449; *Gould, B. Eur.* pl. 387; *Jerd., B. Ind.* iii p. 818; *Str. F.* i. p. 265; iv. pp. 31, 202; *Murray, Hdbk., Zool., &c., Sind,* p. 240; *id., Vert. Zool., Sind,* p. 310; *Hume, Game Birds Ind.* iii. p. 263.—The SMEW.

Male.—A black patch with green reflections from the base of the bill extending round the eye; head white, occiput with a longitudinal black patch descending down the back of the neck; chin, throat, neck, breast (except two crescentic black bands) and lower parts white; flanks and thigh coverts white, with dark zigzag transverse striæ; back black; greater wing coverts glossy black, tipped with white; lesser wing coverts partly white; primaries dusky black; secondaries glossy black, edged narrowly and tipped with white, forming two narrow bands across the wing; tertiaries leaden grey; upper tail coverts and tail greyish ash; under tail coverts white; bill light plumbeous with a bluish tinge; irides reddish brown; legs and feet plumbeous.

Length.—17 to 18 inches; wing 7·55 to 8·5; tail 3·37 to 3·9; bill 1·5 to 1·6.

The *female* has the head, crown, nape and hind neck reddish chestnut brown; sides of the neck white; crest short; back, upper tail coverts and tail deep ashy grey; chin and throat white; breast greyish white; abdomen white; flanks grey; wings as in the male, but the dark parts grey instead of black.

Length.—16 to 17 inches; wing 7·5 to 7·75; tail 3 to 3·2; bill at front 1·2 to 1·4

Hab.—Sind, Persia, Afghanistan, Punjab, Oudh, N.-W. Provinces, and North Guzerat. A winter visitant to India, arriving in Sind and the Punjab about the last week in October. The Smew is a shy and wary bird, taking to flight with great readiness. Smews are gregarious and are always to be found in flocks of from 10 to 20 or 30, usually in deep water on the Indus and other large rivers. Hume says—"They are difficult to approach. They keep in deep water, far away from any cover, and you can only shoot them from a boat; they can swim faster than any ordinary native boat can be propelled, and are always on the alert." They feed on fish and crustacea chiefly.

Family, PODICIPIDÆ.

Tarsus compressed; primaries short; feet lobed; tail very short, almost wanting; bill slightly curved above at the tip.

Podiceps.—*Latham.*

Bill straight, moderately stout; nostrils oblong, lateral, in a short groove; wings short; tarsus scutellate; hallux bordered by a web.

1409. Podiceps cristatus (*Linn.*), *Bodd., P. E.* 400, 944; *Gould, B. Eur.* pl. 388; *Aud., B. Amer.* vii. pl. 479; *Jerd., B. Ind.* iii. p. 821; *Str. F.* i. pp. 142, 265; iv. pp. 31, 203; *Murray, Hdbk., Zool., &c., Sind,* p. 240; *id., Vert. Zool., Sind,* p. 311.—The Crested Grebe.

Head with a long, dark brown or black silky, erectile crest, standing out behind, divided in two; forehead slightly paler; nape and neck behind

brownish black or black seasonally, continued on to the back, and coalescing with the dusky brown of the back; in some specimens the entire head, back of the neck, back, scapulars and wing coverts are dusky brown, with a greenish lustre; lesser wing coverts white; primaries dusky brown; secondaries white; tertials like the back; lores, sides of the face and cheeks fulvous white; neck in front, breast and entire lower parts satin white; sides of the breast and flanks with a rufescent tinge; nude space between bill and eye red or dusky seasonally; collar chestnut above, edged below with black; bill brown above, reddish on the sides and below, the tip white; irides crimson red.

Length.—22 to 22·5 inches; wing 7·25 to 7·5; bill at front 2·37; tarsus 2.

Hab.—Sind, Beloochistan, Persia, Punjab, N.-W. Provinces, Oudh, Bengal, Guzerat, Kutch and Kattiawar. Affects the sea-coast, also inland lakes, rivers, creeks and ponds, which are covered with reeds and rushes; although their wings are short, they fly well, but resort exclusively to diving, in which they are adepts. They feed on fry of fish, crustacea, tadpoles and seeds of aquatic plants. The skin of the breast is an article of commerce as a substitute for fur.

1410. Podiceps nigricollis (*Sund.*), *Edw. B.* pl. 96, p. 2; *Naum. Vogt.* t. 246; *Gould, B. Europe*, pl. 391; *Hume, Str. F.* i. pp. 142, 266; *Murray, Hdbk., Zool., &c., Sind*, p. 241; *id., Vert. Zool. Sind*, p. 311.—The Black-necked Grebe.

"*Male.*—Whole of the top of the head, together with the rest of the upper part, the chin, throat, and neck all round blackish brown, very glossy on the head; back and wings duller and browner on the neck all round; the chin and throat almost quite black, but a good deal speckled with white; this white speckling extending as a stripe at the sides of the neck behind the ear coverts; two short thick tufts on either side of the occiput, which, though scarcely noticeable in the dried skin, are erected at pleasure in the live bird; behind the eye for about 1·4 inches, a broad streak of orange and reddish yellow silky glistening feathers. The inner web of the sixth primary, and almost the whole of the subsequent primaries and secondaries, pure white; tertiaries and wing coverts unicolorous with the back. The whole breast, abdomen and vent satin white, a little tinged with greyish brown about the vent; tail unicolorous with the back, and on either side of it, and of the tail coverts a good deal of white appears; sides and flanks mottled with blackish brown, with traces of a rufous or orange striation.

"In full breeding plumage the sides and flanks are very strongly streaked with orange red, and the parts indicated as speckled with white are entirely black; in the winter plumage the colours are duller; the front of the neck is an earthy brown; and the whole of those portions, indicated as speckled with white are pure white; the orange red tuft behind the eye is entirely wanting." (*Hume, Str. F.* ii. p. 267.)

Bill black; irides vermilion; legs and feet greenish plumbeous interiorly, and blackish exteriorly.

Length.—12 to 13 inches; expanse 22·5 to 24·5; wing 5·2 to 5·6; tarsus, 2·9 to 3·2; bill at gape 3·6 to 4.

Hab.—Sind and the Mekran Coasts; common about the mouths of the Indus. Whether this species is distinct from *auritus* or not has to be finally settled. In vol. i. *Str. F.*, Mr. Hume gives some characters which distinguish *auritus* from this species, and thinks that "it differs in certain details of colouration and in shape of bill sufficient to justify separation."

1411. Podiceps minor (*Linn.*), *Bodd., Tab. P. E.* p. 905; *Gould, B. Eur.* pl. 392. Podiceps phillipensis (*Gm.*), *Jerd., B. Ind.* iii. p. 822; *Str. F.* i. p. 268; iv. p. 203; *Murray, Hdbk., Zool., &c., Sind*, p. 242; *id., Vert. Zool., Sind*, p. 312.—The Litile Grebe or Dab-Chick.

Crown of the head and nape dark blackish brown, or sepia brown, glossed with greenish; sides of the face, neck on the sides and in front chestnut red; chin dull black; breast sepia brown, mixed with white; flanks pale ferruginous; rest of under parts silky white; under wing coverts buff; primaries pale brown, buffy white basally; secondaries white, margined with brown; back, scapulars and tertials glossy brownish black, with a greenish tinge; bill blackish, paler at the base; irides red brown; legs greenish black or dusky green.

Length.—8 to 9 inches; wing 4; bill at front 0·75; tarsus 1·25.

Hab.—Throughout India, Beloochistan, Persia, Afghanistan, Eastern Turkestan and Nepaul.

Family, PROCELLARIDÆ.—Petrels, &c.

Bill long, straight, compressed, very deeply grooved, tip strong, arched and hooked; nostrils tubular, situated at the base of the bill, and exposed.

Sub-Family, PROCELLARINÆ.—Stormy Petrels.

Nostrils at base of keel divided by a septum; hind toe generally present; bill slender, compressed; tarsus moderate.

Oceanites.—*Keys and Blas.*

Bill short and slender, curved at the tip; tail forked; wings long, second quill longest; tibia partially naked.

1412. Oceanites oceanica (*Kuhl.*), *Sharpe, Rep. Trans. Venus Exped.*, p. 123; *Dresser, B. Eur.* viii. p 505, pl.; *Hume and Dav., Str. F.* vi. p. 490; *Butler, Str. F.* vii. p. 178; *Hume, Str. F.* viii. p. 115; *Legge,*

ii. p. 437. Procellaria oceanica, *Kuhl.*, *Beitr. Z. Zool.* p. 136, pl. 10, fig. 1. Procellaria Wilsoni, *Bonap.*, *Journ. Acad. Phil.* iii. pl. 2. p. 231, pl. 9, fig. 2. Thalassidroma, Wilsoni, *Gould. B. Austr.*, vii. pl. 65. Thalassidroma——? *Jerd.*, *B. Ind.* ii. p. 827; *Legge*, *Str. F.* iii. p. 375.—Wilson's Petrel.

General plumage deep sooty brown, or brownish black, blackish on the primaries, tertiaries, occiput, nape and tail; secondary greater coverts and latest secondaries wood brown or pale hair brown, narrowly margined towards the tips with yellowish white; upper tail coverts, flanks and bases of some of the external under tail coverts pure white; a few of the feathers of the lower abdomen narrowly fringed with white; bill dull black; legs and feet polished black, with a conspicuous pale yellow patch in the centre of each web; irides blackish.

Length.—7·12 inches; wing 6·25; tarsus 1·4; bill at front 0·5; from gape 0·7; hind toe obsolete; hind claw just visible as a tiny spur at the base of the tarsus. (*Hume*, *Str. F.* v., p. 291.)

Hab.—Sind and Mekran Coast; also the Ganges, the Bay of Bengal, and the Tenasserim Coast.

Stormy Petrels, vulgarly known to sailors as Mother Carey's chickens, and disliked by them as being foretellers of an approaching storm, have long been celebrated for the wonderful manner by which they traverse the ocean, flying close above the water, or passing over the wavy billows pattering the surface with their webbed feet. Petrels are usually seen in windy or stormy weather, chiefly because "the marine creatures are flung to the surface by the chopping waves, and can be easily picked up as the bird pursues its course." Crustaceans, fish, molluscs and floating algæ are the chief food of Petrels, and it is said they will follow in small flocks under the wake of a ship for the sake of picking up refuse food thrown overboard. On the Mekran and Sind Coasts they are usually met with singly or in pairs flying backwards just above the surface of the water, as Jerdon justly remarks "much resembling swifts, both in general appearance, colour and flight." They are numerous between Charbar and Pusnee, and beyond the mouths of the Indus on the Kurrachee Coast; Jerdon records this species from the mouths of the Ganges and throughout the Bay of Bengal.

Gen. **Daption**.—*Stephens.*

Wings long; tail moderate; bill hooked at the tip, and very weak.

1413. Daption capensis (*Linn.*), *Gould, B. Austr.* vii. pl. 53; *Sharpe, Rep. Trans. Venus Exped.*, p. 118; *Hume, Str. F.* vii. pp. 442, 463; viii. p. 115; *Legge, B. Ceylon*, p. 1056; *Oates, B. Br. Burm.* ii. p. 438. Procellaria capensis, *Linn.*, *Syst. Nat.* i. p. 213.—The Cape Petrel.

Whole head, chin, sides and back of the neck, upper back and lesser wing coverts sooty brown; lower back, upper tail coverts, scapulars and tertiaries

white, each feather tipped with sooty brown; secondaries more broadly tipped; median and greater wing coverts with the outer webs and the tips of the inner sooty brown; remainder of the inner web white; primaries blackish, with a broad white marginal band on the inner web; basal two-thirds of tail white, remainder sooty brown; lower plumage from the chin white; under tail coverts tipped with sooty brown.

Length.—About 14 inches; tail 4; wing 9; tarsus 1·7; bill from gape 1·5. (*Oates.*)

Bill blackish brown; irides and feet dark brown. (*Gould.*)

Hab.—Obtained by Mr. Hume in the Straits between Ceylon and the mainland. Oates says it is certain to be found in the vicinity of the Burmese coast at times.

Gen. **Puffinus.**

Bill longer than the head, slender, compressed at the point; lower mandible reflected at the tip; nostrils in a double tube, extending along the under surface of the bill; tarsus moderate, compressed; toes three in front, rather long; hind toe rudimentary; 1st quill longest.

1414. Puffinus persicus, *Hume, Str. F.* i. p. 5; v. p. 292; *Murray, Hdbk., Zool.*, &c., *Sind*, p. 243; *id., Vert. Zool., Sind*, p. 213.—The Persian Shear-Water.

Female.—The head and nape deep sooty brown, the whole of the rest of the upper parts blackish brown; almost, if not quite, black on the primaries, rump, upper tail coverts and tail; upper portion of the lores mingled dusky brown and whitish; lower portion of the lores and the whole of the chin and throat, as far as the eyes on either side, breast, abdomen, vent and shorter central lower tail coverts, pure white; a line about 0·06 wide encircles the eye and extends backwards from the posterior angle as a narrow white streak for a distance of 0·35 to 0·4 inch; below this the ear coverts are dusky brown, slightly mingled with whitish; the white line below the eye is only separated from the white of the throat by a hair line of greyish brown. The sides of the neck and the breast, where the brown of the upper meets the white of the lower parts, are somewhat paler brown, slightly intermingled with white. The sides, axillaries, flanks, and the lesser under wing coverts next the body, and the whole of the exterior and longer tail coverts are deep brown; the rest of the lower wing coverts, except just at the edge of the wing, are white, here and there slightly mottled, especially at the edge of the wing, with dusky brown; the longer axillaries are mottled with white along their bases.

Bill dusky brown, bluish at base and basal three-fourths of lower mandible; irides brown; legs and feet white, tinged with pink and lavender; claws,

margin of web, exterior of foot, and outer toe, and part of ridge of mid-toe black.

Length.—13 inches; wing 7; tarsus 1·5; bill from forehead to tip 1·3; from anterior margin of nostril 1·06 inches. (*Hume, Str. F.* i. p. 5.)

Hab.—Sind Coast and the mouths of the Indus, also on the Mekran Coast. Like the Petrel, the Puffin or Shear-water also lives entirely on the sea, except during the breeding season, when holes in rocks are their haunts; like the Petrels, they feed on floating garbage, fish, crustacea, &c.

1415. Puffinus chlororhynchus, *Lesson, Traite*, p. 613; *Newton, Ibis*, 1861, p. 181; 1867, p. 359; *Legge, B. Ceylon*, p. 1054; *Oates, B. Br. Burm.* ii. p. 439.—The Green-Billed Shearwater.

Whole plumage sooty brown, darkest on the wings and tail; paler beneath and tinged with glaucous on the chin and throat.

Irides dusky; bill dusky greenish; legs fleshy white. (*Legge.*)

Length.—About 15 inches; tail 5·3; wing 1·09; tarsus 1·8; bill from gape 2.

Hab.—Indian Ocean, breeding in the Mauritius and neighbouring islands, where it deposits its single egg under stones and in burrows. Has been met with on the Coast of Ceylon, and will probably be found to occur in the Bay of Bengal, and the Burmese Coast.

Pelecanoides urinatrix is said by Sundevall to have been observed in the Bay of Bengal, but as nothing more is known of it, I do not include it in the *Avifauna*. The whole of the upper plumage is glossy black, the lesser wing coverts fringed with white, also the secondaries and tertiaries; lower plumage glistening white.

Length.—About 8 inches; wing 4·8.

ORDER—GAVIÆ.

Family, LARIDÆ, *Vig.* Lestridæ, *Kaup.*

Bill straight, compressed; wings long and pointed; tail long; tarsi with transverse scutes in front; hind toe usually short.

Sub-Family, STERCOCARINÆ.—*G. R. Gray.*

Base of bill covered with a cere, tip hooked; 1st quill longest; nostrils median.

Gen. **Stercocarius**.—*Briss.*

Keel of bill covered with a bony or membranous cere; 1st quill longest.

1416. Stercorarius asiaticus, *Hume, Str. F.* i. p. 268; v. p. 294. Lestris parasiticus (*Lin.*), *Gould, B. Eur.* pl. 448; *And. Birds Amer.* vii. pl. 452; *Murray, Hdbk., Zool., &c., Sind,* p. 244; *id., Vert. Zool., Sind,* p. 314.—The Skua.

This is not uncommon off the Manora headland, and along the Sind and Mekran Coasts. There is some difference of opinion in regard to the identity of this bird, under the synonyms given of it above. Mr. Hume, in vol. i., p. 268, refers it to *L. parasiticus,* but in his observations on the species states it may not improbably hereafter turn out that both his specimens and those of Major Tickell's belong to a distinct species intermediate between *pomarinus* and *parasiticus*, in which case he says it may stand as *Stercorarius asiaticus,* nobis, In vol. v. of the same journal he points out the differences between *L. parasiticus* and his *Stercorarius asiaticus.*

The following is the description of the species from specimens obtained by him at Pusnee on the Mekran Coast:—

"The central tail feathers are manifestly imperfectly developed, one projects 0·75 and the other 0·25 beyond the rest of the tail; the bird is obviously in a state of change of plumage, as the two first primaries in each wing are old, and comparatively pale brown, with conspicuous white shafts only tinged brownish for about 0·5 immediately above the tips, while all the other primaries are new and very dark brown, almost black, with only the basal half of the shafts white, and even that slightly tinged with brown; some of the secondaries, scapulars, coverts and feathers of the back are brown; the same dull pale umber as the first two primaries, and so are two of the tail feathers, while the whole of the rest of the wings and tail are of the same deep blackish brown as the third to the tenth primaries. What is noticeable is, that on the back and scapulars the paler brown feathers have no white tippings, which most probably have worn off, these feathers being the old ones, but all the dark feathers of these parts have narrow brownish white margins. The upper tail coverts are conspicuously tipped with white, and the longer ones have two very broad slightly rufous or fulvous white bars. The forehead, crown and occiput are dull, pale, wood brown, here and there faintly tinged rufescent, the feathers with pretty broad blackish brown central streaks; the lores are greyish white, the feathers narrowly dark centred; the cheeks, ear coverts and nape are white, more or less tinged with fulvous or buffy, with very narrow dark brown shaft-stripes; the chin and throat white; the feathers of the base of the neck all round and the breast white, tinged in places fulvous, in places slightly rufescent, with a broad dark brown subterminal transverse band; the sides, flanks and lower tail coverts are white, with broad brown transverse bars, which in some of the lower tail coverts have a slight rufescent aureola; the abdomen and vent are white, but on the sides of the abdomen there are faint traces of barrings similar to those of the breast and flanks; the axillaries

are broadly barred, with a somewhat greyish brown and greyish white; the tibial feathers pure brown."

Length.—19 inches; expanse 45; tail from vent 6·4; wing 13; bill at front (including cere, which is 0·7) 1·2; bill from gape 2·02; tarsus 1·8; legs and feet dull black; bill brown; cere pale greenish brown; irides brown.

Stercorarius pomatorhinus is said to have occurred near Moulmein and *S. antarticus* in Ceylon.

Sub-Family, LARINÆ.—*Bp.*

Bill long, straight above, and slightly curved at the tip.

Gen. **Larus.**—*Lin.*

Bill moderate, strong, compressed, cultrated, bent down at the tip; lower mandible angled beneath; nostrils linear, lateral, longitudinal, pervious; tibia naked; tarsi moderate; toes palmated; hind toe free, short and high on the tarsus; wings long.

1417. Larus cacchinnans, *Pall., Zoogr. Rosso.* ‖ *As.* ii. p. 318. Larus argentatus, *Bp., Icon. F. Ital. Uccel.*; *Hume, Yarkand Exp. Zool.*, p. 299; *id., Str. F.* i. p. 270; vii. p. 463; *Murray, Hdbk., Zool., &c., Sind*, p. 245; *id., Vert. Zool., Sind*, p. 316. Larus leucophæus, *Licht., Nom. Av. Mus. Berol.* p. 99; *Dresser, B. Eur.* pt. xxii.—The Yellow-legged Herring Gull.

Summer Plumage.—Entire head, neck all round, entire lower parts, upper tail coverts and tail pure white; round the eye an orange red ring; entire mantle and back, tertiaries and secondaries a delicate pale bluish grey; the tertiaries and secondaries and longer scapulars broadly tipped with white; the earlier secondaries, especially with the major portion of the inner webs, also white; edge of the wing about the carpal joint white; primaries, the first with the whole outer web black, tipped with white and with a broad white band across both webs near the tip; above this band a considerable portion of the inner web is black, and the rest pale grey; second primary similar, but the white band often entirely wanting or reduced to a spot on the inner web only, the black on the inner web of less extent than in the first, and the basal portion of the outer web the same pale blue grey as the coverts and the rest of the wing; the third and following primaries have only the white tips and no white band, the outer webs become more grey as they recede from the second, and the black diminishes on the inner webs proportionally, so that on the seventh or eighth it is generally reduced to a narrow black band across both webs, or in some cases on the outer web only, and in others entirely wanting on the last three quills.

In the winter plumage the nape and back of the neck are striated with pale brown, in some specimens, thinly on the crown also; *legs and feet* lemon yellow.

Length.—23 to 25·75 inches; expanse 58 to 60; wing 16·75 to 18; tarsus 2·5 to 2·78; bill at front 1·9 to 2·35; mid-toe and claw 2·25 to 2·6; bill yellow, red near the tip of the lower mandible in summer. In winter it is dull yellow, whitish at the tip, with a dark spot on both mandibles near the tip, and an orange spot at the tip of the lower one. (*Hume, Str. F.* p. i. 270, *L. argentatus.*)

Hab.—Sind, Beloochistan (Mekran Coast), Persian Gulf, large rivers of the Punjab, N.-W. Provinces, the Delhi District and Rajputana.

Numerous during winter in the Kurrachee harbour. It has not yet been finally settled whether this species is *L. argentatus* or *cacchinnans*. Mr. Howard Saunders (*P. Z. S.* 1878) identifies it with *cacchinnans*; the characters of both species are so similar, that it becomes a vexed question. Mr. Hume maintains it is open to argument. All my specimens agree with Mr. Hume's description; but the length of the mid-toe and claw in 5 out of 6 specimens is 2·25, and of those in the striated plumage the mantle is rather darker.

1418. Larus affinis, *Reinhardt., Vidensk. Meddel.* 1853, p. 78; *et Ibis*, 1861, p. 17; *Seebohm and Brown, Ibis*, 1876, p. 452. Larus fuscus. *Jerd., B. Ind.* p. 830, No. 978; *Gould, B. Eur.* pl. 431. Larus occidentalis, *Hume, Str. F.* 1873, p, 273 (*nec Aud*); *Murray, Hdbk., Zool., &c., Sind*, p. 246; *id., Vert. Zool. Sind*, p. 318.—The Lesser Herring Gull.

Head, crown, neck and nape white in summer, in winter streaked with dusky brown, and with a dusky eye spot; chin, throat and breast white; back dark slaty grey, also the greater and lesser wing coverts; primaries dark slaty grey, the first six tipped with white, the first with a broad bar and the extreme tip white, the rest only tipped white; secondaries like the back, and tipped with white; some of the tertials also tipped with white; under wing coverts white; upper and under tail coverts and tail white.

Length.—Male, 24·2 inches; wing 17·2; tarsus 2·6; mid toe and claw 2·3; bill at front 2·25.

Length.—Female, 22·3 inches; wing 16·8; tarsus 2·6; mid-toe and claw 2·2; bill at front 2·1; bill yellow, the angle on the lower mandible red; irides pale yellow; eyelids yellowish red.

Hab.—Sind, Beloochistan (Mekran Coast), the Coromandel Coast, Kutch, Guzerat, Concan and Deccan.

In immense numbers on the Sind and Mekran Coasts. In the Kurrachee harbour in large flocks, feeding among fishermen when landing their nets and about their huts.

1419. Larus gelastes, *Licht. in Thienem, Fort p. fianz. Vog. Eur.* pt. v. p. 22; *Degl. Orn. Eur.* ii. p. 318; *Bree, B. Eur. 2nd Ed.* v. p. 72;

Blanf., *East. Pers.* ii. p. 291. Larus lambruschini, *Bp.*, *Schl. Mus. P. Bas.* p. 28; *Hume*, *Str. F.* i. p. 274.—The Rosy Sea Gull.

Summer Plumage.—Entire head, neck, upper back, rump, upper tail coverts, entire lower parts and tail white, tinged with rosy, except on the head, where the rosy tinge is scarcely perceptible; mantle, secondaries, tertiaries, lesser and median wing coverts, and the upper greater coverts, also the wing lining pale bluish french grey, rather pearly grey on the back and tertiaries; four or five of the primary coverts and edge of the wing white; primaries, the first white, except the outer web, tip and margin of the inner web; second to fourth primaries white, the margin of their outer webs narrower and decreasing in extent terminally, and broadening and running up basally on their inner webs, with the black tips broader successively; fifth and sixth primaries tipped white; the outer web of the fifth greyish, and that of the sixth slightly darker, with a subterminal dark band; bill, legs and feet deep red; the bill in some with a blackish tinge; eyelids bright red; irides pale yellow.

Length.—17 to 18·5 inches; wing 11·5 to 12·0; bill at front 1·6 to 1·82; tarsus 2 to 2·12.

Hab.—Sind (Kurrachee harbour), Gulf of Oman, Persian Gulf, the Mediterranean and Black Sea, also the Red Sea.

Numerous everywhere in the Kurrachee harbour during winter. Distinguished from all other species by its never having a hood and the dark spot in front and behind the eye, characteristic of the winter plumage of *ridibundus*.

1420. Larus hemprichi, *Bp.*, *Heugl. Ibis*, 1859, p. 350; *Blanford*, *Abyssinia*, p. 441; *id.*, *East. Pers.* ii. p. 292; *Hume*, *Str. F.* i. p. 279; iv. p. 444; v. p. 296; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 248; *id.*, *Vert. Zool.*, *Sind*, p. 318.—Hemprich's Sea Gull.

Summer.—Forehead, crown, nape, chin and throat chocolate brown; neck in front darker, nearly blackish brown, forming a sort of a "bib"; on the upper breast, the edges of the brown of the back of the neck margining the broad white demicollar of the same colour; upper back, scapulars, lesser, median and greater coverts, also the secondaries and tertials, deep chocolate brown, all the secondaries broadly tipped with white; primaries dark brown, nearly black, all, except the first three, tipped with white; edge of the wing white; breast and sides of the breast paler brown than the back; abdomen, vent, under tail coverts, flanks, upper tail and thigh coverts white; legs and feet yellowish, or greyish yellow; bill greenish drab, tipped red, with a subterminal black bar; irides dark brown.

In winter the forehead and lores are a pale brown, also the crown of the head and cheeks, the feathers here and there margined with greyish white

breast pale brown, the feathers margined greyish white; chin and throat white, the feathers of the latter tipped with brown, otherwise as in the summer plumage, the colour of the mantle and wings being slightly paler.

Length.—17·5 to 18·5 inches; wing 13·25 to 13·7; tarsus 2 to 2·1; bill at front 1·8 to 2·0.

Hab.—Sind, Mekran Coast, Persian Gulf, from the Red Sea to Aden, Kutch, Guzerat, Concan (at Bombay).

1421. Larus brunneicephalus, *Jerdon, Madras Journ.* xii. p. 225; *id., Birds Ind.* iii. p. 832; *Holdsworth, P. Z. S.* 1872, p. 480; *Str. F.* i. p. 278; iv. p. 203; vi. p. 291; *Murray, Hdbk., Zool., &c., Sind,* p. 247; *id., Vert. Zool. Sind,* p. 318.—The Brown-headed Gull.

Summer Plumage.—Entire head and neck sooty brown, darker where it terminates; orbital feathers white posteriorly; back and wings light grey; nape, hind neck, upper tail coverts and tail, also the under parts white; first primary black; inner web white at the base and with a white subterminal band, the second has both webs white at the base and a smaller terminal spot, the third is grey, with still less black and no white, and so on, lessening to the seventh; the other quills are grey; bill and feet red, the bill darkish at the tip; irides white. (*Jerd.*)

Length.—15·8 to 16·5 inches; wing 11·5 to 13·0; tail 4·5 to 5·5.

In winter, the head, neck all round, entire lower parts and upper tail coverts, also the edge of the wing, are white; tail white with a black band, narrowly edged with white terminally; a dark spot before and behind the eye; quills black, white at their bases, and except the first two, all tipped with white; secondaries dark brown, tipped with white; tertials and upper plumage as in summer.

Hab.—Sind, along the coast and inland, Mekran Coast, Persian Gulf, Bengal, Kutch, Guzerat and the Deccan. Occurs also in Burma and Ceylon.

1422. Larus ichthyætus, *Pall., It.* ii. *App.* No. 27; (*Caspian*) *id., Zoogr. Rosso. As.* ii. p. 322; *Tristram, Ibis,* 1868, p. 30; (*Palestine*) *Shelley, B. of Egypt,* p. 307; *Dresser, B. Eur.* pt. xviii.; *Str. F.* i. p. 276. *Murray, Hdbk., Zool., &c., Sind,* p. 247; *id., Vert. Zool. Sind,* p. 319. Kroikocephalus ichthyætus (*Pall.*), *Jerd., B. Ind.* iii. p. 831.—The Great Black-headed Gull.

Summer Plumage.—Entire head and upper half of neck black; orbital feathers white; mantle, back, scapulars and wings bluish grey; entire lower parts, tail, and upper tail coverts white; in immature plumage the tail has a black band; primaries with a black band, increasing in width to the outermost one, which has the whole of the outer web and half of the inner web black;

red at the tip, with a black bar across both mandibles; the extreme tip orange yellow.

Length.—28·5 to 29 inches; wing 19·0 to 20·0; bill at front 2·6 to 2·7; tail 7·5 to 7·7.

Hab.—Sind and Mekran Coasts, also the larger inland lakes of Sind, Persian Gulf, the Punjab, N.-W. Provinces, Bengal, the Concan, Bombay, and South India (Madras).

1423. Larus ridibundus, *Linn., Syst. Nat.* i. p. 225; *Gould, B. Eur.* pl. 425; *Jerd., B. Ind.* iii. p. 832; *Str. F.* i. p. 278; *Murray, Hdbk., Zool., &c., Sind*, p. 278; *id., Vert. Zool., Sind*, p. 319.—The Laughing Gull.

Head and upper part of the neck all round deep reddish or blackish brown; lower neck, breast, abdomen, vent, under and upper tail coverts and tail white; mantle, tertials and secondaries pale ashy; four or five lower primary coverts white, the rest pale ashy; primaries white, outer web, except for about an inch of the tip and edge of the inner web of first primary black; second primary broadly edged on the inner web and tipped with black on the outer web; at about the terminal third of the quill a narrow black margin about an inch in length; third primary white on the onter web, greyish on the inner, broadly margined and tipped with black, and for about two inches from the tip a margin on the outer web; 4th primary the same; rest pale grey; the fifth, sixth and seventh narrowly tipped with black; the inner primaries and some of the secondaries dark shafted; bill and legs deep red; irides dark brown.

Length.—15·5 to 17 inches; wing 13·0 to 13·5; tail 4·75 to 5·5; bill at front 1·37 to 1·75.

In winter plumage, the head and neck are white, and there is a dark spot in front of the eye and another near the ear coverts; the primaries too differ in their markings; the first is white, with the outer web black, also the margin of the inner one and the tip, the second is similar, but the black outer web begins from the tip of its covert, and the inner web and tip is margined more broadly with black; the black of the outer web of the third is still less, and it decreases also in the fourth, the inner web of which is greyish instead of white, and broadly margined and tipped with black, the rest are greyish with black tips, except the two last, which has besides a small white spot terminally; the first three primary quills agree well with the plate in *P. Z. S.*, 1878, p. 201, (Saunders on the *Larinæ*.)

Hab.—Sind, in the Kurrachee harbour, and on the inland lakes; the Mekran Coast, Persian Gulf, rivers of the Punjab and Bengal, at Bombay, also the Mediterranean Coast to Egypt, Asia Minor, the Red Sea and Arabian Coast.

Sub-Family, STERNINÆ.—*Bp.*

Bill long or moderate, entire, straight, compressed and pointed; the lower mandible angled; nostrils longitudinal; wing long and pointed; tail short and even, or long and forked; tarsus short and slender; toes short, webbed.

The common residence of this Family is the sea shore, mouths or banks of large rivers and lakes. They are always in large flocks, and especially so in the breeding season.

They continue long on the wing, and are quick in all their evolutions, darting upon their finny prey, rising in the air, or gliding along near the surface of the water. They are commonly divided as Marsh, River, Sea, and Oceanic Terns, according to their habits and structure.

Gen. **Hydrochelidon**.—*Boie.*

Bill rather long, slender, gently arched on the culmen; gonys with the ascending portion short; tail short, slightly forked; feet not fully webbed.

1424. Hydrochelidon hybrida, *Pall., Zoogr. Ross. Asiat.* ii. p. 388; *Oates, Str. F.* iii. p. 348. Sterna Javanica, *Horsf., Trans. Linn. Soc.* xiii. p. 198. Hydrochelidon Indica, *Jerd., B. Ind.* iii. p. 837; *Hume, Nests and Eggs, Ind. B.* p. 648. Sterna innotata, *Beavan, Ibis*, 1868, p. 404. Hydrochelidon hybrida, *Salvad., Ucc. Born.* p. 372; *Saunders, P. Z. S.* 1876, p. 640; *Dresser, B. Eur.* viii. p. 315, pl.; *Legge, Birds of Ceylon*, p. 996; *Oates, B. Br. Burm.* p. ii. p. 419.—The WHISKERED TERN.

Forehead, crown, nape and back of neck glossy black; lores and chin white; throat and breast pale bluish ash; abdomen dusky; under tail coverts white, also the edge of the wing; mantle, wings, upper tail coverts and tail bluish ash; external tail feathers white; under wing coverts white; bill lake red; irides brown; legs and feet dull red.

Length.—11 to 13 inches; wing 8·5 to 9·75; tail 3·75 to 4·5; bill at front 1·5

Hab.—Throughout India, Burmah and Ceylon, affecting lakes and the sea coast.

1425. Hydrochelidon leucoptera (*Meisn and Schinz.*), *Dresser, B. Eur.* viii. p. 321, pl.; *Saunders, P. Z. S.* 1876, p. 641; *Hume, Str. F.* viii., p. 115; *Legge, B. Ceylon*, p. 1,000. Hydrochelidon nigra (*Linn.*), *apud. Salvad., Ucc. Born.* p. 372. Sterna leucoptera, *Meisn and Schinz., Vog. Schweiz.* p. 264.—The WHITE-WINGED BLACK TERN.

Head, neck, back, scapulars, innermost secondaries and entire under parts, (except the under tail coverts which are white) deep glossy black; primary quills, blackish grey, fading to greyish white on the outer portions of the

inner webs, except on the terminal portion shafts of the feathers white; secondaries light french grey; lesser wing covers, edge of the wing, tail, and upper tail coverts white; larger coverts french grey; under wing coverts black and blackish grey; edge of the wing mottled with white. Bill reddish black; irides dark brown; legs and feet vermilion red, with a coral tinge.

In winter the forehead and crown are white, nape and occiput dark grey, also the back and scapulars; rump and upper tail coverts pale greyish white; throat, foreneck, under tail coverts, and under wing coverts white; a black spot in front of the eye; breast greyish.

Length.—9·5 inches; tail 3; wing 8·2; tarsus 0·75; bill from gape 1·25.

Hab.—Throughout India, Burmah and Ceylon, affecting lakes, rivers and sea-coasts.

1426. Hydrochelidon nigra, *Linn.*, *Syst. Nat.* i. p. 226; *Hume, Str. F.* vii. pp. 445, 446.—The Black Tern.

Head, neck, breast and under parts as far as the thighs black; lower abdomen and vent pale ash; upper plumage, including the wings and tail, dark hoary plumbeous; outermost feathers of tail white exteriorly; legs and feet crimson; claws black; bill black.

Length.—10 inches; tail 3; wing 8·2; bill 1·25.

Hab.—Sind and Persian Gulf.

Gen. **Gelochelidon**.—*Linn.*

Nostrils with plumes reaching the opening; first quill of wing longest; tail forked; tarsus rather long; bill moderate; culmen slightly curved and with projecting gony or angle.

1427. Gelochelidon anglica (*Mont.*), *Jerd.*, *B. Ind.* ii. p. 836; *Salvad.*, *Ucc. Born.* p. 371; *Blyth*, *B. Burm.* p. 163; *Hume*, *Str. F.* vi. p. 491. Sterna anglica, *Mont.*, *Orn. Dict. Suppl. Saunders*, *P. Z. S.* 1876, p. 644; *Dresser*, *B. Eur.* viii. p. 295. pl.; *Hume*, *Str. F.* viii. p. 115; *Legge*, *B. Ceylon*, p. 1011; *Oates*, *Str. F.* x. p. 246; *id.*, *Birds Br. Burm.* ii. p. 422. Gelochelidon anglicus, *Jerd.*, *B. Ind.* ii. p. 836. Gelochelidon nilotica, *Murray*, *Vert. Zool.*, *Sind*, p. 320. Sterna nilotica (*V. Hass.*), *Hume*, *Str. F.* i. p. 281.—The Gull-billed Tern.

In summer forehead, lores, head on the crown, nape and back of the neck silky or deep black; sides of the face, chin, throat, breast and under parts white; mantle, wings and tail light grey, wings reach about two inches beyond the tail, the first primary is rather a hoary grey, the rest light grey, their tips and inner webs next the shaft dusky brown, the margins for their basal two-thirds greyish white; shafts white; secondaries and tertiaries light grey;

under wing coverts white; tail light grey, the feathers white shafted; bill, legs and feet black, the latter with sometimes a reddish tinge; irides dark brown.

Length.—14·5 to 16·2 inches; wing 13 to 14·5 inches; reaching the tail by from 2·0 to 2·7 inches; bill at front 1·5 to 1·7; tarsus 1·5.

In winter, the black head is replaced by a white grey streaked head, and a few dusky spots behind and round the eye.

Hab.—Sind, Beloochistan, Persia, Bengal, Rajputana, Kutch, the Concans, and Deccan. Has been recorded from Arracan and met with on the coast of the Irrawady delta near Elephant Point and the mouth of the Bassein Creek. Affects the large inland pieces of water, especially numerous on the Munchur Lake in Sind, and the salt water creeks in the deltaic districts. Arrives about the middle of September and leaves about the third week in May.

Gen. **Sterna**,—*Linn.*

Characters the same as *Gelochelidon*. Front toes united by indented web; hind toe short.

1428. Sterna caspia, *Pall, Nov. Comm. Petrop* xiv. p. 582; *Hume, Str. F.* i. p. 280; *Oates, Str. F.* iii. p. 347; *Saunders, P. Z. S.* 1876, p. 656; *Dresser, B. Eur.* viii. p. 289, pl.; *Hume, Str. F.* viii. p. 115; *Parker, Str. F.* ix. p. 487; *Legge, B. Ceylon*, p. 1008; *Oates, Str. F.* x. p. 246; *Murray, Vert. Zool., Sind*, p. 427; *Oates, B. Br. Burm.* ii. p. 427. Sylochelidon caspius, *Jerd., B. Ind.* ii. p. 835.—The Caspian Tern.

Summer Plumage.—Crown of the head, nape and back of the neck and ear coverts velvet black; chin, throat, face, breast, the neck in front and behind and entire under parts white; mantle, wings and tail pale blue grey or pearl grey; the first five or six primaries slaty grey, their shafts white; under wing coverts white. In winter the head is white with a few dark feathers on the nape; bill vermilion red, paler towards the tip; irides brown; legs and feet black.

Length.—18·0 to 20·0 inches; wing 16·0 to 17; tail 4·5 to 5·75; bill at front 2·6 to 2·75; tarsus 1·5 to 1·75.

Hab.—Sind, Beloochistan Coast, Persian Gulf, the Punjab, N.-W. Provinces and Oudh. Affects the sea-coasts, larger rivers, jheels, lakes and other inland pieces of water. Breeds in N.-W. Ceylon, where Mr. Parker (*Str. F.* x. p. 487) found a colony breeding.

1429. Sterna Bergii, *Licht., Verzeich*, p. 80; *Hume, Nests and Eggs Ind. B.* p. 655; *id., Str. F.* i. p. 283; iv. p. 470; *Saunders, P. Z. S.* 1876, p. 657; *Hume, Str. F.* viii. p. 116; *Parker, Str. F.* ix. p. 490; *Legge, B. Ceylon*, p. 102; *Murray, Vert., Zool., Sind*, p. 322. Sterna cristata, *Steph. in*

Thalasseus cristatus, *Jerd.*, *B. Ind.* ii. p. 842; *Blyth*, *B. Burm.* p. 163. Thalasseus Bergii, *David. et Oust. Ois Chine*, p. 523.—The Large Crested Sea Tern.

Forehead, lores, sides of the face, neck in front and behind, chin, throat, breast, and all the lower parts white; crown of the head, including the eye, crest and nape glossy black; back, wings and tail dusky grey; inner webs of primaries next the shaft dark brown, the margins white; inner primaries unicolorous silvery or hoary grey, margined with white; secondaries white on their inner webs and tips. Bill pale yellow; irides dark brown; legs and feet black.

Length.—17·0 to 18·5 inches; wing 14·0 to 14·6; bill at front 2·6 to 2·8.

Hab.—Coasts of India generally to the Persian Gulf. Occurs commonly in the Kurrachee harbour, along the Mekran Coast and the Persian Gulf, Burmah and Ceylon. Breeds in the Gulf of Oman, on the Island of Astola, nearly opposite Jask, whence thousands of eggs have been collected during May and June. The eggs are typically broad ovals, strongly pointed towards the small end, but considerably elongated. Varieties are not uncommon. The ground colour varies from white, greenish and pinkish white to pale buff, pale yellowish, and again pale pinkish stone colour to the richest and warmest salmon pink; the markings are of two colours, an intensely deep burnt sienna brown, often quite black in its intensity, and a pale inky purple, which has an appearance of lying beneath the surface of the shell. In some eggs the inky purple markings are almost entirely wanting, in others more numerous and extensive than the dark ones. In others these dark markings are comparatively thinly sprinkled or dense; again there are some with huge blotches and spots about the larger end. The eggs vary from 2·3 inches to 2·71 in length and 1·63 to 1·78 in breadth; the average of 2 dozens was 2·45 × 1·71.

1430. Sterna cantiaca (*Gm.*), *Yarr.*, *Br. B. 2nd Ed.* iii. fig. p. 497; *Gould*, *B. Eur.* pl. 415; *Str. F.* i. p. 285; *Murray*, *Hdbk.*, *Zool.*, *&c.*, *Sind*, p. 248c; *id.*, *Vert. Zool. Sind*, p. 321.—The Black-headed Tern.

Summer Plumage.—Forehead, crown, back of the neck and nape, occipital crest and ear coverts glossy black; sides of the face, chin, throat, neck in front and behind, breast and entire lower parts white, tinged with rosy; mantle and wings pale silvery grey; the first primary is slightly darker than the rest, with more than half of the inner webs near the shaft white; the next two or three paler, also the succeeding ones, till they shade away into the colour of the wing coverts; their inner webs greyish white or white; under wing coverts white; tail forked, white, the external feathers on each side slightly greyish on their outer webs; upper tail coverts white.

In winter plumage the whole of the head is white or mottled with white and black, and there is a crescentic narrow black spot in front of the eye; mantle

and wings as in the summer plumage. Legs and feet black, also the bill, which is tipped on both mandibles with horny yellow, or yellowish white; irides brown.

Length.—17·5 to 18·0 inches; wing 11·5 to 12·5; tail 6 to 6·2; bill at front 2·0 to 2·4; wings reach about one inch beyond the tip of the tail. The females are smaller, with a much shorter tail and no rosy tinge.

Hab.—Sind, Beloochistan (Mekran Coast), Persia and Egypt. Its other habitats are in various parts of Europe. Affects the sea coast of Sind and Beloochistan, congregating in large flocks on sand banks or rocks in the Kurrachee harbour.

1431. Sterna media, *Horsf., Trans. Linn. Soc.* xiii. p. 198; *Saunders, P. Z. S.* 1876, p. 655; *Hume, Str. F.* v. p. 301; *Dresser, B. Eur.* viii. p. 285, pl.; *Hume and Dav., Str. F.* vi. p. 493; *Hume, Str. F.* viii. p. 116; *Legge, B. Ceylon*, p. 1030; *Murray, Vert., Zool., Sind*, p. 321; *Oates, B. Burm.* ii. p. 421. Sterna bengalensis, *Less. Traite d'Orn.* p. 621; *Hume, Nests and Eggs Ind. B.* p. 655; *id., Str. F.* i. p. 284; ii. p. 318; iv. p. 474. Thalasseus bengalensis, *Jerd., B. Ind.* iii. p. 483; *Blyth, B. Burm.* p. 193.—The Allied Tern.

Summer Plumage.—Forehead, crown, nape, back of the neck and occipital crest glossy black; lores, face, sides of the neck, breast and entire lower parts white; mantle and wings light silvery or satin grey, paler on the tail; the outer web of the external feathers greyish white; primaries dusky grey, the inner webs margined with white, and the portion next the shaft dusky; wings extend two inches beyond the end of the tail; inner webs of secondaries white. Bill yellow; irides deep brown; legs and feet black.

Length.—15·5 to 16·5 inches; wing 12·2 to 12·25; tail 6 to 6·7; bill at front 2·5; tarsus 1·0 to 1·2.

In winter plumage the entire forehead and lores are pure white, the crown white, the feathers centred dusky; occiput dusky, the feathers slightly margined with white; a spot in front of the eye and a line behind it black.

Hab.—The sea coasts of Sind, Beloochistan, Bengal, Bombay, Madras, Malabar Coast, Burmah and Ceylon. A maritime species abundant in the Kurrachee harbour, mouths of the Indus, and the tidal creeks.

1432. Sterna melanauchen, *Temm., Pl. Col.* 427; *Saunders, P. Z. S.* 1876, p. 661. Onychoprion melanauchen, *Jerd., B. Ind.* iii. p. 844; *Oates, B. Br. Burm.* ii., p. 429. Sternula melanauchen, *Hume, Nests and Eggs, Ind. B.* p. 656. Onychoprion sumatrana (*Raffl.*), *Salvad., Ucc. Born.* p. 374. Sterna sumatrana (*Raffl.*), *Hume and Dav., Str. F.* vi. p. 493;

Entire plumage white; the back, wings and tail tinged with grey; outer web of first primary dark grey; a black band from the lores, through the eye, and continued behind so as to form a large triangular patch on the back of the neck. Bill black, the extreme tips yellowish; legs black; irides brown.

Length.—14 to 14·5 inches; tail 6; wing 8 6; tarsus 0·7; bill from gape 2·1; fork of tail 3·5.

Hab.—Tenasserim, the Andaman and Nicobar Islands. In the two latter places it breeds from May to August. Eggs, two in number, laid in a depression in a rock. Colour similar to those of the other members of the group, clouded, spotted and blotched with pale purple or dusky lilac. Size 1·41 to 1·65 × 1·06 to 1·2.

1433. Sterna seena, *Sykes, P. Z. S.* 1832, p. 171; *Hume, Nests and Eggs, Ind. B.* p. 650; *id., Str. F.* iii. p. 193; *Saunders, P. Z. S.* 1876, p. 645; *Anders., Yunnan, Exped.* p. 693; *Hume, Str. F.* viii. p. 116; *Legge, B. Ceylon*, p. 1003; *Oates, B. Br. Burm.* ii. p. 423; *Murray, Vert. Zool., Sind*, p. 323. Sterna aurantia, *Gray and Hardw., Ill. Ind. Zool.* i. pl. 69, fig. 2. Seena aurantia, *Jerd., B. Ind.* ii. p. 838; *Blyth, B. Burm.* p. 163; *Wardlaw-Ramsay, Ibis*, 1877, p. 472; *Oates, Str. F.* v. p. 169.—The Indian River Tern.

Forehead, crown, nape and back of the neck, also circle enclosing the eye, glossy black; sides of the face, chin and throat white; breast and abdomen pearly greyish white; under tail coverts white; tail pale grey, the external feathers white; back, secondaries, tertiaries and wing coverts pale or ashy grey; primaries hoary or silvery grey, the inner webs of the first three light brown, edged with dusky; under wing coverts white; upper tail coverts like the back. In winter plumage the head is white, except a circle of black or dusky round the eye and on the ear coverts. Bill bright yellow, tipped dusky; irides brown; legs and feet red.

Length.—15·0 to 16·3 inches; wing 11·0 to 11·5; bill at front 1·5; tarsus 0·56 to 1·0; tail 7·0 to 7·5

Hab.—Throughout India, Burmah and Ceylon, also in Beloochistan and Persia. A permanent resident in Sind; affects the river and lakes, also jheels. In Sind it breeds in June and July; March and April in Tenasserim, depositing three eggs in a slight depression in the sand. Considerable numbers breed together. Eggs, various shades of buff, streaked, blotched and spotted with brown. Size 1·5 to 1·75 inch × 1·17 to 1·32.

1434. Sterna melanogastra, *Temm., Pl. Col.* p. 434; *Salvad, Ucc. Born.* p. 377; *Saunders, P. Z. S.* 1876, p. 645; *Hume and Dav., Str. F.* vi. p. 492; *Legge, Birds, Ceylon*, p. 1006; *Oates, B. Br. Burm.* ii. p. 424. Sterna javanica, *Horsf., Zool. Res. in Java, Gen. Cat.*; *Jerd., B. Ind.* iii. p. 840; *Hume, Nests and Eggs*, p. 652; *Murray, Vert. Zool., Sind*, p. 323.—The

Head and nape black; neck behind black; scapulars, tertials and wing coverts light grey; lores, sides of the face, ear coverts, chin and throat white; neck in front and breast pearly grey; abdomen, vent and under tail coverts brownish black.

Bill orange yellow; irides brown; legs vermilion red.

Length.—12 inches; wing 9·3; tail 6; bill at front 1·43; tarsus 1. In winter the head is white with dusky streaks, the abdomen is like the back and not black, and the bill tipped with dusky.

Hab.—Throughout India, Burmah and Ceylon. Spread throughout the Burmese and Indo-Burmese Countries. Affects inland waters, ponds, marshes and rivers. Breeds all over the Empire, in company with the preceding and in similar situations. Eggs also very similar, but smaller, from 1·18 to 1·5 × 0·95 to 1·02 inches.

1435. Sterna Dougalli, *Mont., Dict. Orn. Suppl. Saunders, P. Z. S.* 1876, p. 652; *Dresser, B. Eur.* viii. p. 273, pl.; *Legge, Str. F.* iii. p. 376; *id., Birds Ceylon*, p. 1033. Sterna paradisea, *Keys and Blas. Wirb. Eur.* p. 247. Sterna gracilis, *Gould, P. Z. S.* 1847, p. 222; *id., B. Austr.* vii. pl. 27. Sterna korustes, *Hume, Str. F.* ii. p. 318.—The Roseate Tern.

In summer the crown and nape are deep glossy black; back and upper surface of the wings delicate, light french grey; rump and upper tail coverts white, washed with grey; rest of the plumage pure white, except that the under surface of the body is tinged with a delicate light rose colour; first primary with the outer web black, the rest with the outer webs hoary grey; inner webs of the primaries dark grey, broadly margined to the tip of the feather with white; bill red at the base, otherwise black; iris dark brown; legs reddish orange.

In *winter* the forehead and cheeks are white; crown and nape brownish black, slightly marked with white; lesser wing coverts along the edge brownish; no trace of rose colour on the under parts, otherwise as in the summer plumage. (*Dresser.*) Legs and feet bright vermilion red; claws black; irides deep brown; bill black; gape and base of lower mandible varied from reddish fleshy to vermilion red. (*Davison.*)

Length.—14·5 to 15 inches; tail 7 to 7·5; wing 8·5; to 8·7; tarsus 0·7; bill from gape 2·0; fork of tail about 4.

Hab.—Tenasserim, off the mouth of the Loynah Creek, also the Bassein estuary. It has a wide range, being found in Europe, Africa and America, and is met with in various parts of India, Ceylon and the Andaman Islands, extending down to Australia. Frequents only the sea-coasts. Breeds on isolated sandbanks. In Ceylon, Mr. Parker found a colony nesting in June

on a low sand bank on Adam's Bridge. The nests were depressions in the sand, and contained one or two eggs, of the same type as those of the last, pale buff, blotched, streaked and spotted with brown.

1436. Sterna hirundo, *Linn., Syst. Nat.* i. p. 957; *Gould, B. Europe*, pl. 417; *Jerd., B. Ind.* iii. p. 839. Sterna fluviatilis, *Naum. Vogt.* t. p. 712.—The EUROPEAN TERN.

Whole head and nape black; plumage above grey; upper tail coverts white; tail pale grey, the feathers white on their inner web; chin, throat, ear coverts and sides of the neck pure white; rest of the lower parts pearly greyish white; lower tail coverts white. Bill deep red; irides brown; legs red.

Length.—12·5 inches; wing 9·8 to 10·3; tail 4·5; bill at front 1·4; tarsus 1.

In winter the forehead and top of the head are white, with blackish mixed round the eyes, occiput and nape.

Hab.—Central and Southern India and Sind, along the River Indus to the Punjab and the Cashmere lakes.

1437. Sterna albigena, *Licht., Nom. Mas. Berol.* p. 98; *Str. F.* iv. p. 467; v. p. 298; *Murray, Hdbk, Zool, &c., Sind*, p. 248; *id., Vert. Zool. Sind*, p. 324.—The WHITE-CHEEKED TERN.

The lores and point of the forehead white, the latter with a few black speckles; a patch in front of the eye black, speckled with white; the anterior half of the crown white, tinged earthy or brownish grey, and with spots and blotches of brownish black. Feathers immediately above the eye, all the feathers behind it, the sides of the head, occiput and nape, black; the posterior half of the crown blackish brown, a little mingled with greyish white; an imperfect white band from the lores beneath the eyes, with another imperfect black one below it. The back of the neck is whitish, the feathers suffused with grey towards the tips; the whole of the back, scapulars, wings and tail a moderately dark french grey, darker than in *S. bengalensis*, but not so dark as in some specimens of *Bergii*. The upper tail coverts slightly paler; the wings more silvery, but the outer web of the first primary and of the exterior elongated tail feather much darker; the inner webs of the primaries darker; the first primary with a considerable portion of the inner web white to the margin; the other primaries also with white on their inner web, but with a grey band on their margin. The second and third tail feathers also a rather darker grey on their outer webs towards the points; the rest of tail feathers, inner and outer webs, pretty well concolorous with the rump and upper tail coverts; the chin, throat and sides of the neck almost pure white, with only a few faint dusky grey patches; the breast and abdomen a dusky bluish grey, with many large patches of white; the lower tail coverts greyish white; the wing lining white.

In breeding plumage, according to Heuglin, the upper surface is a pale bluish grey; the front and sides of the neck, breast and abdomen, a somewhat paler and more purplish grey; the entire upper surface of head and nape intensely black; the chin and upper part of the throat, the lores, and an oblique band below the eyes, conspicuously snowy white; the bill coral red, blackish towards the base of the culmen and at the tips; the feet bright coral red.

Length.—14·5 inches to 12·5; expanse 29·25 to 29·5; tail from vent 6·5 to 4·1; wing 9·9 to 9·7; tarsus 0·77 to 0·75; bill from gape 2·15, at front 1·55 to 1·47; irides brown; legs and feet Indian red, tinged in front of tarsi and toes with blackish dusky; bill blackish, with the extreme tips whitish horny.—(*Str. F.* vi. p. 469.)

Occurs along both the Sind and Mekran Coasts, and in the Kurrachee harbour. Mr. Hume (vol. iv. p. 468) in his excellent paper on the birds of "the Laccadives and the West Coast," says—This species, which he obtained there, had only hitherto been obtained on the coasts of the Red Sea, northward to about 24° parallel north latitude and southward to the Gulf of Aden.

1438. Sterna Saundersii, *Hume, Str. F.* iv. p. 469; v. p. 326; *Murray, Hdbk., Zool., &c., Sind*, p. 249; *id., Vert. Zool., Sind*, p. 325. —Saunders' Little Tern.

"A triangular frontal patch, the angles reaching to within 0·12 of the eyes, white; a very broad stripe through the lores to the eye black; a narrow white line intervenes between this stripe and the upper mandible. The whole crown, occiput, short occipital crest and sides of occiput as low as the lower margin of the eye velvet black, the central two-thirds of the lower eyelid white, and no black below this; all the rest of the sides of head and neck, chin, throat, entire under parts, wing lining and exterior tail feather, pure white; the first three primaries black with black shafts and broad white margins on their inner webs; their greater coverts dusky black; the whole of the rest of the upper surface, including wings and tail, and excepting parts and feathers already described, a most delicate satin grey, contrasting in the strongest manner with the early black primaries.

"*Length.*—9·12 inches; expanse 19·25; tail 3·0; wing 6·43; bill at front 1·12, from gape 1·5; tarsus 0·6; legs and feet dusky yellowish olive; bill yellow, broadly tipped dusky; irides blackish brown."—(*Str. F.* v. p. 326.)

This species is extremely common at Kurrachee and along the coast during the latter part of April, also in May and June, in which months it breeds at Kurrachee on the bare plains between Kurrachee and Clifton at Ghizree and on the Moach. The eggs are usually laid in a small depression in the saline soil, the birds selecting wherever possible spots where there is a little loose shelly sand. Eggs glossless and often chalky, two to three in number, oval

and pointed at one end; of a drab, buff, or stone colour, streaked, blotched and spotted, of a dark or deep brown or reddish brown colour generally at the larger end.

1439. Sterna sinensis, *Gm.*, *Syst. Nat.* i. p. 608; *Saunders*, *P. Z. S.* 1876, p. 662; *Hume*, *Str. F.* v. p. 325; viii. p. 116; *Legge*, *B. Ceylon*, p. 1019. Sternula minuta (*Linn.*), *Hume*, *Nests and Eggs Ind. B.* p. 654 (part); *Oates*, *Str. F* iii. p. 349. Sterna minuta, *apud Wald. in Blyth's B. Burm.* p. 163. Sternula sinensis, *David et Oust. Ois. Chine*, p. 627. Sterna Gouldi, *Hume*, *Str. F.* v. p. 326; *Oates*, *Str. F.* x. p. 247.—The Eastern Little Tern.

Summer Plumage.—Forehead, continued back to a point on either side just over the eye, white; crown, nape, the upper part of the hind neck and a streak from the nostrils through the eye to the nape, deep black; upper plumage pale grey, becoming paler and whitish on the upper tail coverts and tail; first two primaries nearly black, margined on their inner webs with white; remaining primaries and secondaries grey, the latter tipped with white on the outer webs; shaft of the first primary white, that of the second more or less white; remainder of the plumage white. *In winter* the crown is white, gradually turning to dusky and running into the nape, which remains black, the black of the nape extending to behind the eye; the band from the nostril to the eye is lost, there being merely a dusky spot in front of the eye; rest of plumage as in summer. Irides brown; bill yellow, broadly tipped with black; legs and feet orange yellow.

Length.—10 inches; tail 4; wing 7·0; tarsus 0·75; bill from gape 1·7; fork of tail 2·2.

Hab.—The greater part of India and Ceylon. In Burmah it is recorded by Oates from Southern Pegu. Affects all the larger rivers within tidal influence. Breeds in Burmah during March and April, depositing four eggs in a small depression in a sandbank.

1440. Sterna anæsthetus, *Scop.*, *Del. Flor. et Faun. Insubr.* ii. p. 92; *Saunders*, *P. Z. S.* 1876, p. 664; *Butler*, *Str. F.* v. p. 301; *Hume*, *Str. F.* viii. p. 116; *Legge*, *B. Ceylon*, p. 1040; *Oates*, *B. Br. Burm.* ii. p. 431; *Murray*, *Vert. Zool. Sind*, p. 325. Sterna panayensis, *Gm.*, *Syst. Nat.* i. p. 607. Onychoprion anæsthetus, *Jerd.*, *B. Ind.* iii. p. 844; *Salvad*, *Ucc. Born.* p. 374. Haliplana anæstheta, *David. et Oust. Oist. Chine*, p. 528.—The Panayan Tern.

"A frontal band, extending backwards over the eyes for about 0·15 behind the posterior angle of the eye, pure white; a broad black stripe through the lores, to, and behind the eyes joining the black of the occiput; forehead and crown inside the white band and entire occiput and nape velvet black; chin, throat, sides of the neck, axillaries, under wing coverts, lower tail coverts,

edge of the wing along carpal joint and ulna white; the breast, abdomen and flanks white, shaded with pale french grey; back of the neck the same; back, wings and tail sooty brown ; upper back strongly shaded with bluish grey, as are also some of the tail feathers; lesser wing coverts behind the white edge of the wing blackish brown; the primaries a darker brown, their shafts brown on the upper surface; outer web of first primary almost black, the rest greyish white on their inner webs, towards their bases; external tail feathers white for the basal half on both webs, greyish brown on the inner web for the terminal half. In winter the entire under surface is pure white, and there is a dark spot in front of the eye; head greyish white or white, the feathers mesially spotted or striped dusky; a black collar at the base of the occiput, extending on each side nearly to the eye.

"Bill dusky reddish, red towards the base of the lower mandible; legs coral red; bill, legs and feet black.

Length.—14·75 inches; wing 9·62; tail 7; bill at front 1·6."—(*Str. F.* vi. p. 474.)

Hab.—Sind, Beloochistan (Mekran Coast), Persian Gulf, the Concan and the Laccadives, Burmah and Ceylon. Mr. Hume found them breeding on the Vingorla rocks on the Western Coast.

1441. Sterna fuliginosa, *Gm., Syst. Nat.* i. p. 605; *Hume, Str. F.* iv. p. 477; *Saunders, P. Z. S.* 1876, p. 666; *Dresser, B. Eur.* viii. p. 307, pl.; *Legge, Birds Ceylon*, p. 1037; *Murray, Vert. Zool., Sind*, p. 326; *Oates, B. Br. Burm.* ii. p. 432. Onychoprion fuliginosus, *Salvad, Ucc. Born.* p. 373. Haliplana fuliginosa, *Dav. et Oust. Ois. Chine*, p. 528.—The Sooty Tern.

Forehead and a streak from the base of the bill to the eye white; sides of the face, chin, throat, neck in front, breast and entire under parts white; top of head, nape, neck behind, back, scapulars and wings sooty black; under wing coverts white; tail forked, external feathers on each side white on their outer web, rest are white at the base; legs and feet black; irides brown; web of outer side of mid-toe reaches to the root of the claw.

Length.—16·5 to 17·5 inches; wing 10·5 to 11·8; tail 6·9 to 7·5; tarsus 0·95 to 1; bill at gape 2·0 to 2·4; bill at front 1·6 to 1·7.

Hab.—Sind, Mekran Coast, Persian Gulf (Bushire), the Concan (Bombay), Malabar Coast and Ceylon. Breeds on the Laccadive Islands during January and February.

Gen. **Anous**.—*Leach.*

Bill long, slender, slightly curved at the tip, angle well marked; nostrils in a groove; wings long; tarsus short; claw of mid-toe serrated.

1442. Anous stolida (*Linn.*), *Gould, B. Austr.* vii. pl. 34; *Jerd., B. Ind.* iii. p. 845; *Salvad., Ucc. Born.* p. 379; *Hume, Str. F.* ii. p. 320; *Saunders, P. Z. S.* 1876, p. 669; *Hume, Str. F.* viii. p. 116; *Legge, B. Ceylon*, p. 1043; *Murray, Vert. Zool., Sind*, p. 326; *Oates, B. Br. Burm.* ii. p. 434.—The Common Noddy.

A black line from the base of the bill to the eye; forehead white; crown fulvous or yellowish grey; neck, nape, chin, throat, breast, greater and lesser wing coverts, under wing coverts, upper and under tail coverts and tail dark chocolate brown; back and primaries darker, or blackish brown; legs and feet black; irides brown.

Length.—Male, 15 inches; wing 11·5; tail 6·5; bill at front 1·6.

Hab.—Sind and Mekran Coasts, also the Bay of Bengal, Laccadives and the West Coast.

1443. Anous tenuirostris (*Tem.*), *Saunders, P. Z. S.* 1876, p. 670, pl. lxi. fig. 1; *Hume, Str. F.* viii. p. 116. Sterna tenuirostris, *Tem. Pl. Col.* p. 202. Anous melanops, *Gould, P. Z. S.*, 1845, p. 103; *id., B. Austr.* vii. pl. 35. Anous senex (*Leach*), *apud Hume, Str. F.* ii. p. 321; iv. p. 480. —The Grey-faced Noddy.

Forehead, crown, nape and upper neck a clear french grey, shading off imperceptibly into the surrounding parts, a black band surrounding the upper half and front of the eye, broader in front; lores, cheeks, and sides of the neck intermediate in colour between the crown and the throat, which with the whole remaining plumage is chocolate brown; wings and tail almost black; outer web of first primary deep black; shafts of the primaries rufous brown; a narrow line of white on the lower eyelid and a still smaller one on the upper. (*Oates.*)

Length.—About 12 inches; tail 4·5; wing 8·3; tarsus 0·8; bill from gape 2·1.

Hab.—According to Hume, it is said to occur in the Bay of Bengal. One specimen was got at Port Blair. Abundant in the Australian seas. Breeds in some of the Islands in Torres Strait, laying a single egg, which is stone-coloured and marked with red and brown.

1444. Anous leucocapillus, *Gould, P. Z. S.* 1845, p. 103; *id., B. Austr.* vii. pl. 36; *Hume, Str. F.* ii. p. 322; iv. p. 480; *Saunders, P. Z. S.*, 1876, p. 670, pl. lxi. fig. 3; *Hume, Str. F.* viii. p. 116. Anous tenuirostris (*Tem.*), *apud. Jerd., B. Ind.* ii. p. 846.—The White-headed Noddy.

Forehead, crown and nape white; a narrow line of white on the lower eyelid; lores blackish; whole plumage chocolate brown, the quills darker. Bill black; gullet pale yellow; feet black with the web fleshy yellow. (*Jerd.*)

Length about 13 inches; tail 5; wing 9; tarsus 0·95; bill from gape 2·2.

Hab.—Bay of Bengal.

Gygis alba, Sparrm., The White Noddy, with the whole plumage white, except the feathers round the eye and the shafts of the quills, which are black, is said to have been procured in the Bay of Bengal by Dussumier. As there is no further record of its occurrence, except Mr. Hume's belief that he has seen it twice in the same seas, I do not include it in the Avifauna.

Sub-Family, RHYNCHOPSINÆ.—*Bonap.*

Upper mandible shorter than the lower, and grooved to receive the sharp cutting edge of the lower one; claws long and curved; tail forked.

Gen. **Rhynchops**.—*Linn.*

Characters same as those of the Sub-Family. Hind toe elevated, the tip touching the ground.

1445. Rhynchops albicollis, *Swains., Anim. in Menag.* p. 360; *Jerd., B. Ind.* iii. p. 847; *Hume, Nests and Eggs*, p. 656; *id., Str. F.* iii. p. 193; *Blyth, B. Burm.* p. 164; *Wardlaw-Ramsay, Ibis*, 1877, p. 472; *Hume, Str. F.* viii. p. 116; *Oates, Str. F.* x. p. 247; *Murray, Vert. Zool., Sind*, p. 327; *Oates, B. Br. Burm.* ii. p. 436.—The Indian Skimmer.

Forehead, lores, sides of the face, ear coverts, chin, throat, neck all round breast and entire lower parts white; crown of the head, nape, back, lesser and median coverts glossy, sooty blackish brown; lower back and rump and lateral tail feathers white; primaries black; secondaries and tertials tipped with white; bill orange, yellowish at the tip; irides brown; legs and feet bright vermilion.

Length.—16 to 16·5 inches; wing 16; tail 4·75 to 5; bill, upper mandible, 2·9 to 3; lower mandible to gape, 3·75 to 3·9.

Hab.—Throughout India nearly, on the larger rivers and lakes. Occurs in large flocks of several hundreds or in small companies of 6 or a dozen. Breeds throughout the Empire on sandbanks; the ground colour of the eggs is very variable, from a pale pinky buff to stone colour, and the markings are bold—blotches, streaks and spots of chocolate and reddish brown. In size they vary from 1·45 to 1·76 inches in length and from 1·08 to 1·28 in breadth.

ORDER.—STEGANOPODES.

Feet entirely webbed; hind toe articulated on the inner side of the tarsus

Family PHÆTONTIDÆ.

Bill Ternlike, moderate, stout, straight, the culmen curved, and the margins finely serrated; nostrils pervious; tail with the two central feathers much elongated; lower part of tibia naked.

Gen. PHÆTON.—*Lin.*

Characters same as those of the family.

1446. Phæton rubricauda, *Bodd., Tabl. Pl. Enl.* p. 57; *Jerd., B. Ind.* ii. p. 849; *Salvad., Ucc. Born.* p. 370; *Hume, Str. F.* ii. p. 322; viii. p. 116. *Oates, B. Br. Burm.* ii. p. 224. Phaëton phœnicurus, *Gm., Syst. Nat.* i. p. 583; *Gould, B. Austr.* vii. p. 73 Phaëton ætherius, *Bloch, Voy. Blonde. App.* p. 251.—The Red-tailed Tropic Bird.

Whole plumage silky white, except a mark in front of and behind the eye, and the shafts of the primaries and tail feathers, which are black; lengthened central pair of tail feathers red; feathers of the flanks slate colour mesially, also of most of the tertiaries. Bill yellow; tarsus and basal portion of the toes and webs yellow; remainder of feet black.

Length.—33 inches; tail 19; wing 13·2; tarsus 1·2; bill from gape 3·2.

Hab.—Bay of Bengal. Breeds on islands, laying a single egg in a burrow; egg reddish grey, marked with reddish brown.

1447. Phæton flavirostris, *Brandt, Bull. Acad. Sc. St. Petersb.* ii. p. 349; *Hume, Str. F.* ii. p. 323; v. p. 498; viii. p. 116; *Legge, Birds, Ceylon*, p. 1172; *Oates, B. Br. Burm.* ii. p. 225. Phaëton candidus (*Briss.*), *apud. Jerd., B. Ind.* ii. p. 850.—The White Tropic Bird.

Entire plumage white, except a mark in front of the eye continued as a broad band down the sides of the head; the first four primaries with the outer web; the shaft and a narrow portion of the inner web to within an inch of the tip; the basal portion of the shaft of the next few primaries; a broad band along the median wing coverts, greater portion of the tertiaries and the tips of the scapulars; also the shafts of the lengthened tail feathers and the basal two-thirds of the others which are black; longer flank feathers streaked with slate colour. Bill in the dry specimen pale yellow, with a pale plumbeous line along the central portion of both mandibles; tarsus and basal portion of feet yellow; rest of feet black. (*Oates.*)

Length.—30 inches; tail 18; wing 10·6; tarsus 0·9; bill from gape 2·5.

Hab.—Ross Island (Andaman Group). Breeds on Ascension Island. Oates adds that a specimen of this Phaëton was captured at a considerable distance from the sea in Cachar.

1448. Phæton indicus, *Hurie, Str. F.* iv. p. 481; *Butler, Str. F.* v.

Legge, Birds Ceylon, p. 1173; *Murray, Vert. Zool., Sind*, p. 327; *Oates, B Br. Burm.* ii. p. 226. Phaëton ætherius (*Linn.*), *apud. Hume, Str. F.* i. p. 286; ii. p. 323.—The SHORT-TAILED TROPIC BIRD.

"A broad, conspicuous black crescent in front of the eye, and a narrow black line from the gape to nostrils and nostrils to culmen, dividing the feathers from the bill; the whole forehead, front part of the crown, ear coverts and entire lower parts, including wing lining and axillaries, pure white; a black line from the posterior angle of the eye, running round the back of the nape, where it forms a more or less conspicuous half collar; hind crown and nape inside the half collar white, each feather with a triangular black bar near the tips; carpal joint of wing, four or five posterior primaries, all the secondaries, the primary coverts, except those of the first five quills, the greater and median coverts pure white; winglet, greater coverts, shafts and outer webs of the first five primaries, together with a narrow stripe along the shaft of the inner web, black; the extreme tips and inner webs of these feathers white; tertiaries and their greater coverts black, narrowly margined on the exterior webs and tipped with white; the lesser secondary coverts similar; the entire back, rump, scapulars, and upper tail coverts white, closely barred with black, the bars being slightly cuspidate on the upper back, and the longest scapulars almost devoid of barring; tail feathers white, their bases black shafted, and the lateral feather mostly with an arrow-head bar or spot near the tip; irides deep brown; legs and hallux and its web white, tinged bluish and creamy yellow; rest of feet and claws black.

"*Male—Length*, excluding elongated tail feathers, 16·85 to 17·8 inches; central feathers project beyond the rest of the tail 3 to 5·9; expanse 37 to 39·5; tail from vent, including elongated feathers, 7·5 to 10·3, ; wing 10·75 to 11·8; bill at front 2·2 to 2·45; tarsus 1·0 to 1·13; mid-toe and claw 1·55 to 1·8. *Female—Length*, 18·05 exclusive of elongated feathers, which project 4 inches beyond the others; expanse 39; tail from vent, including elongated feathers, 9·0; wing 11·7; bill at front 2·4; tarsus 1."

This is Mr. Hume's description of specimens secured by him in the Gulf of Oman on the Mekran Coast; whether it is the immature of *P. æthereus*, or a new species, is yet a moot question. Captain Butler, in 1877 (*Str. F.* v. p. 302) also secured two specimens on the Mekran Coast between Oormara and Gwadur, and these, Mr. Hume says, are precisely similar to the four specimens secured in the Bay of Bengal. Mr. Davison also observed it at the extreme southern point of Tenasserim and off Cape Negrais.

Family.—FREGATIDÆ.

Wings highly developed. The single species *known to occur in India* lives almost entirely in the air, taking its prey on the wing. Form and habits Pelagic.

Gen. **Fregata.**—*Briss.*

Bill much hooked at the tip; wings long; tail forked, long; tarsi partially feathered; claws short and curved.

1449. Fregata aquila (*Linn.*), *Salvad., Ucc. Born.* p. 364; *Hume, Str. F.* viii. p. 116; *Legge, Birds of Ceylon*, p. 1204. Pelecanus aquilus, *Linn., Syst. Nat.* i. p. 216. Attagen aquilus, *Jerd., B. Ind.* iii. p. 853. Tachypetes aquilus, *Sharpe, Rep. Trans. Venus Exped.* p. 151.—The Frigate Bird.

Glossy black throughout. The young with the head, neck and lower abdomen white.

Length.—37 inches; wing 26; tail 9·5; tarsus 0·8; bill from gape 5·0. Gular pouch scarlet; bill pale blue.

Hab.—The Malabar Coast and the Bay of Bengal.

Fregata minor, which differs from this in being smaller, is said to be found in the Malay Peninsula and Ceylon. The notice of its find in Burmah is only conjectured.

Family, PELECANIDÆ.—*Leach.*

Bill stout, straight, broad at the base, compressed at the tip, edges irregularly serrated; feet webbed; face nude.

Sub-Family, SULIDÆ.

Bill short, straight, curved and hooked at tip.

Gen. **Sula.**

Characters those of the Sub-Family. Plumage black and white.

1450. Sula cyanops, *Sundev., Phys. Salsk. Tidskr.* 1837, p. 218, t. 5; *Legge, Birds of Ceylon*, p. 1180; *Hume, Str. F.* viii. p. 116. Sula personata; *Gould, P. Z. S.* 1846, p. 21; *id., B. Austr.* vii. pl. 77. Dysporus cyanops, *Oates, B. Br. Burm.* ii. p. 231.—The Masked Booby.

Face to behind the eyes and throat nude; entire head, neck, back, rump, upper tail coverts and entire lower parts white, with a slight fulvous tinge; primaries, secondaries and tertials, also the tail, black; irides lemon yellow; bill horny, blackish at the base; both mandibles denticulated for one-half their length from tip.

Length.—32·5 inches; bill at front 4; gape 4·87; tail from vent 8·0; tarsus 2·25; wing 16·5; legs and feet pale bluish grey.

Hab.—Sind and Beloochistan (Mekran Coast), Bengal, Ceylon, and the Western Coast near Alibag.

1451. Sula australis. *Steph, Gen. Zool.* xiii. p. 104; *Hume, Str. F.* v. p. 318. Pelecanus sula, *Linn., Syst. Nat.* i. p. 218. Sula fusca (*Linn.*), *apud Jerd., B. Ind.* iii. p. 851. Dysporus sula, *David et Oust. Ois Chine,* p. 530; *Oates, B. Br. Burm.* ii. p. 229.—The Brown Booby.

Breast, abdomen, sides of the body, vent and under tail coverts white; sides of the under tail coverts, also under wing coverts, marked with brown on the edges of the feathers; remaining plumage umber brown; the feathers of the back, scapulars, and rump edged with whity brown; quills and tail dark umber brown; irides white; bill creamy white, with a bluish tinge in veins; pouch, gape, lores and orbital space pale hoary greenish yellow; legs and feet pale yellow. (*Hume.*)

Length.—About 30 inches; tail 8; wing 16·5; tarsus 1·9; bill from gape 4·5.

Hab.—The Bay of Bengal and the Tenasserim Coast.

1452. Sula piscator (*Linn.*), *Gould, B. Austr.* vii. pl. 79; *Jerd., B. Ind.* iii. p. 852; *Hume, Str. F.* viii. p. 116. Sula piscatrix, *Salvad, Ucc. Born.* p. 368; *Hume, Str. F.* iv. p. 483. Pelecanus piscator, *Linn., Syst. Nat.* i. p. 217—The Red-Legged Booby.

Whole plumage white, tinged with yellowish on the head and neck; quills and greater wing coverts blackish, variegated with silvery grey. (*Oates.*) Legs and feet red; young birds are brown.

Length.—26 inches; tail 8; wing 13·8; bill from gape 4·3.

Hab.—Bay of Bengal.

Sub-Family, PELECANINÆ.

Bill long, flattened, compressed and hooked at tip; tail short; lower mandible and throat with a membranous pouch; orbits nude.

Gen. **Pelecanus**.—*Lin.*

Characters those of the Sub-Family; second quill of wing longest; secondaries nearly as long as the quills; a membranous mandibular and gular pouch.

Pelicans live in large congregated flocks and feed entirely on fish. They fly high into the air, and go up vast heights by circling; they do not however obtain their prey by diving either under water from the surface, nor by diving into it after the manner of sea gulls and terns, but arrange themselves in some suitable or likely spot on the water in two, three or even four rows, or if there is not a sufficient number, form into a large semi-circle, and beat the water on the surface with their wings, clapping also their huge bills,

all they get. They breed either on high trees or according to situation low thorny ones, making a huge nest of sticks. Not more than from five to twenty breed on one tree. Eggs, three in number, white and extremely chalky.

1453. Pelecanus crispus, *Bruch.*, *Berl. Trans.* 1838, t. 3, 4; *Naum. Vog.* t. p. 283; *Gould, B. Eur.* pl. 406; *Str. F.* i. p. 288; vii. p. 288; *Murray, Hdbk., Zool., &c., Sind.*, p. 248g; *id., Vert. Zool. Sind*, p. 328—The Large Crested Pelican.

In the adult in spring plumage, excepting the quills, primary coverts and winglet, the whole plumage is white, with more or less of a pearly grey tinge on both the upper and under surfaces according to the light in which it is looked at; there is a broad band at the base of the neck in front, and at the sides faintly tinged with very pale straw colour; there is not the faintest tinge of rosy anywhere; the whole of the feathers of the head and neck are very narrow, long, soft and silky, much curled and twisted on the head, especially behind and just above the eye; and the feathers of the back of the head are much elongated, so as to form a dense, full crest, some 4·25 inches long; a line of feathers, about 1·5 inches wide down the whole back of the neck, is of a more snowy and less pearly white than the rest of the neck; the scapulars, rump, and upper tail coverts and median and greater wing coverts are conspicuously black shafted; and all these, except the longest of the scapulars, are very long and lanceolate. A few of the longest scapulars are broad and round, or mucronate at the end; back, scapulars and tail with a beautiful satiny gloss; the two exterior tail feathers with nearly the whole shafts black and generally with a decided grey tinge on the outer web to near the tip; the rest of the tail feathers with only the terminal third of the shafts black; primaries (all of which are white at the base) and their coverts and winglet very dark brown almost black; the second to the fifth primary emarginate on the outer web and silvered with grey on the last above the emargination, which in the second is hidden by the coverts; there is more or less silvering of grey on the outer webs of all the other primaries, their coverts and winglet; the first five primaries are faintly notched on the inner web, and more pale or greyish white on the latter above the notches, while the rest of the primaries have the inner portions of the inner webs white, this is still more conspicuous in the secondaries, most of which have their whole outer webs a silver grey; the tertials are pure white; the feathers of the base of the neck and breast thickly set, very narrow and pointed, the filaments along the margin a good deal separated.

The young bird wants the linear lanceolate feathers. It has the whole head, neck, and upper and lower surface white; the back of the neck more or less shaded with grey; tips of the quills and a row of small coverts near the margin of the wing pale wood brown; the feathers of the head shorter and more fur-like than in the male; crest small; scapulars and shoulder feathers

broadly tipped with pale brown, with dark shafts; tail feathers white at the base on both webs; greater part of the rest of the inner webs white; primaries and secondaries white at their bases; a large portion of their inner webs white; the rest a darkish brown.

Adult.—Irides white; in the young pale yellow; legs and feet pale plumbeous; edges of upper and lower mandible for the terminal two-thirds yellowish, and in the young a horny whity brown, or yellowish grey; the nail orange or pale orange. In the breeding plumage the pouch is a deep orange red, with a black patch on either side, just at the base of the lower mandible; in the non-breeding plumage a dirty primrose, or pale fleshy, tinged with lemon yellow.

Length.—Male, 70 to 74·5 inches; expanse 114 to 122; tail 9·5 to 10; wing 26·25 to 29·28; bill at front including nail 15·4 to 16·6. *Females* smaller; *length* 66 to 68; wing 25 to 28. (*Str. F.* vii. p. 448; *Hume Monog. Pelecanus.*)

Hab.—Sind, Punjab, N.-W. Provinces and Oudh, also Beloochistan (Mekran Coast).

1454. Pelecanus manillensis, *Gm.*, *Syst. Nat.* i. p. 571. Pelecanus phillipensis, *Gm. Syst. Nat.* i. p. 571; *Jerd.*, *B. Ind.* iii. p. 858, No. 1004; *Hume, Nests and Eggs, Ind. B.* p. 658; *id.*, *Str. F.* viii. p. 116; *Murray, Vert. Zool. Sind*, p. 330; *Oates, B. Br. Burm.* ii. p. 326. Pelecanus rufescens, *apud. Elliot. P. Z. S.* 1869, p. 583 (part). Pelecanus phillipinensis, *Blyth, B. Burm.* p. 164; *Legge, Birds Ceylon*, p. 1198.—The Spotted-billed or Grey Pelican.

Breeding Plumage.—Head, neck and upper plumage greyish white or in some pure white, with dark bases visible only on lifting the feathers; feathers of the head long, soft, silky and greyish brown, forming a mane-like ridge to the upper back; occipital crest short, the feathers slightly recurved, of a brownish colour and tipped with white; scapulars white at the base, of a grey colour and black shafted; upper back and scapulars with the feathers sharply pointed; lower back, rump and flanks rich vinaceous, the shafts like those of the upper tail coverts hair brown; lesser and median coverts like the back; greater coverts grey, black shafted; primaries dusky grey, white at the base; secondaries and tertiaries dusky grey; feathers of the tail grey, black shafted; the basal half or more of the inner webs and shafts white; under tail coverts, greyish white, mottled with brown and like the under wing coverts tinged with vinaceous; bill pale bluish, tinged with fleshy, the tip yellowish; mandibular and gular pouch dusky; the gular pouch with reddish venations and tinged ochreous or yellow; irides pale or dusky brown; legs fleshy. *In non-breeding plumage* there is no vinaceous tinge.

Length.—60 to 62 inches; wing 24 to 25·5; tail 8 to 8·7; tarsus 2·9 to 3·1; bill at front 12·5 to 14·3.

Hab.—Sind, Kutch, Rajputana, Guzerat, Deccan and Bengal, also Southern India, Burmah, and Ceylon. Breeds in vast numbers about the end of October, also in February and March, in the Persian Gulf, Ceylon, and parts of Burmah.

1455. Pelecanus roseus, *Gm., Syst. Nat.* i. p. 570; *Oates, B. Br. Burm.* ii. p. 239. Pelecanus javanicus, *Horsf., Trans. Linn. Soc.* xiii. p. 197; *Jerd., B. Ind.* iii. p. 857; *Elliot, P. Z. S.* 1869, p. 581; *Hume, Str. F.* vii. p. 116. Pelecanus onocrotalus, *Jerd., B. Ind.* iii. p. 854. Pelecanus minor, *apud. Oates, Str. F.* x. p. 247. Pelecanus mitratus (*Licht.*), *Jerd. B. Ind.* iii p. 856.—The Eastern White Pelican.

Occipital crest small, yellowish white; head, neck, upper and lower surface of body white, with a roseate tinge; primaries dusky; secondaries grey externally; tertiaries white, with broad black margins, internally greyish; tail white; bill blue in the centre, red and yellow on the sides, the tip blood red; lower mandible bluish posteriorly, yellow in front; pouch yellow; irides blood red; legs fleshy pink.

Length.—56 inches; wing 24 to 25; tail 6·5; tarsus 4; mid-toe and claw 4·5; bill 12 to 13 inches.

Hab.—Nearly throughout India and Burmah, arriving in August, and leaving during January and February.

Sub-Family, GRACULINÆ or PHALACROCORACIDÆ.

Bill moderately long, straight and hooked at the tip; face partially nude, also the gullet, which is capable of distension; wings moderate; upper and lower tail coverts short; tail with stiff feathers.

Gen. Phalacrocorax.—*Briss.*

Characters the same as those of the Sub-Family.

1456. Phalacrocorax carbo (*Linn.*), *Dav. et Oust. Ois Chine*, p. 532; *Dresser, B. Eur.* vi. p. 151, pl.; *Legge, Birds of Ceylon*, p. 1182; *Doig, Str. F.* vii. p. 468; *Hume, Str. F.* viii. p. 116; *Oates, B. Br. Burm.* ii. p. 231. Pelecanus carbo, *Linn., Syst. Nat.* i. p. 216. Pelecanus sinensis, *Shaw and Nodd., Nat. Misc.* pl. 529. Graculus carbo, *Jerd., B. Ind.* iii. p. 861; *Hume, Nests and Eggs*, p. 659; *Murray, Vert. Zool., Sind*, p. 330.—The Large Cormorant.

In summer or breeding plumage, the head and neck are black with white feathers intermixed; nape with a short black erectile crest; lower neck, breast

and entire under surface, except a white thigh patch, glossy black; rump, upper tail coverts and tail black; chin and a fillet of white running up to the eye white, bounded behind by a black band; primaries and their coverts dull black; scapulars, tertials, greater, median and lesser wing coverts bronze brown, the feathers margined with black; legs and feet black; bill brownish; irides deep or sea-green; facial skin pale greenish; gular pouch yellow, spotted bluish in some.

Length.—32 to 35 inches; wing 13·2 to 14·7; tail 7 to 7·5; bill at front 2·3 to 2·5.

In winter the neck is black; the white feathers and white thigh patch disappear.

Hab.—Sind, N.-West Provinces, Western and Central India, also Beloochistan and Persia, extending to Eastern Turkestan, Nepaul and Cashmere. Distribution almost universal.

Breeds wherever found. In Sind in the middle of the Samara Dhund in the Eastern Narra Districts. Nest a platform of sticks, lined with grass and rushes. Eggs 4 to 6 in number, white or greenish white, glossless, and of a chalky texture.

Whether on sea or on the inland lakes, Cormorants make terrible havoc among the fishes inhabiting the waters they affect. Sometimes, though seldom so seen, they swoop down from mid air on the object of their prey, and pursue it under the surface of the water with great dexterity and unerring certainty. They, however, must necessarily rise to the surface to swallow their prey, and this trait no doubt has led to their being trained by fishermen for the purpose of catching fish. In Sind as well as in China and other countries fishermen always have a dozen or more of these birds sitting, when not employed, lazily on the cross beam of the prow of their boats, quite sullen and stern; the whole deportment of the bird gives it the aspect of an unrelenting tyrant.

In fishing a leathern collar is put round their necks, to prevent the fish being swallowed, and it is said the fishermen in Sind make a livelihood by the amount of fish caught by Cormorants when their nets fail. They are not, however, hooded, as falcons are, when unemployed.

1457. Phalacrocorax fuscicollis, *Steph., Gen. Zool.* xiii. pt. 1, p. 91; *Legge, B. Ceylon*, p. 1182; *Hume and Dav., Str. F.* vi. p. 496; *Hume, Str. F.* viii. p. 116; *Oates, B. Br. Burm.* ii. p. 233. Phalacrocorax sinensis, *Steph., Gen. Zool.* xiii. pt. 1, p. 96. Graculus sinensis (*Shaw*),

Vert. Zool., Sind, p. 331. Graculus fuscicollis, *Blyth, B. Burm.* p. 164; *Oates, Str. F.* v. p. 170.—The WHITE-TUFTED CORMORANT.

Breeding Plumage.—Whole plumage deep black; glossed with blue and green, the feathers of the back and wing coverts with black margins; a tuft of decomposed soft white feathers about an inch in length on either side of the head just behind the ear coverts; the female has not the white tufts.

Non-breeding Plumage—Adult Male.—Entire head and neck glossy black; back, scapulars, rump and upper tail coverts bronze, some of the feathers of the back and wing coverts margined with black; throat white; cheeks, pale brown; entire lower surface black. *No white thigh or cheek patch.* Bill, gular skin and orbits as in the last; irides bluish green; feet black.

Length.—24 to 27 inches; wing 11; tail 6; bill at front 2·25. In the breeding plumage the forehead and sides of the head are speckled with white, there is a white tuft of feathers behind the ears, and the chin is white.

Hab.—Sind, Kutch, Guzerat, Rajputana, the Deccan, Burmah and Ceylon; also in South Ceylon. Very abundant and resident everywhere it occurs in India. Breeds during November; in some parts as early as July and August.

1458. Phalacrocorax pygmæus (*Pall.*), *Dresser, B. Eur.* vi. p. 173, pl.; *Legge, B. Ceylon*, p. 1191. Pelecanus pygmæus, *Pall., Reis. Russ. Reichs.* ii. p. 712. Graculus javanicus, *Jerd., B. Ind.* iii. p. 863; *Murray, Vert. Zool., Sind*, p. 332. Graculus melanognathos, *Hume, Nests and Eggs, Ind. B.* p. 660. Graculus pygmæus, *Blyth, B. Burm.* p. 164.—The LITTLE CORMORANT.

In Summer Plumage.—A white triangular patch on the head; lores and a line through the eyes white; a few white hair-like feathers on the nape and sides of the neck; chin black; whole body glossy black; head with a short occipital crest; wing coverts, scapulars, secondaries and tertiaries glossed silvery, the feathers margined with black; bill brownish or purplish brown; gular and orbital skin livid fleshy; legs dusky.

Length.—19 to 20 inches; wing 8·5; tail 5·5; bill at front 1·25; tarsus 1·3.

Hab.—Sind, Punjab, N.-W. Provinces, Kutch, Guzerat, Rajputana, Concan, the Deccan, Burmah and Ceylon. Breeds wherever found from August to December according to locality.

Sub-Family, PLOTINÆ.

Gen. **Plotus**.—*Lin.*

Bill long, straight, slender; second and third quills longest; nostrils basal; covered by a shield; tail long and rounded.



Plotus melanogaster.

1459. Plotus melanogaster (*Penn.*), *Jerd.*, *B. Ind.* iii. p. 865, No. 1008; *Hume, Nests and Eggs Ind. B.* p. 661; *Str. F.* vol. i. p. 469; *id.*, *Str. F.* i. p. 194; *Blyth, B. Burm.* p. 165; *Legge, B. Ceylon*, p. 1194; *Hume and Dav.*, *Str. F.* vi. p. 496; *Oates, Str. F.* x. p. 248; *Murray, Hdbk., Zool., &c. Sind.*, p. 249; *id.*, *Vert. Zool. Sind*, p. 332. Anhinga melanogaster, *Penn.*, *Ind. Zool.*, p. 27, pl. 12 (*Sili*, Sind).—The Indian Snake Bird.

Head, nape and neck brown, the feathers edged with pale ferruginous; back of the neck slightly darker; chin and throat white, also a line from below the eye to half way down the neck, and a narrow streak from the base of the bill; back and entire under surface glossy black; primaries, secondaries, tertiaries, scapulars and wing coverts black, very slightly glossed;

some of the inner secondaries, all the wing coverts, scapulars and tertials mesially white; upper tail coverts and tail black, the central feathers with barred ridges; under wing coverts black; legs and feet black; bill dusky on the upper mandible, yellowish on the lower; irides yellow.

Length.—32 to 33 inches; wing 13·2 to 14; tail 8·3 to 9·2; bill at front 3·5.

Hab.—Sind, Bengal, Rajputana, Kutch, Guzerat, Concan, Deccan and India generally; also Burmah and Ceylon, extending to the Malay Peninsula.

Breeds in Sind and wherever found from June to December in large societies. Eggs, white or bluish white, with a chalky coat.



GENERAL INDEX.

PAGE

Abbotti, Malacocincla .....ii. 140
———, Trichastoma .....ii. 140
———, Turdinus.....ii. 140
Abrornis affinis..... i. 217
——— albigularis..... i. 221
——— albosuperciliaris ..... i. 218
——— cantator..... i. 216
——— castaneiceps ..... i. 220
——— chloronopus ..... i. 250
——— chloronotus ..... i. 250
——— chrysea ..... i. 216
——— erochroa..... i. 258
——— flaviventris..... i. 219
——— melanotis ..... i. 218
——— poliogenys..... i. 221
——— schisticeps ..... i. 218
——— superciliaris ..... i. 219
——— tenuiceps ..... i. 248
——— xanthoschistos ..... i. 217
Acanthis brevirostris ....ii. 302
——— fringillirostris .....ii. 303
Acanthoptila nipalensis .....ii. 89
Acanthylis gigantea .....ii. 392
Accentor altaicus .....ii. 193
——— atrigularis .....ii. 190
——— cacharensis .....ii. 193
——— Huttoni .....ii. 190
——— immaculatus .....ii. 190
——— Jerdoni .....ii. 192
——— mollis .....ii. 190
——— nipalensis .....ii. 193
——— rubeculoides .....ii. 191
——— strophiatus .....ii. 191
——— variegatus .....ii. 193
ACCENTORES .....ii. 189
Accipiter badius..... i. 18
——— nisus ..... i. 21
——— virgatus..... i. 22
ACCIPITRES..... i. 1

PAGE

Aceros nipalensis .....ii. 494
——— plicatus .....ii. 494
——— subruficollis .....ii. 493
acornaus, Erythrosterna ..... i. 195
Acredula erythrocephala .....ii. 194
——— jouschistos .....ii. 195
Acridiornis straminea ..... i. 260
Acridotheres fuscus .....ii. 366
——— ginginanus .....ii. 365
——— Siamensis .....ii. 367
——— tristis .....ii. 365
Acrocephalus agricola ..... i. 258
——— brunnescens ..... i. 257
——— bistrigiceps ..... i. 256
——— dumetorum ..... i. 258
——— magnirostris ..... i. 257
——— orientalis ..... i. 257
——— stentoreus ..... i. 257
ACROMYODI ..... i. 125
Actinodura Daflaensis .....ii. 120
——— Egertoni .....ii. 118
——— nipalensis .....ii. 120
——— Ogleii.....ii. 121
——— Ramsayi .....ii. 119
——— Waldeni .....ii. 119
Actinura Ramsayi.....ii. 119
Actitis *glareola* .....ii. 620
——— hypoleucos.....ii. 619
——— ochropus.....ii. 619
acuta, Dafila .....ii. 689
acuticauda, Amadina .....ii. 343
———, Cypselus .....ii. 388
———, Munia..... .....ii. 344
acuticaudus, Cypselus .....ii. 389
Adamsi, Alaudula .....ii. 357
———, Montifringilla .....ii. 303
———, Prinia ..... i. 279
ædon, *Arundinax* ..... i. 261
——, Lusciniola ..... i. 261

PAGE

Ædon familiaris ..... i. 238
Ægialitis cantiana.....ii. 587
——— *curonica*.....ii. 588
——— dubia .....ii. 588
——— fluviatilis .....ii. 588
——— Geoffroyi .....ii. 585
——— Jerdoni .....ii. 588
——— minutus.....ii. 588
——— mongolica.....ii. 586
——— *mongolus*.....ii. 586
——— *nigrifrons* .....ii. 586
——— phillipensis .....ii. 588
——— phillipinus.....ii. 588
——— *placida* .....ii. 586
——— *pyrrhothorax*.....ii. 586
——— *veredus* .....ii. 586
Ægialophilus cantianus .....ii. 587
Ægithaliscus erythrocephalus ...ii. 194
——— jouschistos .....ii. 195
——— niveogularis .....ii. 196
Ægithalus flammiceps .....ii. 196
Ægithina nigrolutea .....ii. 10
——— tiphia.....ii. 9
——— viridissima .....ii. 8
ægocephala, Limosa .....ii. 626
ægyptius, Merops .....ii. 473
æmodium, Conostoma .....ii. 123
æmodius, Parus .....ii. 189
ænea, Carpophaga .....ii. 503
——, Chaptia..... i. 153
——, Columba .....ii. 503
ænobarbus, Allotrius .....ii. 200, 201
æralatus, Ptererythrius .....ii. 199
æruginosus, Circus ..... i. 16
Æsacus recurvirostris .....ii 594
æsalon, Falco ..... i. 75
——, Hypotriorchis ..... i. 75
——, Lithofalco..... i. 75
ætherius, Phæton .....ii. 733
Æthopyga cara .....ii. 222
———dabryi .....ii. 227
———debrii.....ii. 227
———gouldiæ ....ii. 226
———*horsfieldi* .....ii. 225
———ignicauda.....ii. 224
———*Lathami* .....ii. 222
———Miles.....ii. 222

PAGE

Æthopyga nipalensis.....ii. 225
———sanguinipectus .....ii. 225
———saturata .....ii. 221
———seheriæ.....ii. 222
———Vigorsii .....ii. 221
———*Waldeni* .....ii. 226
Aethorhynchus lafresnayii .....ii. 11
afer, Leptosoma .....ii. 417
affine, Trochalopterum .....ii. 76
affinis, Abrornis ..... i. 217
——, Anthracoceros .....ii. 490
——, Arachnothera.....ii. 234
——, Batrachostomus .....ii. 398
——, Calornis .....ii. 371
——, Coracias .....ii. 476
——, Cryptolopha ..... i. 216
——, Cuculus .....ii. 416
——, Cymborhynchus .....ii. 387
——, Cypselus .....ii. 388
——, Dumeticola..... i. 261
——, Garrulax.....ii. 76
——, Hesperiphona.....ii. 298
——, Milvus..... i. 58
——, Mirafra .....ii. 349
——, Motacilla ..... i. 247
——, Muscipeta ..... i. 212
——, Ninox ..... i. 107
——, Pycnoramphus .....ii. 298
——, Pyrrhulauda .....ii. 213
——, Sylvia ..... i. 236
——, Taccocua..... .....ii. 425
——, Tchitrea ..... i. 212
——, Terpsiphone ..... i. 212
africana, Butalis ..... i. 186
agile, Piprisoma.....ii. 251
agilis, Anthus .....ii. 285
——, Fringilla .....ii. 251
——, Pipastes .....ii. 286
agricola, Acrocephalus ..... i. 258
agricolensis, Calamodyta..... i. 255
———, Jerdonia ..... i. 255
Agrobates brunnescens ..... i. 257
Agrodroma agilis ..... ii. 291
——— campestris .....ii. 290
——— cinnamomea .....ii. 287
——— Jerdoni .....ii. 288

PAGE

Agrodroma similis .....ii. 287
——— sordida .....ii. 287,ii. 288
akool, Porzana .....ii. 643
Alauda arvensis.....ii. 359
——— calendrella .....ii. 355
——— deva .....ii. 359
——— gulgula .....ii. 359
——— peguensis .....ii. 359
——— plumata .....ii. 284
alaudarius, Tinnunculus ..... i. 77
ALAUDIDÆ .....ii. 348
Alaudula Adamsi .....ii. 357
——— raytal .....ii. 356
alba, Ardea .....ii. 655
— , Ciconia .....ii. 651
— , Gygis .....ii. 731
— , Herodias .....ii. 655
— , Motacilla .....ii. 269
albellus, Mergellus .....ii. 706
albicilla, Aquila ..... i. 51
——— , Erythrosterna ..... i. 188
——— , Falco ..... i. 51
——— , Haliætus ..... i. 51
——— , Muscicapa ..... i. 188
albicillus, Haliætus ..... i. 51
albicollis, Leucocerca ..... i. 207
———, Rhipidura ..... i. 207
———, Rhynchops .....ii. 731
albida, Emberiza .....ii. 335
albifrons, Anser.....ii. 674
———, Pericrocotus..... i. 180
albifrontata, Rhipidura ..... i. 210
albigena, Sterna..... ....ii. 726
albigula, Cinclosoma.....ii. 109
albigularis, Abrornis..... i. 221
——— , Dumetia.....ii. 132
——— , Garrulax .....ii. 109
——— , Ianthocincla .....ii. 109
——— , Pomatorhinus .....ii. 103
——— , Suya ..... i. 278
albirictus, Buchanga..... i. 154
albirostris, Anthracoceros .....ii. 490
——— , Buceros .....ii. 490
——— , Hydrocissa .....ii. 490
albiventer, Tesia.....ii. 52
albiventris, Callene .....ii. 58
——— , Cercotrichas .....ii. 69

PAGE

albiventris, Cittocincla .....ii. 69
——— , Kittacincla.....ii. 69
——— , Pnoepyga .....ii. 52
albocincta, Merula..... i. 304
albocinctus, Turdus ..... i. 304
albocristatus, Euplocamus .....ii. 540
——— , Gallophasis .....ii. 540
albofrontata, Rhipidura ..... i. 210
albogularis, Geocichla ..... i. 298
———, Prinia ..... i. 290
alboides, Motacilla.....ii. 275
alboniger, Dromolæa.....ii. 2
———, Limnætus..... i. 41
———, Saxicola .....ii. 2
———, Spizaetus .....i. 41
albonigra, Saxicola.....ii. 2
albonotatus, Caprimulgus .....ii. 400
albosuperciliaris, Abrornis ..... i. 218
——— , Garrulax .....ii. 117
ALCEDINIDÆ .....ii. 478
ALCEDININÆ .....ii. 478
Alcedo asiatica .....ii. 479
——— atricapilla .....ii. 484
——— Beavani .....ii. 480
——— bengalensis.....ii. 478
——— cærulea .....ii. 479
——— chloris.....ii. 483
——— collaris .....ii. 483
——— coromanda.....ii. 482
——— euryzona .....ii. 479, 480
——— fuscus.....ii. 483
——— grandis .....ii. 479
——— ispida .....ii. 479
——— meningting .....ii. 480
——— nigricans .....ii. 479, 480
——— pileata.....ii. 483
——— rufigastra .....ii. 480
——— smyrnensis.....ii. 483
alchata, Pterocles .....ii. 525
alcinus, Machærhamphus..... i. 61
Alcippe atriceps .....ii. 169
——— Bourdilloni .....ii. 169
——— chrysæa .....ii. 170
——— collaris .....ii. 160
——— fusca .....ii. 168
——— magnirostris .....ii. 168
——— nipalensis .....ii. 167

PAGE

Alcippe phæocephala ..... ii. 167
——— phayrei ..... ii. 168
——— phayrii ..... ii. 168
——— *poiocephala* ..... ii. 167
——— *Tickelli* ..... ii. 144
——— vinipectus ..... ii. 166
Alcurus nipalensis ..... ii. 32
———ochrocephalus ..... ii. 33
———striatus ..... ii. 32
alexandri, Palæornis ..... ii. 466
Allotrius ænobarbus ..... ii. 200, 201
——— intermedius ..... ii. 200
——— melanotis ..... ii. 200
——— xanthochloris ..... ii. 201
Alophonerpes pulverulentus ..... ii. 450
alpina, Tichodroma ..... ii. 213
alpinus, Tringa ..... ii. 615
——— , Pyrrhocorax ..... ii. 144
Alseonax ferruginea ..... i. 184
——— latriostris ..... i. 185
——— terricolor ..... i. 185
Alsocomus Hodgsoni ..... ii. 510
——— punniceus ..... ii. 509
altaicus, Accentor ..... ii. 193
althæa, Sylvia ..... i. 237
altirostre, Chrysomma ..... ii. 131
altirostris, Crypsirrhina ..... i. 136
——— , Pyctorhis ..... i. 131
amabilis, Carcineutes ..... ii. 486
Amadina acuticauda ..... ii. 344
——— atricapilla ..... ii. 342
——— Inglisi ..... ii. 343
——— leucogastra ..... ii. 343
——— malabarica ..... ii. 345
——— malacca ..... ii. 341
——— *oryzivora* ..... ii. 343
——— pectoralis ..... ii. 343
——— punctulata ..... ii. 342
——— rubronigra ..... ii. 342
——— striata ..... ii. 343
——— subundulata ..... ii. 343
——— superstriata ..... ii. 343
amandava, Estrilda ..... ii. 347
amauroptera, Halcyon ..... ii. 487
——— ., Pelargopsis ..... ii. 487
ambiguus, Carpodacus ..... ii. 321

PAGE

amicta, Nyctiornis ..... ii. 474
amictus, Merops ..... ii. 474
Ammomanes deserti ..... ii. 351
——— isabellina ..... ii. 351
——— lusitania ..... ii. 351
——— lusitanica ..... ii. 351
——— phœnicura ..... ii. 352
Ammoperdix bonhami ..... ii. 553
amurensis, Erythropus ..... i. 79
Ampeliceps coronatus ..... ii. 374
ampelinus, Hypocolius ..... ii. 166
anæsthetus, *Haliplana* ..... ii 728
———, *Onychoprion* ..... ii. 728
———, Sterna ..... ii. 728
analis, Dendrotypes ..... ii. 456
——, Otocompsa ..... ii. 38
——, Picus ..... ii 456
——, Pycnonotus ..... ii. 38
——, Turdus ..... ii. 38
Anas boscas ..... ii. 683
——caryophyllacea ..... ii. 685
——circia ..... ii. 693
——crecca ..... ii. 692
——fulva ..... ii. 679
——*Javana* ..... ii. 695
——Javanica ..... ii. 678
——*leucoptera* ..... ii. 680
——*penelope* ..... ii. 691
——pœcilorhyncha ..... ii. 684
——scutulata ..... ii. 680
——strepera ..... ii. 686
ANASTOMINÆ ..... ii. 666
Anastomus oscitans ..... ii. 666
andamanica, Arachnethra ..... ii. 233
andamanicus, Cynniris ..... ii. 233
andamanensis, Broderipus ..... i. 148
———— , Buchanga ..... i. 158
———— , Dicrurus ..... i. 158
———— , Dissemuroides ..... i. 158
———— , Eulabes ..... ii. 337
———— , Geocichla ..... i. 298
———— , Hirundo ..... ii. 261
———— , Oriolus ..... i. 148
———— , Pericrocotus ..... i. 174
andersoni, Euplocamus ..... ii. 544
anglica, Gelochelidon ..... ii. 720

PAGE
anglicus, Gelochelidon .....ii. 720
angustirostris, Chaulelasmus .....ii. 687
Anhinga melanogaster .....ii. 741
annectens, Ixus .....ii. 40
———, Lioptila .....ii. 67
Anorrhinus austeni .....ii. 495
——— comatus .....ii. 495
——— galeritus.....ii. 495
——— Tickelli .....ii. 495
Anorthura formosa .....ii. 50
——— nipalensis .....ii. 49
Anous *leucocapillus* .....ii. 730
——— *melanops*.....ii. 730
——— *senex* .....ii. 730
——— stolida.....ii. 730
——— tenuirostris.....ii. 730
Anser albifrons.....ii. 674
——— brachyrrhynchus .....ii. 673
——— cinereus .....ii. 675
——— coromandeliana.....ii. 677
——— erythropus.....ii. 675
——— indicus .....ii. 675
——— minutus .....ii 675
——— *segetum* .....ii. 672
ANSERIDÆ .....ii. 672
antarcticus, Stercorarius .....ii. 713
Anthipes leucomelanura ..... i. 230
——— *moniliger* ..... i. 230
——— *submoniliger*..... i. 231
Anthocincla phayrii .....ii. 376
Anthothreptes hypogrammica ...ii. 238
——— malaccensis .....ii. 240
——— phœnicotis .....ii. 239
——— simplex .....ii. 238
Anthracoceros affinis .....ii. 491
——— albirostris .....ii. 490
——— coronatus .....ii. 490
——— malabaricus .....ii. 490
Anthreptes *celebensis* .. ..ii. 240
——— *malaccensis* .....ii. 240
——— *modesta* .....ii. 236
——— *nuchalis* .....ii. 238
——— *phœnicotis* .....ii. 239
——— simplex .....ii. 239
——— singalensis .....ii. 239
Anthreptes. *xanthochlora*.....ii 239
Anthropoides virgo .....ii. 602

PAGE
Anthus *agilis* .....ii. 285
——— *aquaticus* .....ii. 294
——— *arboreus*.....ii. 285
——— *Blakistoni* .....ii. 294
——— *Caffer* .....ii. 291
——— campestris.....ii. 290
——— *cervinus*.....ii. 292, 293
——— *cinnamomeus*.....ii. 292
——— Jerdoni .....ii. 288
——— maculatus .....ii. 285
——— *malayensis* .....ii. 292
——— *montanus* .....ii. 294
——— *neglectus*.....ii. 294
——— nilgherriensis .....ii. 286
——— *raaltêni* .....ii. 291
——— Richardi.....ii. 289
——— rosaceus.....ii. 293
——— *rufescens* .....ii. 290
——— rufulus .....ii. 291
——— *similis* .....ii. 287
——— sordidus.....ii. 287
——— *spinoletta* .....ii. 294
——— spipoletta .....ii. 294
——— striolata.....ii. 290
——— trivialis .....ii. 284
antigone, Grus .....ii. 599
antiquorum, Phœnicopterus.....ii 669
apiaster, Merops .....ii. 473
apicauda, Treron.....ii. 503
apicaudus, Sphenocercus .....ii. 503
apivorus, Pernis ..... i. 62
aplonotus, Parus.....ii. 185
———, Machlolophus .....ii. 185
apus, Cypselus .....ii. 388
aquaticus, Anthus .....ii. 294
———, Cinclus .....ii. 54
Aquila *albicilla* ..... i. 51
——— *bifasciata* ..... i. 30, 32
——— bonelli ..... i. 36
——— chrysætos ..... i. 29
——— clanga ..... i. 35
——— fulva ..... i. 29
——— *fulvescens* ..... i. 33
——— fusca ..... i. 33
——— hastata ..... i. 34
——— heliaca..... i. 30
——— *imperialis* ..... i. 30

	PAGE
Aquila mogilnik	i. 30, 32
—— nævia	i. 34, 35
—— *nipalensis*	i. 32
—— pennata	i. 37
—— punctata	i. 33
—— vindhiana	i. 33
—— *vittata*	i. 35
aquila, Fregata	ii. 736
—— Tachypetes	ii. 734
AQUILINÆ	i. 27
aquilinus, Buteo	i. 23
aquilus, Attagen	ii. 734
——, Pelecanus	ii. 734
Arachnethra *andamanica*	ii. 233
—— asiatica	ii. 228
—— brevirostris	ii. 228
—— flammaxillaris	ii. 233
—— *frenata*	ii. 233
—— hypogrammica	ii. 238
—— intermedia	ii. 228
—— *lotenia*	ii. 229
—— *macularia*	ii. 238
—— simplex	ii. 239
Arachnophila simplex	ii. 239
Arachnothera *affinis*	ii. 234
—— *aurata*	ii. 235
—— chrysogenys	ii. 237
—— longirostris	ii. 234
—— modesta	ii. 236
—— magna	ii. 235
—— *pusilla*	ii. 234
arboreus, Anthus	ii. 284
——, Pipastes	ii. 284
Arboricola atrogularis	ii. 556
—— brunneipectus	ii. 556
—— chloropus	ii. 556
—— intermedia	ii. 558
—— rufogularis	ii. 558
—— Tickelli	ii. 558
—— torqueola	ii. 556
Arborophila brunneipectus	ii. 556
—— chloropus	ii. 557
—— intermedia	ii. 558
—— Mandelli	ii. 559
—— rufogularis	ii. 558
Archibuteo *hemiptilopus*	i. 26
—— *leucoptera*	i. 26

	PAGE
Archibuteo strophiatus	i. 26
arctivitta, Cecropis	ii. 265
——, Hirundo	ii. 265
——, Lillia	ii. 265
arcuata, Dendrocygna	ii. 679
Ardea *alba*	ii. 655
—— *argala*	ii. 647
—— cinerea	ii. 652
—— *cinnamomea*	ii. 661
—— *coromanda*	ii. 657
—— *egretta*	ii. 655
—— *flavicollis*	ii. 658
—— *fusca*	ii. 652
—— *garzetta*	ii 655
—— goliath	ii. 651
—— *grayii*	ii. 658
—— *grisea*	ii. 663
—— insignis	ii. 652
—— *intermedia*	ii. 655
—— *jugularis*	ii. 657
—— leucocephala	ii. 649
—— *melanolopha*	ii. 664
—— *nigrirostris*	ii. 655
—— purpurea	ii. 653
—— sumatrana	ii. 651
—— *tectirostris*	ii. 651
—— *torra*	ii. 655
—— *typhon*	ii. 651
ARDEIDÆ	ii. 650
Ardeiralla cinnamomea	ii. 660
—— *flavicollis*	ii. 660
ardeola, Dromas	ii. 598
Ardeola Grayi	ii. 658
—— *leucoptera*	ii. 658
—— prasinosceles	ii. 658
ardesiacus, Platylophus	i. 167
Ardetta cinnamomea	ii. 661
—— flavicollis	ii. 660
—— minuta	ii. 662
—— sinensis	ii. 661
arenaria, Calidris	ii 617
arenarius, Lanius	ii. 208
——, Pterocles	ii. 523
argala, Ardea	ii. 647
——, Leptoptilos	ii. 647
argentauris, Leiothrix	ii. 178
——, Mesia	ii. 178

PAGE

argoondah, Perdicula ..... ii. 562
Argus giganteus ..... ii. 530
argus, Argusianus ..... ii. 530
———, Phasianus ..... ii. 530
Argusa giganteus ..... ii. 530
Argusianus argus ..... ii. 530
——— —— giganteus ..... ii. 530
Argya caudata ..... ii. 93
——— Earlii ..... ii. 92
——— eclipes ..... ii. 94
——— gularis ..... ii. 94
——— hyperythra ..... ii. 92
——— malcolmi ..... ii. 95
——— subrufa ..... ii. 92
arquatus, Numenius ..... ii. 630
———, *Scolopax* ..... ii. 630
Artamides Dobsoni ..... i. 169
Artamus fuscus ..... *Addenda*
——— leucorhynchus ..... *Addenda*
Arundinax ædon ..... i. 261
——— olivaceus ..... i. 261
arvensis, Alauda ..... ii. 359
Ascalaphia bengalensis ..... i. 84
——— —— coromanda ..... i. 85
asha, Demi-egretta ..... ii. 656
asiatica, Alcedo ..... ii. 479
———, Arachnechthra ..... ii. 228
———, Cinnyris ..... ii. 228
———, Cyanops ..... ii. 429
———, Hydrobata ..... ii 54
———, Megalæma ..... ii. 429
———, Mycteria ..... ii. 648
———, Nectarinia ..... ii. 228
———, Perdicula ..... ii. 562
———, Trogon ..... ii. 429
asiaticus, Arachnecthra ..... ii. 228
———, Caprimulgus ..... ii. 399
———, Cinclus ..... ii. 54
———, Cinnyris ..... ii. 228
———, Trogon ..... ii. 420
———, Xenorhynchus ..... ii. 648
Asio accipitrinus ..... i. 115
—— *brachyotus* ..... i. 114
—— otus ..... i. 114
assamica, Mirafra ..... ii. 348
Assamensis, Cynniris ..... ii. 221
——— ——, Drymocataphus ..... ii. 144

PAGE

assimilis, Dendrocitta ..... i. 137
———, Horornis ..... i. 267
———, Lanius ..... ii. 202
———, Macropygia ..... ii. 511
———, Neornis ..... i. 267
———, Passer ..... ii. 312
———, Picus ..... ii. 454
———, Psarisomus ..... ii. 383
———, Stachyridopsis ..... ii. 155
———, Stachyris ..... ii. 155
astigma, Muscicapula ..... i. 196
Astur badius ..... i. 18
—— *palumbarius* ..... i. 16, 19
—— poliopsis ..... i. 19
—— soloensis ..... i. 20
—— trivirgatus ..... i. 17
aswuree, Dendrocygna ..... ii. 678
ater, Falco ..... i. 58
Athene brama ..... i. 104
—— brodiei ..... i. 110
—— castanoptera ..... i. 112
—— cuculoides ..... i. 113
—— pulchra ..... i. 105
—— radiata ..... i. 111
—— scutulata ..... i. 108
Athertonii, Merops ..... ii. 474
———, Nyctiornis ..... ii. 474
Atkinsoni, Parus ..... ii. 186
atra, Buchanga ..... ii. 154
——, Fulica ..... ii. 636
atrata, Pratincola ..... i. 194
atratus, Dendrotypes ..... ii. 457
——, Picus ..... ii. 457
atricapilla, Alcedo ..... ii. 484
——— , Amadina ..... ii. 342
——— , Loxia ..... ii. 342
——— , Munia ..... ii. 342
——— , Halcyon ..... ii. 484
atricapillus, Garrulus ..... i. 141
———, Molpastes ..... ii. 36
———, Muscicapa ..... ii. 36
———, Pycnonotus ..... ii. 36
atriceps, Alcippe ..... ii. 169
——— , Falco ..... i. 68
atriceps, Brachypteryx ..... ii. 169
——— , Parus ..... ii. 182
——— , Turdus ..... ii. 26

PAGE

atrigularis, Accentor ..... ii. 190
——— , Merula ..... i. 308
——— , Orthotomus ..... i. 286
——— , Planesticus ..... i. 308
——— , Prinia ..... i. 277
——— , Saxicola ..... ii. 5
——— , Suya ..... i. 277
——— , Turdus ..... i. 308
atripennis, Caprimulgus ..... ii. 400
atrogularis, Arboricola ..... ii. 557
——— , Sarcogramma ..... ii. 593
atronuchalis, Lobivanellus ..... ii. 593
Attagen aquilus ..... ii. 734
——— minor ..... ii. 734
aucheri, Lanius ..... ii. 202
aurantia, Seena ..... ii. 724
——— , *Sterna* ..... ii. 724
aurantiaca, Pyrrhula ..... ii. 325
aurantias, Brachypternus ..... ii. 439
aurata, Arachnothera ..... ii. 235
aureiventer, Zosterops ..... ii. 243
aureiventris, Zosterops ..... ii. 243
aureocapilla, Budytes ..... ii. 279
aureola, Emberiza ..... ii. 330
——— , Euspiza ..... ii. 330
——— , Leucocerca ..... i. 210
aurifrons, Chloropsis ..... ii. 13
——— , Fringilla ..... ii. 315
——— , *Phyllornis* ..... ii. 13
——— , *Serinus* ..... ii. 314, 315
auritus, Sypheotides ..... ii. 578
aurocristatus, Picus ..... ii. 458
aurorea, Motacilla ..... i. 322
——— , Ruticilla ..... i. 322
Austeni, Anorrhinus ..... ii. 495
——— , Trochalopterum ..... ii. 83
——— , Paradoxornis ..... ii. 128
——— , Pomatorhinus ..... ii. 101
——— , Zosterops ..... ii. 243
australis, Mycteria ..... ii. 648
——— , Sula ..... ii. 735
——— , Xenorhynchus ..... ii. 648
avensis, Campophaga ..... i. 172
——— , Volvocivora ..... i. 172
avocetta, Recurvirostra ..... ii. 631

PAGE

azurea, Hypothymis ..... i. 201, 202
——— , Myiagra ..... i. 202

babylonicus, Falco ..... i. 170
bacha, Spilornis ..... i. 46
badius, Accipiter ..... i. 18
——— , Astur ..... i. 18
——— , Micronisus ..... i. 18
——— , Phodilus ..... i. 124
baicalensis, Motacilla ..... ii. 272
bailloni, Porzana ..... ii. 641
——— , Calliope ..... i. 316
——— , *Rallus* ..... ii. 641
bakkamæna, Scops ..... i. 93
balli, Scops ..... i. 100
ballicassius, Dicrurus ..... i. 154
Bambusicola Fytchi ..... ii. 560
banyumas, Cyornis ..... i. 225
barbarus, Falco ..... i. 70
barbatus, Gypætus ..... i. 28
batassiensis, Cypselus ..... ii. 390
Batrachostomus affinis ..... ii. 398
——— Javensis ..... ii. 397
——— Hodgsoni ..... ii. 398
——— moniliger ..... ii. 397
baya, Ploceus ..... ii. 338, 339
Bayleyi, Dendrocitta ..... i. 137
Baza Ceylonensis ..... i. 65
—— lophotes ..... i. 62
—— sumatrensis ..... i. 63
Beavani, Alcedo ..... ii. 480
——— , Cisticola ..... i. 291
——— , Lophophanes ..... ii. 187
——— , Parus ..... ii. 187
——— , Prinia ..... i. 291
beema, Motacilla ..... ii. 281
Belangeri, Garrulax ..... ii. 108
bengalensis, Alcedo ..... ii. 478
———, *Ascalaphia* ..... i. 84
———, Bubo ..... i. 83
———, Centrococcyx ..... ii. 424
———, Centropus ..... ii. 424
———, Cuculus ..... ii. 424
———, Drymœca ..... i. 288

	PAGE
bengalensis, Gyps	i. 8
———, Hierax	i. 65
———, Malacocircus	ii. 122
———, Palæornis	ii. 468
———, Pitta	ii. 380
———, Ploceus	ii. 340
———, Pseudogyps	i. 8
———, Psittacus	ii. 468
———, Rhynchœa	ii. 609
———, *Sterna*	ii. 723
———, Sypheotides	ii. 578
———, *Thalasseus*	ii. 723
———, Timalia	ii. 129
———, *Urrua*	i. 84
Berenicornis comatus	ii. 495
bergii, Sterna	ii. 721
——, *Thalasseus*	ii. 722
Bewicki, Cygnus	ii. 672
Bhringa remifer	i. 159
———*tectirostris*	i. 159
bicincta, Osmotreron	ii. 499
bicolor, Brachypteryx	ii. 142
———, Carpophaga	ii. 505
———, Columba	ii. 505
———, Erythrocichla	ii. 142
———, Myristicivora	ii. 505
———, Pratincola	i. 194
———, Saxicola	i. 194
bicornis, Buceros	ii. 489
——, Dichoceros	ii. 489
——, Homrais	ii. 489
Biddulphi, Chrysonotus	ii. 438
bifasciata, Aquila	i. 30, 32
bilobus, Charadrius	ii. 594
———, Sarciophorus	ii. 593
bimaculata, Melanocorypha	ii. 355
bispecularis, Garrulus	i. 141
bistrigiceps, Acrocephalus	i. 256
bitorquatus, Rhinoptilus	ii. 580
blakistoni, Anthus	ii. 294
blanfordi, Drymoica	i. 279
———, Ixus	ii. 42
———, Microtarsus	ii. 42
———, Prinia	i. 279
———, Pycnonotus	ii. 41

	PAGE
Blanfordius striatulus	i. 275
Blewitti, Heteroglaux	i. 105
———, Microperdix	ii. 565
Blythii, Phaiopicus	ii. 440
——, Sturnia	ii. 371
——, Ceriornis	ii. 536
Blythipicus porphyromelas	ii. 442
——— pyrrhotis	ii. 442
boarula, Calobates	ii. 278
———, Motacilla	ii. 278
bonelli, Aquilla	i. 36
———, Eutolmætus	i. 36
———, Falco	i. 36
———, Nisætus	i. 36
———, Pseudætus	i. 36
Bonhami, Ammoperdix	ii. 553
borealis, Motacilla	ii. 281
——, Phyllopneuste	i. 239
——, Phylloscopus	i. 239
boscas, Anas	ii. 684
Botaurus *limnophilax*	ii. 664
——— stellaris	ii. 662
Bourdilloni, Alcippe	ii. 169
———, Merula	i. 306
boulboul, Lanius	i. 304
———, Merula	i. 306
brachydactyla, Calendrella	ii. 355
brachyotus, *Asio*	i. 114
———, *Otus*	i. 114
———, *Strix*	i. 144
brachyphorus, Dissemurus	i. 158
——— , Edolius	i. 160
BRACHYPODINÆ	ii. 7
Brachypodius cinereiventris	ii. 27
——— criniger	ii. 31
——— *immaculatus*	ii. 26
——— *melanocephalus*	ii. 27
——— *poiocephalus*	ii. 28
——— *tristis*	ii. 25
Brachypteryx *atriceps*	ii. 169
——— bicolor	ii. 142
——— Buxtoni	ii. 146
——— cruralis	ii. 60
——— hyperythra	ii. 61
——— macroptera	ii. 146

PAGE

Brachypteryx stellata .....ii. 62
Brachypternus aurantius .....ii. 439
———— chrysonotus.....ii. 440
———— dilutus.....ii. 439
———— puncticollis.....ii. 440
brachyrrhynchus, Anser .....ii. 673
Brachypus euptilosus.....i. 25
———— plumosus .....ii. 42
———— poiocephalus .....ii. 28
———— *xantholæmus* .....ii. 41
brachyura, Pitta ... .ii. 380
Brachyurus cœruleus .....ii. 377
———— cucullatus .....ii. 281
———— cyaneus .....ii. 378
———— davisoni .....ii. 377
———— granatinus.....ii. 379
———— megarhynchus .....ii. 379
———— moluccensis .....ii. 379
———— nipalensis .....ii. 376
brachyurus, Micropternus .....ii. 441
———, Corvus .....ii. 380
———, Picus .....ii. 441
Bradybates phœnicuroides .....ii. 67
Bradypteri .... i. 270
Bradyptetes cetti ..... i. 266
brama, Carine ....i. 104
Brandti, Montifringilla.....ii. 306
brasiliana, Certhia.....ii. 332
———, Cinnyris .....ii. 232
———, Leptocoma .....ii. 232
———, Nectarophila .....ii. 232
braziliana, Cinnyris .....ii. 232
brevicauda, Prinia ..... i. 282
brevicaudata, Corythocichla .....ii. 150
brevicaudatus, Macronus.....ii. 150
———, Turdinus .....ii. 150
brevirostris, Arachnechthra .....ii. 228
———, Acanthis .....ii 302
———, Cinnyris .....ii. 228
———, Linaria .....ii. 302
———, Pericrocotus ..... i. 177
brodiei, Athene ..... i. 110
———, Glaucidium ..... i. 110
Broderipus andamanensis.....ii 148
brookeanus, Hemicercus .....ii. 453
brooksi, Haliætus ..... i. 51
———, Phylloscopus ..... i. 263

PAGE

brunnea, Erithacus ..... i. 314
brunneicauda, Minla ..... ii. 159
brunneicephalus, Larus .....ii. 717
brunneifrons, Cettia ..... i. 269
————, Picus .....ii 457
brunneipectus, Arboricola .....ii. 557
———— , Arborophila.....ii. 557
brunnescens, Acrocephalus ..... i. 257
———— , Agrobates ..... i. 257
———— , Horeites ..... i. 257
brunneus, Erithacus ..... i. 314
———— , Hemicercus .....ii. 461
———— , Ixus .....ii. 43
———— , Phylloscopus ..... i. 263
———— , Picus.....ii. 461
———— , Pycnonotus .....ii. 43
brunniceps, Cisticola..... ..... i. 292
————, Salicaria..... i. 292
Bubo bengalensis ..... i. 84
—— coromandus ..... i. 85
—— nipalensis..... i. 86
—— *orientalis*..... i. 86
—— strepitans ..... i. 87
Bubonidæ ..... i. 83
Buboninæ ..... i. 83
Bubulcus coromandus .....ii. 657
Bucanetes githaginea .....ii. 307
Bucco caniceps .....ii. 428
—— cyanotis .....ii. 432
—— grandis .....ii. 426, 427
—— hæmacephalus .....ii. 431
—— Hayi.....ii. 432
—— indicus.....ii. 431
—— malabarica .....ii. 432
—— mystacophanus .....ii. 427
—— virens .....ii. 427
Buceros albirostris.....ii. 490
———— bicornis .....ii. 489
———— cavatus .....ii. 489
———— *comatus* .....ii. 490, 495
———— galeritus .....ii. 491
———— *ginginianus* .....ii. 492
———— *griseus*.....ii. 492
———— homrai.....ii. 489
———— *nipalensis* .....ii. 494
———— *pusaran* .....ii. 493, 494
———— scutatus .....ii. 491

PAGE

Buceros *subruficollis* ..... ii. 493
——— undulatus ..... ii. 494
——— vigil ..... ii. 491
BUCEROTIDÆ ..... ii. 488
Buchanani, Cisticola ..... i. 288
———, Drymœca ..... i. 228
———, Emberiza ..... ii. 333
———, Franklinia ..... i. 288
Buchanga albirictus ..... i. 154
——— *andamanensis* ..... i. 159
——— atra ..... i. 154
——— cærulescens ..... i. 157
——— cineracea ..... i. 156
——— leucogenys ..... i. 156
——— leucophæa ..... i. 156
——— longicaudata ..... i. 155
——— pyrrhops ..... i. 156
——— waldeni ..... i. 155
Budytes aureocapilla ..... ii. 279
—— calcarata ..... ii. 279
—— calcaratus ..... ii. 280
—— cinereocapillus ..... ii. 281
—— citreola ..... ii. 279, 280
——— citreoloides ..... ii. 280
——— flava-melanocephala ..... ii. 281
——— melanocephalus ..... ii. 282
——— viridis ..... ii. 281
Bulaca indranee ..... i. 121
——— ocellata ..... i. 118
——— sinensis ..... i. 118
burkii, Culicepeta ..... i. 215
burmannica, Leucocerca ..... i. 140
———, Sturnia ..... ii. 369
———, Ninox ..... i. 108
burmannicus, Micropternus ..... ii. 440
———, Pelargopsis ..... ii. 488
———, Pycnonotus ..... ii. 35
———, Temenuchus ..... ii. 369
Burnesia flaviventris ..... i. 282
——— lepida ..... i. 283
——— socialis ..... i. 282
burnesia, Gallinula ..... ii. 655
burnesi, Eurycercus ..... i. 271
———, Laticilla ..... i. 271
burtoni, Callacanthis ..... ii. 302
———, Fringilla ..... ii. 302
Butalis africana ..... i. 186

PAGE

Butalis ferruginea ..... i. 184
——— grisola ..... i. 186
——— latirostris ..... i. 185
——— sibirica ..... i. 183
——— terricolor ..... i. 185
Butastur indicus ..... i. 50
——— liventer ..... i. 48
——— teesa ..... i. 47
Buteo aquilinus ..... i. 23
—— canescens ..... i. 23
—— desertorum ..... i. 25
—— *ferox* ..... i. 23
—— *japonicus* ..... i. 25
—— liventer ..... i. 48
—— longipes ..... i. 23
—— plumipes ..... i. 25
—— pygmæus ..... i. 50
—— *rufiventer* ..... i. 25
—— *vulgaris* ..... i. 25
BUTEONINÆ ..... i. 10
Buxtoni, Zosterops ..... ii. 243

Caccabis chukor ..... ii. 553
cacharensis, Accentor ..... ii. 193
cachinnans, Trochalopterum ..... ii. 84
Cacomantis passerinus ..... ii. 413
——— nigra ..... ii. 413
——— rufiventris ..... ii. 413
——— tenuirostris ..... ii. 413
——— threnodes ..... ii. 413
cærulea, Alcedo ..... ii. 479
———, Gigantipitta ..... ii. 377
———, Pitta ..... ii. 377
cælicolor, Grandala ..... i. 319
———, Sialia ..... i. 319
cærulatum, Cinclosoma ..... ii. 117
———, Garrulax ..... ii. 117
———, Ianthocincla ..... ii. 117
cærulatus, Crateropus ..... ii. 117
———, Dryonastes ..... ii. 117
———, Garrulax ..... ii. 117
cærulecula, Cyanecula ..... i. 317
———, Motacilla ..... i. 17
cæruleculus, Cyanecula ..... i. 317
———, Erithacus ..... i. 317
æ ruleocephala, Ruticilla ..... i. 325

	PAGE
cærulescens, Buchanga	i. 157
——— , Dicrurus	i. 157
——— , Harpagus	i. 65
——— , Hierax	i. 66
——— , Microhierax	i. 65
cæruleus, Brachyurus	ii. 377
——— , Dryonastes	ii. 117
——— , Elanus	i. 59
cæsius, Parus	ii. 182
caffer, Anthus	ii. 291
Calamodus melanopogon	i. 265
Calamodyta agricolensis	i. 255
——— doriæ	i. 259
——— dumetorum	i. 258
calandra, Melanocorypha	ii. 355
calcarata, Budytes	ii. 279
calcaratus, Budytes	ii. 280
calendrella, Alauda	ii. 355
Calendrella brachydactyla	ii. 355
Calidris arenaria	ii. 617
calidris, *Scolopax*	ii. 622
——— , Totanus	ii. 622
caligata, Hypolais	i. 255
caligatus, Spizaetus	i. 42
Callacanthis burtoni	ii. 302
Callene albiventris	ii. 58
——— frontalis	ii. 58
——— *Hodgsoni*	ii. 67
——— rufiventris	ii. 59
Callialycon coromanda	ii. 482
Calliope *bailoni*	i. 316
——— kamschatkensis	i. 315
——— tschebaiewi	i. 317
calliope, Erithacus	i. 315
——— , Motacilla	i. 315
callipyga, Leiothrix	ii. 179
Callisitta formosa	ii. 218
Callolophus malaccensis	ii. 443
——— mentalis	ii. 443
——— miniatus	ii. 443
——— puniceus	ii. 444
Calobates melanope	ii. 279
——— sulphurea	ii. 278
Calœnas nicobarica	ii. 518
Caloperdix ocellata	ii. 560
——— oculea	ii. 560

	PAGE
Caloramphus Lathami	ii. 432
Calornis affinis	ii. 371
——— chalybea	ii. 371
——— daurica	ii. 368
——— Irwini	ii. 371
——— Tytleri	ii. 371
calvus, Otogyps	i. 9
——— , Vultur	i. 9
Calyptomena viridis	ii. 382
CALYPTOMENINÆ	ii. 382
cambaiensis, Thamnobia	ii. 64
cambayensis, Turtur	ii. 514
——— Perdicula	ii. 562
campestris, Anthus	ii. 290
Campephaga *avensis*	i. 172
——— *melanoptera*	i. 172
Campophaga innominata	i. 172
——— intermedia	i. 171
——— lugubris	i. 171
——— melanoptera	i. 172
——— neglecta	i. 172
——— *polioptera*	i. 172
——— *saturata*	i. 171
——— Sykesi	i. 181
CAMPEPHILINÆ	ii. 449
CAMSCHATKENSIS	i. 315
Cancroma coromanda	ii. 657
candida, Glaux	ii. 123
——— , Sterna	i. 123
——— , Strix	i. 123
candidus, Himantopus	ii. 632
——— , *Phæton*	ii. 732
canente, Hemicercus	ii. 453
——— , Micropicus	ii. 453
——— , Picus	ii. 453
canescens, Buteo	i. 23
——— , Scolopax	ii. 621
——— , Totanus	ii. 621
canicapillus, Iyngipicus	ii. 458
——— , Picus	ii. 458
caniceps, Bucco	ii. 428
——— , Carduelis	ii. 300
——— , Megalæma	ii. 428
canifrons, Spizixus	ii. 48
canningi, Rallina	ii. 640
canorus, Cuculus	ii. 408

PAGE

canorus, Turdus ..... ii. 722
cantator Abrornis ..... i. 216
——— Cryptolopha ..... i. 216
——— Culicepeta ..... i. 216
——— Motacilla ..... i. 216
cantatrix, Cryptolopha ..... i. 216
cantiaca, Sterna ..... ii. 722
cantiana, Ægialitis ..... ii. 587
———, Ægialophilus ..... ii. 587
———, Charadrius ..... ii 587
cantillans, Certhia ..... ii 245
———, Mirafra ..... ii. 350
capellana, Corone ..... i. 129
capensis, Daption ..... ii 710
———*Procellaria* ..... ii. 710
———Rhynchæa ..... ii. 609
capistrata, Cinclosoma ..... ii. 96
———, Malacias ..... ii. 96
———, Salicaria ..... i. 258
———, Saxicola ..... ii. 3
capitalis, Hemipus ..... i. 165
CAPITONIDÆ ..... ii. 427
caprata, Motacilla ..... i. 194
——— Pratincola ..... i. 193
CAPRIMULGIDÆ ..... ii. 397
Caprimulgus albonotatus ..... ii. 400
———asiaticus ..... ii. 399
———atripennis ..... ii. 401
———indicus ..... ii. 402
———Jotaka ..... ii. 403
———Kelaarti ..... ii. 403
———macrurus ..... ii. 400
———mahrattensis ..... ii. 399
———monticolus ..... ii. 400
———spilocircus ..... ii. 400
———Unwinii ..... ii. 401
cara, Æthopyga ..... ii. 202
carbo, *Graculus* ..... ii. 740
———, *Pelecanus* ..... ii. 740
———, Phalacrocorax ..... ii. 740
Carcineutes amabilis ..... ii. 486
——— pulchellus ..... ii 486
Carduelis caniceps ..... ii. 300
Carine brama ..... i. 104
———*glaux* ..... i. 105
———pulchra ..... i. 105

PAGE

Caridagrus concretus ..... ii. 485
carneipes, Mycerobas ..... ii. 298
———, Pcynoramphus ..... ii. 298
Carpodacus ambiguus ..... ii. 321
——— crassirostris ..... ii. 307
——— Davidianus ..... ii 321
——— dubius ..... ii. 320
——— Edwardsii ..... ii. 319
——— erythrinus ..... ii. 316
——— grandis ..... ii. 318
——— Murrayi ..... ii. 305
——— pulcherrimus ..... ii. 321
——— rhodochlamys ..... ii. 318
——— rhodochrous ..... ii. 318
——— rhodopeplus ..... ii. 318
——— rubicilla ..... ii. 317
——— sipahi ..... ii. 317
——— thura ..... ii. 320
Carpophaga ænea ..... ii. 503
——— bicolor ..... ii. 505
——— griseicapilla ..... ii. 504
——— insignis ..... ii. 504
——— *insularis* ..... ii. 505
——— *palumboides* ..... ii. 505
——— sylvatica ..... ii 503
CARPOPHAGINÆ ..... ii. 503
caryophyllacea, Anas ..... ii. 685
———, Rhodonessa ..... ii. 685
Casarca leucoptera ..... ii. 681
———rutila ..... ii. 680
———scutulata ..... ii. 681
———Tadorna ..... ii. 680
cashmiriensis, Chelidon ..... ii. 254
———, Cinclus ..... ii. 54
———, Hirundo ..... ii. 254
———, Hydrobata ..... ii. 54
———, Motacilla ..... ii. 275
casiotis, Palumbus ..... ii. 506
caspia, Sterna ..... ii. 721
caspius, Sylochelidon ..... ii. 721
castanea, Merula ..... i. 306
———, Pucrasia ..... ii. 538
castaneicauda, Siva ..... ii. 175
castaneiceps, Minla ..... ii. 158, 159
castaneoceps, Proparus ..... ii. 158
———, Staphidia ..... ii. 164

PAGE

castaneoceps, Cryptolopha ..... i. 220
———— , Reguloides ..... i. 220
castaneocoronata, Oligura ..... ii. 156
———— , Sylvia ..... ii. 156
———— , Tesia ..... ii. 156
castaneoventris, Sitta ..... ii. 217
castaneum, Philentoma ..... i. 213
castanicauda, Siva ..... ii. 175
castaniceps, Abrornis ..... i. 220
———, Leiothrix ..... ii. 158
———, Minla ..... ii. 158, 159
———, Staphidia ..... ii. 164
castanoptera, Athene ..... i. 112
castanopterum, Glaucidium ..... i. 111
castanopterus, Oriolus ..... i. 149
cathpharius, Picus ..... ii. 455
caucasica, Coccothraustes ..... ii. 317
———, Pyrrhula ..... ii. 317
caudata, Argya ..... ii. 93
———, Chatorhæa ..... ii. 93
———, Pnoepyga ..... ii. 53
caudacuta, Hirundinapus ..... ii. 393
caudatus, Cossyphus ..... ii. 93
———, Crateropus ..... ii. 93
Caulodroma gracei ..... ii. 153
cavatus, Buceros ..... ii. 489
———, Dichoceros ..... ii. 489
Ceblypyris *isabellina* ..... i. 166
Cecropis arctivitta ..... ii. 265
celebensis, Anthreptes ..... ii. 240
Celeopicus porphyromelas ..... ii. 442
———— pyrrhotis ..... ii. 442
Centrococcyx bengalensis ..... ii. 424
———— eurycercus ..... ii. 423
———— intermedius ..... ii. 423
———— maximus ..... ii. 422
———— rufipennis ..... ii. 423
cenchris, Erythropus ..... i. 79
———, *Falco* ..... i. 78
———, *Tinnunculus* ..... i. 78
CENTROPODINÆ ..... ii. 422
Centropus bengalensis ..... ii. 424
———— cuculoides ..... ii. 425
———— eurycercus ..... ii. 423
———— intermedius ..... ii. 423
———— rufipennis ..... ii. 423
Cephalopyrus flammiceps ..... ii. 196

PAGE

Cerchneis amurensis ..... i. 79
———— naumanni ..... i. 78
———— pekinensis ..... i. 79
———— tinnunculus ..... i 77
Cercotrichas albiventris ..... ii. 69
———— macrurus ..... ii. 68
Ceriornis Blythi ..... ii. 536
———— melanocephalus ..... ii. 535
———— satyra ..... ii. 534
Certhia brasiliana ..... ii 232
———— cantillans ..... ii. 245
———— cruentata ..... ii. 244
———— discolor ..... ii. 212
———— erythrorhynchus ..... ii. 249
———— goalpariensis ..... ii. 222
———— himalayana ..... ii. 212
———— *mandelli* ..... ii. 212
———— muraria ..... ii. 213
———— nipalensis ..... ii. 212
———— spilonota ..... ii. 213
———— Stolickzæ ..... ii. 212
———— trigonostigma ..... ii. 245
———— Zeylonica ..... ii. 232
CERTHIIDÆ ..... ii. 211
CERTHIINÆ ..... ii. 211
CERTHIOMORPHÆ ..... ii. 211
certhiola, Locustella ..... i. 259
———, Motacilla ..... i. 259
Certhilauda desertorum ..... ii. 361
———— doriæ ..... ii. 361
Certhiparus ignitincta ..... ii. 158
cervina, Motacilla ..... ii. 292
cerviniceps, Lyncornis ..... ii. 404
cerviniventris, Anthipes ..... i. 232
———, Digenea ..... i. 232
cervinus, Anthus ..... ii. 292, 293
Ceryle guttata ..... ii. 481
———— rudis ..... ii. 481
Cettia brunneifrons ..... i. 269
———— cetti ..... i. 266
———— *cettioides* ..... i. 266
———— flavolivacea ..... i. 268
———— fortipes ..... i. 267
———— major ..... i. 269
———— *orientalis* ..... i. 266
———— pallidipes ..... i. 268
———— *stolickzæ* ..... i. 266

PAGE

ceylonensis, Baza ..... i. 65
———, Culicicapa ..... i. 214
———, Ketupa ..... i. 83
———, Oriolus ..... i. 149
———, Upupa ..... ii. 469
ceylonica, Porzana ..... ii. 639
———, *Rallina* ..... ii. 639
Ceyx tridactyla ..... ii. 486
Chæmarrornis leucocephalus ..... ii. 68
Chætornis locustelloides ..... i. 274
——— striata ..... i. 274
Chætura coracina ..... ii. 392
——— gigantea ..... ii. 391
——— leuconotus ..... ii. 393
——— nudipes ..... ii. 393
CHÆTURINÆ ..... ii. 391
Chaitaris grandis ..... i. 233
Chalcococcyx xanthorhynchus ... ii. 416
Chalcoparia phœnicotis ..... ii. 239
——— singalensis ..... ii. 239
Chalcophaps indica ..... ii. 517
Chalcophasis sclateri ..... ii. 534
Chalcostetha insignis ..... ii. 220
——— *insperata* ..... ii. 220
——— *pectoralis* ..... ii. 220
chalybæa, Calornis ..... ii. 371
chalybeus, Turdus ..... ii. 371
Chaptia ænea ..... i. 153
——— malayana ..... i. 154
——— malayensis ..... i. 154
CHARADRINÆ ..... ii. 583
Charadrius *bilobus* ..... ii. 594
——— *cantianus* ..... ii. 597
——— *curonicus* ..... ii. 588
——— *dubius* ..... ii. 588
——— *fluviatilis* ..... ii. 588
——— fulvus ..... ii. 584
——— *Geoffroyi* ..... ii. 585
——— *himantopus* ..... ii. 632
——— *longipes* ..... ii. 584
——— *malabaricus* ..... ii. 593
——— *mongolicus* ..... ii. 586
——— *mongolus* ..... ii. 586
——— *œdicnemus* ..... ii. 596
——— *phillippinus* ..... ii. 588
——— pluvialis ..... ii. 584
——— *pyrrhothorax* ..... ii. 586
Charadrius *scolopax* ..... ii. 596
——— *virginicus* ..... ii. 585
chatorrhæa, Timalia ..... ii. 93
Chatorrhæa caudata ..... ii. 93
——— Earlii ..... ii. 92
——— eclipes ..... ii. 94
——— gularis ..... ii. 94
Chaulelasmus angustirostris ..... ii. 687
——— streperus ..... ii. 686
cheela, Circætus ..... i. 44
———, Spilornis ..... i. 44
Chelidon cashmiriensis ..... ii. 254
——— lagopus ..... ii. 254
——— nipalensis ..... ii. 255
——— urbica ..... ii. 254
Chelidorynx hypoxantha ..... i. 206
Chettusia cinerea ..... ii. 591
——— flavipes ..... ii. 591
——— gregaria ..... ii. 590
——— inornata ..... ii. 591
——— leucura ..... ii. 590
——— Villotæi ..... ii. 591
Chibia hottentotus ..... i. 152
Chimarrhornis leucocephalus ..... ii. 63
chinensis, Cissa ..... i. 139
———, Coturnix ..... ii. 567
———, Dryonastes ..... ii. 115
———, Eudynamis ..... ii. 418
———, Excalfactoriâ ..... ii. 567
———, Francolinus ..... ii. 552
———, Garrulax ..... ii. 115
———, Hirundo ..... ii. 256
———, Lanius ..... ii. 115
———, Tetrao ..... ii. 552, 567
chinquis, Polyplectron ..... ii. 531
chiquera, Falco ..... i. 74
———, Hypotriorchis ..... i. 74
———, Lithofalco ..... i. 74
Chiquera typus ..... i. 74
chirurgus, Hydrophasianus ..... ii. 634
———, *Tringa* ..... ii. 634
Chleuasicus *atrosuperciliaris* ..... ii. 127
——— fulvifrons ..... ii. 127
——— ruficeps ..... ii. 127
chlorigaster, Chrysophlegma ..... ii. 446
———, Crocopus ..... ii. 498

PAGE

chloris, Halcyon .....ii. 484
———, Sauropatis .....ii. 484
chlorocephala, Chloropsis.....ii. 16
chlorocephalus, Phyllornis .....ii. 16
chlorolophus, Chloropicus .....ii. 445
———, Chrysophlegma.....ii. 445
———, Picus .....ii. 445
chloronopus, Abrornis ..... i. 250
chloronotus, *Abrornis* ..... i. 250
———, Reguloides ..... i. 250
chlorophæa, Rhinortha .....ii. 419
———, Rhynortha .....ii. 419
chlorophanes, Chrysophlegma.....ii. 446
——— , Picus .....ii. 446
chlorophæus, Cuculus .....ii. 419
Chloropicoides rafflesii .....ii. 436
Chloropicus chlorolophus.....ii. 445
——— dimidiatus.....ii. 448
——— flavinucha.....ii. 444
——— mentalis .....ii. 443
——— miniatus .....ii. 444
——— occipitalis.....ii. 147
——— puniceus .....ii. 444
——— striolatus .....ii. 447
Chloropsis aurifrons .....ii. 18
——— auriventris .....ii. 12
——— chlorocephala .....ii. 16
——— cyanopogon .....ii. 17
——— Hardwickii .....ii. 12
——— jerdoni .....ii. 15
——— malabarica .....ii. 14
——— zosterops .....ii. 15
chloroptera, Osmotreron .....ii. 502
chloropus, Arboricola .....ii. 557
——— Arboriphila .....ii. 557
——— Gallinula .....ii. 645
——— Peloperdix .....ii. 557
——— Tropicoperdix .....ii. 557
chlororhynchus, Puffinus .....ii. 711
chocolatina, Pnoepyga .....ii. 49
Chotorhea caudata.....ii. 93
Chotorea mystacophanus.....ii. 427
chrysæa, Alcippe .....ii. 170
———, Stachyridopsis .....ii. 155
———, Stachyris .....ii. 155
chrysæus, Proparus .....ii. 170
———, Siva .....ii. 170

PAGE

chrysæus, Tarsiger..... i. 201
chrysea, *Abrornis* ..... i. 216
——— , Alcippe .....ii. 170
——— , Ploceela .....ii. 340
——— , Stachyridopsis.....ii. 155
Chrysococcyx Hodgsoni .....ii. 415
——— Limborgi .....ii. 416
——— maculatus .....ii. 415
——— malayanus .....ii. 416
——— Schomburgki .....ii. 415
——— smaragdinus .....ii. 415
——— xanthorhynchus ...ii. 415
Chrysocolaptes delesserti .....ii. 451
——— festivus .....ii. 452
——— goensis.....ii. 452
——— gutticristatus .....ii. 451
——— melanotus .....ii. 452
——— strictus .....ii. 451
——— sultaneus.....ii. 451
chrysogenys, Arachnothera.....ii. 237
Chrysomitris spinoides.....ii. 301
——— thibetana.....ii. 301
Chrysomma altirostris .....ii. 131
——— sinensis .....ii. 130
Chrysonotus, Biddulphi .....ii. 438
——— , brachypternus .....ii. 440
——— , intermedius .....ii. 438
——— , rubropygialis.....ii. 438
——— , shorei .....ii. 438
Chrysophlegma chlorigaster .....ii. 446
——— chlorolophus .....ii. 445
——— chlorophanes .....ii. 446
——— flavinucha .....ii. 444
——— malaccensis.....ii. 443
——— mentalis .....ii. 443
——— puniceus .....ii. 444
chrysopterum, Garrulax .....ii. 78
———, Trochalopteron ...ii. 78
———, Trochalopterum ...ii. 78
chrysopterus, Crateropus .....ii. 78
——— , Ianthocincla .....ii. 78
chrysopygia, Saxicola .....ii. 5
chrysorrhæum, Dicæum .....ii. 247
chrysorrhoides, Hæmatornis .....ii. 36
———, Molpastes .....ii. 36
chukor, Caccabis.....ii. 553
cia, Emberiza .....ii. 333
CICHLOMORPHÆ.....ii. 1

PAGE
Cichlops monticolus .....ii. 289
——— thermophilus .....ii. 290
——— ubiquitarius .....ii. 291
Cichloramphus sylvanus .....ii. 295
Ciconia alba .....ii. 649
——— javanica.....ii. 648
——— leucocephala .....ii. 649
Cimbyrhinchus cucullatus .....ii. 385
cinclorhynchus, Monticola ..... i. 312
———, Orocetes ..... i. 313
———, Petrophila ..... i. 313
Cinclosoma albigula .....ii. 109
——— asiaticus.....ii. 54
——— cærulatum .....ii. 117
——— capistrata .....ii. 96
——— cashmeriensis .....ii. 54
——— lineatum.....ii. 86
——— moniliger .....ii. 111
——— nipalensis .....ii. 120
——— rufimenta .....ii. 80
Cinclus aquaticus .....ii. 54
——— interpres .....ii. 597
cinclus, Tringa .....ii. 615
cineracea, Buchanga..... i. 156
cinerea, Ardea .....ii. 652
——, Chettusia.....ii. 591
——, Curruca ..... i. 235
——, *Fulica* .....ii. 646
——, Grus .....ii. 601
——, Leiothrix .....ii. 160
——, Minla .....ii. 160
——, Muscitrea ..... i. 164
——, Sylvia ..... i. 235
——, Terekia .....ii. 623
cinerascens, Eurycercus ..... i. 271
———, Laticilla ..... i. 271
cineraceum, Trochalopterum .....ii. 81
cineraceus, Circus ..... i. 13
cinereiventris, Brachypodius .....ii. 27
———, Micropus .....ii. 27
cinereicapilla, Cisticola..... i. 291
———, Cryptolopha ..... i. 215
———, Culicicapa..... i. 215
———, Myiolestes..... i. 215
———, *Prinia* ..... i. 291

PAGE
cinereus, Anser .....ii. 673
———, Gallicrex.....ii. 646
———, Parus, ...ii. 188
———, Pericrocotus ..... i. 176
———, *Pluvianus* ... .ii. 591
cingalensis, Chalcoparia .....ii. 239
cinnamomea, Agrodroma.....ii. 286
———, *Ardea* .....ii. 661
———, *Ardeiralla* .....ii. 661
———, Ardetta .....ii. 661
———, Currucaria .....ii. 228
———, Passer .....ii. 311
cinnamomeiventris, Sitta.....ii. 217
cinnamomeus, Anthus .....ii. 291
———, Passer .....ii. 311
CINNYRIMORPHÆ .....ii. 219
Cinnyris *andamanicus* .....ii. 233
——— asiatica.....ii. 228
——— braziliana .....ii. 232
——— brevirostris .....ii. 228
——— *chrysogenys* .....ii. 237
——— *epimacurus* .....ii. 224
——— flammaxillaris.....ii. 233
——— *Gouldi* .....ii. 226
——— hasselti.....ii. 232
——— *ignicaudus* .....ii. 224
——— *longirostra* .....ii. 237
——— lotenia .....ii. 229
——— Macklotii.....ii. 220
——— minima.....ii. 230
——— *nipalensis* .....ii. 225
——— *orientalis*.....ii. 228
——— *phœnicotis* .....ii. 239
——— *politus* .....ii. 229
——— ruber.....ii. 232
——— *rubricauda* .....ii. 224
——— zeylonica .....ii. 230
Circaetus cheela ..... i. 44
——— gallicus ..... i. 43
circia, Anas .....ii. 693
——, Querquedula.....ii. 693
Circus æruginosus ..... i. 16
——— cinerasceus ..... i. 13
——— cyaneus ..... i. 10
——— macrurus ..... i. 14

PAGE

Circus pygargus ..... i. 13
—— *Swainsonii* ..... i. 14
cirrhatus, Spizaetus ..... i. 40
Cirripidesmus Geoffroyi .....ii. 585
———— mongolicus .....ii. 586
Cissa chinensis ..... i. 139
—— cucullata ..... i. 134
—— sinensis ..... i. 139
—— speciosa ..... i. 139
Cisticola Beavani ..... i. 290
——— Buchanani ..... i. 289
——— cinereicapilla ..... i. 291
——— cisticola ..... i. 292
——— *cursitans* ..... i. 292
——— *delicatula* ..... i. 293
——— *erythrocephala* ..... i. 293
——— exilis..... i. 293
——— gracilis ..... i. 290
——— *homalura*..... i. 292
——— *isura* ..... i. 293
——— melanocephala ..... i. 293
——— *munipurensis* ..... i. 292
——— *schœnicola* ..... i. 292
——— Sylvia ..... i. 292
——— *Tytleri* ..... i. 293
——— *poliocephala* ..... i. 292
CISTICOLÆ ..... i. 274
citreola, Budytes .....ii. 279
——, Motacilla .....ii. 279
citreoloides, Budytes.....ii. 280
————, Motacilla .....ii. 280
citrina, Geocichla ..... i. 298
Citrinella fucata .....ii. 328
——— rutila .....ii. 331
——— Stewarti.....ii. 334
citrinus, Turdus ..... i. 293
Cittocincla albiventris .....ii. 69
———— macrura .....ii. 68
———— tricolor.....ii. 68
clanga, Aquila..... i. 35
Clangula glaucion .....ii. 702
Clorhynchus strophiatus .....ii. 631
clypeata, Spatula .....ii. 682
coccinæum, Dicæum .....ii. 244
coccinea, Eucichla .....ii. 380
——— Pitta.....ii. 380
Coccothraustes caucasica .....ii. 317

PAGE

Coccothraustes humii .....ii. 296
———— icteroides .....ii. 297
———— melanoxanthus ...ii. 297
———— sinensis .....ii. 342
———— speculigerus.....ii. 298
———— vulgaris.....ii. 296
COCCOTHRAUSTINÆ .....ii. 296
COCCYGES ANISODACTYLÆ .....ii. 469
Coccystes coromandus .....ii. 417
——— jacobinus .....ii. 417
——— melanoleucus .....ii. 417
Coccyzura tusalia .....ii. 511
cochinchinensis, Oriolus ..... i. 147
Cochoa purpurea..... i. 168
——— viridis ..... i. 167
cœlestis, Gallinago .....ii. 606
———, Scolopax .....ii. 607
COLIOMORPHÆ ..... i. 125
collaris, Alcedo .....ii. 484
———, Alcippe .....ii. 160
———, Todiramphus .....ii. 484
Collocalia concolor.....ii. 393
——— francica .....ii. 395
——— fuciphaga .....ii. 395
——— inexpectata .....ii. 394
——— innominata .....ii. 394
——— Linchi.....ii. 395
——— maxima .....ii. 394
——— nidifica .....ii. 393
——— spodiopygia .....ii. 394
——— unicolor.....ii. 393
collurioceps, Dasyornis..... i. 275
Collurio erythronotus .....ii. 205
——— nigriceps .....ii. 206
——— tephronotus .....ii. 204
collyrioides, Lanius .....ii. 210
Colœus monedula ..... i. 129
Columba ænea.....ii. 503
——— bicolor .....ii. 505
——— cristata.....ii. 461
——— fulvicollis .....ii. 501
——— *hodgsoni* .....ii. 510
——— intermedia .....ii. 507
——— leptogrammica .....ii. 511
——— leuconota.....ii. 509
——— livia.....ii. 508, 509
——— meena .....ii. 573

PAGE

Columba nicobarica .....ii. 518
——— risoria .....ii. 515
——— rupestris .....ii. 509
——— striata .....ii. 518
——— tigrina .....ii. 515
——— vernans .....ii. 500
——— viridis .....ii. 500
COLUMBIDÆ .....ii. 505
columboides, Palæornis .....ii. 465
comatus, Anorrhinus.....ii. 495
———, Berenicornis .....ii. 495
———, Buceros .....ii. 495
———, Cypselus .....ii. 397
———, Dendrochelidon.....ii. 397
———, Macropteryx .....ii. 397
commixtus, Parus .....ii. 182
communis, Coturnix .....ii. 565
———, Falco..... i. 68
———, *Otus* ..... i. 114
concolor, Cotile .....ii. 259
———, Cotyle .....ii. 257
———, Dicæum .....ii. 247
———, Herodias.....ii. 657
———, Hirundo .....ii. 257
———, Hypsipetes .....ii. 19
———, Ptyonoprogne .....ii. 257
concreta, Dacelo.....ii. 486
———, Halcyon .....ii. 486
concretus, Caridagrus .....ii. 486
Conostoma æmodium .....ii. 123
contra, Sturnopastor .....ii. 364
Copsychus *andamanensis* .....ii. 65
——— ceylonensis .....ii. 65
——— *macrurus*.....ii. 68
——— *mindanensis* .....ii. 65
——— *musicus* .....ii. 65
——— saularis.....ii. 65
Coracias affinis .....ii. 476
——— coracina .....ii. 392
——— garrula.....ii. 475
——— indicus.....ii. 475
——— orientalis.....ii. 477
——— sumatranus.....ii. 386.
coracina, Chætura .....ii. 392
corallina, Dendrophila .....ii. 218
corax, Corvus ..... i. 127, 128
cordatus, Hemicercus .....ii. 453

PAGE

cornix, Corone..... i. 129
cornuta, Tadorna .....ii. 681
coromanda, Alcedo.....ii. 482
———, Ardea .....ii. 657
———, Ascalaphia.....ii. 185
———, *Buphus* .....ii. 657
———, Callialcyon.....ii. 482
———, *Cancroma* .....ii. 657
———, Halcyon .....ii. 482
———, Urrua ..... i. 85
coromandeliana, *Anser*.....ii. 677
coromandelianus, Halcyon .....ii. 482
——— , Nettapus .....ii. 677
coromandelica, Coturnix .....ii. 566
———, Cursorius.....ii. 579
———, *Tetrao* .....ii. 566
coromandelicus, Alcedo.....ii. 482
———, *Nettapus*.....ii. 677
coromandus, Bubulcus .....ii. 657
———, Coccystes.....ii. 417
———, Cuculus .....ii. 417
———, *Nettapus* .....ii. 677
———, Urrua ..... i. 85
coronata, Dendrochelidon .....ii. 395
———, Ficedula .....ii. 244
———, Hirundo .....ii. 395
———, Perdix .....ii. 561
———, Phyllopneuste ..... i. 244
———, Pitta .....ii. 380
———, Reguloides..... i. 244
coronatus, Ampeliceps .....ii. 374
———, Anthracoceros .....ii. 490
———, Buceros .....ii. 490
———, Dendrochelidon.....ii. 395
———, Hydrocissa .....ii. 490
———, Macropteryx .....ii. 397
———, Orthotomus..... i. 287
———, Phyllergates ..... i. 287
———, Phyllobates..... i. 287
———, Phylloscopus ..... i. 244
———, Platylophus ..... i. 167
———, Pterocles .....ii. 520
Corone *capellana* ..... i. 129
——— *cornix* ..... i. 129
——— corone ..... i. 130
——— *impudicus* ..... i. 130
——— insolens ..... i. 130

PAGE

Corone *levaillanti* ..... i. 131
—— macrorhynchus ..... i. 131
—— splendens ..... i. 131
CORVIDÆ ..... i. 125
Corvus brachyurus ..... ii. 380
—— *corax* ..... i. 128
—— *culminatus* ..... i. 131
—— *impudicus* ..... i. 130
—— *infumatus* ..... i. 128
—— *insolens* ..... i. 130
—— Javanensis ..... ii. 373
—— Lawrencei ..... ii. 128
—— leucolophus ..... ii. 107
—— levaillanti ..... i. 131
—— macrorhynchus ..... i. 131
—— speciosus ..... i. 139
—— splendens ..... i. 130
—— umbrinus ..... i. 127
—— vaillantii ..... i. 131
Corydalla griseogularis ..... ii. 288
—— Richardi ..... ii. 289
—— sinensis ..... ii. 289
Corydon sumatranus ..... ii. 386
Coryllis rufulus ..... ii. 291
—— striolata ..... ii. 290
—— vernalis ..... ii. 463
Corythocichla brevicaudata ..... ii. 150
—— striata ..... ii. 151
Cossyphus caudatus ..... ii. 93
Cotile concolor ..... ii. 257
—— obsoleta ..... ii. 258
—— riparia ..... ii. 255
—— rupestris ..... ii. 258
—— sinensis ..... ii. 256
—— subsoccata ..... ii. 256
COTURNICINÆ ..... ii. 565
Coturnix chinensis ..... ii. 567
—— communis ..... ii. 565
—— coromandelica ..... ii. 566
—— erythrorhyncha ..... ii. 564
—— pentah ..... ii. 562
Cotyle *concolor* ..... ii. 257
—— *riparia* ..... ii. 255
—— *rupestris* ..... ii. 258
—— *sinensis* ..... ii. 256
crassirostris, Carpodacus ..... ii. 307
——, Tringa ..... ii. 615

PAGE

CRATEROPODES ..... ii. 75
Crateropus canorus ..... ii. 122
—— caudatus ..... ii. 93
—— chrysopterus ..... ii. 78
—— delesserti ..... ii. 112
—— Earlii ..... ii. 93
—— erythrocephalus ..... ii. 77
—— griseus ..... ii. 122
—— *gularis* ..... ii. 94
—— leucolophus ..... ii. 107
—— Somervillei ..... ii. 123
Crawfurdi, Euplocamus ..... ii. 544
——, Thriponax ..... ii. 450
crecca, Anas ..... ii. 692
——, Querquedula ..... ii. 692
crepitans, Œdicnemus ..... ii. 526
Crex pygmæa ..... ii. 641
Criniger brachypodius ..... ii. 31
—— flaveolus ..... ii. 29
—— griseiceps ..... ii. 30
—— gutturalis ..... ii. 30
—— ictericus ..... ii. 33
—— ochraceus ..... ii. 30
—— phæocephalus ..... ii. 29
—— *Susannii* ..... ii. 25
—— tristis ..... ii. 25
crinigera, Suya ..... i. 275
——, Tricholestes ..... ii. 31
crispifrons, Gypsophila ..... ii. 146
——, Turdinus ..... ii. 146
crispus, Pelecanus ..... ii. 736
cristata, Fuligula ..... ii. 698
—— Galerida ..... ii. 360
—— *Sterna* ..... ii. 721
cristatellus, Limnaetus ..... i. 40
cristatus, Columba ..... ii. 561
——, *Gallicrex* ..... ii 646
——, Lanius ..... ii. 207
——, Pavo ..... ii. 529
——, Pernis ..... i. 61
——, Podiceps ..... ii. 707
——, Regulus ..... ii. 197
——, Rollulus ..... ii. 561
——, *Thalasseus* ..... ii. 722
——, Vanellus ..... ii. 589
croceoventre, Dicæum ..... ii. 245
Crocopus chlorigaster ..... ii. 498

PAGE

Crocopus Hardwickii.....ii. 498
——— Jerdoni .....ii. 498
——— phœnicopterus .....ii. 498
——— viridifrons .....ii. 499
Crossoptilon drouyni.....ii. 533
——— thibetanum .....ii. 533
crucigera, Pyrrhulauda.....ii. 352
cruentata, Certhia .....ii. 244
cruentatum, Dicæum.....ii. 244
cruentus, Ithaginis.....ii. 536
——— *Phasianus* .....ii. 536
cruralis, Brachypteryx .....ii. 60
Crypsirrhina altirostris..... i. 136
——— cucullata ..... i. 139
——— frontalis ..... i. 136
——— pallida ..... i. 135
——— varians ..... i. 138
Cryptolopha affinis..... i. 216
——— albigularis ..... i. 221
——— burkii ..... i. 215
——— *cantator* ..... i. 216
——— cantatrix ..... i. 216
——— castaneoceps ..... i. 226
——— cinereocapilla ..... i 215
——— flavigularis .... i. 222
——— Hodgsoni ..... i. 221
——— poliogenys ..... i. 220
——— schisticeps ..... i. 218
——— superciliaris ..... i. 219
——— xanthoschista ..... i. 217
cucullata, Cissa ..... i. 134
———, Crypsirrhina..... i. 139
———, Pitta .....ii. 381
cucullatus, Brachyurus.....ii. 381
——— , Cimbirhynchus .....ii. 386
——— , Eurylæmus .....ii. 385
Cuculidæ .....ii. 408
Cuculinæ .....ii. 408
cuculoides, Athene..... i. 113
———, Centropus .....ii. 425
———, Glaucidium ..... i. 113
———, Noctua ..... i. 113
cuculopsis, Heterophasia .....ii. 95
Cuculus affinis.....ii. 410
———bengalensis .....ii. 424
———canorus.....ii. 408
———chlorophæus .....ii. 419

PAGE

Cuculus coromandus.....ii. 417
———himalayanus .....ii. 408
———lugubris .....ii. 414
———malayanus .....ii. 416
———micropterus .....ii. 410
———poliocephalus .....ii. 409
———Sonnerati .....ii. 410
———sparverioides .....ii. 411
———strenuus .....ii. 411
———striatus .....ii. 408, 410
———sumatranus..... .....ii. 419
———xanthorhynchus .....ii. 416
Culicicapa ceylonensis ..... i. 214
——— *cinereocapilla* ..... i. 215
Culicipeta Burkii ..... i. 215
——— cantator..... i. 216
——— castaneoceps..... i. 220
——— tephrocephalus..... i. 217
culminatus, Corvus ..... i. 131
Cuncuma leucogaster ..... i. 53
——— macei ..... i. 54
curonica, Ægialitis .....ii. 588
curonicus, Charadrius .....ii. 588
Curruca cinerea ..... i. 235
——— famula ..... i. 284
curruca, Sylvia ..... i. 236
cursitans, Cisticola ..... i. 292
——— Prinia..... i. 292
Cursoridæ.....ii. 578
Cursorius coromandelicus .....ii. 579
——— gallicus .....ii. 579
curvirostra, Loxia .....ii. 323
Cutia nipalensis .....ii. 180
cuvieri, Euplocamus .....ii. 543
———, Lophophorus.....ii. 543
———, Nycthemerus.....ii. 543
cyana, Larvivora..... i. 314
———, Monticola..... i. 312
cyane, Larvivora..... i. 315
———, Motacilla ..... i. 315
cyanea, Brachyurus .....ii. 378
———, Eucichla.....ii. 378
———, Muscitrea ..... i. 233
———, Pitta .....ii 378
Cyanecula cærulecula ..... i. 317
——— suecica..... i. 317
cyaneus, Circus ..... i. 10

PAGE

cyaneus, Erithacus ..... i. 315
———, Petrocossyphus ..... i. 312
cyaniventris, Oligura ..... ii. 157
———— , Pycnonotus ..... ii. 47
———— , Rubigula ..... ii. 47
cyaniventer, Tesia ..... ii. 157
cyanocephalus, Palæornis ..... ii. 467
———— , Psittacus ..... ii. 468
Cyanocincla cyanus ..... i. 312
Cyanoderma erythropterum ..... ii. 149
cyanonotus, Geocichla ..... i. 297
———, Turdus ..... i. 297
cyanopogon, Chloropsis ..... ii. 17
———— , Phyllornis ..... ii. 17
Cyanops asiatica ..... ii. 429
——— Davisoni ..... ii. 430
——— Franklinii ..... ii. 430
——— Hodgsoni ..... ii. 427
——— incognita ..... ii. 430
——— Ramsayi ..... ii. 430
cyanops, *Dysporus* ..... ii. 734
———, Sula ..... ii. 734
Cyanoptera erythroptera ..... ii. 149
cyanoptera, Pitta ..... ii. 379
cyanopterus, Brachyurus ..... ii. 379
cyanotis, Bucco ..... ii. 432
———, Megalæma ..... ii. 432
———, Xantholæma ..... ii. 432
cyanotus, Turdus ..... i. 297
cyanuroptera, Leiothrix ..... ii. 176
———, Siva ..... ii. 176
cyanus, Monticolus ..... i. 312
———, Cyanocinclus ..... i. 312
Cygnus Bewicki ..... ii. 671
——— musicus ..... ii. 672
——— olor ..... ii. 671
Cymbirhynchus cucullatus ..... ii. 385
——— malaccensis ..... ii. 387
Cymborhynchus affinis ..... ii. 387
——— macrorhynchus ..... ii. 386
——— malaccensis ..... ii. 387
Cyornis banyumas ..... i. 225
——— magnirostris ..... i. 226
——— olivacea ..... i. 229
——— pallipes ..... i. 223
——— rubeculoides ..... i. 225

PAGE

Cyornis Tickelliæ ..... i. 225
——— Tickellii ..... i. 225
———unicolor ..... i. 224
——— vivida ..... i. 232
Cypselidæ ..... ii. 387
Cypselinæ ..... ii. 387
Cypselus acuticaudus ..... ii. 388
——— affinis ..... ii. 388
——— apus ..... ii. 388
——— batassiensis ..... ii. 390
——— comatus ..... ii. 397
——— coracinus ..... ii. 392
——— giganteus ..... ii. 391
——— infumatus ..... ii. 390
——— leuconyx ..... ii. 390
——— leucopygialis ..... ii. 389
——— longipennis ..... ii. 396
——— melba ..... ii. 388
——— pacificus ..... ii. 388
——— palmarum ..... ii. 390
——— subfurcatus ..... ii. 389
——— tectorum ..... ii. 391
——— tinus ..... ii. 390

dabryi, Æthopyga ..... ii. 227
———, Nectarinia ..... ii. 227
Dacelo concreta ..... ii. 485
——— pulchella ..... ii. 486
Dafila acuta ..... ii. 689
Daflaensis, Actinodura ..... ii. 120
———, Suthora ..... ii. 125
dalhousiæ, Parisomus ..... ii. 383
damascensis, Tringa ..... ii. 612
Daption capensis ..... ii. 710
Darwini, Turdinus ..... ii. 146
Dasyornis collurioceps ..... i. 274
daudini, Merops ..... ii. 472
daulias, Turdus ..... i. 310
dauma, Geocichla ..... i. 294
———, Oreocincla ..... i. 294
———, Turdus ..... i. 294
daurica, Hirundo ..... ii. 265
———, Lillia ..... ii. 265
dauricus, Temenuchus ..... ii 368

PAGE

davisoni, Brachyurus ..... ii. 377
———, Cyanops ..... ii. 430
———, Gerônticus ..... ii. 667
———, Graptocephalus ..... ii. 667
———, Hemixus ..... ii. 22
———, Ixus ..... ii. 40
———, Leioptila ..... ii. 67
———, Pycnonotus ..... ii. 40
———, Spilornis ..... i. 46
———, Turdulus ..... i. 300
debrii, Æthopyga ..... ii. 227
delesserti, Chrysocolaptes ..... ii. 451
———, Crateropus ..... ii. 112
———, Garrulax ..... ii. 112
———, Indopicus ..... ii. 451
delicatula, Sylvia ..... i. 237
deliciosa, Otis ..... ii. 577
Demiegretta *asha* ..... ii. 656
——— concolor ..... ii. 657
——— gularis ..... ii. 656
——— sacra ..... ii. 657
——— schistacèa ..... ii. 656
Dendrochelidon comatus ..... ii. 397
——— coronatus ..... ii. 395
——— Klecho ..... ii. 396
——— longipennis ..... ii. 396
Dendrocitta assimilis ..... i. 137
——— Bayleyi ..... i. 137
——— frontalis ..... i. 136
——— himalayensis ..... i. 136
——— leucogastra ..... i. 136
——— pallida ..... i. 135
——— rufa ..... i. 135
——— sinensis ..... i. 137
Dendrocopus Darjeelingensis ..... ii. 458
——— sordidus ..... ii. 453
Dendrocygna *arcuata* ..... ii. 678
——— *aswuree* ..... ii. 678
——— fulva ..... ii. 679
——— *javanica* ..... ii. 678
——— major ..... ii. 679
Dendrophila corallina ..... ii. 218
——— frontalis ..... ii. 218
Dendrotypes analis ..... ii. 461
——— atratus ..... ii. 457
——— macii ..... ii. 456
Dendrotreron Hodgsoni ..... ii. 510

PAGE

deserti, Ammomanes ..... ii. 350
———, Saxicola ..... ii. 5
desertorum, Buteo ..... i. 25
———, Gerthilauda ..... ii. 361
deva, Spizalauda ..... ii. 359
diardi, Garrulax ..... ii. 109
———, Melias ..... ii. 420
———, Rhopodytes ..... ii. 420
———, Turdus ..... ii. 109
———, Zanclostomus ..... ii. 420
Dicæidæ ..... ii. 244
Dicæum chrysorrhæum ..... ii. 247
——— coccinæum ..... ii. 244
——— concolor ..... ii. 247
——— *croceoventre* ..... ii. 245
——— cruentatum ..... ii. 244
——— erythrorhynchum ..... ii. 249
——— ignipectus ..... ii. 246
——— inornatum ..... ii. 248
——— *minima* ..... ii. 249
——— *olivaceum* ..... ii. 248
——— trigonostigma ..... ii. 245
Dichoceros bicornis ..... ii. 489
——— cavatus ..... ii. 489
——— homrai ..... ii. 489
dichrous, Lophophanes ..... ii. 188
———, Parus ..... ii. 188
dicruriformis, Dissemuroides ..... i. 158
dicruroides, Pseudornis ..... ii. 414
———, Surniculus ..... ii. 414
Dicrurus andamanensis ..... i. 158
——— annectens ..... i. 151
——— balicassius ..... i. 154
——— cærulescens ..... i. 157
——— himalayanus ..... i. 155
——— intermedius ..... i. 156
——— leucophæus ..... i. 156
——— longicaudatus ..... i. 155
——— macrocercus ..... i. 154
——— platurus ..... i. 160
——— retifer ..... i. 160
diffusus, Oriolus ..... i. 147
Digenea cerviniventris ..... i. 230
——— chloropicus ..... ii. 448
——— dimidiatus ..... ii. 446
——— leucomelanura ..... i. 229
——— moniliger ..... i. 230

PAGE

Digenea submoniliger ..... i. 231
dilutus, Brachypternus ..... ii. 439
Dimorpha moniliger ..... i. 230
discolor, Certhia ..... ii. 212
Dissemuroides andamanensis ..... i. 158
——— dicruriformis ..... i. 158
Dissemurus grandis ..... i. 160
——— *malabaroides* ..... i. 160
——— paradiseus ..... i. 159
dissimilis, Geocichla ..... i. 307
———, Turdus ..... i. 307
Dissura episcopus ..... ii. 649
dixoni, Geocichla ..... i. 296
Dobsoni, Artamides ..... i. 169
Dædalion soloensis ..... i. 20
domestica, Fringilla ..... ii. 310
———, Pyrgita ..... ii. 310
domesticus, Passer ..... ii. 310
domicola, Hirundo ..... ii. 263
——— Hypurolepis ..... ii. 263
doriæ, Calamodyta ..... i. 259
——, Certhilauda ..... ii. 361
dougalli, Sterna ..... ii. 725
Dromas ardeola ..... ii. 598
Drymocataphus Assamensis ..... ii. 144
——— fulvus ..... ii. 144
——— ignotus ..... ii. 143
——— nigricapitatus ..... ii. 143
——— rubiginosus ..... ii. 145
——— Tickelli ..... ii. 144
Drymœca gracilis ..... i. 283
——— inornata ..... i. 279
——— insularis ..... i. 279
——— longicaudata ..... i. 279
——— neglecta ..... i. 281
——— rufescens ..... i. 281
——— valida ..... i. 281
Drymoica blanfordi ..... i. 279
——— brevicauda ..... i. 267
——— fusca ..... i. 279
——— Jerdoni ..... i. 280
——— neglecta ..... i. 281
——— sylvatica ..... i. 280
Drymoipus extensicauda ..... i. 279
——— fuscus ..... i. 279
——— inornatus ..... i. 279

PAGE

Drymoipus Jerdoni ..... i. 281
——— longicaudatus ..... i. 249
——— longicaudus ..... i. 279
——— rufescens ..... i. 281
——— sylvaticus ..... i. 281
——— terricolor ..... i. 279
——— validus ..... i. 281
Dryopicus cærulatus ..... ii. 750
Dryonastes chinensis ..... ii. 115
——— ruficollis ..... ii. 114
——— sannio ..... ii. 117
——— strepitans ..... ii. 116
——— subcærulatus ..... ii. 118
Dryopicus gutturalis ..... ii. 450
dubia, Ægialitis ..... ii. 588
——, *Ardea* ..... ii. 654
——, Minla ..... ii. 161
dubius, Carpodacus ..... ii. 320
——, Charadrius ..... ii. 588
——, *Leptoptilus* ..... ii. 649
——, Minla ..... ii. 161
——, Proparus ..... ii. 161
——, Schœniparus ..... ii. 161
——, Totanus ..... ii. 622
——, Turdus ..... ii. 307
Ducula griseicapilla ..... ii. 504
dukkhunensis, Motacilla ..... ii. 269
Dumetia albigularis ..... ii. 132
——— hyperythra ..... ii. 133
Dumeticola affinis ..... i. 261
——— luteoventris ..... i. 262
——— Mandelli ..... i. 262
——— thoracica ..... i. 261
dumetorum, Acrocephalus ..... i. 258
———, Calamodyta ..... i. 258
dussumieri, Hemipodius ..... ii. 570
———, Turnix ..... ii. 570
duvaucelli, Harpactes ..... ii. 407
———, Pyrotrogon ..... ii. 407
———, Trogon ..... ii. 407
Dysporus cyanops ..... ii. 734
——— piscator ..... ii. 735
——— sula ..... ii. 735

Earlii, Argya ..... ii. 92

PAGE

Earlii, Crateropus .....ii. 93
——, Malacocercus .....ii. 92
eclipes, Argya .....ii. 94
——, Chatarrhœa .....ii. 94
Edela ruficeps ..... i. 287
edele, Orthotomus ..... i. 285
——, Sutoria ..... i. 285
Edolius brachyphorus ..... i. 160
—— cristatellus ..... i. 160
—— grandis ..... i. 160
—— malabaricus ..... i. 160
—— paradiseus..... i. 160
—— picinus ..... i. 153
—— Rangoonensis ..... i. 160
—— remifer ..... i. 159
edwardsi, Carpodacus .....ii. 319
——, Eupodotis .....ii. 574
——, *Porphyrio* .....ii. 634
——, Propasser .....ii. 319
egertoni, Actinodura .....ii. 118
egretta, Ardea .....ii. 655
egrettoides, Herodias .....ii. 655
Elanus cæruleus..... i. 59
—— *melanopterus* ..... i. 59
elæica, Hypolais..... i. 253
elegans, Pastor .....ii. 368
——, Pericrocotus ..... i. 174
Elphinstonei, Palumbus .....ii. 507
Emberiza albida.....ii. 335
—— aureola.....ii. 330
—— Buchanani .....ii. 333
—— *cia*.....ii. 333
—— flavogularis.....ii. 330
—— *flavogularis*.....ii. 331
—— fucata .....ii. 328
—— *huttoni*.....ii. 333
—— leucocephala .....ii. 334
—— luteola .....ii. 329
—— melanocephala .....ii. 329
—— *melanops*.....ii. 332
—— *pithyornis* .....ii. 335
—— pusilla .....ii. 327
—— rutila .....ii. 331
—— schœnicola .....ii. 326
—— schœniclus .....ii. 326
—— spodocephala .....ii. 332
—— Stewarti .....ii. 334

PAGE

Emberiza Stracheyi .....ii. 333
—— striolata .....ii. 335
emeria, Otocompsa.....ii. 44
Enicurus frontalis .....ii. 74
—— fuliginosus .....ii. 73
—— maculatus .....ii. 72
—— nigrifrons .....ii. 74
—— ruficapillus.....ii. 73
—— scouleri .....ii. 74
—— sinensis .....ii. 70
Entomobia pileata .....ii. 484
epauletta, Pyrrhoplectes .....ii. 315
Ephialtes Bakkamæna ..... i. 93
—— griseus ..... i. 98
—— gymnopodus .....ii. 92
—— lempiji ..... i. 96
—— lettia ..... i. 95
—— malabaricus ..... i. 98
—— pennatus..... i. 88
—— sagitatus ..... i. 100
—— spilocephalus..... i. 100
—— sunia ..... i. 93
epimacurus, Cinnyris .....ii. 224
episcopa, Dissura .....ii. 649
episcopus, Ciconia.....ii. 649
——, Dissura .....ii. 649
——, Melanopelargus.....ii. 649
epops, Upupa .....ii. 469
eremita, Graculus ..... i. 144
Erismatura leucocephala .....ii. 703
Erithacus brunneus ..... i. 314
—— cæruleculus ..... i. 317
—— calliope ..... i. 315
—— *cyane*..... i. 315
—— cyaneus ..... i. 315
—— pectoralis ..... i. 316
—— pyrrhula .....ii. 325
—— tschebaieiwi ..... i. 317
erochroa, Abrornis ..... i. 251
——, Phylloscopus..... i. 251
——, Reguloides..... i. 251
Erythaca flavolivacea ..... i. 200
erythaca, Siphia..... i. 194
Erythra phœnicura .....ii. 645
erythrinus, Carpodacus.....ii. 316
erythrocephala, Cisticola ..... i. 293
——, Pyrrhula .....ii. 324

PAGE

erythrocephalum, Trochalopterum ii. 77
erythrocephalus, Ægithaliscus ...ii. 194
———————, Cisticola ..... i. 293
———————, Crateropus.....ii. 77
———————, Garrulax .....ii. 77
———————, Harpactes .....ii. 205
———————, Merops .....ii. 472
———————, Orites .....ii. 194
———————, Parus .....ii. 194
———————, Pyrrhula.....ii. 324
———————, Trogon .....ii. 405
Erythrocichla bicolor.....ii. 142
erythrogaster, Monticola ..... i. 313
———————, Orocetes ..... i. 313
———————, Petrophila ..... i. 313
———————, Turdus ..... i. 313
erythrogastra, Hirundo.....ii. 262
———————, Motacilla ..... i. 322
———————, Ruticilla..... i. 321, 322
erythrogenys, Coturnix.....ii. 564
———————, Pomatorhinus .....ii. 105
———————, Perdicula .....ii. 564
erythrognathus, Phœnicophaus ...ii. 421
———————, Rhamphococcyx..ii. 421
erythrolæma, Trochalopteron .....ii. 79
———————, Trochalopterum.....ii. 79
erythrophrys, Fringilla.....ii. 302
erythronota, Ruticilla ..... i. 323
———————, Sylvia ..... i. 323
erythronotum, Dicæum ..... ii. 244
erythronotus, Lanius.....ii. 205
erythroprocta, Ruticilla..... i. 320
erythroptera, Cyanoptera.....ii. 149
———————, Mirafra.....ii. 350
———————, Mixornis .....ii. 149
erythropleura, Cinclosoma .....ii. 77
———————, Suya ..... i. 279
———————, Timalia.....ii. 149
erythropterum, Cyanoderma .....ii. 149
———————, Lanius.....ii. 198
———————, Melophus .....ii. 337
erythropygius, Gecinus..... i. 179
———————, Pericrocotus..... i. 179
Erythropus *amurensis* ..... i. 79
———————— *cenchris* ..... i. 77
———————— *vespertinus*..... i. 79
erythropus, Anser .....ii. 675

PAGE

erythrorhyncha, Microperdix .....ii 564
erythropygia, Cecropis .....ii. 266
———————, Hirundo .....ii. 267
erythrorhynchos, Certhia .....ii. 249
erythrorhynchum, Dicæum .....ii. 249
Erythrospiza githaginea .....ii. 307
———————— mongolica .....ii. 308
———————— phœnicoptera .....ii. 306
———————— sanguinea.....ii. 306
Erythrosterna acornaus ..... i. 195
———————— albicilla ....., i. 188
———————— hyperythra ..... i. 188
———————— leucura ..... i. 188
———————— maculata ..... i. 196
———————— parva ..... i. 187
———————— pusilla ..... i. 196
———————— sordida ..... i. 187
Erythrura prasina .....ii. 346
Esacus magnirostris .....ii. 594
———— recurvirostris .....ii. 594
Estrilda amandava.....ii. 346, 347
———— flavidiventris .....ii. 346
———— formosa.....ii. 348
———— punicea.....ii. 346
Estrildinæ .....ii. 341
Eucichla coccinea .....ii. 380
———— cyanea.....ii. 378
———— Gurneyi .....ii. 381
Eudynamys chinensis .....ii. 418
———————— honorata .....ii. 418
———————— malayana .....ii. 418
———————— orientalis .....ii. 418
Eugenii, Myiophoneus .....ii. 56
Eulabes andamanensis .....ii. 373
———— intermedia .....ii. 373
———— javanensis.....ii. 373
eulophotes, Herodias.....ii. 656
Eumyias melanops ..... i. 222, 223
eunomus, Turdus ..... i. 306
eupatrius, Palæornis .....ii. 466
Euplectus striatus .....ii. 339
Euplocamus albocristatus .....ii. 540
———————— Andersoni .....ii. 544
———————— Crawfurdi .....ii. 544
———————— Cuvieri .....ii. 543
———————— Horsfieldi.....ii. 542
———————— ignitus .....ii. 544

PAGE

Euplocamus leucomelanus .....ii. 541
——— lineatus.....ii. 542
——— melanonotus .....ii. 541
——— Vieilloti .....ii. 544
Eupodotis edwardsi .....ii. 574
euptilosa, Brachypus.....ii. 25
———, Pinarocichla.....ii. 25
eurhyncha, Salicaria..... i. 258
Eurinorhynchus griseus .....ii. 611
——— pygmæus .....ii. 611
europæus, Caprimulgus.....ii. 402
Eurycercus *Burnesi* ..... i. 271
——— cinerascens..... i. 271
eurycercus, Centrococcyx.....ii. 423
———, Centropus .....ii. 423
Eurylæmus cucullatus .....ii. 385
——— Javanicus .....ii. 385
——— ochromelas.....ii. 385
EURYLÆMIDÆ .....ii. 382
Eurylaimus cucullatus .....ii. 385
——— horsfieldii .....ii. 385
——— javanicus .....ii. 385
——— lunatus .....ii. 385
——— ochromelas.....ii. 385
——— rubropygius .....ii. 384
——— sumatranus .....ii. 386
Eurystomus orientalis .....ii. 477
euryzona, Alcedo .....ii. 480
euryzonoides, *Gallinula* .....ii. 639
———, Rallina .....ii. 639
Euspiza aureola .....ii. 330
——— fucata .....ii. 328
——— *lathami* .....ii. 337
——— luteola.....ii. 329
——— melanocephala .....ii. 329
——— rutila .....ii. 331
——— simillima .....ii. 329
Eutolmaetus bonelli ..... i. 36
eutolmus, Hierax ..... i. 65
Eversmanni, Palumbæna .....ii. 507
Excalfactoria chinensis.....ii. 567
exilis, Cisticola ..... i. 293
——, Malurus ..... i. 293
extensicauda, Drymoipus..... i. 279
exustus, Pterocles .....ii. 524

PAGE

Fairbanki, Trochalopteron .....ii. 85
———, Trochalopterum.....ii. 85
falcata, Querquedula.....ii. 695
Falcinellus igneus .....ii. 668
falcinellus, Plegadis .....ii. 669
———, Tantalus .....ii. 668
Falco æsalon... ..... i. 75
——— albicilla ..... i. 51
——— ater..... i. 58
——— atriceps ..... i. 68
——— babylonicus ..... i. 70
——— barbarus ..... i. 70
——— Brooksi..... i. 68
——— cenchris..... i. 78
——— chiquera ..... i. 74
——— communis ..... i. 68
——— Hendersoni ..... i. 76
——— juggur ..... i. 72
——— lanarius ..... i. 76
——— melanopterus ..... i. 59
——— pelegrinoides ..... i. 68
——— peregrinator..... i. 69
——— peregrinus..... i. 68
——— regulus ..... i. 75
——— sacer ..... i. 76
——— severus ..... i. 74
——— Shaheen ..... i. 69
——— subbuteo ..... i. 73
——— tinunculoides ..... i. 78
FALCONES ..... i. 2
FALCONIDÆ..... i. 10
FALCONINÆ..... i. 16
fallax, Lanius .....ii. 202
familiaris, Ædon ..... i. 238
———, Sylvia ..... i. 238
famula, Curruca ..... i. 284
fasciata, Rallina.....ii. 640
fasciatus, Harpactes .....ii. 405
———, Mulleripicus .....ii. 450
———, Nisaetus..... i. 36
———, Palæornis .....ii. 464
———, Psittacus .....ii. 464
———, Pterocles .....ii. 527
———, Rallus .....ii. 640
Feddeni, Thriponax .....ii. 450
Feldeggi, Motacilla .....ii. 282
ferina, Fuligula .....ii. 700

PAGE

ferrea, Oreicola ..... i. 205
——— , Pratincola ..... i. 205
——— , Saxicola ..... i. 205
ferox, Buteo ..... i. 203
ferrugiceps, Merops .....ii. 471
ferrugínea, Alseonax ..... i. 184
——— , Butalis ..... i. 184
——— , Hemichelidon..... i. 184
ferrugineus, Alseonax ..... i. 184
———, Gallus.....ii. 545
ferruginosum, Malacopterum .....ii. 142
———, Trichostoma.....ii. 142
ferruginosus, Pomatorhinus.....ii. 102
festivus, Chrysocolaptes .....ii. 452
Ficedula coronata ..... i. 244
Fieldeni, Lithofalco ..... i. 66
filicauda, Hirundo .....ii. 264
filifera, Hirundo.....ii. 264
—— , Uromitrus.....ii. 264
Finlaysoni, Ixus .....ii. 40
———, Pycnonotus .....ii. 40
Finschi, Palæornis .....ii. 466
flammaxillaris, Arachnechthra ...ii. 233
———— , Cinnyris .....ii. 233
———— , Nectarinia .....ii. 233
flammeus, Ægithalus .....ii. 196
——— , Cephalopyrus .....ii. 196
——— , Pericrocotus ..... i. 174
——— , Strix ..... i. 122
flammifer, Pericrocotus ..... i. 175
flava, Budytes .....ii. 281
flava-melanocephala, Budytes .....ii. 281
flavala, Hemixus.....ii. 20
flaveolus, Criniger .....ii. 29
——— , Passer .....ii. 313
flavescens, Ixus .....ii. 39
——— ,Pycnonotus .....ii. 39
flavicollis, *Ardea*.....ii. 660
——— , *Ardeiralla* .....ii. 660
——— , Ardetta.....ii. 660
——— , Fringilla .....ii. 308
——— , Gymnoris.....ii. 308
——— , Ixulus .....ii. 162
——— , Petronia .....ii. 308
——— , Passer .....ii. 308
flavidiventris, Estrilda .....ii. 346
flavigularis, Cryptolopha ..... i. 222

PAGE

flavinucha, Chloropicus.....ii. 444
——— , Chrysophlegma .....ii. 444
——— , Picus .....ii. 444
flavipes, Chettusia .....ii. 591
flavirictes, Pycnonotus .....ii. 39
flavirostris, Paradoxornis.....ii. 128
——— , Phæton .....ii. 732
——— , Urocissa ..... i. 134
flaviventris, Abrornis ..... i. 219
———, Burnesia ..... i. 282
———, Orthotomus ..... i. 282
———, Otocompsa .....ii. 46
———, Prinia ..... i. 282
———, Rubigula ..... ii. 46
flaviviridis, Orthotomus ..... i. 286
flavocristatus, Parus .....ii. 182
———— , Melanochlora .....ii. 182
flavogularis, Emberiza .....ii. 330
——— , Osmotreron .....ii. 500
flavolivacea, Cettia..... i. 268
——— , Erithaca ..... i. 200
——— , Ianthina ..... i. 200
——— , Neornis .....ii. 264
flavolivaceus, Neornis ..... i. 264
——— , Phylloscopus ..... i. 245
fluviatilis, Ægialitis .....ii. 588
——— , Charadrius .....ii. 588
——— , *Sterna* .....ii. 726
fluvicola, Petrochelidon .....ii. 268
formosa, Anorthura .....ii. 50
——— , Callisitta .....ii. 218
——— , Estrilda .....ii. 348
——— , Querquedula .....ii. 694
——— , Sitta.....ii. 218
fortipes, Cettia ..... i. 267
——— , Horeites ..... i. 267
——— , Horornis ..... i. 267
——— . Schœnicola ..... i. 267
francica, Collocalia .....ii. 395
Francolinus chinensis .....ii. 552
——— perlatus .....ii. 552
——— phayrei .....ii. 552
——— pictus .....ii. 551
——— vulgaris.....ii. 550
franklinii, Cyanops.....ii. 430
Fregata aquila.....ii. 734
———*minor* .....ii. 734

PAGE

Fregilus graculus ..... i. 144
——— **himalayanus** ..... i. 144
frenata, Arachnechthra .....ii. 233
Fringilla aurifrons .....ii. 315
——— **burtoni** .....ii. 302
——— **domestica** .....ii. 310
——— **erythrophrys** .....ii. 302
——— **flavicollis** .....ii. 308
——— **githaginea** .....ii. 307
——— **hispaniolensis** .....ii. 311
——— **leuconota** .....ii. 344
——— **melanictera** .....ii. 337
——— **montifringilla** .....ii. 299
——— **phillipinus** .....ii. 337
——— **prasina** .....ii. 346
——— **punicea** .....ii. 346
——— **rhodochrous** .....ii. 318
——— **rhodopeplus** .....ii. 318
——— **sanguinea** .....ii. 306
Fringillaria striolata .....ii. 335
fringillarius, Microhierax ..... i. 66
Fringilauda nemoricola .....ii. 305
FRINGILLIDÆ .....ii. 296
FRINGILLIFORMES .....ii. 244
FRINGILLINÆ .....ii. 298
fringillirostris, Acanthis .....ii. 303
frontalis, Callene .....ii. 58
——— **, Crypsirrhina** ..... i. 136
——— **, Dendrocitta** ..... i. 136
——— **, Dendrophila** .....ii. 218
——— **, Enicurus** .....ii. 74
——— **, Henicurus** .....ii. 74
——— **, Hirundo** .....ii. 263
——— **, Hydrocichla** .....ii. 74
——— **, Nectarinia** .....ii. 239
——— **, Orthorhynchus** .....ii. 218
——— **, Phœnicura** ..... i. 323
——— **, Propasser** .....ii. 320
——— **, Ruticilla** ..... i. 323
——— **, Sitta** .....ii. 218
frugilegus, Trypanocorax ..... i. 126
fucata, Citrinella .....ii. 328
——— **, Emberiza** .....ii. 328
——— **, Euspiza** .....ii. 328
fuciphaga, Collocalia .....ii. 395
——— **, Hirundo** .....ii. 395

PAGE

fulicarius, Phalaropus .....ii. 618
fulicatâ, Thamnobia .....ii. 64
fuliginosa, *Haliplana* .....ii. 729
——— **, Hemichelidon** .....ii. 183
——— **, Nymphæus** ..... i. 204
——— **, Rhyacornis** ..... i. 204
——— **, Ruticilla** ..... i. 204
——— **, Sterna** .....ii. 729
——— **, Suya** ..... i. 275
——— **, Xanthopygia** ..... i. 204
fuliginosus, Onychoprion .....ii. 729
fuliginiventer, Horornis ..... i. 264
——— **, Phylloscopus** ..... i. 264
fuliginiventris, Lusciniola ..... i. 264
Fuligula cristata .....ii. 699
——— **ferina** .....ii. 700
——— **marila** .....ii. 699
——— **nyroca** .....ii. 701
——— **rufina** .....ii. 697
fulva, Dendrocygna .....ii. 679
fulvescens, Gyps ..... i. 4
fulvicollis, Osmotreron .....ii. 501
——— **, Treron** ..... ii. 501
fulvifrons, Chleuasicus .....ii. 127
——— **, Suthora** .....ii. 127
fulviventris, Horornis ..... i. 264
fulvus, Drymocataphus .....ii. 144
fulvus, Charadrius .....ii. 584
fusca, Alcippe .....ii. 168
——, **Cercomela** .....ii. 1
——, **Myrmecocichla** .....ii. 1
——, **Porzana** .....ii. 642
——, **Prinia** ..... i. 279
——, **Rallina** .....ii. 642
——, **Saxicola** .....ii. 1
fuscata, Herbivocula ..... i. 263
——— **, Merula** ..... i. 306
——— **, Phyllopneuste** ..... i. 263
——— **, Phylloscopus** ..... i. 263
fuscatus, Planesticus ..... i. 307
——, **Turdus** ..... i. 306
fuscicollis, *Graculus* .....ii. 740
———, **Phalacrocorax** .....ii. 739
fusciflavescens, Micropus .....ii. 27
fuscoventris, Leucocerca ..... i. 207, 209
fuscus, Acridotheres .....ii. 365

PAGE
fuscus, Artamus ..... ii. 157
——, Drymoipus ..... i. 279
——, Halcyon ..... ii. 483
——, Rallus ..... ii. 642
——, Totanus ..... ii. 622
Fytchi, Bambusicola ..... ii. 560

galbanus, Garrulax ..... ii. 112
galbula, Oriolus ..... i. 145
galeatus, Buceros ..... ii. 491
Galerida cristata ..... ii. 360
galeritus, Anorrhinus ..... ii. 495
Gallicrex cinereus ..... ii. 646
—— *cristatus* ..... ii. 646
gallicus, Circætus ..... i. 43
——, Cursorius ..... ii. 579
Gallinago cœlestis ..... ii. 607
—— gallinaria ..... ii. 607
—— gallinula ..... ii. 608
—— nemoricola ..... ii. 604
—— scolopacinus ..... ii. 606
—— solitaria ..... ii. 606
—— stenura ..... ii. 605
gallinago, Scolopax ..... ii. 608
gallinaria, Gallinago ..... ii. 607
——, Scolopax ..... ii. 607
Gallinula Burnesi ..... ii. 646
—— chloropus ..... ii. 645
—— cristata ..... ii. 646
—— *euryzonoides* ..... ii. 639
—— phœnicura ..... ii. 645
—— *poliocephalus* ..... ii. 635
Gallinulinæ ..... ii. 635
Galloperdix lunulatus ..... ii. 548
—— spadiceus ..... ii. 547
Gallophasis Vieillotti ..... ii. 544
Gallus ferrugineus ..... ii. 545
—— Sonneratti ..... ii. 546
Gampsorhynchus rufulus ..... ii. 91
—— torquatus ..... ii. 91
ganeesa, Hypsipetes ..... ii. 19
gangeticus, Suya ..... i. 281
garoensis, Turdinus ..... ii. 144
garrula, Coracias ..... ii. 475
Garrulax affine ..... ii. 76
—— albigularis ..... ii. 109

PAGE
Garrulax *albosuperciliaris* ..... ii. 117
—— *chinensis* ..... ii. 115
—— chrysopterus ..... ii. 78
—— cœrulatus ..... ii. 117
—— delesserti ..... ii. 112
—— Belangeri ..... ii. 107, 108
—— Diardi ..... ii. 109
—— erythrocephalus ..... ii. 77
—— galbanus ..... ii. 112
—— gularis ..... ii. 112
—— leucogaster ..... ii. 109
—— leucolophus ..... ii. 107
—— *Macclellandi* ..... ii. 111
—— melanotis ..... ii. 110
—— merulinus ..... ii. 113
—— moniliger ..... ii. 111
—— nuchalis ..... ii. 116
—— pectoralis ..... ii. 110
—— *ruficollis* ..... ii. 114
—— sannio ..... ii. 117
—— *strepitans* ..... ii. 116
—— uropygialis ..... ii. 110
Garrulus atrocapillus ..... i. 141
—— bispecularis ..... i. 142
—— lanceolatus ..... i. 143
—— *leucotis* ..... i. 144
—— *melanocephalus* ..... i. 141
—— *ornatus* ..... i. 142
—— striatus ..... ii. 114
—— *vigorsi* ..... i. 143
garzetta, Ardea ..... ii. 655
——, Herodias ..... ii. 655
Gauropicoides Rafflesi ..... ii. 436
Gecininæ ..... ii. 436
Gecinulus Grantia ..... ii. 437
——viridis ..... ii. 437
Gecinus erythropygius ..... ii. 449
—— nigrigenys ..... ii. 449
—— occipitalis ..... ii. 447
—— squamatus ..... ii. 446
—— striolatus ..... ii. 447
—— viridanus ..... ii. 448
—— vittatus ..... ii. 448
Gelochelidon anglica ..... ii. 720
—— *anglicus* ..... ii. 720
Gemitores ..... ii. 497
Gennæus lineatus ..... ii. 542

PAGE
Geocichla albogularis ..... i. 298
——— andamanensis ..... i. 298
——— citrina ..... i. 298
——— cyanonotus ..... i. 297
——— cyanota ..... i. 298
——— dauma ..... i. 294
——— dissimilis ..... i. 307
——— dixoni ..... i. 296
——— inframarginata..... i. 300
——— innotata..... i. 298
——— marginata ..... i. 297
——— mollissima..... i. 295
——— monticola ..... i. 296
——— neilgherriensis ..... i. 295
——— sibirica ..... i. 300
——— unicolor ..... i. 309
——— Wardi ..... i. 300
Geoffroyi, Ægialitis .....ii. 585
———, Cirripidesmus .....ii. 586
Geopelia striata .....ii. 518
Geronticus *Davisoni* .....ii. 667
——— papillosus .....ii. 667
gibberifrons, Querquedula .....ii. 697
gigantea, Acanthylis .....ii. 392
———, Chætura .....ii. 391
giganteus, Argus .....ii. 530
———, Argusa .....ii. 530
———, Argusiana.....ii. 530
———, Cypselus .....ii. 391
———, Hirundinapus .....ii. 391
———, *Leptoptilus* .....ii. 647
Gigantipitta cærulea.....ii. 377
gingalensis, Tockus .....ii. 492
ginginianus, Acridotheres .....ii. 365
———, Buceros.....ii. 492
———, Neophron ..... i. 9
githaginea, Bucanetes .....ii. 307
———, Carpodacus .....ii. 307
———, Erythrospiza.....ii. 307
———, Fringilla.....ii. 307
———, Propasser .....ii. 307
———, Pyrrhula.....ii. 307
glareola, *Actitis* .....ii. 620
———, Rhyacophila .....ii. 620
———, Totanus .....ii. 620
———, *Tringa* .....ii. 620

PAGE
Glareola orientalis .....ii. 581
——— pratincola .....ii. 581
Glaucidium brodiei ..... i. 110
——— *castanopterum* ..... i. 112
——— cuculoides ..... i. 113
——— malabaricum ..... i. 112
——— radiatum ..... i. 111
GLAREOLIDÆ .....ii. 580
glaucion, Clangula.....ii. 702
Glaux candida..... i. 123
glottis, Totanus .....ii. 621
goensis, Chrysocolaptes .....ii. 452
———, Lobivanellus.....ii. 292
———, Picus .....ii. 452
goalpariensis, Nectarinia .....ii. 222
goliath, Ardea.....ii. 651
Gorsakius melanolophus .....ii. 664
Gouldi, Harpactes .....ii. 406
——— *Sterna* .....ii. 728
GOURIDÆ .....ii. 517
gouldiæ, Æthopyga .....ii. 226
———, Cinnyris .....ii. 226
———, Nectarinia .....ii. 226
gourdini, Pycnonotus .....ii. 38
govinda, Milvus..... i. 57
gracei, Caulodroma .....ii. 153
gracilis, Cisticola ..... i. 290
———, Drymœca .....i. 283
———, Hypsipetes .....ii. 97
———, Malacias .....ii. 97
———, Prinia ..... i. 290
———, Saxicola .....ii. 3
———, Sibia .....ii. 97
———, *Sterna* .....ii. 725
Gracula intermedia .....ii. 373
——— Javanensis.....ii. 373
——— nigricollis .....ii. 375
——— religiosa .....ii. 373
——— sturnina .....ii. 368
Graculus *carbo* .....ii. 738
——— eremita.....i. 144
——— *fuscicollis* .....ii. 740
——— graculus ..... i. 144
——— *Javanicus* .....ii. 740
——— *melanognathos* .....ii. 740
——— *pygmæus*.....ii. 740

PAGE

Graculus *sinensis* .....ii. 739
Gracupica nigricollis.....ii. 375
GRALLATORES.....ii. 571
Grammatoptila striata .....ii. 114
Graminicola bengalensis .....i. 288
Grammithorax, Phaiopicus .....ii. 460
———, Meiglyptes.....ii. 460
granatina, Pitta .....ii. 380
granatinus, Brachyurus .....ii. 379
Grandala cœlicolor ..... i. 319
——— schistacea ..... i. 319
grandis, Alcedo .....ii. 479
———, Bucco .....ii. 427
———, Carpodacus .....ii. 318
———, Chaitaris ..... i. 233
———, Dissemmurus ..... i. 160
———, Edolius..... i. 160
———, Megalaima .....ii. 426
———, Niltava ..... i. 233
Grantia, Gecinulus.....ii. 437
Graptocephalus Davisoni.....ii. 667
Graucalus Layardi ..... i. 170
——— Macei..... i. 170
gravivox, Pomatorhinus .....ii. 106
grayi, Ardeola.....ii. 658
gregaria, Chettusia .....ii. 590
grisea, *Ardea* .....ii. 663
———, Pyrrhulauda .....ii. 352
———, Timalea .....ii. 122
griseicapilla, Carpophaga.....ii. 504
——— , Ducula .....ii. 504
griseiceps, Criniger .....ii. 30
griseigularis, Pyctorhis .....ii. 131
griseorufescens, Corydalla .....ii. 288
griseus, Buceros.....ii. 492
———, Crateropus .....ii. 122
———, *Eurynorhynchus*.....ii. 611
———, Malacocercus .....ii. 122
———, Nycticorax .....ii. 663
———, Scops..... i. 98
———, Turdus .....ii. 122
grisola, Butalis .....i. 186
———, Hyloterpe ..... i. 164
———, Muscicapa ..... i. 186
———, Muscitrea ..... i. 164
———, Tephrodornis..... ..... i. 164

PAGE

Grus cinerea .....ii. 601
——— leucogeranus ..... i. 600
gularis, Argya.....ii. 94
———, Chatarrhœa .....ii. 94
———, Crateropus.....ii. 94
———, Demiegretta .....ii. 656
———, Garrulax .....ii. 112
———, Mixornis .....ii. 148
———, Motacilla .....ii. 148
———, Ortygornis.....ii. 554
———, Paradoxornis.....ii. 126
———, Perdix.....ii. 554
———, Picus .....ii. 442
———, Rubigula .....ii. 47
———, Suthora .....ii. 126
———, Yuhina .....ii. 171
gulgula, Alauda.....ii. 359
gurial, Pelargopsis .....ii. 487
gurneyi, Eucichla .....ii. 381
——— , Pitta.....ii. 381
guttacristatus, Chrysocolaptes ...ii. 451
——— , Picus.....ii. 451
guttata, Ceryle ....ii. 481
——— , Stachyris ....ii. 139
guttaticollis, Paradoxornis .....ii. 128
guttatus, Henicurus .....ii. 72
——— , Stachyris .....ii. 138
——— , Turdinus.....ii. 139
gutticristatus, Chrysocolaptes.....ii. 451
gutturalis, Criniger .....ii. 30
——— , Dryopicus.....ii. 450
——— , Hirundo .....ii. 261
——— , Picus .....ii. 450
——— , Trichophorus .....ii. 30
Gygis alba .....ii. 731
GYMNORHINÆ .....ii. 197
Gypætus barbatus ..... i. 28
——— hemalachanus ..... i. 28
——— orientalis..... i. 28
Gyps Bengalensis ..... i. 8
——— fulvescens..... i. 4
——— himalayensis ..... i. 5
——— indicus ..... i. 6, 7
——— pallescens ..... i. 7
——— *tenuirostris* ..... i. 6
Gypsophila crispifrons .....ii. 146

PAGE

hæmacephala, Megalæma ..... ii. 431
————, Xantholæma ..... ii. 431
hæmacephalus, Bucco ..... ii. 431
HÆMATOPODIDÆ ..... ii. 596
Hæmatopus osculans ..... ii. 599
———— ostralegus ..... ii. 599
hæmatopygia, Montifringilla ..... ii. 306
———— , Leucosticte ..... ii. 306
Hæmatornis atricapillus ..... ii. 36
———— chryssorhoides ..... ii. 36
———— luteolus ..... ii. 39
———— spilogaster ..... i. 46
Hæmatospiza boetonensis ..... ii. 317
———— sipahi ..... ii. 317
hæmorrhous, Hæmatornis ..... ii. 34
———— , Molpastes ..... ii. 34
———— , Pycnonotus ..... ii. 34
HALCYONIDÆ ..... ii. 487
Halcyon amauroptera ..... ii. 487
——— atricapillus ..... ii. 484
——— chloris ..... ii. 484
——— concreta ..... ii. 485
——— coromanda ..... ii. 482
——— coromandelianus ..... ii. 482
——— fuscus ..... ii. 483
——— leucocephalus ..... ii. 487
——— pileata ..... ii. 483
——— smyrnensis ..... ii. 483
Haliætus albicillus ..... i. 51
——— *brooksi* ..... i. 51
——— *fulviventer* ..... i. 54
——— humilis ..... i. 82
——— indus ..... i. 56
——— *indus* ..... i. 56
——— leucogaster ..... i. 53
——— leucoryphus ..... i. 54
——— *pelagicus* ..... i. 51
——— plumbeus ..... i. 81
haliætus, Pandion ..... i. 80
Haliastur Indus ..... i. 56
Haliplana anasthæta ..... ii. 728
———— *fuliginosa* ..... ii. 729
Hamiltoni, Phasianus ..... ii. 540
haplonotus, Parus ..... ii. 185
hardwickii, Chloropsis ..... ii. 12
————, Crocopus ..... ii. 498
————, Iyngipicus ..... ii. 460

PAGE

hardwickii, Perdix ..... ii. 548
————, Phyllornis ..... ii. 12
————, Picus ..... ii. 460
harmondi, Ibis ..... ii. 668
Harpactes Duvaucelli ..... ii. 407
——— erythrocephalus ..... ii. 405
——— fasciatus ..... ii. 405
——— Gouldii ..... ii. 406
——— Hodgsoni ..... ii. 405
——— orescius ..... ii. 406
——— oreskios ..... ii. 406
hasseltii, Cinnyris ..... ii. 232
———, Nectarinia ..... ii. 232
———, Nectarophila ..... ii. 232
hasseltii, Leptocoma ..... ii. 232
hastata, Aquila ..... i. 34
Haughtoni, *Pseudototanus* ..... ii. 623
————, Totanus ..... ii. 623
hayi, Bucco ..... ii. 432
——, Caloramphus ..... ii. 432
——, Megalorhynchus ..... ii. 432
Helodromus ochropus ..... ii. 619
helvetica, Squatarola ..... ii. 583
———, Tringa ..... ii. 583
hemalachana, Gypætus ..... i. 28
Hemicercus brookeanus ..... ii. 453
——— canente ..... ii. 453
——— cordatus ..... ii. 453
——— sordidus ..... ii. 453
Hemichelidon ferruginea ..... i. 184
——— fuliginosa ..... i. 183
——— sibirica ..... i. 184
Hemicircus brunneus ..... ii. 461
——— canente ..... ii. 453
——— rubiginosus ..... ii. 442
Hemiparus strigula ..... ii. 175
Hemipodius Dussumieri ..... ii. 570
——— maculosus ..... ii. 570
——— plumbipes ..... ii. 568
——— Sykesi ..... ii. 570
Hemipteron nipalense ..... ii. 134
Hemipus capitalis ..... i. 165
——— obscurus ..... i. 165
——— picatus ..... i. 164
hemispila, Nucifraga ..... i. 132
hemitilopus, Archibuteo ..... i. 26
Hemixus Davisoni ..... ii. 22

PAGE

Hemixus flavala .....ii. 20
——— hildebrandti .....ii. 21
——— malaccensis .....ii. 22
hendersoni, Falco ..... i. 76
———, Lusciniopsis ..... i. 260
———, Locustella ..... i. 260
———, Saxicola.....ii. 4
Henicurus frontalis .....ii. 74
———guttatus .....ii. 72
———immaculatus .....ii. 70
———leschenaulti.....ii. 70
———maculatus .....ii. 73
———ruficapillus .....ii. 73
———schistaceus .....ii. 71
Herbivocula fuscata ..... i. 263
——— Schwarzi .... i. 263
Herodias alba.....ii. 655
——— *egrettoides* .....ii. 655
——— eulophotes.....ii. 656
——— garzetta.....ii. 655
——— intermedia .....ii. 655
——— *plumifera* .....ii. 655
——— torra .....ii. 655
Herpornis xantholeuca.....ii. 174
Hesperiphona affinis .....ii. 298
——— carneipes .....ii. 298
——— icteroides .....ii. 297
——— speculigérus .....ii. 298
Heteroglaux Blewitti..... i. 105
Heteromorpha ruficeps .....ii. 126
——— unicolor.....ii. 126
Heterophasia cuculopsis .....ii. 95
Heterorhynchus humii.....ii. 50
Heterura sylvana .....ii. 295
Hieratus pennatus..... i. 37
Hierax bengalensis ..... i. 66
——— cærulescens ..... i. 66
——— eutolmus..... i. 66
——— malayensis..... i. 166
Hierofalco saker ..... i. 76
Hierococcyx nanus .....ii. 412
——— nisicolor .....ii. 413
——— sparverioides .....ii. 411
——— varius.....ii. 412
hildebrandti, Hemixus .....ii. 21
himalayensis, Accentor .....ii. 193
———, Dendrocitta ..... i. 136

PAGE

himalayensis, Gypa ..... i. 5
———, Regulus.....ii. 197
———, Sitta .....ii. 215
———, Tetraogallus .....ii. 549
himalayana, Certhia .....ii. 212
———, Loxia.....ii. 323
———, Sitta .....ii. 215
himalayanus, Cuculus .....ii. 409
———, Dicrurus ..... i. 155
———, Fregilus ..... i. 144
———, Otis.....ii. 577
———, Oriolus ..... i. 149
———, Picus .....ii. 454
Himantopus candidus .....ii. 632
——— *intermedius* .....ii. 632
himantopus, Charadrius .....ii. 632
hirsutus, Ninox ..... i. 108
Hirundinapus caudacuta .....ii. 393
——— giganteus .....ii. 391
——— indicus .....ii. 392
——— leucopygialis .....ii. 392
——— sylvatica .....ii. 392
HIRUNDINIDÆ .....ii. 253
HIRUNDININÆ .....ii. 253
hirundo, Sterna .....ii. 726
Hirundo andamanénsis.....ii. 261
——— arctivittata.....ii. 265
——— brevirostris.....ii 394
——— cashmiriensis.....ii. 254
——— chinensis.....ii. 256
——— concolor .....ii. 257
——— coronata .....ii. 395
——— daurica .....ii. 265
——— domicola.....ii. 263
——— erythrogastra.....ii. 262
——— erythropygia .....ii. 266
——— filicauda .....ii. 264
——— filifera .....ii. 264
——— fluvicola .....ii. 268
——— fuciphaga .....ii. 395
——— gutturalis .....ii. 261
——— horreorum .....ii. 262
——— japonica .....ii. 265
——— javanica .....ii. 263
——— jewan .....ii. 261
——— klecho .....ii. 396
——— lagopoda.....ii. 254

	PAGE
Hirundo longipennis	ii. 396
——— nipalensis	ii. 265
——— panayana	ii. 261
——— riparia	ii. 255
——— rufa	ii. 262
——— rustica	ii. 259
——— rupestris	ii. 258
——— Smithii	ii. 264
——— striolata	ii. 265
——— Tytleri	ii. 262
——— urbica	ii. 253
hispaniolensis, Passer	ii. 311
hodgei, Thriponax	ii. 449
hodgsoni, Alsocomus	ii. 510
———, Batrachostomus	ii. 398
———, Chrysococcyx	ii. 415
———, Columba	ii. 510
———, Cryptolopha	i. 221
———, Cyanops	ii. 428
———, Harpactes	ii. 405
———, Megalæma	ii. 428
———, Motacilla	ii. 275, 276
———, Otothrix	ii. 398
—— —, Phyllornis	ii. 13
———, Picus	ii. 455
———, Poliomyias	i. 194
———, Prinia	i. 290
———, Ruticilla	i. 321
———, Siphia	i. 194
———, Thriponax	ii. 409
———, Tickellia	i. 221
———, Trogon	ii. 405
———, Turdus	i. 302
Hodgsonius phœnicuroides	ii. 67
homalura, Cisticola	i. 292
homochroa, Saxicola	ii. 5
homrai, Buceros	ii. 489
———, Dichoceros	ii. 486
Homrai bicornis	ii. 489
honorata, Eudynamis	ii. 418
Hoplopterus ventralis	ii. 592
Horeites brunneifrons	i. 268
——— brunnescens	i. 257
——— fortipes	i. 267
——— major	i. 269
——— pallidipes	i. 268
——— pollicarius	i. 269

	PAGE
Horeites sericea	i. 268
Horornis assimilis	i. 267
——— flaviventris	i. 263
——— fuliginiventer	i. 264
——— fortipes	i. 267
——— fulviventris	i. 263
horreorum, Hirundo	ii. 262
horsfieldi, Æthopyga	ii. 225
———, Arrenga	ii. 57
———, Euplocamus	ii. 542
———, Eurylæmus	ii. 385
———, Nectarinia	ii. 225
———, Myiophoneus	ii. 57
———, Pomatorhinus	ii. 100
hottentotus, Chibia	i. 152
Houbara Macqueenii	ii. 575
Huhua nipalensis	i. 86
humii, Coccothraustes	ii. 296
——, Heterorhynchus	ii. 50
——, Phylloscopus	i. 248
——, Pyrrhospiza	ii. 322
——, Sphenocichla	ii. 50
——, Suthora	ii. 124
humilior, Turtur	ii. 516
humilis, Haliætus	i. 82
———, Ixulus	ii. 164
———, Staphidia	ii. 164
———, Turtur	ii. 516
huttoni, Accentor	ii. 190
———, Emberiza	ii. 333
hybrida, Hydrochelidon	ii. 719
Hydrobata asiatica	ii. 54
——— Cashmiriensis	ii. 54
Hydrochelidon hybrida	ii. 719
——— indica	ii. 719
——— leucoptera	ii. 719
——— nigra	ii. 720
Hydrocichla frontalis	ii. 74
——— ruficapilla	ii. 73
Hydrocissa affinis	ii. 490
——— albirostris	ii. 490
——— coronata	ii. 490
Hydrophasianus chirurgus	ii. 634
——— *sinensis*	ii. 634
Hydrornis nipalensis	ii. 376
——— Oatesi	ii. 377
Hypacanthis spinoides	ii. 301

PAGE

hyperboreus, Phalaropus .....ii. 617
Hyloterpe grisola ..... i. 164
——— philomela ..... i. 164
hyperythra, Argya.....ii. 92
———, Brachypteryx .....ii. 61
———, Dumetia .....ii. 133
———, Erythrosterna ..... i. 188
———, Muscicapa..... i. 188
hyperythrum, Pellorneum .....ii. 133
hyperythrus, Hypopicus ..... ii. 459
———, Nemura ..... i. 201
———, Picus..... .....ii. 459
———, Tarsiger ..... i. 201
hypogrammica, Arachnethra .....ii. 238
———, Anthothreptes ...ii. 238
———, Nectarinia .....ii. 238
Hypolais *caligata* ..... i. 255
——— obsoleta ..... i. 255
——— pallida..... i. 253
——— rama ..... i. 254
hypoleucus, Actitis .....ii. 619
———, *Lanius* .....ii. 210
———, *Pomatorhinus* .....ii. 104
———, *Totanus*.....ii. 619
———, *Tringa* .....ii. 619
———, *Tringoides*.....ii. 619
hypoleuca, Timelia.....ii. 131
Hypopicus hyperythrus.....ii. 459
Hypotænidia *obscuriora* .....ii. 638
———striata .....ii. 637
Hypothymis azurea ..... i. 201
——— occipitalis..... i. 202
Hypocolius ampelinus ..... i. 166
Hypotriorchis æsalon ..... i. 75
——— chiquera ..... i. 74
——— severus ..... i. 74
——— subbuteo ..... i. 73
hypoxantha, Chelidorynx..... i. 206
hypoxanthus, Ploceus .....ii. 340
Hypsipetes concolor .....ii. 19
——— ganeesa .....ii. 19
——— macclellandi .....ii. 24
——— malaccensis.....ii. 22
——— nilgherriensis .....ii. 19
——— psaroides.....ii. 18
——— subniger .....ii. 19

PAGE

Hypsipetes Yunnanensis .....ii. 19
Hypurolepis domicola .....ii. 263
——— javanica.....ii. 263

Ianthina cyanura ..... i. 198
——— flavo-olivacea .... i. 200
——— rufilata..... i. 198
——— superciliaris ..... i. 200
Ianthocincla albigularis .....ii. 109
——— chrysoptera .....ii. 78
——— gularis .....ii. 112
——— ocellata.....ii. 90
——— pectoralis.....ii. 110, 111
——— phœnicea .....ii. 83
——— ruficollis .....ii. 114
——— rufogularis .....ii. 80
——— squamata .....ii. 82
Ibidorhynchus Struthersii .....ii. 631
Ibis *harmondi* .....ii. 668
—— melanocephala .....ii. 667
ichthyætus, Kroikocephalus.....ii. 717
———, Larus .....ii. 717
———, Polioaetus..... i. 81
Ichthyætus *leucoryphus* ..... i. 54
——— nanus ..... i. 83
icterioides, Coccothraustes .....ii. 297
——— , Hesperiphona .....ii. 297
——— , Pycnoramphus .....ii. 297
icterica, Xenocichla .....ii. 33
ictericus, Criniger .....ii. 33
ignicapillum, Dicæum .....ii. 249
igneus, Falcinellus.....ii. 668
———, Numenius .....ii. 669
———, Pericrocotus ..... i. 175
ignicapillus, Prionochilus.....ii. 249
ignipectus, Dicæum .....ii. 246
———, Myzanthe.....ii. 246
ignicauda, Æthopyga .....ii. 224
ignicaudus, Cinnyris .....ii. 224
ignitus, Euplocamus .....ii. 544
igneotincta, Minla.....ii. 158
ignitincta, Certhiparus.....ii. 158
ignotinctus, Proparus .....ii. 158
ignotus, Drymocataphus .....ii. 143
ignotum, Pellorneum.....ii. 143

PAGE

imbricatum, Trochalopteron .....ii. 87
———, Trochalopterum .....ii. 87
imbricatus, Garrulax .....ii. 87
immaculatus, Accentor .....ii. 190
———, Brachypodius .....ii. 26
———, Henicurus .....ii. 70
immodestus, Pericrocotus ..... i. 180
impeyanus, Lophophorus .....ii. 539
impudicus, Corvus ..... i. 130
incerta, Psittacula .....ii. 462
incertus, Psittacus .....ii. 462
incognita, Cyanops .....ii. 430
———, Megalæma .....ii. 430
———, Sturnia .....ii. 369
indica, Chætura .....ii. 391
——, Chalcophaps .....ii. 517
——, Coracias .....ii. 476
——, Hydrochelidon .....ii. 719
——, Lusciniola ..... i. 262
——, Motacilla .....ii. 283
——, Mycteria .....ii. 648
——, Nemoricola .....ii. 283
——, Noctua ..... i 104
——, *Parra* .....ii. 633
——, Poliornis ..... i. 50
——, Strix ..... i. 122
——, Tephrodornis ..... i. 162
——, Upupa .....ii. 469
——, Xantholæma .....ii. 431
indicus, Anser .....ii. 675
——, Bucco .....ii. 431
——, Butastur ..... i. 50
——, Caprimulgus .....ii. 402, 403
——, Coracias .....ii. 475
——, Gyps ..... i. 7
——, Hirundinapus .....ii. 392
——, Limonidromus .....ii. 283
——, Lobivanellus .....ii. 292
——, Metopodius .....ii. 633
——, Œdicnemus .....ii. 596
——, Oriolus ..... i. 147
——, Pandion ..... i. 80
——, Passer .....ii. 310
——, Phæton .....ii. 732
——, Phyllopneuste ..... i. 262
——, Rallus .....ii. 638

PAGE

indicus, Sylvia ..... i. 262
——, Vultur ..... i. 200
Indicator xanthonotus .....ii. 434
INDICATORINÆ .....ii. 434
indoburmannicus, Palæornis .....ii. 465
Indopicus delesserti .....ii. 451
——— strictus .....ii. 451
indrance, Syrnium ..... i. 121
indus, Haliætus ..... i. 56
——, Haliastur ..... i. 56
inexpectata, Collocalia ..... ii. 394
inframarginata, Oreocincla ..... i. 300
infumata, Leucocerca ..... i. 280
infumatus, Corvus ..... i. 128
———, Cypselus .....ii. 390
infuscata, Taccocua .....ii. 425
inglisi, Amadina .....ii. 343
——, Munia .....ii. 343
——, Pomatorhinus .....ii. 104
innominata, Campophaga ..... i. 172
———, Collocalia ..... ii. 394
———, Ninox ..... i. 108
———, Vivia .....ii. 435
innotata, Geocichla ..... i. 298
———, Iora .....ii. 11
———, *Sterna* .....ii. 719
Inocotis papillosus .....ii. 667
inornata, Chettusia .....ii. 591
——— Megalæma .....ii 428
——— Myzanthe .....ii. 248
——— Suya ..... i. 279
inornatum, Dicæum .....ii. 248
inornatus, Drymoipus ..... i. 279
———, Lobivanellus .....ii. 591
inquieta, Scotocerca ..... i. 284
inquietus, Malurus ..... i. 284
insignis, Ardea .....ii. 652
——, Carpophaga .....ii. 504
——, Chalcostetha .....ii. 220
——, Nectarinia .....ii. 220
——, Poliohierax ..... i. 66
——, Pratincola ..... i. 191
insolens, Corone ..... i. 130
———, Corvus ..... i. 130
insperata, Chalcostetha .....ii. 220
insularis, *Carpophaga* .....ii. 505

PAGE

intensior, Pericrocotus..... i. 178
intermedia, Arachnechthra .....ii. 228
———, Arboricola.....ii. 558
———, Arborophila .....ii. 558
———, *Ardea*.....ii. 655
———, Buchanga ..... i. 156
———, Campophaga..... i. 171
———, Columba .....ii. 507
———, Eulabes .....ii. 373
———, Gracula .....ii. 373
———, *Herodias* .....ii. 655
———, Tiga .....ii. 438
intermedium, Pellorneum .....ii. 135
intermedius, Allotrius .....ii. 200
———, Centrococyx.....ii. 423
———, Centropus.....ii. 423
———, Chrysonotus.....ii. 438
———, Dicrurus ..... i. 156
———, *Himantopus*.....ii. 632
———, Molpastes .....ii. 35
———, Ptererythrius .....ii. 200
———, Pycnonotus .....ii. 35
———, Tiga .....ii. 438
interpres, Cinclus .....ii. 597
———, Strepsilas .....ii. 597
———, Tringa .....ii. 597
Iole Macclellandi .....ii. 24
—Tickelli.....ii. 25
—viridescens.....ii. 23
—virescens .....ii. 23
Iora innotata .....ii. 11
— tiphia .....ii. 8
— viridissima .....ii. 8
— xantholeuca .....ii. 174
— zeylonica.....ii. 9
iora, Phœnicomanes .....ii. 11
Irena puella..... i. 161
irwini, Calornis .....ii. 371
isabellina, Ammomanes .....ii. 351
———, Ceblypyris .....i. 166
———, Lanius .....ii. 208
———, Saxicola .....ii. 6
ispida, Alcedo.....ii. 479
isabellinus, Lanius.....ii. 208
isura, Cisticola ..... i. 293
Ithaginis cruentus.....ii. 536
Ixos metallicus .....ii. 26

PAGE

Ixulus flavicollis .....ii. 162
——— humilis .....ii. 164
——— occipitalis .....ii. 163
——— striatus .....ii. 165
——— rufigenis .....ii. 165
Ixus annectens .....ii. 40
— blanfordi.....ii. 42
— brunneus .....ii. 43
— davisoni .....ii. 40
— finlaysoni .....ii. 40
— flavescens .....ii. 39
— luteolus .....ii 39
— plumosus .....ii. 42
— pusillus .....ii. 43
— xantholæmus .....ii. 41
Iyngipicus canicapillus.....ii. 458
——— Hardwickii.....ii. 460
——— pumilus .....ii. 458
——— pygmæus.....ii. 460
——— rubricatus .....ii. 459
Iynx torquilla .....ii. 433

jacobinus, Coccystes.....ii. 417
———, Oxylophus .....ii. 417
Jamesoni, Pratincola ..... i. 189
japonica, Hirundo .....ii. 265
japonicus, Buteo ..... i. 25
javanensis, Batrachostomus.....ii. 397
———, Corvus .....ii. 373
———, Eulabes .....ii. 373
———, Gracula .....ii. 373
———, Ketupa..... i. 184
———, Loxia .....ii. 340
———, Picus.....ii. 438
———, Plocéela .....ii. 340
———, Ploceus .....ii. 340
———, Tiga .....ii. 438
javanica, Anas .....ii. 695
———, Ardea.....ii. 659
———, Butorides .....ii. 659
———, Ciconia .....ii. 648
———, Dendrocygna .....ii. 678
———, Hirundo.....ii. 263
———, Hypurolepis .....ii. 263
———, Leucocerca ..... i. 208

PAGE

javanica, Rhipidura ..... i. 208
———, *Sterna*.....ii. 719
———, Strix .... i 122
javanicus, Eurylæmus .....ii. 385
———, Eurylaimus .....ii. 385
———, Leptoptilus .....ii. 648
———, Palæornis.....ii. 464
———, *Pelecanus*.....ii. 738
———, Phœnicophaus.....ii. 422
———, Zanclostomus .....ii. 422
javensis, Phyllornis .....ii. 15
———, Picus .....ii. 450
———, Podargus .....ii. 397
———, Thriponax .....ii. 450
Jerdoni, Accentor .....ii. 129
———, Ægialitis .....ii. 588
———, Agrodroma .....ii. 288
———, Anthus.....ii. 288
———, Chloropsis .....ii. 15
———, Garrulax .....ii. 85
———, Machlolophus .....ii. 185
———, Oreicola, ... i. 205
———, Parus .....ii. 185
———, Phaiopicus .....ii. 442
———, Phœnicophaus .....ii. 421
———, Phyllornis .....ii. 14
———, Sylvia ..... i. 236
———, Thriponax .....ii. 450
———, Timelia.....ii. 129
———, Treron .....ii. 153
———, Trochalopteron .....ii. 85
———, Trochalopterum .....ii. 85
———, Zosterops .....ii. 15
Jerdonia agricolensis..... i. 255
jewan, Hirundo .....ii. 261
jocosa, Otocompsa .....ii. 44
jotaka, Caprimulgus .....ii. 403
joudera, Turnix .....ii. 569
jouschistos, Acredula .....ii. 195
———, Ægithaliscus .....ii. 195
———, Parus .....ii. 195
juggur, Falco ..... i. 72
jugiferus, Passer.....ii. 313
jugularis, Ardea .....ii. 657
———, Meiglyptes .....ii. 461

PAGE

kamschatkensis, Calliope ..... i. 315
———, Turdus ..... i. 315
Kelaarti, Caprimulgus .....ii. 403
Ketupa ceylonensis ..... i. 83
——— javanensis ..... i. 84
khasiana, Suya .... i. 277
kieneri, Limnaetus..... i. 38
———, Lophotriorchis .... i. 38
———, Spizaetus ..... i. 38
Kingi, Saxicola ....ii. 5
Kittacincla macrura .....ii. 68
klecho, Dendrochelidon .....ii. 396
———, Hirundo.....ii. 396
korschun, Milvus ..... i. 58
korustes, Sterna .....ii. 725
Kroicocephalus ichthyætus .....ii. 717
kundoo, Oriolus ..... i. 146

lachrymosa, Picumnoides .....ii. 436
lactea, Glareola .....ii. 582
lafresnayi, Æthorhynchus .....ii. 11
lagopoda, Chelidon .....ii. 254
———, Hirundo.....ii. 254
lagopus, Chelidon .....ii. 254
lahtora, Collyrio.....ii. 204
———, Lanius .....ii. 203
Lalage melanothorax ..... i. 182
——— Sykesi ..... i. 181
——— terat ..... i. 182
Lamprococcyx maculatus .....ii. 415
——— malayanus .....ii. 416
LAMPROTORNINÆ.....ii. 373
lanarius, Falco ..... i. 76
lanceolata, Locustella ..... i. 260
———, Sylvia ..... i. 260
lanceolatus, Garrulus ..... i. 143
LANIIDÆ.....ii. 197
LANIINÆ.....ii. 197, 202
Lanius arenarius.....ii. 208
——— assimilis .....ii. 203
——— aucheri .....ii. 202
——— boulboul ..... i. 304
——— caniceps .....ii. 205
——— chinensis.....ii. 115

PAGE

Lanius erythronotus ..... ii. 205
—— erythropterus ..... ii. 198
—— fallax ..... ii. 202
—— Hardwickii ..... ii. 210
—— hypoleucus ..... ii. 210
—— isabellinus ..... ii. 208
—— lahtora ..... ii. 203
—— luscionensis ..... ii. 207
—— melanocephalus ..... ii. 26
—— minor ..... ii. 203
—— nasutus ..... ii. 206
—— nigriceps ..... ii. 206
—— nipalensis ..... ii. 204
—— pallidirostris ..... ii. 202
—— phœnicuroides ..... ii. 209
—— phœnicurus ..... ii. 207
—— Schwaneri ..... ii. 207
—— *speculigerus* ..... ii. 209
—— tephronotus ..... ii. 204
—— tricolor ..... ii. 206
—— vittatus ..... ii. 210
lapponica, Limosa ..... ii. 627
Larus affinis ..... ii. 715
—— *argentatus* ..... ii. 714
—— brunneicephalus ..... ii. 717
—— cacchinnans ..... ii. 714
—— *fuscus* ..... ii. 715
—— gelastes ..... ii. 715
—— hemprichii ..... ii. 716
—— ichthyætus ..... ii. 717
—— *lambruschini* ..... ii. 716
—— *leucophæus* ..... ii 714
—— *occidentalis* ..... ii. 715
—— ridibundus ..... ii. 718
Larvivora brunnea ..... i. 314
—— cyana ..... i. 314
—— cyane ..... i. 315
—— superciliaris ..... i. 314
lateralis, Zosterops ..... ii. 243
lathami, Æthopyga ..... ii. 222
——, Calorhamphus ..... ii. 432
——, Euspiza ..... ii. 322
——, Palæornis ..... ii. 464
Laticilla Burnesi ..... i. 271
—— cinerascens ..... i. 271

PAGE

lawrencei, Corvus ..... i. 128
layardi, Graucalus ..... i. 170
Layardia subrufa ..... ii. 92
Leioptila Davisoni ..... ii. 67
—— saturata ..... ii. 67
Leiothrix argentauris ..... ii. 178
—— callipyga ..... ii. 179
—— castaniceps ..... ii 158
—— cinerea ..... ii. 160
—— cyanuroptera ..... ii. 176
—— luteus ..... ii. 179
—— strigula ..... ii. 175
lempiji, Ephialtes ..... i. 96
——, Scops ..... i. 96
lepida, Burnesia ..... i. 283
——, Drymoica ..... i. 283
——, Prinia ..... i. 283
lepidus, Drymoipus ..... i. 283
Lepocestes porphyromelas ..... ii. 442
Leptocoma brasiliana ..... ii. 232
—— minima ..... ii. 230
—— zeylonica ..... ii. 230
leptogrammica, Columba ..... ii. 511
——, Macropygia ..... ii. 511
Leptoptilos argala ..... ii. 647
—— dubius ..... ii. 647
—— giganteus ..... ii. 647
—— Javanicus ..... ii. 648
Leptosoma afer ..... ii. 417
Lerwa nivicola ..... ii. 550
—— perdix ..... ii. 550
leschenaulti, Henicurus ..... ii. 70
——, Merops ..... ii. 472
——, Taccocua ..... ii. 425
——, Turdus ..... ii. 70
Lestris pomarinus ..... ii. 713
—— *pomatorrhinus* ..... ii. 712
lettia, Ephialtes ..... i. 95
——, Scops ..... i. 95
lettoides, Scops ..... i. 98
leucocapillus, Anous ..... ii. 730
leucocephala, Ardea ..... ii. 649
——, Ciconia ..... ii. 649
——, Chæmarrornis ..... ii. 63
——, Emberiza ..... ii. 334

PAGE

leucocephala, Sturnia.....ii. 369
leucocephalus, Chæmarrornis .....ii. 68
———— , Chimarrhornis.....ii. 63
———— , Halcyon .....ii. 487
———— , Sturnia .....ii. 368
———— , Tantalus .....ii 665
Leucocerca albicollis ..... i. 207
———— albofrontata ..... i. 210
———— aureola..... i. 210
———— burmannica ..... i. 210
———— fuscoventris ..... i. 207
———— infumata..... i. 208
———— javanica ..... i. 208
———— leucogaster ..... i. 209
———— pectoralis ..... i. 209
leucogaster, Cuncuma ..... i. 53
———— , Garrulax .....ii. 109
———— , Haliætus ..... i. 53
———— , Leucocerca ..... i. 209
———— , Picus .....ii. 450
———— , Pomatorhinus .....ii. 99
leucogastra, Amadina .....ii. 343
———— , Dendrocitta ..... i. 136
———— , Munia.....ii. 343
leucogenys, Buchanga ..... i. 156
———— , Otocompsa .....ii. 45
leucogeranus, Grus.....ii. 600
leucolophus, Corvus .....ii. 107
———— , Crateropus .....ii. 107
———— , Garrulax .....ii. 107
leucomelanura, Digenea ..... i. 229
———— , Siphia ..... i. 229
leucomela, Saxicola .....ii. 3, 4
leucomelanus, Euplocamus .....ii. 541
———— , Phasianus .....ii. 541
leuconota, Columba .....ii. 509
———— , Fringilla .....ii. 344
———— , Munia .....ii. 344
leuconotus, Chætura .....ii. 393
leuconyx, Cypselus.....ii. 390
leucophæa, Buchanga..... i. 156
leucophæus, Dicrurus..... i. 157
leucoprocta, Niltava ..... i. 233
leucoproctum, Trichastoma ..... i. 233
leucopsis, Motacilla .....ii. 275
———— , Sitta .....ii. 217
leucoptera, *Anas* .....ii. 680

PAGE

leucoptera, *Archibuteo* ..... i. 26
———— , Ardeola .....ii. 658
———— , *Casarca* .....ii. 680
———— , Hydrochelidon .....ii. 719
———— , *Sterna* .....ii. 719
leucopterus, Platysmurus..... i. 140
———— , Sarcidiornis .....ii. 680
———— , Temenuchus .....ii. 371
leucopygia, Chætura .....ii. 392
———— , Hirundinapus.....ii. 392
———— , Rhaphidura .....ii. 392
———— , Saxicola .....ii. 4
leucorhynchus, Artamus ..... i. 157
leucorodia, Platalea .....ii. 665
leucoryphus, Haliætus ..... i. 54
———— , Ichthyætus ..... i. 54
Leucosticte hæmatopygia.....ii. 306
leucotis, Garrulus ..... i. 143
———— , Pycnonotus .....ii. 33
leucura, Chettusia.....ii. 591
———— , Erythrosterna..... i. 188
———— , Muscisylvia.....ii. 59
———— , Myiomela.....ii. 59
———— , Niltava..... i. 233
———— , Notodela .....ii. 59
———— , Pratincola ..... i. 192
———— , Saxicola .....ii. 4
———— , Tentheca ..... i. 162
leucoroides, Saxicola.....ii. 4
levaillantii, Corone ..... i. 131
———— , Corvus ..... ii. 131
Lichtensteini, Pterocles .....ii. 526
Lillia arctivitta..... .....ii. 625
Limborgi, Chrysococcyx .....ii. 416
Limicola platyrhyncha.....ii. 610
———— sibirica .....ii. 610
Limnaetus alboniger..... i. 41
———— cristatellus ..... i. 40
———— kieneri ..... i. 38
———— nipalensis ..... i. 139
———— niveus ..... i. 42
———— spizaetus ..... i. 42
limnophilax, Botaurus .....ii. 664
Limonidromas indicus .....ii. 283
Limosa ægocephala .....ii. 626
———— lapponica .....ii. 627

PAGE

Linaria brevirostris .....ii. 302
——— cannabina .....ii. 303
linchi, Collocalia .....ii. 394
lineata, Megalæma.....ii. 427
lineatum, Cinclosoma .....ii. 86
———, Trochalopteron.....ii. 86
———, Trochalopterum .....ii. 86
lineatus, Euplocamus .....ii. 542
——— , Garrulax .....ii. 86
——— , Gennæus .....ii 542
——— , Numenius .....ii 630
——— , Nycthemerus ..... ii. 542
——— , Phasianus .....ii. 542
Lirrota saturata.....ii. 299
Liopipo mahrattensis .....ii. 458
Lioptila annectens.....ii. 67
LIOTRICHES .....ii. 153
Liothrix lutea.....ii. 179
——— luteus .....ii. 179
——— strigula .....ii. 179
Lithofalco æsalon ..... i. 75
——— chiquera ..... i. 74
——— fieldeni ..... i. 66
liventer, Butastur ..... i. 48
——— , Buteo ..... i. 48
——— , Poliornis ..... i. 48
livia, Columba.....ii. 508
Lobipluvia malabarica .....ii. 594
Lobivanellus atrcnuchalis .....ii. 593
——— goensis.....ii. 592
——— indicus .....ii. 592
——— inornatus.....ii. 591
Locustella certhiola ..... i. 259
———Hendersoni..... i. 260
———lanceolata ..... i. 260
———macropus..... i. 260
———minuta..... i. 260
———rubescens..... i. 259
———stramínea ..... i. 260
———subsignata ... . i. 260
———temporalis ..... i. 259
locustelloides, Chætornis..... i. 274
Lonchura punctulata .....ii. 343
longicauda, Motacilla ..... i. 285
———, Orthotomus ..... i. 285
longicaudata, Buchanga ..... i. 155
———, Drymœca ..... i. 279

PAGE

longicaudata, Sylvia ..... i. 279
———, Urocichla ....ii. 49
longicaudatus, Dicrurus ..... i. 155
———, Drymoipus ..... i. 279
longicaudus, Drymoipus, ... i. 299
longipennis, Cypselus .....ii. 396
———, Dendrochelidon .....ii. 396
———, Hirundo .....ii. 396
———, Macropteryx.....ii 396
longipes, Buteo ..... i. 23
——— , Charadrius .....ii. 584
longirostra, Cinnyris .....ii. 237
LONGIROSTRES .....ii. 603
longirostris, Arachnothera .....ii. 234
———, Otocorys .....ii. 358
———, Pyctorhis .....ii. 130
———, Upupa .....ii. 469
Lophophanes Bevani.....ii. 187
——— dichrous .....ii. 188
——— melanolophus.....ii. 186
——— rubidiventris .....ii. 187
——— rufonuchalis ..... ii. 186
Lophophorus Cuvieri.....ii. 543
——— Impeyanus .....ii. 533
——— Sclateri .....ii. 533
Lophospizia trivirgatus ..... i. 17
lophotes, Baza..... i. 62
Lophotriorchis Kieneri..... i. 38
Loriculus indicus ..... ii 463
——— vernalis .....ii. 463
LORIINÆ .....ii. 463
lotenii, Arachnethra .....ii. 229
——— , Cinnyris.....ii. 229
——— , Nectarinia.....ii. 229
Loxia atricapilla.....ii. 342
——— curvirostra .....ii. 323
——— himalayana .....ii. 323
——— malacca .....ii. 341
——— punctulata.....ii. 342
——— rubicilla .....ii. 317
——— undulata .....ii. 342
lucionensis, Lanius .....ii. 207
lugubris, Campophaga ..... i. 171
——— , Cuculus .....ii. 414
——— , Ninox ..... i. 106
——— , Otus... ..... i. 106
——— , Phylloscopus ..... i. 243

PAGE

lugubris, Surniculus .....ii. 414
lunatus, Eurylaimus .....ii. 384
———, Serilophus .....ii. 383
lunulatus, Galloperdix .....ii. 548
Lusciniola ædon..... i. 261
——— fuliginiventris ..... i. 264
——— fuscata..... ..... i. 263
——— indica ..... i. 262
——— luteiventris..... ..... i. 262
——— melanopogon ..... i. 265
——— neglecta ..... i. 264
——— neglectus..... i. 264
——— Schwarzi .... i. 263
——— thoracica ..... i. 261
lusitanica, Ammonanes .....ii. 351
Lusciniopsis hendersoni ..... i. 260
lusitania, Ammomanes..... .....ii. 351
lutea, Liothrix .....ii. 179
——, Sylvia.....ii. 179
luteiventris, Lusciniola ..... i. 262
luteoventris, Dumeticola..... ..... i. 262
———, Tribura ..... i. 262
luteola, Emberiza .....ii. 329
——, Euspiza ..... ii 329
luteolus, Hæmatornis .....ii. 39
——— , Ixus ....ii. 39
——— , Pycnonotus.....ii. 39
luteus, Liothrix .....ii. 179
luzoniensis, Motacilla .....ii. 275
Lyncornis cerviniceps .....ii. 404

Macei, Cuncuma..... i. 54
——, Dendrotypes .....ii. 456
macgrigoriæ, Niltava ..... i. 234
——— , Phœnicura ..... i. 234
Machæramphus alcinus ... . i. 61
Machetes pugnax .....ii. 616
Machlolophus Dendrotypes.....ii. 456
——— Jerdoni .....ii. 456
——— melanolophus .....ii. 186
——— picus .....ii. 456
——— rubidiventris.....ii. 187
——— spilinotus .....ii. 185
——— subviridis .....ii. 185
——— xanthogenys.....ii. 186
Macii, Dendrotypes .....ii. 454

PAGE

Macii, Graucalus ..... i. 170
——, Picus.....ii. 456
Maackii, Salicaria..... i. 256
mackloti, Cinnyris.....ii. 220
Maclellandi, Hypsipetes .....ii. 24
———, Garrulax .....ii. 111
———, Iole ..... ii. 24
———, Pomatorhinus .....ii. 106
macqueeni, Houbara .....ii. 575
macrocercus, Dicrurus ..... i. 154
Macrochires .....ii. 387
Macrones brevicaudata.....ii. 148
macroptera, Brachypteryx .....ii. 146
macrolopha, Pucrasia .....ii. 538
Macropteryx comatus .....ii. 397
———coronatus .....ii. 395
———longipennis .....ii. 396
———spodiopygius .....ii. 394
macropus, Locustella ..... i. 260
Macropygia assimilis.....ii. 511
——— leptogrammica .....ii. 511
——— tussalia .....ii. 511
Macropygiinæ .....ii. 510
Macrorhamphus semipalmatus ...ii. 625
macrorhyncha, Pratincola ..... i. 189
macrorhynchus, Corone..... i. 131
——— Corvus..... i. 131
——— Cymborhynchus ..ii. 386
——— Todus .....ii. 387
macrura, Cittocincla.....ii. 68
macrurus, Caprimulgus .....ii. 400
——— , Cercotrichas .....ii. 68
——— , Circus ..... i. 14
macularia, Arachnecthra .....ii. 238
maculata, Erythrosterna ..... i. 196
———, Muscicapula..... i. 196
———, Ploceus ....ii. 338
maculatus, Anthus.....ii. 285
——— , Chrysococcyx.....ii. 415
——— , Henicurus .....ii. 73
——— , Lamprococcyx .....ii. 415
——— , Pardalotus .....ii. 250
——— , Pipastes .....ii. 285
——— , Prionochilus .....ii. 250
——— , Trogon .....ii. 415
——— , Turnix .....ii. 570
maculipennis, Phylloscopus .....i. 250

PAGE

maculosa, Turnix .....ii. 570
maculosus, Hemipodius .....ii. 570
madraspatana, Motacilla .....ii. 277
madraspatensis, Motacilla .....ii. 277
magna, Arachnothera .....ii. 235
——, Sitta .....ii. 215
magnirostris, Acrocephalus..... i. 251
—— , Alcippe .....ii. 141
—— , Cyornis ..... i. 226
—— , Malacopteron .....ii. 141
—— , Malacopterum .....ii. 141
—— , Palæornis .....ii. 466
—— , Phyllopneuste ..... i. 243
—— , Phylloscopus ..... i. 242
—— , Psilorhinus..... i. 134
—— , Siphia ..... i. 226
—— , Turdinus.....ii. 141
—— , Urocissa ..... i. 133
magnum, Malacopterum .....ii 147
mahrattensis, Caprimulgus.....ii. 399
——, Liopipo .....ii. 458
——, Picus .....ii. 457
major, Dendrocygna.....ii. 679
—— , Horeites ..... i. 269
—— , Milvus..... i. 57
majoroides, Picus .....ii. 455
majus, Malacopteron.....ii. 147
malabarica, Bucco .....ii. 432
——, Chloropsis.....ii. 14
——, Lobipluvia.....ii. 594
——, Osmotreron .....ii. 501
——, Phyllornis.....ii. 14
——, Sturnia .....ii. 370
——, Turdus ....ii. 14
——, Xantholæma .....ii. 432
malabaricus, Amadina .....ii. 345
—— , Anthracoceros .....ii. 490
—— , Charadrius .....ii. 593
—— , Edolius ..... i. 160
—— , Pericrocotus ..... i. 176
—— , Scops..... i. 98
—— , Temenuchus ... .ii. 370
—— , Trogon.....ii. 405
—— , Turdus .....ii. 370
malabaroides, Dissemurus ..... i. 160
malacca, Amadina .....ii. 341

PAGE

malaccensis, Anthothreptes.....ii. 240
——, Callolophus .....ii. 443
——, Chrysophlegma .....ii. 443
——, Cymborhynchus .....ii. 387
——, Hemixus .....ii. 22
——, Hypsipetes .....ii. 22
——, Nyctiornis .....ii. 474
——, Picus.....ii. 443
——, Pitta .....ii. 379
——, Psittacus .....ii. 462
——, Venilia .....ii. 443
Malacias capistrata .....ii. 96
—— gracilis.....ii. 97
—— melanoleuca .....ii. 97
—— pulchella .....ii. 98
Malacocincla Abbotti .....ii. 140
Malacocircus bengalensis.....ii. 122
—— caudatus .....ii. 93
—— Earlei .....ii. 92
—— griseus..... ii. 122
—— Malcolmi.....ii. 95
—— ubigino sus .....ii. 130
—— Somervillei .....ii. 123
—— subrufus.....ii. 92
—— sykesi .....ii. 123
—— terricolor .....ii. 122
MALACONOTINÆ .....ii. 197, 198
Malacopteron ferruginosum.....ii. 142
—— magnirostris .....ii. 141
—— majus .....ii. 147
Malacopterum magnirostris.....ii. 141
—— magnum .....ii. 147
—— majus .....ii. 147
malacoptilus, Rimator .....ii. 153
malayana, Chaptia ..... i. 154
—— , Eudynamis .....ii. 418
malayanus, Chrysococcyx .....ii. 416
—— , Cuculus .....ii. 416
—— , Lamprococcyx .....ii. 416
malayensis, Anthus .....ii. 291
——, Chaptia ..... i. 154
—— , Hierax ..... i. 66
—— , Neopus ..... i. 38
malcolmi, Argya.....ii. 95
——, Timalia .....ii. 95
——, Malacocircus.....ii. 95

PAGE

mandelli, Arboricola ..... ii. 559
———, Certhia ..... ii. 212
———, Minla ..... ii. 161
———, Pellorneum ..... ii. 134
———, Phylloscopus ..... i. 262
———, Proparus ..... ii. 161
———, Siphia ..... i. 228
manillensis, Pelecanus ..... ii. 737
manyar, Ploceus ..... ii. 339
marginata, Geocichla ..... i. 297
——— , Zoothera ..... i. 297
mariæ, Pomatorhinus ..... ii. 103
marilla, Fuligula ..... ii. 699
marshallorum, Megalæma ..... ii. 426
maruetta, *Ortygometra* ..... ii. 642
———, Porzana ..... ii. 642
maura, Pratincola ..... i. 191
maxima, Collocalia ..... ii. 394
maximus, Centrococcyx ..... ii. 423
media, Sterna ..... ii. 723
meena, Columba ..... ii. 513
———, Turtur ..... ii. 513
Megalæma asiatica ..... ii. 429
——— cyanotis ..... ii. 432
——— grandis ..... ii. 426
——— caniceps ..... ii. 428
——— cyanotis ..... ii. 432
——— grandis ..... ii. 426
——— hæmacephala ..... ii. 431
——— hodgsoni ..... ii. 427
——— inornata ..... ii. 428
——— lineata ..... ii. 427
——— marshallorum ..... ii 426
——— mystacophanus ..... ii. 427
——— Ramsayi ..... ii. 430
——— virens ..... ii. 426, 427
——— viridis ..... ii. 429
Megalaima asiatica ..... ii. 429
——— incognita ..... ii. 430
Megalorhynchus Hayi ..... ii. 432
Megalurus palustris ..... i. 272
MEGAPODIDÆ ..... ii. 556
Megapodius nicobariensis ..... ii. 532
megarhyncha, Pitta ..... ii. 379
megarhynchus, Brachyurus ..... ii. 379
———, Ploceus ..... ii. 339
Meiglyptes grammithorax ..... ii. 460

PAGE

Meiglyptes jugularis ..... ii. 461
——— tukki ..... ii. 461
melanauchen, *Onychoprion* ..... ii. 723
———, Pyrrhulauda ..... ii. 353
———, Sterna ..... ii. 723
———, *Sternula* ..... ii. 723
melanictera, Fringilla ..... ii. 337
melanicterus, Melophus ..... ii. 337
melanocephala, Cisticola ..... i. 293
———, Emberiza ..... ii. 329
———, Euspiza ..... ii. 329
———, Motacilla ..... ii. 282
melanocephalus, Brachypodius ..... ii. 27
———, Budytes ..... ii. 282
———, Ceriornis ..... ii. 535
———, Garrulus ..... i. 141
———, Ibis ..... ii. 667
———, Lanius ..... ii. 26
———, Micropus ..... ii. 26
———, Oriolus ..... i. 149
———, Tantalus ..... ii. 667
———, Threskiornis ..... ii. 667
Melanochlora flavocristata ..... ii. 182
——— sultanea ..... ii. 182
Melanocorypha bimaculata ..... ii. 355
——— calandra ..... ii. 355
——— rufescens ..... ii. 355
——— torquata ..... ii. 355
melanogaster, *Anhinga* ..... ii. 741
———, Plotus ..... ii. 741
melanogastra, Sterna ..... ii. 724
melanognathus, Graculus ..... ii. 740
melanoleuca, Malacias ..... ii. 97
——— Rhodophila ..... i. 205
———, Sibia ..... ii. 97
melanoleucus, Circus ..... i. 12
———, Coccystes ..... ii. 417
———, Malacias ..... ii. 97
melanolopha, Ardea ..... ii. 664
melanolophus, Gorsachius ..... ii. 664
——— , Lophophanes ..... ii. 186
——— , Machlolophus ..... ii. 186
——— , Parus ..... ii. 186
melanonota, Sarcidiornis ..... ii. 697
melanonotus, Anser ..... ii. 697
——— , Euplocamus ..... ii. 541
——— , Sarkidiornis ..... ii. 697

PAGE

melanope, Calobates ..... ii. 278
Melanopelargus episcopus ..... ii. 649
melanopogon, Calamodus ..... i. 265
———, Lusciniola ..... i. 265
———, Sylvia ..... i. 265
melanops, *Anous* ..... ii 730
———, Emberiza ..... ii 332
———, Eumyias ..... i. 223
———, Glaucomyias ..... i. 223
———, Stoporala ..... i. 223
melanoptera, Campophaga ..... i. 172
melanopterus, Elanus ..... i. 59
———, Falco ..... i. 59
melanorhynchus, Palæornis ..... ii. 464
melanostigma, Trochalopteron ... ii 80
———, Trochalopterum ... ii. 80
melanothorax, Lalage ..... i. 182
melanotis, Allotrius ..... ii. 200
———, Garrulax ..... ii. 110
———, Pterorythrius ..... ii. 200
melanotus, Abrornis ..... i. 218
———, Chrysocolaptes ..... ii 452
———, Milvus ..... i. 57
———, Motacilla ..... ii. 278
———, Spilornis ..... i. 45
melanoxanthus, Coccothraustes ... ii. 296
———, Micrura ..... ii. 251
———, Mycerobas ..... ii 296
———, Pachyglossa ..... ii. 251
———, Prionochilus ..... ii. 251
melaschistos, Volvocivora ..... i. 171
melba, Cypselus ..... ii. 388
Melias diardi ..... ii. 420
——— tristis ..... ii. 419
Melizophilus striatus ..... i. 284
Melophus erythropterus ..... ii. 337
——— melanicterus ..... ii 337
meningting, Alcedo ..... ii. 480
mentalis, Callolophus ..... ii. 443
———, Chloropicus ..... ii. 443
———, Chrysophlegma ..... ii. 443
———, Picus ..... ii. 443
Mergellus albellus ..... ii. 708
Mergus merganser ..... ii. 705
——— serrator ..... ii 704
meridionale, Trochalopterum ... ii. 86
MERGIDÆ ..... ii 704

PAGE

MEROPIDÆ ..... ii 470
Merops Ægyptius ..... ii. 437
——— amictus ..... ii. 473
——— apiaster ..... ii 473
——— Athertoni ..... ii. 474
——— Daudini ..... ii. 472
——— erythrocephalus ..... ii. 472
——— ferrugiceps ..... ii. 471
——— Leschenaulti ..... ii. 472
——— Persicus ..... ii. 473
——— phillipensis ..... ii. 472
——— phillipinus ..... ii. 471
——— quinticolor ..... ii. 471
——— Swinhoei ..... ii. 472
——— viridis ..... ii. 471
Merula albocincta ..... i. 304
——— atrigularis ..... i. 308
——— boulboul ..... i. 304
——— bourdilloni ..... i. 306
——— castanea ..... i. 306
——— fuscata ..... i. 306
——— kinnisi ..... i. 306
——— nigropileus ..... i. 305
——— obscura ..... i. 309
——— pallida ..... i. 310
——— protonomelæna ..... i. 307
——— ruficollis ..... i. 308
——— simillima ..... i. 305
——— unicolor ..... i. 309
merulina, Stactocichla ..... ii. 113
Merva Jerdoni ..... ii. 153
Mesia argentauris ..... ii 178
mesoleuca, Ruticilla ..... i. 320
———, Sylvia ..... i. 320
metallicus, Ixos ..... ii. 26
Metopodius indicus ..... ii. 633
Metoponia pusilla ..... ii. 315
Microcichla scouleri ..... ii. 74
Microhierax cærulescens ..... i. 65
——— fringillarius ..... i. 66
Micronisus badius ..... i. 18
——— soloensis ..... i. 20
Microperdix Blewitti ..... ii. 565
——— erythorhyncha ..... ii. 564
Micropicus canente ..... ii. 453
microptera, Mirafra ..... ii. 349
Microptemus brachyurus ..... ii. 441

PAGE
Micropternus burmannicus.....ii. 440
——— gularis.....ii. 441
——— phaioceps .....ii. 440
——— phaoceps .....ii. 440
micropterus, Cuculus .....ii. 410
Micropus cinereiventris .....ii. 27
——— fusciflavescens .....ii. 27
——— melanocephalus .....ii. 26
——— phæocephalus .....ii. 28
Microtarsus Blanfordi.....ii. 42
——— olivaceus.....ii. 43
Microura squamata .....ii. 50
Micrura ignipectus .....ii. 246
——— melanoxantha .....ii. 251
miles, Æthopyga .....ii. 222
Milvus affinis ..... i. 58
——— ater ..... i. 58
——— govinda ..... i. 57
——— korschun..... i. 58
——— major ..... i. 57
——— melanotis ..... i. 57
——— niger ..... i. 58
mindanensis, Copsychus ....ii. 65
miniatus, Callolophus .....ii. 443
———, Chloropicus .....ii. 443
———, Picus .....ii. 443
minima, Cynniris..... ii. 230
———, Nectarinia .....ii. 230
minimum, Dicæum .....ii. 249
Minla brunneicauda .....ii. 159
———castaneiceps .....ii. 158, 159
———cinerea .....ii. 160
———dubia .....ii. 161
———dubius .....ii. 161
———igneotincta .....ii. 158
———mandelli .....ii. 161
———rufigularis .....ii. 160
minor, Fregata .....ii. 738
———, Pelecanus .....ii. 738
———, Phœnicopterus .....ii. 670
———, Podiceps.....ii. 709
———, Sturnus .....ii. 363
———, Trichostoma .....ii. 140
minuscula, Sylvia .....i. 237
minuta, Ardetta.....ii. 662
———, Locustella.....i. 260
PAGE
minuta, Porzana .....ii. 643
———, *Sterna* .....ii. 728
———, *Sternula* .....ii. 728
———, Tringa .....ii. 612
minutus, Ægialitis... .....ii. 588
———, Pericrocotus ..... i. 175
———, Tricholestes .....ii. 31
———, Trichophorus.....ii. 31
Mirafra affinis.....ii. 349
——— assamica .....ii. 348
——— cantillans .....ii. 350
——— erythroptera.....ii. 350
——— Hayi .....ii. 350
——— microptera .....ii. 349
——— phœnicura.....ii. 352
mitratus, Pelecanus .....ii. 738
Mixornis erythroptera .....ii. 149
——— gularis.....ii. 148
——— rubricapilla.....ii. 148
——— similis .....ii. 148
——— sumatrana .....ii. 148
modesta, Anthreptes.....ii. 236
——— , Arachnothera .....ii. 236
modestus, Parus .....ii. 188
———, Pericrocotus ..... i. 176
———, Prionochilus .....ii. 252
———, Scops..... i. 162
———, Sylviparus .....ii. 188
———, Turdus .....ii. 309
mogilnik, Aquila ..... i. 30, 32
mollis, Accentor.....ii. 190
mollissima, Geocichla ..... i. 295
——— ———, Oreocichla ..... i. 295
mollisimus, Turdus ..... i. 295
Molpastes atricapillus .....ii. 36
——— chryssorhoides.....ii. 36
——— hæmorrhous.....ii. 34
——— intermedius .....ii. 35
——— nigropileus .....ii. 36
——— pygæus .....ii. 37
moluccensis, Brachyurus .....ii 379
——— , Picus.....ii. 460
——— , Pitta .....ii. 379
——— , Turdus .....ii. 379
monacha, Dromolæa .....ii 3

PAGE

monachus, Vultur ..... i. 3
monedula, Coleus ..... ii. 129
mongolica, Ægialitis ..... ii. 586
mongolicus, Charadrius ..... ii. 586
———, Cirripidesmus ..... ii. 586
mongolus, Ægialitis ..... ii. 586
———, Charadrius ..... ii. 586
moniliger, Anthipes ..... i. 230
———, Batrachostomus ..... ii. 397
———, Digenea ..... i. 230
———, Dimorpha ..... i. 230
———, Garrulax ..... ii. 111
moniligera, Cinclosoma ..... ii. 111
montana, Saxicola ..... ii. 5
montanus, Anthus ..... ii. 286, 294
———, Passer ..... ii. 309
———, Pipastes ..... ii. 286
Monticola cinclorhynchus ..... i. 312
——— cyana ..... i. 312
——— cyanus ..... i. 312
——— erythrogaster ..... i. 313
——— saxatilis ..... i. 311
monticola, Geocichla ..... i. 296
——— Zoothera ..... i. 296
monticolus, Caprimulgus ..... ii. 183, 400
———, Cichlops ..... ii. 289
Montifringilla adamsi ..... ii. 303
——— blanfordi ..... ii. 304
——— brandti ..... ii. 306
——— fringilla ..... ii 299
——— hæmatopygia ..... ii. 306
——— nemoricola ..... ii. 305
——— ruficollis ..... ii. 304
——— sordida ..... ii. 305
moriæ, Saxicola ..... ii. 4
Motacilla affinis ..... ii. 247
——— alba ..... ii. 269
——— *alboides* ..... ii. 275
——— *baicalensis* ..... ii. 272
——— beema ..... ii. 281
——— boarula ..... ii. 278
——— borealis ..... ii. 281
——— cærulecula ..... i. 317
——— cashmeriensis ..... ii. 274
——— cervina ..... ii. 292
——— citreola ..... ii. 279

PAGE

Motacilla calliope ..... i. 315
——— cyane ..... i. 315
——— dukhunensis ..... ii. 269
——— Feldeggi ..... ii. 282
——— gularis ..... ii. 148
——— Hodgsoni ..... ii. 275, 276
——— Indica ..... ii. 283
——— leucopsis ..... ii. 275
——— longicauda ..... i. 285
——— *luzoniensis* ..... ii. 275, 276
——— madraspatensis ..... ii. 277
——— melanocephala ..... ii. 282
——— melanope ..... ii. 278
——— ocularis ..... ii. 272
——— personata ..... ii. 263
——— picata ..... ii. 277
——— proregulus ..... i. 250
——— rubricapilla ..... i. 148
——— sulphurea ..... ii. 278
——— superciliosus ..... i. 249
——— sutoria ..... i. 285
——— viridis ..... ii. 281
MOTACILLIDÆ ..... ii. 268
motacilloides, Pericrocotus ..... i. 176
Mulleripicus Feddeni ..... ii. 450
——— pulverulentus ..... ii. 450
Munia acuticauda ..... ii. 344
——— atricapilla ..... ii. 342
——— Inglisii ..... ii. 343
——— leucogastra ..... ii. 343
——— leuconota ..... ii. 344
——— malabarica ..... ii. 342
——— malacca ..... ii. 341
——— pectoralis ..... ii. 343
——— punctulata ..... ii. 342
——— rubronigra ..... ii. 342
——— sinensis ..... ii. 342
——— striata ..... ii. 344
——— subundulata ..... ii. 342
——— superstriata ..... ii. 342
——— undulata ..... ii. 342
munipurensis, Cisticola ..... i. 292
———, Suthora ..... ii. 125
muraria, Certhia ..... ii. 213
———, Sitta ..... ii. 213
murina, Myiothera ..... ii. 153

PAGE

Murrayi, Carpodacus.....ii. 305
——— , Propasser .....ii. 305
Muscicapa ædon ..... i. 261
——— albicilla..... i. 188
——— atricapillus .....ii. 36
——— cinereo-alba..... i. 185
——— grisola ..... i. 186
——— hyperythra ..... i. 188
——— paradisea..... i. 219
——— parva..... i. 187
——— rufigularis ..... i. 187
——— sordida .....ii. 187
——— superciliaris..... i. 195
MUSCICAPIDÆ ..... i. 183
Muscicapula astigma..... i. 196
——— maculata ..... i. 196
——— sapphira ..... i. 195
——— superciliaris..... i. 195
Muscipeta affinis ..... i. 212
——— paradisi..... i. 210
Muscisylvia leucura .....ii. 59
Muscitrea cinerea ..... i. 164
——— cyanea ..... i. 233
——— grisola ..... i. 164
musicus, Copsychus .....ii. 65
——— , *Cygnus*.....ii. 671
muticus, Pavo.....ii. 529
Mycerobas carneipes .....ii. 998
——— melanoxanthus .....ii. 296
Mycteria *australis*.....ii. 648
——— *indica* .....ii. 648
Myiagra azurea ..... i. 201
——— tytleri ..... i. 202
MYIAGRINÆ ..... i. 200
Myiolestes cinereocapilla ..... i. 215
Myiomela leucura .....ii. 59
Myiophoneus Eugenii .....ii. 56
——— Horsfieldi .....ii. 57
——— Temmincki.....ii. 55
Myiothera murina .....ii. 152
MYIOTHERINÆ .....ii. 150
Myristicivora bicolor .....ii. 505
Myrmecocichla fusca.....ii. 1
mystacinus, Turdus ..... i. 308
mystacophanus, Bucco .....ii. 427
——— , Chotorea.....ii. 427
——— Megalæma ..... ii. 427

PAGE

Myzanthe ignipectus.....ii. 246
——— inornata.....ii. 248
Myzornis pyrrhura .....ii. 173
——— pyrrhurus .....ii. 173

NATATORES .....ii. 669
nævia, Aquila ..... i. 34, 35
nagaensis, Sitta .....ii. 215
nana, Sylvia..... i. 237
nanus, Hieroccocyx .....ii. 412
——— , Ichthyætus..... i. 82
——— , Spizaetus ..... i. 41
——— , Yungipicus.....ii. 460
Napothera rubicauda.....ii. 142
narcondami, Rhytidoceros .....ii. 494
nasutus, Lanius .....ii. 206
naumanni, Turdus ..... i. 306
Nectarinia asiatica 228
——— brevirostris.....ii. 228
——— dabryi .....ii. 227
——— flammaxillaris.....ii. 233
——— frontalis .....ii. 239
——— goalpariensis .....ii. 222
——— Gouldiæ .....ii. 226
——— hasseltii .....ii. 232
——— Horsfieldi .....ii. 225
——— hypogrammica .....ii. 238
——— lotenia .....ii. 229
——— mahrattensis .....ii. 228
——— minima .....ii. 230
——— nipalensis.....ii. 225
——— pectoralis .....ii. 220
——— Phayrei .....ii. 232
——— phœnicotis .....ii. 239
——— phœnicura .....ii 224
——— seheriæ.....ii. 222
——— simplex .....ii. 239
——— vigorsii.....ii. 221
——— zeylonica.....ii. 230
NECTARINIIDÆ .....ii. 219
Nectarophilla brasiliana .....ii. 232
——— hasseltii .....ii. 232
——— malaccensis .....ii. 240
——— zeylonica .....ii. 230
neglectæ, Campophaga ..... i. 172

PAGE

neglecta, Drymoica ..... i. 281
———, Lusciniola ..... i. 264
———, Prinia ..... i. 280
———, Sitta ..... ii. 216
———, Volvocivora ..... i. 172
neglectus, Anthus ..... ii. 294
———, Lusciniola ..... i. 264
———, Pericrocotus ..... i 178
———, Phylloscopus ..... i. 264
———, *Porphyrio* ..... ii. 635
Neilgherriensis, Oreocincla ..... i. 295
———, Turdus ..... i. 295
nemoricola, Fringillauda ..... ii. 305
———, Gallinago ..... ii. 604
———, Montifringilla ..... ii. 305
———, Leucosticte ..... ii. 305
———, Sturnia ..... ii. 371
nemoricolus, Temenuchus ..... ii. 371
Nemura cyanura ..... i. 198
——— flavo-olivacea ..... i. 200
——— hyperythra ..... i. 199
Neophron ginginianus ..... i. 9
NEOPHRONINÆ ..... i. 9
Neopus malayensis ..... i. 38
Neornis assimilis ..... i. 267
——— cacharensis ..... i. 268
Nettapus coromandelianus ..... ii. 677
——— coromandelicus ..... ii. 677
——— coromandus ..... ii. 677
nicobarica, Calœnas ..... ii. 518
———, Columba ..... ii. 518
———, Zosterops ..... ii. 242
nicobariensis, Megapodius ..... ii. 532
———, Zosterops ..... ii. 242
niger, Milvus ..... i. 58
nigra, Cacomantis ..... ii. 414
——, Ciconia ..... ii. 649
——, Hydrochelidon ..... ii. 270
nigricans, Alcedo ..... ii. 479, 480
nigricapitatus, Drymocataphus ... ii. 143
nigriceps, Actinodura ..... ii. 96
———, Collurio ..... ii. 206
———, Collyrio ..... ii. 206
———, Lanius ..... ii. 200
———, Sibia ..... ii. 96
———, Stachyris ..... ii. 138
nigricollis, Gracula ..... ii. 375

PAGE

nigricollis, Gracupica ..... ii. 375
nigrigenis, Gecinus ..... ii. 449
nigrimentum, Yuhina ..... ii. 172
nigripennis, Upupa ..... ii. 470
nigripileus, Molpastes ..... ii. 36
——— Pycnonotus ..... ii. 36
nigrogularis, Ruticilla ..... i. 324
nigrolutea, Ægithina ..... ii. 10
nigropileus, Ixos ..... ii. 36
———, Merula ..... i. 305
———, Ochromela ..... i 227
———, Turdus ..... i. 305
nigrorufa, Saxicola ..... i. 227
———, Siphia ..... i. 227
nilghiriensis, Anthus ..... ii. 286
nilgiriensis, Geocichla ..... i. 295
———, Hypsipetes ..... ii. 19
nilotica, *Gelochelidon* ..... ii. 720
———, Sterna ..... ii. 720
Niltava grandis ..... i. 233
——— Hodgsoni ..... i. 199
——— leucoprocta ..... i. 233
——— leucura ..... ii. 233
——— macgrigoriæ ..... i. 234
——— sundara ..... i. 231
——— vivida ..... i. 232, 234
Ninox affinis ..... i. 107
——— burmannica ..... i. 108
——— hirsutus ..... i. 108
——— innominata ..... i. 106
——— lugubris ..... i. 108
——— nipalensis ..... i. 106
——— obscura ..... ii. 109
——— scutellatus ..... i. 106
——— scutulata ..... i. 108
nipalense, Hemipteron ..... ii. 134
———, Pellorneum ..... ii. 134
nipalensis, Acanthoptila ..... ii. 89
———, Acanthoptilus ..... ii. 89
———, Accentor ..... ii. 193
———, Aceros ..... ii. 494
———, Actinodura ..... ii. 120
———, Æthopyga ..... ii. 225
———, Alcippe ..... ii. 167
———, Anorthura ..... ii. 49
———, Brachypteryx ..... ii. 61
———, Bubo ..... i. 86

PAGE

nipalensis, Buceros .....ii. 494
——— , Cecropis .....ii. 265
——— , Certhia.....ii. 212
——— , Chelidon .....ii. 255
——— , Cinclosoma .....ii. 120
——— , Cinnyris .....ii. 225
——— , Cutia .....ii. 180
——— , Delichon .....ii. 255
——— , Hirundo .....ii. 235
——— , Huhua ..... i. 86
——— , Hydrornis .....ii. 376
——— , Lanius .....ii. 204
——— , Malacocercus .....ii. 89
——— , Nectarinia .....ii. 225
——— , Ninox ..... i. 106
——— , Pitta .....ii. 326
——— , Procarduelis .....ii. 299
——— , Pucrasia .....ii. 538
——— , Pyrrhula .....ii. 324
——— , Sitta .....ii. 218
——— , Siva .....ii. 167
——— , Suthora .....ii. 125
——— , Tichodroma .....ii. 213
——— , Timalia..... .....ii. 89
——— , Treron .....ii. 497
Nisætus bonelli ..... i. 36
——— fasciatus ..... i. 36
——— pennatus .....ii. 37
Nisus soloensis ..... i. 20
nisus, Accipiter ..... i. 21
nisicolor, Hierococcyx .....ii. 413
nitens, Sturnopastor .....ii. 364
Nitidula Hodgsoni..... i. 199
——— *Campbelli* .....i. 199
nitidus, Orthotomus ..... i. 286
——— , Phylloscopus ..... i. 240
niveogularis, Acredula .....ii. 196
——— , Acanthiparus .....ii. 196
——— , Ægithaliscus .....ii. 196
——— , Orites .....ii. 196
nivicola, Lerwa .....ii. 550
nivosus, Francolinus .....ii. 548
Noctua cuculoides ..... i. 113
——— indica ..... i. 104
Notodela leucura .....ii. 59
nuchalis, Anthreptes.....ii. 238
——— , Dryonastes .....ii. 113

PAGE

nuchalis, Garrulax .....ii. 116
——— , Parus .....ii. 188
——— , Pomatorhinus .....ii. 99
Nucifraga nemispila ..... i. 132
nudipes, Chætura .....ii. 393
——— , Hirundinapus.....ii. 393
Numenius arquatus .....ii. 630
——— *igneus* .....ii. 669
——— *lineatus* .....ii. 630
——— phæopus .....ii. 629
Nycthemerus cuvieri.....ii. 543
——— lineatus .....ii. 543
Nyctiardea nycticorax .....ii. 663
Nycticorax griseus .....ii. 663
nycticorax, Nyctiardea .....ii. 663
Nyctiornis amicta .....ii. 474
——— athertoni.....ii. 474
——— malaccensis.. .....ii. 474
Nymphæus fuliginosa ..... i. 204
nyroca, Fuligula..... .....ii. 701

Oatesi, Hydrornis .....ii. 377
———, Pitta .....ii. 377
obscura, Merula ..... i. 309
——— , Ninox ..... i. 106
——— , Suya..... i. 275
——— , Turdus..... i. 309
obscuriora, Hypotænidia .....ii. 638
obscurus, Hemipus..... i. 165
———, Pomatorhinus .....ii. 100
———, Rhyticeros.....ii. 494
———, Rhytidoceros .....ii 494
———, Tephrodornis ..... i. 165
obsoleta, Cotile .....ii. 258
——— , Cotyle.....ii. 258
——— , Hypolais ..... i. 255
——— , Ptyonoprogne.....ii. 258
——— , Salicaria ..... i. 255
occipitalis, Chloropicus .....ii. 447
——— , Gecinus .....ii. 447
——— , Hypothymis ..... i. 20
——— , Ixulus .....ii. 163
——— , Picus .....ii. 447
——— , Phylloscopus ..... i. 244
——— , Phyllopneuste ..... i. 244
——— , Reguloides ..... i. 244

PAGE

occipitalis, Siva .....ii. 163
——— , Urocissa ..... i. 133
——— , Yuhina .....ii. 163, 172
oceanicus, Oceanites .....ii. 709
Oceanites oceanica .....ii. 709
ocellata, Caloperdix .....ii. 560
——— , Ianthocincla .....ii. 90
ocellatum, Cinclosoma .....ii. 90
ocellatus, Crateropus .....ii. 90
———, Garrulax .....ii. 90
———, Tetrao.....ii. 560
———, Turnix .....ii. 568
ochracea, Sasia .....ii. 436
ochfaceiceps, Pomatorhinus .....ii. 101
ochraceus, Criniger .....ii. 30
——— , Picumnoides .....ii. 436
——— , Picumnus.....ii. 436
ochrocephalus, Alcurus.....ii. 33
———— , Trachycomus .....ii. 33
———— , Turdus .....ii. 33
Ochromela nigrorufa ..... i. 227
ochromelas, Eurylæmus .....ii. 385
ochropus, Actitis .....ii. 619
———, *Helodromas* .....ii. 619
———, *Totanus* .....ii. 619
ochrophus, Tringa.....ii. 619
ocularis, Motacilla .....ii. 272
oculea, Caloperdix .....ii. 560
———, Perdix.....ii. 560
Ocyceros birostris .....ii. 492
——— Tickelli .....ii. 496
Ocyris oinops .....ii. 327
Œdicnemus crepitans .....ii. 596
———— indicus .....ii. 596
———— recurvirostris .....ii. 596
———— scolopax .....ii. 596
Œnanthe caprata ..... i. 194
œnanthe, Saxicola .....ii. 6
oglei, Actinodura .....ii. 121
oinops, Ocyris.....ii. 327
Oligura castaneocoronata.....ii. 156
———cyaniventris.....ii. 157
olivacea, Cyornis ..... i. 229
——— , Perdix .....ii. 556
——— , Phragmaticola ..... i. 261
——— , Siphia ..... i. 229

PAGE

olivaceum, Turdinus .....ii. 140
olivaceus, Arundinax..... i. 261
———, microtarsus .....ii. 42
———, Pomatorhinus .....ii. 99
Ololygon tenuirostris .....ii. 413
olor, Cygnus .....ii. 671
onocrotalus, Pelecanus .....ii. 738
Onychoprion anæsthetus ..... ii. 728
———— *fuliginosus* .....ii. 729
———— *melanauchen* .....ii. 723
———— *sumatrana* .....ii. 723
Ophrysia superciliosa .....ii. 563
opistholeuca, Saxicola .....ii. 4
Oreicola ferrea..... i. 205
——— Jerdoni ..... i. 205
Oreocincla dauma ..... i. 294
——— mollissima ..... i. 294
——— neilgherriensis ..... i. 294
Oreocorys sylvanus .....ii. 295
Orescius Gouldii .....ii. 406
orescius, Harpactes .....ii. 406
oreskios, Harpactes .....ii. 406
———, Trogon.....ii. 406
orientalis, Acrocephalus ..... i. 257
———, Bubo ..... i. 86
———, Cettia..... i. 266
———, Coracias .....ii. 476
———, Eudynamis .....ii. 418
———, Eurystomus .....ii. 476
———, Glareola .....ii. 582
———, Gypætus ..... i. 28
Oriolus andamanensis ..... i. 148
——— castanopterus ..... i. 149
——— ceylonensis ..... i. 149
——— cochinchinensis .....ii. 147
——— diffusus ..... i. 147
——— galbula ..... i. 145
——— himalayanus..... i. 149
——— horsfieldi ..... i. 148
——— indicus ..... i. 147
——— kundoo ..... i. 146
——— melanocephalus ..... i. 149
——— sinensis ..... i. 368
——— tenuirostris ..... i. 147
——— Trailii..... i. 150
——— xanthonotus ..... i. 149

	PAGE
Orites niveogularis	ii. 196
Orocetes cinclorhynchus	i. 312
—— erythrogaster	i. 313
Orthorhinus Tickelli	ii. 105
Orthorhynchus frontalis	ii. 218
Orthotomus atrigularis	i. 286
—— coronatus	i. 286
—— edele	i. 285
—— flaviventris	i. 282
—— flaviviridis	i. 286
—— longicauda	i. 285
—— nitidus	i. 286
—— ruficeps	i. 286
—— sericeus	i. 286
—— sutorius	i. 285
Ortygometra maruetta	ii. 642
Ortygornis gularis	ii. 555
—— ponticeriana	ii. 554
oryzivora, Amadina	ii. 345
——, Padda	ii. 345
oscitans, Anastomus	ii. 666
Oscines cultirostres	ii. 362
osculans, Hæmatopus	ii. 599
Osmotreron bicincta	ii. 499
—— *chloroptera*	ii. 502
—— fulvicollis	ii. 501
—— malabarica	ii. 500
—— Phayrei	ii. 501
—— Phayrii	ii. 501
—— pompadoura	ii. 502
—— vernans	ii. 500
—— viridis	ii. 500
ostralegus, Hæmatopus	ii. 599
Otitidæ	ii. 572
Otis deliciosa	ii. 577
—— himalayensis	ii. 577
—— tarda	ii. 572
—— tetrax	ii. 573
Otocompsa analis	ii. 38
—— emeria	ii. 44
—— flaviventris	ii. 46
—— jocosa	ii. 44
—— leucogenys	ii. 45
—— leucotis	ii. 38
—— personata	ii. 38
Otocorys longirostris	ii. 358
Otocorys scriba	ii. 358
Otogyps calvus	i. 9
—— fulvus	i. 5
Otomela phœnicuroides	ii. 209
Otothrix Hodgsoni	ii. 398
Otus brachyotus	i. 115
—— communis	i. 114
—— lugubris	i. 106
—— vulgaris	i. 114
Oxylophus jacobinus	ii. 417
—— serratus	ii. 417
Pachyglossa melanoxantha	ii. 251
pacificus, Cypselus	ii. 389
Padda oryzivora	ii. 345
pagodarum, Sturnia	ii. 367
——, Temenuchus	ii. 367
——, Turdus	ii. 367
Palæornin.æ	ii. 464
Palæornis alexandri	ii. 466
—— bengalensis	ii. 468
—— columboides	ii. 465
—— cyanocephalus	ii. 467
—— eupatrius	ii. 466
—— fasciatus	ii. 464
—— finschi	ii. 466
—— indoburmannicus	ii. 465
—— javanicus	ii. 464
—— lathami	ii. 464
—— magnirostris	ii. 466
—— melanorhynchus	ii. 464
—— purpurea	ii. 468
—— rosa	ii. 468
—— schisticeps	ii. 466
—— sivalensis	ii. 466
—— torquatus	ii. 467
pallens, Turdus	i. 309
pallescens, Gyps	i. 7
pallida, Crypsirrhina	i. 135
——, Dendrocitta	i. 135
——, Hypolais	i. 253
——, Merula	i. 310
——, Saxicola	ii. 3
——, Ptyonoprogne	ii. 258
pallidipes, Cettia	i. 268

PAGE

pallidipes, Horeites ..... i. 268
———, Phylloscopus ..... i. 268
pallidus, Circus ..... i. 14
——— , Merula ..... i. 310
——— , Spilornis ..... i. 46
——— , Turdus ..... i. 310
pallipes, Cyornis ..... i. 223
———, Muscicapa ..... i. 223
palmarum, Cypselus ..... ii. 390
palpebrosa, Zosterops ..... ii. 242
Paludicola nipalensis ..... ii. 376
palumbarius, Astur ..... i. 16
Palumbæna Eversmanni ..... ii. 507
PALUMBINÆ ..... ii. 505
palumboides, Carpophaga ..... ii. 505
Palumbus casiotis ..... ii. 506
——— elphinstonei ..... ii. 507
——— pulchricollis ..... ii. 505
——— *torringtoni* ..... ii. 507
palustre, Pellorneum ..... ii. 138
palustris, Megalurus ..... i. 272
panayana, Hirundo ..... ii. 261
Pandion haliætus ..... i. 80
——— indicus ..... i. 80
PANDIONES ..... i. 80
panayensis, Sterna ..... ii. 728
papillosus, Geronticus ..... ii. 667
——— , Inocotis ..... ii. 668
paradisea, Sterna ..... ii. 725
paradiseus, Dissemurus ..... i. 159
———, Edolius ..... i. 160
paradisi, Muscicapa ..... i. 210
———, Tchitrea ..... i. 210
———, Terpsiphone ..... i. 210
Paradoxornis austeni ..... ii. 128
——— flavirostris ..... ii. 128
——— gularis ..... ii. 126
——— guttaticollis ..... ii. 128
——— ruficeps ..... ii. 125
——— unicolor ..... ii. 126
Pardalotus maculatus ..... ii. 250
PARIDÆ ..... ii. 181
PARINÆ ..... ii. 181
PARRIDÆ ..... ii. 632
PARRINÆ ..... ii. 633
Parra *indica* ..... ii. 633

PAGE

Parus æmodius ..... ii. 189
——— aplonotus ..... ii. 185
——— atkinsoni ..... ii. 187
——— atriceps ..... ii. 182
——— Beavani ..... ii. 187
——— cæsius ..... ii. 182
——— cinereus ..... ii. 182
——— commixtus ..... ii. 182
——— dichrous ..... ii. 188
——— erythrocephalus ..... ii. 194
——— flavocristatus ..... ii. 182
——— haplonotus ..... ii. 185
——— jerdoni ..... ii. 185
——— jouschistos ..... ii. 193
——— melanolophus ..... ii. 186
——— modestus ..... ii. 188
——— monticolus ..... ii. 183
——— nipalensis ..... ii. 182
——— nuchalis ..... ii. 188
——— rubidiventer ..... ii. 187
——— rufonuchalis ..... ii. 186
——— sericophrys ..... ii. 188
——— spilonotus ..... ii. 185
——— subviridis ..... ii. 185
——— sultaneus ..... ii. 182
——— xanthogenys ..... ii. 184, 185
parva, Erythrosterna ..... i. 187
——— , Muscicapa ..... i. 187
——— , Porzana ..... ii. 643
Passer assimilis ..... ii. 312
——— cinnamomeus ..... ii. 311
——— domesticus ..... ii. 310
——— flaveolus ..... ii. 313
——— flavicollis ..... ii. 308
——— hispaniolensis ..... ii. 311
——— indicus ..... ii. 310
——— jugiferus ..... ii. 313
——— montanus ..... ii. 309
——— pusillus ..... ii. 315
——— pyrrhonotus ..... ii. 310
——— salicicolus ..... ii. 311
PASSERES ..... i. 124
PASSERIFORMES ..... ii. 124
passerinus, Caccomantis ..... ii. 413
Pastor elegans ..... ii. 368
——— malayensis ..... ii. 368

PAGE

Pastor roseus .....ii. 372
——— suratensis .....ii. 372
Pavo cristatus.....ii. 529
—— muticus .....ii. 529
—— tibetanus.....ii. 531
PAVONINÆ .....ii. 529
pectoralis, Amadina .....ii. 343
———, Chalcostheta .....ii. 220
———, Erithacus..... i. 316
———, Garrulax .....ii. 110
———, Ianthocincla .....ii. 110
———, Nectarinia .....ii. 220
———, Leucocerca ..... i 209
———, Munia .....ii. 343
———, Oreocincla ..... i. 298
———, Pellorneum ....ii. 134
———, Phaiopicus .....ii. 461
———, Picus .....ii. 457
———, Rhipidura ..... i. 209
———, Serinus.....ii. 314
peguanus, Pastor .....ii. 372
peguensis, Alauda .....ii. 359
pelagicus, Haliætus ..... i. 51
Pelargopsis amauroptera .....ii. 487
——— burmannica .....ii. 488
——— gurial.....ii. 487
——— intermedia.....ii 488
PELECANINÆ .....ii. 735
Pelecanoides urinatrix .....ii. 712
Pelecanus *aquilus* .....ii. 734
——— carbo .....ii. 738
——— crispus .....ii. 736
——— javanicus .....ii. 738
——— manillensis .....ii. 737
——— *minor*.....ii. 738
——— *mitratus* .....ii. 728
——— *onocratalus* .. ..ii. 738
——— *phillipinensis* .....ii. 737
——— *phillipensis* .....ii. 737
——— *piscator*.....ii. 735
——— *pygmæus* .....ii. 740
——— roseus .....ii. 738
——— *rufescens* .....ii. 736
——— sinensis.....ii. 738
——— *sula* .....ii. 735

PAGE

Pellorneum hyperythrum .....ii. 133
——— ignotum .....ii. 143
——— intermedium .....ii. 135
——— mandelli.....ii. 134
——— minor .....ii. 137
——— nipalensis .....ii. 134
——— palustre .....ii. 138
——— pectoralis .....ii. 134
——— ruficeps .....ii. 134, 136
——— subochraceum .....ii. 137
——— tickelli.....ii. 137, 144
pellotis, Timalia .....ii. 89
———, Malacocercus .....ii. 89
Peloperdix chloropus.....ii. 557
pelvica, Tentheca ..... i. 163
———, Tephrodornis ..... i. 163
pelvicus, Tephrodornis .....ii. 163
penelope, Anas .....ii. 691
———, Mareca .....ii. 691
penicillata, Otocorys .....ii. 358
pennata, Aquila ..... i. 37
pennatus, Ephialtes ..... i. 88
———, Hierætus ..... i. 37
———, Nisætus..... i. 37
pentah, Coturnix .....ii. 562
percussus, Prionochilus .....ii. 249
PERDICINÆ .....ii. 549
Perdicula argoondah.....ii. 562
——— asiatica .....ii. 562
——— cambayensis .....ii. 562
——— erythrorhyncha .....ii. 564
Perdix coronata .....ii. 561
——— gularis .....ii. 555
——— Hardwickii.....ii. 548
——— *Hodgsoni* .....ii. 555
——— lerwa .....ii. 550
——— megapodiæ.....ii. 556
——— olivacea .....ii. 556
——— oculea .....ii. 560
——— pictus .....ii. 551
peregrinator, Falco ..... i. 69
peregrinus, Falco ..... i. 68
———, Pericrocotus ..... i. 176
Pericrocotus albifrons ..... i. 180
——— andamanensis..... i. 174

PAGE

Pericrocotus erythropygius ..... i. 179
——— elegans ..... i. 174
——— flammeus ..... i. 175
——— flammifer ..... i. 174
——— fraterculus ..... i. 174
——— igneus ..... i. 175
——— immodestus ..... i. 180
——— intensior ..... i. 178
——— malabaricus ..... i. 176
——— minutus ..... i. 175
——— modestus ..... i. 176
——— motacilloides ..... i. 176
——— neglectus ..... i. 178
——— peregrinus ..... i. 176
——— roseus ..... i. 178
——— solaris ..... i. 179
——— speciosus ..... i. 173, 174
perlatus, Francolinus ..... ii. 552
——— Tetrao ..... ii 552
Pernis apivorus ..... i. 62
——— cristata ..... i. 61
——— ptilorhynchus ..... i. 61
persicus, Puffinus ..... ii. 711
———, Merops ..... ii. 473
personata, Motacilla ..... ii. 273
———, Otocompsa ..... ii. 38
———, Podica ..... ii. 637
———, Sula ..... ii. 734
Petrochelidon fluvicola ..... ii. 268
Petrocossyphus cyaneus ..... i. 312
——— saxatilis ..... i. 311
Petronia flavicollis ..... ii. 308
Petrophila cinclorhynchus ..... i. 312
——— erythrogaster ..... i. 313
phæocephala, Alcippe ..... ii. 167
phæocephalus, Criniger ..... ii. 29
———, Micropus ..... ii. 28
phæoceps, Micropternus ..... ii. 440
phæopus, Numenius ..... ii. 629
———, Scolopax ..... ii. 629
Phæton *ætherius* ..... ii. 732
——— *candidus* ..... ii. 732
——— flavirostris ..... ii. 732
——— indicus ..... ii. 732
——— *phœnicurus* ..... ii. 732
——— rubricauda ..... ii. 732
phaioceps, Micropternus ..... ii. 440

PAGE

Phaiopicus Blythi ..... ii. 440
——— grammithorax ..... ii. 460
——— Jerdoni ..... ii. 441
——— jugularis ..... ii. 461
——— pectoralis ..... ii. 461
——— rufinotus ..... ii. 440
Phalacrocorax carbo ..... ii. 738
——— fuscicollis ..... ii. 739
——— pygmæus ..... ii. 740
——— sinensis ..... ii. 738
Phalaropus fulicarius ..... ii. 617
——— hyperboreus ..... ii. 617
Phasianus argus ..... ii. 530
——— cruentus ..... ii. 536
——— Gardneri ..... ii. 537
——— Hamiltoni ..... ii. 540
——— leucomelanus ..... ii. 541
——— nipalensis ..... ii. 535
——— roulroul ..... ii. 561
——— Wallichi ..... ii. 539
Phayrei, Alcippe ..... ii. 168
———, Francolinus ..... ii 552
———, Nectarinia ..... ii. 232
Phayrii, Alcippe ..... ii. 168
———, Anthocincla ..... ii. 376
———, Osmotreron ..... ii. 501
———, Pomatorhinus ..... ii. 102
Philentoma castaneum ..... i. 214
——— phyrrhopterum ..... i. 214
——— velatum ..... i. 213
phillipensis, Ægialitis ..... ii. 588
———, Merops ..... ii. 471
———, Pelecanus ..... ii. 737
———, Podiceps ..... ii. 709
phillipinensis, Pelecanus ..... ii. 737
———, Ploceus ..... ii. 338
phillipinus, Ægialitis ..... ii. 588
———, Charadrius ..... ii. 588
———, Fringilla ..... ii. 340
———, Merops ..... ii. 471
———, Ploceus ..... ii. 339
Philomachus pugnax ..... ii. 616
philomela, Hyloterpe ..... i. 164
Phodilus badius ..... i. 124
——— nipalensis ..... i. 92
phœniceum, Trochalopterum ..... ii. 83
phœnicomanes, Iora ..... ii. 11

PAGE
Phœnicophæs erythrognathus .....ii. 421
Pœnicophaus erythrognathus .....ii. 421
———— Jerdoni.....ii. 421
PHŒNICOPHÆINÆ .....ii. 418
phœnicoptera, Erythrospiza.....ii. 306
phœnicopterus, Crocopus .....ii. 498
Phœnicopterus antiquorum .....ii. 669
———— minor.....ii 670
———— *roseus* .....ii. 669
Phœnicornis princeps .....ii. 173
phœnicotis, Anthreptes .....ii. 239
———— , Anthothreptes .....ii. 239
———— , Chalcoparia.....ii. 239
———— , Cinnyris .....ii. 239
———— , Nectarinia .....ii. 239
Phœnicura fuliginosa ..... i. 204
———— leucocephala .....ii. 63
———— muraria ..... i. 319
———— macgrigoriæ ..... i. 234
———— rubicauda ..... i. 204
———— ruticilla ..... i. 320
———— schisticeps ..... i. 324
———— sylvia ..... i. 320
phœnicura, Ammomanes .....ii. 352
———— , Erythra .....ii. 645
———— , Gallinula .....ii. 645
———— , Mirafra.....ii. 352
———— , Nectarinia .....ii. 224
———— , Ruticilla ..... i. 319, 320
phœnicuroides, Bradybates .....ii. 67
———— , Hodgsonius .....ii. 67
———— , Lanius .....ii. 209
———— , Otomela .....ii. 209
———— , Phæton.....ii. 732
———— , Ruticilla ..... i. 319, 320
phœnicurus, Lanius .....ii. 209
Phragmaticola olivacea..... i. 261
Phyllobates coronatus ..... i. 287
Phyllopneuste borealis ..... i. 239
———— brehmi ..... i. 246
———— coronata..... i. 244
———— fuscata ..... i. 263
———— indicus ..... i. 262
———— magnirostris ..... i. 242
———— nitida ..... i. 240
———— occipitalis ..... i. 244
PAGE
Phyllopneuste rama ..... i. 254
———— tristis ..... i. 246
———— viridanus ..... i. 241
Phyllornis aurifrons .....ii. 13
———— chlorocephala .....ii. 16
———— cyanopogon .....ii. 16
———— Hardwickii .....ii. 12
———— hodgsoni .....ii. 13
———— javensis.....ii. 15
———— jerdoni .....ii. 15
———— malabaricus .....ii. 14
———— Sonnerati .....ii. 15
Phylloscopus affinis ..... i. 247
———— borealis ..... i. 239
———— brooksi..... i. 263
———— brehmi..... i. 263
———— brunneus..... i. 263
———— burmannicus ..... i. 244
———— coronatus ..... i. 244
———— erochrous ..... i. 251
———— flavolivacea..... i. 245
———— fuliginiventer..... i. 264
———— fuscatus ..... i. 263
———— Humii ..... i. 248
———— lugubris ..... i. 243
———— maculipennis ..... i. 250
———— magnirostris ..... i. 242
———— neglectus..... i. 264
———— nitidus..... i. 240
———— occipitalis ..... i. 244
———— pallidipes..... i. 268
———— plumbeitarsus ..... i. 241
———— presbytis ..... i. 246
———— proregulus ..... i. 250
———— pulcher ..... i. 251
———— reguloides ..... i. 245
———— subviridis ..... i. 252
———— sindianus..... i. 252
———— Schwarzi..... i. 264
———— Seebohmi ..... i. 241
———— superciliosus ..... i. 249
———— tenellipes ..... i. 242
———— trochiloides ..... i. 248
———— tristis ..... i. 246
———— tytleri ..... i. 248
Phylloscopus viridanus..... i. 241

PAGE

Pica bottanensis ..... i. 132
—— caudata ..... i. 132
—— rustica ..... i. 132
picoides, Sibia ..... ii. 95
picata, Dromolæa ..... ii. 3
———, Motacilla ..... ii. 277
———, Saxicola ..... ii. 2
———, Sibia ..... ii. 96
picatus, Hemipus ..... i. 164, 165
PICI ..... ii. 433
PICIDÆ ..... ii. 433
picinus, Edolius ..... i. 153
pictus, Francolinus ..... ii. 551
———, Perdix ..... ii. 551
PICUMNINÆ ..... ii. 434
Picumnoides lachrymosa ..... ii. 436
———— ochraceus ..... ii. 436
Picumnus innominatus ..... ii. 435
———— ochraceus ..... ii. 436
Picus analis ..... ii. 456
—— assimilis ..... ii. 454
—— atratus ..... ii. 457
—— aurocristatus ..... ii. 458
—— brachyurus ..... ii. 441
—— brunneifrons ..... ii. 457
—— brunneus ..... ii. 461
—— canente ..... ii. 453
—— canicapillus ..... ii. 458
—— cathpharius ..... ii. 455
—— chlorolophus ..... ii. 445
—— chlorophanes ..... ii. 446
—— dimidiatus ..... ii. 446
—— flavinucha ..... ii. 444
—— goensis ..... ii. 452
—— guttacristatus ..... ii. 451
—— gutturalis ..... ii. 450
—— Hardwickii ..... ii. 460
—— himalayanus ..... ii. 454
—— Hodgsonii ..... ii 455
—— hyperythrus ..... ii. 459
—— Javanensis ..... ii. 438
—— Javensis ..... ii. 450
—— leucogaster ..... ii. 450
—— macii ..... ii. 456
—— mahrattensis ..... ii. 457
—— majoroides ..... ii. 455

PAGE

Picus miniatus ..... ii. 443
—— moluccensis ..... ii. 460
—— occipitalis ..... ii. 447
—— pectoralis ..... ii. 456
—— porphyromelas ..... ii. 442
—— pulverulentus ..... ii. 450
—— pumilus ..... ii. 458
—— puniceus ..... ii. 444
—— pyrrhotis ..... ii 441
—— rafflesi ..... ii. 436
—— rufinotus ..... ii. 440
—— scindianus ..... ii. 455
—— shorei ..... ii. 436
—— semicoronatus ..... ii. 459
—— sordidus ..... ii. 453
—— squamatus ..... ii. 441
—— squamigularis ..... ii. 441
—— striatus ..... ii. 451
—— striolatus ..... ii. 447
—— sultaneus ..... ii. 451
—— tristis ..... ii. 460
—— tukki ..... ii. 461
—— viridanus ..... ii. 448
pilaris, Turdus ..... i. 303
pileata, Alcedo ..... ii. 484
———, Entomobia ..... ii. 484
———, Halcyon ..... ii. 483
———, Timelia ..... ii. 129
Pinarocichla euptilosa ..... ii. 25
Pipastes agilis ..... ii. 286
———— arboreus ..... ii. 284
———— maculatus ..... ii. 286
———— plumatus ..... ii. 285
———— trivialis ..... ii. 285
Pipra squalida ..... ii. 251
Piprisoma agile ..... ii. 251
piscator, *Dysporus* ..... ii. 735
———, *Pelecanus* ..... ii. 735
———, Sula ..... ii. 735
piscatrix, Sula ..... ii. 735
pithyornis, Emberiza ..... ii. 335
Pitta bengalensis ..... ii. 380
—— brachyura ..... ii. 380
—— coccinea ..... ii. 380
—— cærulea ..... ii. 377
Pitta coronata ..... ii. 380

PAGE

Pitta cyanoptera.....ii. 379
—— granatina .....ii. 380
—— Gurneyi .....ii. 381
—— malaccensis .....ii. 379
—— megarhyncha.....ii. 379
—— moluccensis .....ii. 379
—— nipalensis .....ii. 376
—— Oatesi .....ii. 377
PITTIDÆ .....ii. 375
placida, Ægialitis .....ii. 586
Planesticus atrigularis ..... i. 308
———— fuscatus ..... i. 307
———— ruficollis ..... i. 308
Platalea leucorodia .....ii. 665
—— pygmæa.....ii. 611
platurus, Dicrurus..... i. 160
Platylophus ardesiacus..... i. 167
———— coronatus ..... i. 167
platyrhyncha, Limicola.....ii. 610
————, *Tringa* .....ii. 610
Platysmurus leucopterus ..... i. 140
platyura, Schœnicola..... i. 270
———, Timalia ..... i. 270
Plegadis falcinellus .....ii. 669
plicatus, Aceros .....ii. 494
——— , Rhytidoceros .....ii. 494
Plocéela chrysea.....ii. 340
———Javanensis .....ii. 340
Ploceus baya .....ii. 338, 339
—— bengalensis .....ii. 340
—— hypoxanthus .....ii. 340
—— Javanensis.....ii. 340
—— maculata .....ii. 338
—— manyar .....ii. 339
—— megarhynchus .....ii. 339
—— phillipensis .....ii. 338
—— phillipinus.....ii. 338, 339
PLOTINÆ .....ii. 740
Plotus melanogaster .....ii. 741
plumata, Alauda.....ii. 284
plumatus, Pipastes.....ii. 285
plumbea, Ruticilla..... i. 204
plumbeitarsus, Phyllopneuste..... i. 241
———— , Phylloscopus ..... i. 241
plumbeus, Haliaetus ..... i. 81
plumbiceps, Staphidea .....ii. 165
plumbipes, Hemipodius .....ii. 568

PAGE

plumbipes, Turnix .....ii. 568
plumifera, Herodias .....ii. 655
plumipes, Buteo ..... i. 25
plumosus, Brachypus.....ii. 42
———, Ixus.....ii. 42
———, Pycnonotus .....ii. 42
pluvialis, Charadrius .....ii. 584
Pluvialis longipes .....ii. 584
Pluvianus cinereus .....ii. 591
Pnoepyga albiventer .....ii. 52
———— albiventris .....ii. 52
———— caudata .....ii. 53
———— chocolatina.....ii. 49
———— longicaudata .....ii. 49
———— pusilla .....ii. 52
———— Roberti .....ii. 152
———— squamata .....ii. 52
PODAGERINÆ .....ii. 404
Podargus javensis .....ii. 397
Podica personata .....ii. 637
Podiceps cristatus .....ii. 707
———— minor .....ii. 709
———— nigricollis .....ii. 708
———— *phillipensis*.....ii. 709
poiocephala, Alcippe .....ii. 167
————, Timalia .....ii. 167
poiocephalus, Brachypodius.....ii. 28
———— , Brachypus .....ii. 28
———— , Micropus.....ii. 28
pœcilorhyncha, Anas .....ii. 684
pœcilopterus, Turdus..... i. 304
Polioaetus humilis..... i. 82
———— ichthyaetus ..... i. 81
poliocephala, Cisticola ..... i. 292
———— , *Gallinula*.....ii. 635
———— , Prinia ..... i. 292
poliocephalus, Cuculus .....ii. 409
————, Porphyrio .....ii. 635
poliogenys, Abrornis ..... i. 220
————, Cryptolopha ..... i. 220
————, Poliornis ..... i. 50
Polyodon occipitalis .....ii. 172
poliopsis, Astur ..... i. 19
Poliohierax insignis ..... i. 66
Poliomyias hodgsoni ..... i. 194
Poliornis indicus ..... i. 50
———— liventer ..... i. 48

PAGE

Poliornis poliogenys ..... i. 50
——— teesa ..... i. 47
poliotis, Suthora ..... ii. 125
polioptera, Campophaga ..... i. 172
politus, Cinnyris ..... ii. 229
pollicaris, Horeites ..... i. 269
Polyphasia rufiventris ..... ii. 413
——— tenuirostris ..... ii. 413
Polyplectron bicalcaratum ..... ii. 531
——— chinquis ..... ii. 531
——— thibetanum ..... ii. 531
Pomatorhinus albigularis ..... ii. 103
——— Austeni ..... ii. 101
——— erythrogenys ..... ii. 105
——— ferruginosus ..... ii. 102
——— gravivox ..... ii. 106
——— Horsfieldi ..... ii. 100
——— hypoleucos ..... ii. 104
——— Inglisi ..... ii. 104
——— leucogaster ..... ii. 99
——— macclellandi ..... ii. 106
——— mariæ ..... ii. 103
——— nuchalis ..... ii. 99
——— obscurus ..... ii. 100
——— ochraiceps ..... ii. 101
——— olivaceus ..... ii. 99
——— Phayrii ..... ii. 102
——— Pinwilli ..... ii. 100
——— ruficollis ..... ii. 104
——— schisticeps ..... ii. 99
——— stenorhynchus ..... ii. 103
——— superciliaris ..... ii. 106
——— Tickelli ..... ii. 105
pomatorhinus, Lestris ..... ii. 714
———, *Stercocarius* ..... ii. 714
pondiceriana, Ortygornis ..... ii. 554
———, Tephrodornis ..... i. 162
———, Vultur ..... i. 9
pompadoura, Osmotreron ..... ii. 502
Porphyrio *neglectus* ..... ii. 635
——— poliocephalus ..... ii. 635
porphyromelas, Blythipicus ..... ii. 442
———, Celeopicus ..... ii. 442
———, Lepocestes ..... ii. 442
———, Picus ..... ii. 442
———, Venilia ..... ii. 442
Porzana akool ..... ii. 643

PAGE

Porzana bailloni ..... ii. 641
——— *ceylonica* ..... ii. 639
——— exquisita ..... ii. 642
——— fusca ..... ii. 642
——— maruetta ..... ii. 642
——— minuta ..... ii. 643
——— *parvus* ..... ii. 643
——— *pygmæa* ..... ii. 641
porzana, Rallus ..... ii. 642
præcognitus, Stachyris ..... ii. 154
prasina, Erythrura ..... ii. 346
———, Fringilla ..... ii. 346
prasinoceles, Ardeola ..... ii. 658
Pratincola atrata ..... i. 194
——— bicolor ..... i. 194
——— caprata ..... i. 192
——— ferrea ..... i. 205
——— insignis ..... i. 190
——— Jamesoni ..... i. 189
——— leucura ..... i. 192
——— macrorhyncha ..... i. 189
——— maura ..... i. 191
——— robusta ..... i. 191
——— rubetra ..... i. 189
——— rubetraoides ..... i. 189
——— rubicola ..... i. 191
pratincola, Glareola ..... ii. 582
presbytis, Phylloscopus ..... i. 246
PRESSIROSTRES ..... ii. 571
princeps, Phœnicornis ..... i. 173
Prinia Adamsi ..... i. 279
——— albogularis ..... i. 290
——— atrigularis ..... i. 277
——— beavani ..... i. 276
——— blanfordi ..... i. 279
——— brevicauda ..... i. 282
——— flaviventris ..... i. 282
——— fusca ..... i. 279
——— gracilis ..... i. 290
——— hodgsoni ..... i. 290
——— inornata ..... i. 279
——— lepida ..... i. 283
——— neglecta ..... i. 280
——— rafflesi ..... i. 282
——— rufescens ..... i. 291
——— rufula ..... i. 290
——— socialis ..... i. 282

PAGE

Prinia Stewarti ..... i. 282
——— **striata** ..... i. 295
——— **superciliaris** ..... i. 279
——— **sylvatica** ..... i. 280
Prionochilus ignicapillus .....ii. 249
——————— **maculatus** .....ii. 250
——————— **melanoxanthus** .....ii. 251
——————— **modestus**.....ii. 252
——————— **percussus**.....ii. 249
——————— **squalidus**.....ii. 251
——————— **thoracicus** .....ii. 250
Prionopidæ ..... i. 162
Procarduelis nipalensis.....ii. 299
——————— **rubescens**.....ii. 300
Procellaria capensis .....ii. 710
——————— ***oceanica*** .....ii. 710
——————— **Wilsonii**.....ii 710
Procellarinæ .....ii. 712
Proparus castaneiceps .....ii. 158
——————— **chrysæus**.....ii. 179
——————— **dubius**.....ii. 161
——————— **ignotinctus**.....ii. 158
——————— **mandelli** .....ii. 161
——————— **vinipectus** .....ii. 166
Propasser ambiguus .....ii. 321
——————— **Edwardsi** .....ii. 319
——————— **frontalis**.....ii. 320
——————— **githaginea** .....ii. 307
——————— **Murrayi** .....ii. 305
——————— **pulcherrimus**.....ii. 321
——————— **rhodochlamys** .....ii. 318
——————— **rhodochrous**.....ii. 299, 318
——————— **rhodopeplus** .....ii. 318
——————— **saturatus** .....ii. 319
——————— **thura** .....ii. 320
Propyrrhula rubeculoides .....ii. 322
——————— **subhimalayensis**.....ii. 326
proregulus, Motacilla ..... i. 250
——————, **Phylloscopus** ..... i. 250
——————, **Reguloides** ..... i. 250
protomomelæna, Merula ..... i. 307
protomomelas, Turdus ..... i. 307
Psarisomus assimilis.....ii. 383
——————— **Dalhousie** .....ii. 383
psaroides, Hypsipetes .....ii. 18

PAGE

Pseudogyps bengalensis ..... i. 8
Pseudornis dicruroides.....ii. 414
Pseudoscolopax semipalmatus.....ii. 625
Pseudototanus Haughtoni .....ii. 622
Psilorhinus magnirostris..... i. 134
Psittaci..... ii. 462
Psittacidæ .....ii. 462
Psittacinæ .....ii. 462
Psittacula incerta .....ii. 462
Psittacus bengalensis .....ii. 468
——— cyanocephalus .....ii. 468
——— fasciatus.....ii. 464
——— incertus .....ii. 462
——— malaccensis .....ii. 462
——— rosa.....ii. 468
——— torquatus .....ii. 467
——— vernalis .....ii. 463
——— vibrissa .....ii. 464
Psittinus incertus .....ii. 462
Ptererythrius æralatus .....ii. 199
——————— erythropterus.....ii. 198
——————— intermedius .....ii. 200
——————— melanotis .....ii. 200
——————— rufiventer .....ii. 200
——————— xanthochloris.....ii. 201
Pteroclidæ .....ii. 579
Pterocles alchata .....ii. 525
——— arenarius.....ii. 523
——— coronatus.....ii. 521
——— exustus .....ii. 524
——— *fasciatus*.....ii. 527
——— guttatus .....ii. 521
——— Lichtensteinii .....ii. 526
——— senegalensis .....ii. 521
——— senegallus .....ii. 521
——— setarius .....ii. 525
Pteruthius erythropterus .....ii. 198
ptilonorhynchus, Pernis ..... i. 61
ptilorhynchus, Pernis ..... i. 61
Pucrasia castanea .....ii. 538
——— macrolopha.....ii. 538
——— nipalensis .....ii. 538
puella, Irena ..... i. 161
Puffinus chlororhynchus .....ii. 712
——— persicus.....ii. 711

PAGE

pugnax, *Tringa* .....ii. 616
———, Turnix .....ii. 569
pulchella, Dacelo .....ii. 486
———, Malacias .....ii. 98
pulchellus, Carcineutes.....ii. 486
———, Sibia.....ii. 98
pulcher, Phylloscopus ..... i. 251
pulcherrimus, Carpodacus .....ii. 321
———, Propasser .....ii. 321
pulchra, Athene ..... i. 100
——, Carinne ..... i. 105
pulchricollis, Palumbus.....ii. 505
pulverulentus, Alophonerpes .....ii. 450
———, Mulleripicus.....ii. 450
———, Picus .....ii. 455
pumilus, Iyngipicus .....ii. 458
——, Picus .....ii. 458
puncticollis, Brachypternus.....ii. 440
punctularia, Munia .....ii. 342
punctulata, Amadina .....ii. 342
———, Lonchura .....ii. 342
———, Loxia .....ii. 342
———, Munia .....ii. 342
punicea, Estrilda .....ii. 346
———, Fringilla.....ii. 346
———, Pyrrhospiza .....ii. 322
puniceus, Alsocomus .....ii. 509
———, Callolophus .....ii. 444
———, Chloropicus .....ii. 444
———, Chrysophlegma .....ii. 444
———, Picus .....ii. 444
purpurea, Ardea .....ii. 653
———, Cochoa..... i. 168
purpureus, Palæornis .....ii. 468
pusaran, Buceros .....ii. 493, 494
pusilla, Emberiza .....ii. 327
——, Erythrosterna ..... i. 196
——, Pnoepyga .....ii. 52, 327
pusillus, Metoponia .....ii. 315
——, Passer .....ii. 315
——, Pnoepyga .....ii. 52
——, Pycnonotus.....ii. 34
——, Serinus .....ii. 315
PYCNONOTINÆ .....ii. 18
Pycnonotus analis .....ii. 38
———— atricapillus .....ii. 36
———— blanfordi .....ii. 41

PAGE

Pycnonotus brunneus .....ii. 43
———— burmanicus .....ii. 35
———— cyaniventris .....ii. 47
———— davisoni .....ii. 40
———— familiaris .....ii. 41
———— finlaysoni .....ii. 40
———— flavescens .....ii. 39
———— gourdinii .....ii. 38
———— gularis .....ii. 47
———— hæmorrhous .....ii. 34
———— ictericus .....ii. 34
———— intermedius .....ii. 35
———— leucotis .....ii. 38
———— luteolus .....ii. 39
———— nigripileus .....ii. 36
———— plumosus .....ii. 42
———— pusillus .....ii. 43
———— pygæus .....ii. 37
———— salvadorii .....ii. 43
———— simplex .....ii. 43
———— xantholæmus.....ii. 41
Pycnoramphus affinis .....ii. 298
———— carneipes .....ii. 297
———— icteroides.....ii. 297
Pyctorhis altirostris .....ii. 131
——— griseigularis .....ii. 131
——— longirostris.....ii. 130
——— sinensis .....ii. 130
pygæus, Molpastes .....ii. 37
——, Pycnonotus .....ii. 37
pygargus, Circus ..... i. 13
pygmæa, Crex .....ii. 641
——— Ortygometra .....ii. 641
——— *Platalea*.....ii. 611
——— Porzana.....ii. 641
——— Zapornia .....ii. 641
pygmæus, Buteo ..... i. 50
———, Eurynorhynchus .....ii. 611
———, *Graculus* .....ii. 740
———, Iyngipicus.....ii. 460
———, *Pelecanus* .....ii. 740
———, Phalacrocorax .....ii. 740
Pyrgita cinnamomea .....ii. 311
——— domestica .....ii. 310
Pyrrhocorax alpinus ..... i. 144
pyrrhonotus, Passer .....ii. 310

PAGE

pyrrhops, Buchanga ..... i. 156
———, Stachyridopsis .....ii. 154
———, Stachyris .....ii. 154
pyrrhopterum, Philentoma ..... i. 214
Pyrrhospiza Humii.....ii. 322
——— punicea .....ii. 322
pyrrhothorax, Charadrius.....ii. 586
———, Ægialitis .....ii. 586
pyrrhotis, Blythipicus .....ii. 442
———, Celeopicus .....ii. 442
———, Picus .....ii. 441
———, Venilia .....ii. 441
Pyrrhula aurantia.....ii. 325
——— aurantiaca .....ii. 325
——— caucasica .....ii. 317
——— erythacus .....ii. 325
——— erythrocephalus.....ii. 324
——— nipalensis .....ii. 324
Pyrrhulauda affinis .....ii. 353
——— crucigera.....ii. 352
——— grisea .....ii. 352
——— melanauchen .....ii. 353
pyrrhura, Myzornis .....ii. 173
———, Yuhina .....ii. 173
Pyrotrogon Duvaucelli .....ii. 407

Querquedula circia.....ii. 693
——— crecca .....ii. 692
——— falcata.....ii. 695
——— formosa .....ii. 694
——— gibberifrons .....ii. 697
——— glocitans .....ii. 694
quinticolor, Merops .....ii. 472

raalteni, Anthus .....ii. 291
radiata, Athene ..... i. 111
radiatum, Glaucidium ..... i. 111
rafflesi, Chloropicoides .....ii. 436
———, Gauropicoides .....ii. 436
———, Picus .....ii. 436
———, Prinia..... i. 282
Rallidæ.....ii 634
Rallina canningi.....ii. 640
——— *ceylonica* .....ii. 639
——— *euryzonoides*.....ii. 639

PAGE

Rallina fasciata .....ii. 640
——— fusca .....ii. 642
Rallinæ.....ii. 641
Rallus baillioni .....ii. 641
——— fuscus .....ii. 642
——— indicus.....ii. 638
——— phœnicurus.....ii. 645
——— porzana .....ii. 642
——— *striatus* .....ii. 638
——— *zeylanicus* .....ii. 639
rama, Hypolais ..... i. 254
——, Phyllopneuste ..... i. 254
Ramsayi, Actinodura .....ii. 119
———, Actinura .....ii. 119
———, Cyanops.....ii. 430
———, Megalæma.....ii. 430
rangoonensis, Edolius ..... i. 160
Raya rubropygia .....ii. 384
raytal, Alaudula .....ii. 356
recurvirostris, Æsacus .....ii. 594
———, Avocetta.....ii. 632
Reguloides castaneoceps ..... i. 220
——— chloronotus ..... i. 250
——— coronata ..... i. 244
——— erochroa ..... i. 251
——— flavolivaceus ..... i. 245
——— occipitalis ..... i. 244
——— proregulus..... i. 249, 250
——— superciliosus .....i. 248, 249
Reguloides trochiloides ..... i. 245
——— viridipennis ..... i. 245
reguloides, Phylloscopus ..... i. 245
Regulus cristatus .....ii. 197
——— himalayensis .....ii. 197
regulus, Falco..... i. 75
religiosa, Gracula .....ii. 373
remifer, Bhringa ..... i. 159
——— , Edolius..... i. 149
retifer, Dicrurus ..... i. 160
Rhamphococcyx erythrognathus ..ii. 421
Rhaphidura leucopygialis .....ii. 392
Rhinoplax griseus .....ii. 492
——— scutatus .....ii. 491
——— vigil .....ii. 491
Rhinortha chlorophæa .....ii. 419
Rhinoptilus bitorquatus .....ii. 580
Rhipidura albicollis ..... *i. 207*

PAGE

Rhipidura albifrontata ..... i. 210
——— albofrontata..... i. 210
——— fuscoventris..... i. 206
——— javanica ..... i. 208
——— pectoralis ..... i. 209
rhodochlamys, Carpodacus .....ii. 318
———— , Propasser .....ii. 318
rhodochrous, Carpodacus .....ii. 318
———— , Fringilla ....ii. 318
———— , Propasser .....ii. 318
rhodopeplus, Carpodacus .....ii. 318
————, Fringilla.....ii. 318
————, Propasser .....ii. 318
Rhodonessa caryophyllacea .....ii. 685
Rhodopechys sanguinea .....ii. 307
Rhodophila melanoleuca ..... i. 205
Rhopodytes diardi .....ii 420
———— sumatranus .....ii. 420
———— tristis .....ii. 419
———— viridirostris .....ii. 421
Rhyacophila glareola.....ii. 620
Rhyacornis fuliginosa ..... i. 204
Rhynchæa bengalensis .....ii. 609
——— capensis .....ii. 609
Rhynchops albicollis .....ii. 731
Rhynortha chlorophæa.....ii. 418
Rhyticeros obscurus .....ii. 494
———— subruficollis .....ii. 493
Rhyticeros undulatus .....ii. 494
Rhytidoceros narcondami.....ii. 494
———— obscurus .....ii. 494
———— plicatus .....ii. 494
———— subruficollis .....ii. 493
———— undulatus .....ii. 494
Richardi, Anthus .....ii. 289
———, Corydalla .....ii. 289
ridibundus, Larus .....ii. 718
Rimator malacoptilus .....ii. 153
riparia, Cotile .....ii. 255
———, Cotyle.....ii. 255
———, Hirundo.....ii. 255
risoria, Columba .....ii. 515
risorius, Turtur.....ii. 515
roberti, Pnoepyga .....ii. 152
———, Sphenocichla.....ii. 50
———, Stachyrirhynchus.....ii. 50
———, Turdinulus.....ii. 152

PAGE

robusta, Pratincola..... i. 191
Rollulus cristatus .....ii. 561
——— roulroul .....ii. 561
rosa, Palæornis .....ii. 468
——, Psittacus .....ii. 468
rosaceus, Anthus .....ii. 293
rostrata, Oreocincla ..... i. 295
roseus, Pastor.....ii. 372
——, Pelecanus .....ii. 738
——, Pericrocotus ..... i. 178
——, Phœnicopterus .....ii. 669
rostratum, Trichastoma .....ii. 146
roulroul, Phasianus .....ii. 561
———Rollulus .....ii. 561
rubeculoides, Accentor .....ii. 191
————, Cyornis ..... i. 225
————, Phœnicura ..... i. 225
————, Propyrrhula .....ii. 322
————, Siphia ..... i. 225
ruber, Cinnyris .....ii. 232
rubescens, Locustella ..... i. 259
———— , Procarduelis .....ii. 300
rubetra, Pratincola ..... i. 189
rubetraoides, Pratincola ..... i. 189
rubicauda, Phœnicura ..... i. 204
rubicilla, Carpodacus .....ii. 317
———, Coccothraustes .....ii. 317
———, Loxia .....ii. 317
rubicola, Pratincola ..... i. 191
rubidiventer, Parus .....ii. 187
———— , Trichastoma .....ii. 145
rubidiventris, Lophophanes .....ii. 187
———— , Machlolophus .....ii. 187
rubicauda, Napothera .....ii. 142
rubiginosus, Drymocataphus .....ii. 145
———— Hemicircus .....ii. 442
———— Malacocercus .....ii. 130
Rubigula cyaniventris .....ii. 47
———— flaviventris.....ii. 46
rubricapilla, Mixornis .....ii. 148
rubricatus, Iyngipicus .....ii. 459
rubricauda, Cynniris .....ii. 224
————, Phaeton .....ii. 732
rubronigra, Amadina.....ii. 342
———— , Munia .....ii. 342
rubropygialis, Tiga.....ii. 438
rubropygius, Eurylæmus .....ii. 384

PAGE

rubropygius, Raya ..... ii. 384
———— , Serilophus ..... ii. 384
rudis, Ceryle ..... ii. 481
rufa, Dendrocitta ..... i. 135
— , Hirundo ..... ii. 262
— , Prinia ..... i. 29
rufescens, Agrodroma ..... ii. 290
———, Anthus ..... ii. 286
———, Drymœca ..... i. 281
———, Drymoipus ..... i. 281
———, Melanocorypha ..... ii. 355
———, *Pelecanus* ..... ii. 737
ruficapilla, Hydrocichla ..... ii. 73
ruficapillum, Trochalopterum ..... ii. 79
ruficapillus, Henicurus ..... ii. 73
ruficauda, Cyornis ..... i. 228
———, Muscicapa ..... i. 228
———, Siphia ..... i. 228
ruficeps, Chleuasicus ..... ii. 127
———, Edela ..... i. 287
——— Heteromorpha ..... ii. 126
——— Orthotomus ..... i. 287
——— Pellorneum ..... ii. 134, 136, 137
——— Stachyris ..... ii. 153
——— Stachyridopsis ..... ii. 153
——— Suthora ..... ii. 125
ruficollis, Dryonastes ..... ii. 114
———, Garrulax ..... ii. 114
——— Ianthocincla ..... ii. 114
——— Merula ..... i. 308
——— Montifringilla ..... ii. 304
——— Planesticus ..... i. 308
——— Pomatorhinus ..... ii. 104
——— *Tringa* ..... ii. 612
rufifrons, Stachyris ..... ii. 154
———, Stachyridopsis ..... ii. 154
rufigastra, Alcedo ..... ii. 480
rufigenys, Ixulus ..... ii. 165
———, Staphidia ..... ii. 165
rufigulare, Trochalopterum ..... ii. 80
rufigularis, Minla ..... ii. 160
rufimenta, Cinclosoma ..... ii. 80
rufina, Fuligula ..... ii. 697
rufinotus, Phaiopicus ..... ii. 440
———, Picus ..... ii. 440
rufipennis, Centropicus ..... ii. 423
———, Centrococcyx ..... ii. 423

PAGE

rufiventa, Cinclosoma ..... ii. 80
rufiventer, Buteo ..... i. 25
———, Ptererythrius ..... ii. 200
rufiventris, Cacomantis ..... ii. 413
——— Callene ..... ii. 59
——— Polyphasia ..... ii. 413
rufogularis, Arboricola ..... ii. 559
———, Arborophila ..... ii. 559
———, Muscicapa ..... i. 187
———, Ruticilla ..... i. 323
———, Schœniparus ..... ii. 160
rufonuchalis, Lophophanes ..... ii. 186
———, Parus ..... ii. 186
rufula, Agrodroma ..... ii. 290
——, Corydalla ..... ii. 291
——, Prinia ..... i. 290
rufulus, Anthus ..... ii. 291
——, Corydalla ..... ii. 291
——, Gampsorhynchus ..... ii. 91
——, Turdus ..... i. 309
rupestris, Columba ..... ii. 509
———, Cotile ..... ii. 258
———, Cotyle ..... ii. 258
———, Hirundo ..... ii. 258
———, Ptyonoprogne ..... ii. 258
rupicolus, Turtur ..... ii. 512, 513
rustica, Hirundo ..... ii. 259
——, Pica ..... i. 132
rusticola, Scolopax ..... ii. 603
rusticula, Scolopax ..... ii. 603
Rutherfordi, Spilornis ..... i. 46
Ruticilla aurorea ..... i. 322
——— cœruleocephala ..... i. 325
——— erythrogastra ..... i. 322
——— erythronota ..... i. 323
——— erythroprocta ..... i. 320
——— frontalis ..... i. 323
——— fuliginosa ..... i. 204
——— hodgsoni ..... i. 321
——— mesoleuca ..... i. 320
——— nigrogularis ..... i. 323
——— phœnicuroides ..... i. 320
——— phœnicurus ..... i. 319
——— plumbea ..... i. 204
——— rufiventris ..... i. 320
——— schisticeps ..... i. 324
ruticilloides, Phœnicura ..... i. 321

PAGE

rutila, Casarca .....ii. 680
——, Citrinella.....ii. 331
——, Emberiza.....ii. 331

sacer, Falco.....i. 76
sacra, Demiegretta .....ii. 657
sagittatus, Ephialtes.....i. 100
——— , Scops .....i. 100
Salicaria brunniceps .....i. 292
——— capistrata, et modesta ... i. 258
——— eurhyncha .....i. 258
——— maacki.....i. 256
——— microptera .....i. 255
——— obsoleta .....i. 255
salicicolus, Passer .....ii. 311
salina, Tringa.....ii. 612
Salpornis spilonotus .....ii. 213
saltator, Saxicola .....ii. 7
salvadorii, Pycnonotus .....ii. 43
sanguinea, Erythrospiza .....ii. 306
———, Fringilla.....ii. 306
———, Rhodopechys.....ii. 306
sanguinipectus, Æthopyga .....ii. 226
sannio, Dryonastes.....ii. 117
——, Garrulax .....ii. 117
sapphira, Muscicapula .....i. 107
Sarcidiornis leucopterus .....ii. 680
——— melanonota .....ii. 677
Sarciophorus bilobus .....ii. 593
Sarcogramma atrogularis.....ii. 593
Saraglossa spiloptera.....ii. 374
Sarkidiornis melanonotus.....ii. 677
Sasia ochracea.....ii. 436
saturata, Æthopyga .....ii. 221
———, Campophaga .....i. 171
———, Cinnyris .....ii. 221
———, Linota .....ii. 299
———, Lathami .....ii. 535
———, Leioptila .....ii. 67
———, Nectarinia .....ii. 221
saturatus, Propasser .....ii. 319
Satyra melanocephala .....ii. 535
saularis, Copsychus .....ii. 65
Saundersi, Sterna .....ii. 727
sauropates, Chloris.....ii. 484
saxatilis, Monticola .....i. 311

PAGE

saxatilis, Petrocossyphus .....i. 311
———, Turdus .....i. 311
Saxicola albonigra .....ii. 2
——— atrigularis .....ii. 5
——— bicolor .....i. 194
——— capistrata.....ii. 3
——— chrysopygia.....ii. 5
——— deserti .....ii. 5
——— ferrea.....i. 205
——— isabellina .....ii. 6
——— leucura .....ii. 4
——— monacha .....ii. 3
——— morio.....ii. 4
——— œnanthe .....ii. 7
——— opistholeuca.....ii. 4
——— picata.....ii. 2
schistacea, Demiegretta .....ii. 656
——— , Grandala .....i. 319
schistaceus, Enicurus .....ii. 71
———, Henicurus.....ii. 71
schisticeps, Abrornis.....i. 218
———, Cryptolopha .....i. 218
———, Palæornis .....ii. 466
———, Phœnicura.....i. 325
———, Pomatorhinus .....ii. 99
———, Ruticilla.....i. 325
schœniclus, Emberiza .....ii. 326
Schœnicola cisticola .....i. 292
——— fortipes .....i. 267
——— platyura .....i. 270
Schœniparus dubius .....ii. 161
——— rufogularis .....ii. 160
Schomburgki, Chrysococcyx .....ii. 415
Schwaneri, Lanius.....ii. 207
schwarzi, Herbivocula .....i. 263
———, Lusciniola.....i. 263
———, Phyllopneuste .....i. 263
———, Phylloscopus .....i. 263
———, Sylvia.....i. 263
scindianus, Picus .....ii. 455
Sclateri, Chalcophasis .....ii. 534
———, Lophophorus .....ii. 534
Scolopacidæ .....ii. 602
scolopacina, Gallinago .....ii. 605
Scolopax albonigra .....ii. 2
——— *arquata* .....ii. 630
——— *calidris* .....ii. 622

PAGE

Scolopax *canescens*.....ii. 621
——— cœlestis .....ii. 616
——— gallinago.....ii. 608
——— ocrophus..... i. 311
——— Œdicnemus .....ii. 596
——— *phœopus* .....ii. 629
——— rusticola .....ii. 603
——— rusticula .....ii. 603
——— stenura .....ii. 605
——— *totanus* .....ii. 621
——— turdus ..... i. 311
Scops bakkamuna ..... i. 98
—— balli ..... i. 100
—— brucii..... i. 91
—— griseus ..... i. 98
—— indicus ..... i. 98, 100
—— lempigi..... i. 96
—— lettia ..... i. 95
—— lettoides ..... i. 98
—— malabaricus ..... i. 98
—— modestus ..... i. 102
—— pennatus .....i. 88
—— plumipes ..... i. 95
—— rufipennis ..... i. 89
—— sagittatus..... i. 100
—— spilocephalus ..... i. 92
—— sunia?..... i. 93
Scotocerca inquieta ..... i. 284
scouleri, Microcichla .....ii. 74
scriba, Otocorys .....ii. 358
scutatus. Buceros .....ii. 491
scutulata, *Anas* .....ii. 681
———, Casarca .....ii. 681
———, Ninox ..... i. 108
scutulatus, Rhinoplax .....ii. 491
seebohmi, Phylloscopus ..... i. 241
Seena aurantia .....ii. 724
—— Sterna .....ii. 724
seheria, Æthopyga.....ii. 222
——, Nectarinia.....ii. 222
seloputo, Strix..... i. 117
——— Syrnium ..... i. 117
semicoronatus, Picus.....ii. 459
semipalmatus, *Macrorhamphus* ...ii. 625
———, Pseudoscolopax.....ii. 625
senegalensis, Pterocles .....ii. 521

PAGE

senegallus, Pterocles.....ii. 521
senex, Anous.....ii. 730
sericeus, Orthotomus ..... i. 287
sericophrys, Parus .....ii. 188
Serilophus lunatus.....ii. 383
——— rubropygius .....ii. 384
Serinus aurifrons .....ii. 315
—— pectoralis .....ii. 314
—— pusillus .....ii. 315
serrator, Mergus.....ii. 704
serratus, Oxylophus .....ii. 417
setarius, Pterocles .....ii. 525
setifer, Trocholapteron.....ii. 87
severus, Falco ..... i. 74
———, Hypotriorchis..... i. 74
shaheen, Falco..... i. 74
shorei, Chrysonotus .....ii. 438
———, Picus .....ii. 438
shorii, Tiga .....ii. 438
Sialia cœlicolor ..... i. 319
siamensis, Acridotheres .....ii. 367
——— , Zosterops .....ii. 243
Sibia capistrata .....ii. 96
—— gracilis .....ii. 97
—— melanoleuca .....ii. 97
—— nigriceps .....ii. 96
—— picata .....ii. 97
—— picoides .....ii. 95
—— pulchellus .....ii. 98
sibirica, Geocichla..... i. 300
——— , Hemichelidon ..... i. 183
sibiricus, Butalis ..... i. 183
——— , Turdulus..... i. 300
——— , Turdus ..... i. 300
simile, Trochalopteron .....ii. 77
similis, Agrodroma .....ii. 287
———, Mixornis.....ii. 148
simillima, Euspiza .....ii. 329
simplex, Anthothreptes.....ii. 238
——— , Anthreptes .....ii. 239
——— , Arachnecthra .....ii. 239
——— , Arachnophila .....ii. 239
——— , Nectarinia .....ii. 239
——— , Pycnonotus .....ii. 43
——— , Zosterops.....ii. 242
sindianus, Phylloscopus ..... i. 252

PAGE

sinensis, Ardetta....ii. 661
——, Cissa....ii. 139
——, Coccothraustes....ii. 342
——, Corydalla....ii. 289
——, Cotile....ii. 258
——, Cotyle....ii. 258
——, Dendrocitta....i. 137
——, Enicurus....ii. 70
——, *Graculus*....ii. 739
——, Henicurus....ii. 70
——, Hydrophasianus....ii. 634
——, Munia....ii. 342
——, Oriolus....ii. 368
——, Parra....ii. 634
——, Pelecanus....ii. 738
——, Phalacrocorax....ii. 739
——, Pyctorhis....ii. 130
——, Sterna....ii. 728
——, *Sternula*....ii. 728
——, Sturnia....ii. 368
——, Urocissa....i. 134
singalensis, Anthreptes....ii. 239
——— Chalcoparia....ii. 239
sipahi, Carpodacus....ii. 317
——, Corythus....ii. 317
——, Hæmatospiza....ii. 317
Siphia erythaca....i. 194
—— hodgsoni....i. 194
—— leucomelanura....i. 229
—— magnirostris....i. 226
—— Mandelli....i. 228
—— nigrorufa....i. 227
—— olivacea....i. 229
—— pallidipes....i. 223
—— rubeculoides....i. 225
—— ruficauda....i. 228
—— strophiata....i. 227
—— Tickelliæ....i. 225
—— tricolor....i. 229
—— unicolor....i. 224
sirkeer, Taccocua....ii. 425
——, Zanclostomus....ii. 425
Sitta castaneoventris....ii. 217
—— cinnamomeiventris....ii. 217
—— formosa....ii. 218
—— frontalis....ii. 218

PAGE

Sitta himalayensis....ii. 215
—— leucopsis....ii. 217
—— magna....ii. 215
—— nagaensis....ii. 215
—— neglecta....ii. 216
—— nipalensis....ii. 216
SITTINÆ....ii. 214
Siva castaneicauda....ii. 175
—— chrysæus....ii. 170
—— cyanuroptera....ii. 176
—— nipalensis....ii. 167
—— occipitalis....ii. 163
—— sordida....ii. 177
—— strigula....ii. 175
—— vinipectus....ii. 166
sivalensis, Palæornis....ii. 466
smaragdinus, Chrysococcyx....ii. 415
smithi, Hirundo....ii. 264
smyrnensis, Alcedo....ii. 483
———, Halcyon....ii. 483
socialis, Burnesia....i. 282
——, Prinia....i. 282
solaris, Pericrocotus....i. 179
solitaria, Gallinago....ii. 605
soloensis, Astur....i. 20
———, *Dœdalion*....i. 20
———, Micronisus....i. 20
———, Nisus....i. 20
somervillei, Crateropus....ii. 123
———, Timalia....ii. 123
Sonneratti, Cuculus....ii. 410
———, Gallus....ii. 546
sordida, Agrodroma....ii. 287
——, Erythrosterna....i. 187
——, Montifringilla....ii. 305
——, Muscicapa....i. 187
——, Phyllornis....ii. 15
——, Siva....ii. 177
sordidus, Anthus....ii. 287
——— Dendrocopus....ii. 453
——— Hemicercus....ii. 453
——— Picus....ii. 453
spadiceus, Galloperdix....ii. 547
sparverioides, Cuculus....ii. 411
———, Hierococcyx....ii. 411
spatula, Clypeata....ii. 682

PAGE

speciosa, Corvus ..... i. 139
speciosus, Pericrocotus ..... i. 173
speculigerus, Coccothraustes .....ii. 298
————, Hesperiphona .....ii. 298
Sphenocercus apicaudus .....ii. 503
———— sphenurus .....ii. 502
Sphenocichla humii .....ii. 50
sphenurus, Vinago.....ii. 502
spilocephalus, Ephialtes ..... i. 100
spilogaster, Hæmatornis ..... i. 46
————, Spilornis..... i. 46
spilonotus, Certhia.....ii. 213
————, Machlolophus.....ii. 185
————, Parus .....ii. 185
————, Salpornis .....ii. 213
Spilopelia tigrina .....ii. 515
spiloptera, Saraglossa .....ii. 374
Spilornis bacha ..... i. 45
———— cheela ..... i. 44, 46
———— Davisoni ..... i. 45
———— melanotis, ... i. 45
———— pallidus ..... i. 49
———— rutherfordi ..... i. 45
———— spilogaster ..... i. 45
spinoides, Chrysomitris.....ii. 301
————, Hypacanthus.....ii. 301
spinoletta, Anthus ..... ii. 294
spipoletta, Anthus .....ii. 294
Spizaetus alboniger ..... i. 41
———— caligatus ..... i. 42
———— cirrhatus..... i. 40
———— kienerii ..... i. 38
———— limnætus..... i. 42
———— nanus ..... i. 40
———— nipalensis ..... i. 39, 42
———— niveus ..... i. 42
Spizalauda deva .....ii. 359
———— malabarica .....ii. 359
Spizixus canifrons .....ii. 48
splendens, Corone ..... i. 130
spodiopygia, Collocalia.....ii. 394
spodocephala, Emberiza .....ii. 332
spodopygius, Macropteryx .....ii. 394
squalida, Pipra .....ii. 251
squalidus, Prionochilus.....ii. 251
squamata, Microura .....ii. 50
————, Pnoepyga .....ii. 52

PAGE

squamatum, Trochalopteron .....ii. 82
————, Trochalopterum .....ii. 82
squamatus, Gecinus .....ii. 446
————, Ianthocincla .....ii. 82
————, Picus .....ii. 446
squamigularis, Picus .....ii. 442
Squatarola helvetica .....ii. 583
Stachyridopsis assimilis .....ii. 155
———— chrysea .....ii. 155
———— præcognitus.....ii. 154
———— pyrrhops .....ii. 154
———— ruficeps .....ii. 153
———— rufifrons .....ii. 154
Stachyris assimilis.....ii. 155
———— bocagii .....ii. 156
———— chrysæa .....ii. 155
———— guttata .....ii. 138
———— nigriceps .....ii. 138
———— pyrrhops.....ii. 154
———— ruficeps .....ii. 153
———— rufifrons.....ii. 154
Stactocichla merulina .....ii. 113
stagnatilis, Totanus .....ii. 621
stapazina, Motacilla .....ii. 7
Staphidia castaneiceps .....ii. 164
———— humilis .....ii. 164
———— plumbeiceps .....ii. 165
———— rufigenis .....ii. 165
———— striata .....ii. 165
STEATORNINÆ.....ii. 397
stellaris, Botaurus .....ii. 662
stellata, Brachypteryx .....ii. 62
stenorhynchus, Pomatorhinus.....ii. 103
stentoreus Acrocephalus ..... i. 257
stenura, Gallinago .....ii. 605
———— , Scolopax .....ii. 605
STERCORARINÆ .....ii. 712
Stercorarius *antarcticus* .....ii. 713
———— asiaticus.....ii. 714
———— pomatorhinus .....ii. 713
Sterna albigena .....ii. 726
———— anæstethus .....ii. 728
———— *anglica*.....ii. 720
———— bengalensis.....ii. 723
———— Bergii .....ii. 721
———— cantiaca .....ii. 722
———— caspia .....ii. 721

PAGE

Sterna *cristata* .....ii. 721
——— Dougalli .....ii. 725
——— *fluviatilis* .....ii. 726
——— fuliginosa .....ii. 729
——— *Gouldi* .....ii. 728
——— *gracilis* .....ii. 725
——— hirundo .....ii. 726
——— *innotata* .....ii. 719
——— *javanica* .....ii. 719, 724
——— *korustes* .....ii. 725
——— *leucoptera* .....ii. 719
——— media .....ii. 723
——— melanauchen .....ii. 723
——— melanogastra .....ii. 724
——— *minuta* .....ii. 728
——— *nilotica* .....ii. 720
——— *panayensis* .....ii. 728
——— *paradisea* .....ii. 725
——— saundersii .....ii. 727
——— seena .....ii. 724
——— sinensis .....ii. 728
——— *sumatrana* .....ii. 723
——— *velox* .....ii. 721
Sternula melanauchen .....ii. 723
——— *minuta* .....ii. 728
stewarti, Citrinella .....ii. 334
———, Emberiza .....ii. 334
———, Prinia ..... i. 232
Stolickzæ, Certhia .....ii. 212
———, Cettia .....ii. 266
stolida, Anous .....ii. 730
stolida, *Sterna* .....ii. 730
Stoparola albicaudata ..... i. 222
——— melanops ..... i. 223
stracheyi, *Emberiza* .....ii. 333
straminea, Acridiornis ..... i. 260
———, Locustella ..... i. 260
strenuus, Cuculus .....ii. 411
strepera, Anas .....ii. 686
streperus, Chaulelasmus .....ii. 686
strepitans, Bubo ..... i. 87
———, Garrulax .....ii. 116
———, Dryonastes .....ii. 116
Strepsilas interpres .....ii. 597
STREPSILINÆ .....ii. 596
striata, Amadina .....ii. 343

PAGE

striata, Corythocichla .....ii. 151
———, Geopelia .....ii. 518
———, Grammatoptila .....ii. 114
———, Hypotænidia .....ii. 637
———, Munia .....ii. 343
———, Prinia ..... i. 275
———, Staphidia .....ii. 165
———, Suya ..... i. 275
striatulus, Blanfordius ..... i. 275
striatus, Alcurus, ...ii. 32
——— , Cuculus ... .ii. 408, 410
——— , Euplectes .....ii. 339
——— , Ixulus .....ii. 165
——— , Melizophilus ..... i. 284
——— , Picus .....ii. 451
——— , *Rallus* .....ii. 638
——— , Tardinus .....ii. 151
strictus, Chrysocolaptes .....ii. 451
——— , Indopicus .....ii. 451
——— , Picus .....ii. 451
STRIGIDÆ ..... i. 122
strigatus, Turdus .....ii. 371
subigula, Hemiparus .....ii. 175
——— , Leiothrix .....ii. 175
——— , Siva .....ii. 175
striolata, Cecropis .....ii. 265
———, Corydalla .....ii. 290
———, Emberiza .....ii. 335
———, Fringillaria .....ii. 335
———, Hirundo .....ii. 265
striolatus, Anthus .....ii. 290
———, Chloropicus .....ii. 447
———, Gecinus .....ii. 447
———, Picus .....ii. 447
———, Trichophorus .....ii. 22
STRIX ..... i. 122
Strix candida ..... i. 123
—— flammea ..... i. 122
—— indica ..... i. 122
—— Javanica ..... i. 122
—— pagodarum ..... i. 117
—— sceloputo ..... i. 117
—— sumatrana ..... i. 87
strophiata, Siphia ..... i. 228
strophiatus, Accentor .....ii. 191, 192
———, Archibuteo ..... i. 26

PAGE

strophiatus, Siphia..... i. 228
struthersii, Ibidorhynchus .....ii. 631
Sturnia Blythii .....ii. 371
—— burmannica .....ii. 369
—— cognita .....ii. 369
—— daurica .....ii. 368
—— dauricus.....ii. 368
—— erythropygia.....ii. 371
—— leucocephala .....ii. 369
—— malabarica.....ii. 370
—— nemoricola.....ii. 371
—— pagodarum .....ii. 367
—— sinensis .....ii. 368
STURNIDÆ .....ii. 362
STURNINÀ .....ii. 368
STURNINÆ .....ii. 363
sturnina, Gracula .....ii. 368
——, Sturnia .....ii. 368
Sturnopastor contra .....ii. 364
—— minor .....ii. 363
—— superciliaris .....ii. 364
—— vulgaris .....ii. 363
Sturnus niteus .....ii. 364
—— unicolor.....ii. 364
subarquata, Pelidna .....ii. 615
——, Tringa .....ii. 615
subbuteo, Falco ..... i. 73
——, Hypotriorchis..... i. 73
subcœrulatus, Dryonastes .....ii. 118
subfurcatus, Cypselus .....ii. 389
subhimalayensus, Corythus.....ii 326
——, Propyrrhula ...ii. 326
——, Tichodroma ...ii. 213
submoniliger, Anthipes ..... i. 231
——, Digenea..... i. 231
subniger, Hypsipetes.....ii. 19
subochraceum, Pellorneum .....ii. 137
subrufa, Argya .....ii. 92
——, Layardia .....ii. 92
subruficollis, Aceros .....ii. 493
——, Buceros .....ii. 493
——, Rhyticeros .....ii. 493
——, Rhytidoceros .....ii. 493
subrufus, Malacocercus .....ii. 92
subsoccata, Cotile .....ii. 256
——, Cotyle.....ii. 256

PAGE

subundulata, Munia .....ii. 342
subunicolor, Garrulax .....ii. 82
——, Trochalopteron .....ii. 82
——, Trochalopterum .....ii. 82
subviridis, Machlolophus .....ii. 185
——, Parus .....ii. 185
——, Phylloscopus ..... i. 252
sueicica, Cyanecula ..... i. 317
Sula australis .....ii. 735
—— cyanops .....ii. 734
—— *fusca*.....ii. 735
—— *personata*.....ii. 734
—— piscator .....ii. 735
—— *piscatrix* .....ii. 735
sula, Dysporus.....ii. 734
—— Pelecanus .....ii. 735
SULIDÆ.....ii. 734
sulphurea, Calobates .....ii. 278
——, Motacilla .....ii. 278
sultaneus, Chrysocolaptes .....ii. 451
——, Indopicus.....ii. 182
——, Melanochlora .....ii. 182
——, Picus.....ii. 451
sumatrana, Ardea .....ii. 657
——, Mixornis .....ii. 148
——, *Onychoprion* .....ii. 723
——, *Sterna*.....ii. 723
——, Strix ..... i. 87
sumatranus, Coracias.....ii. 386
——, Corydon.....ii. 386
——, Cuculus.....ii. 421
——, Eurylæmus.....ii. 386
——, Rhopodytes .....ii. 420
sumatrensis, Baza ..... i. 63
sundara, Niltava..... i. 231
sunia, Ephialtes ..... i. 93
—— , Scops..... i. 93
superciliaris, Abrornis ..... i. 219
——, Cryptolopha ..... i. 219
——, Ianthina ..... i. 200
——, Larvivora..... i. 314
——, Muscicapa ..... i. 195
——, Muscicapula .....i. 195
——, Pomatorhinus.....ii. 106
——, Prinia ..... i. 279
——, Sturnopastor .....ii. 364

PAGE

superciliaris, Tarsiger ..... i. 200
———, Xiphoramphus.....ii. 106
———, Xiphorhynchus .....ii. 106
superciliosa, Ophrysia .....ii. 563
superciliosus, Motacilla..... i. 249
———, Phylloscopus .....i. 249
———, Reguloides .....i. 248, 249
superstriata, Amadina .....ii. 342
———, Munia .....ii. 342
suratensis, Turtur .....ii. 514
Surniculus dicruroides .....ii. 414
———lugubris .....ii. 414
susanii, Criniger.....ii. 25
Suthora daflaensis .....ii. 125
—— gularis .....ii. 126
—— Humii.....ii. 124
—— munipurensis .....ii. 125
—— nipalensis .....ii. 125
—— poliotis .....ii. 125
—— ruficeps .....ii. 125
—— unicolor.....ii. 126
Sutoria sutoria ..... i. 285
sutorius, Orthotomus..... i. 285
Suya albigularis ..... i. 278
—— atrigularis ..... i. 277
—— crinigera ..... i. 274
—— erythropleura ..... i. 279
—— fuliginosa ..... i. 275
—— gangetica ..... i. 281
—— Khasiana..... i. 277
—— obscura ..... i. 275
—— striata ..... i 275
—— superciliaris ..... i. 279
swainsonii, Circus ..... i. 14
swinhoei, Merops .....ii. 472
syenitica, Saxicola .....ii. 4
sykesi, Campophaga ..... i. 181
—— , Hemipodius .....ii. 570
—— , Lalage ..... i. 181
—— , Malacocercus .....ii. 123
—— , Volvocivora ..... i. 181
Sylochelidon caspius .....ii. 721
Sylvanus, Cichloramphus.....ii. 295
———, Heterura .....ii. 295
———, Oreocorys .....ii. 295
sylvatica, Carpophaga .....ii. 503
———, Drymoeca ..... i. 280

PAGE

sylvatica, Drymoipus..... i. 281
———, Hirundinapus .....ii. 392
———, Prinia ..... i. 280
Sylvia affinis ..... i. 236
—— althæa ..... i. 237
—— cinerea ..... i. 235
—— curruca..... i. 236
—— delicatula..... i. 237
—— familiaris..... i. 238
—— indica ..... i. 262
—— Jerdoni..... i. 236
—— longicaudata ..... i. 279
—— melanopogon ..... i. 265
—— minuscula ..... i. 237
—— nana ..... i. 237
—— rufa ..... i. 235
—— Schwarzi ..... i. 263
sylvicola, Tephrodornis..... i. 163
SYLVIINÆ ..... i. 235
Sylviparus modestus .....ii. 188
Sypheotides auritus .....ii. 578
———— bengalensis .....ii. 577
SYRNIINÆ ..... i. 113
Syrnium Butleri..... i. 110
——— indranee ..... i. 121
——— newarense ..... i 120
——— nivicolum ..... i. 117
——— ocellatum ..... i. 118
——— sinense ..... i. 120
Syrrhaptes thibetanus .....ii. 528

Taccocua affinis .....ii. 425
——— infuscata .....ii. 425
——— Leschenaulti.....ii. 425
——— sirkeer .....ii. 425
Tachypetes aquila .....ii. 734
Tadorna casarca .....ii. 680
——— cornuta .....ii. 681
——— *vulpanser* .....ii. 682
taigoor, Turnix .....ii. 569
TANTALINÆ.....ii. 664
Tantalus leucocephalus.....ii. 665
——— melanocephalus .....ii. 667
tarda, Otis .....ii. 572
Tarsiger chrysæus ..... i. 201
—— Hodgsoni..... i. 199

PAGE

Tarsiger hyperythrus ..... i. 199
——— indicus ..... i. 120
——— rufilatus ..... i. 198
Tchitrea affinis ..... i. 212
——— paradisi ..... i. 210
tectirostris, Ardea ..... ii. 651
———, Bhringa ..... i. 159
tectorum, Cypselus ..... ii. 391
teesa, Butastur ..... i. 47
——, Poliornis ..... i. 47
Temenuchus burmannicus ..... ii. 369
——— dauricus ..... ii. 368
——— leucopterus ..... ii. 369
——— malabaricus ..... ii. 368
——— myiophoneus ..... ii. 355
——— nemoricolus ..... ii. 371
——— pagodarum ..... ii. 367
Temmincki tringa ..... ii. 613
temporalis, Locustella ..... i. 259
tenellipes, Phyllopneuste ..... i. 242
———, Phylloscopus ..... i. 242
Tentheca leucura ..... i. 162
——— pelvica ..... i. 163
tenuirostris, Anous ..... ii. 730
———, Cacomantis ..... ii. 413
———, Gyps ..... i. 6
———, Ololygon ..... ii. 413
———, Oriolus ..... i. 147
———, Polyphasia ..... ii. 413
tephrocephala, Cryptolopha ..... i. 217
———, Culicepeta ..... i. 217
Tephrodornis grisola ..... i. 164
———indica ..... i. 162
———obscura ..... i. 165
———pelvica ..... i. 163
———pelvicus ..... i. 163
———pondiceriana ..... i. 162
———sylvicola ..... i. 163
tephronotus, Collurio ..... ii. 204
———, Lanius ..... ii. 204
terat, Lalage ..... i. 182
Terekia cinerea ..... ii. 623
Terpsiphone affinis ..... i. 212
———paradisi ..... i. 210
terricolor, Alseonax ..... i. 185
———, Butalis ..... i. 185
———, Drymoipus ..... i. 279

PAGE

Tesia albiventer ..... ii. 52
——— castaneocoronata ..... ii. 156
——— coromandelica ..... ii. 566
——— cyaniventer ..... ii. 157
——— flaviventer ..... ii. 156
Tetrao chinensis ..... ii. 567
——— ocellatus ..... ii. 560
——— perlatus ..... ii. 552
——— viridis ..... ii. 561
Tetraogallus Himalayensis ..... ii. 549
——— thibetanus ..... ii. 549
tetrax, Otis ..... ii. 573
Thalasseus Bengalensis ..... ii. 729
Thalassidroma Wilsoni ..... ii. 710
Thamnobia cambaiensis ..... ii. 64
——— fulicata ..... ii. 64
thermophilus, Cichlops ..... ii. 290
thibetana, Chrysomitris ..... ii. 301
thibetanum, Polyplectron ..... ii. 531
———, Syrrhaptes ..... ii. 528
thibetanus, Tetraogallus ..... ii. 549
thoracica, Dumeticola ..... i. 261
thoracicus, Prionochilus ..... ii. 250
threnodes, Cacomantis ..... ii. 413
Threskiornis melanocephalus ..... ii. 667
Thriponax Crawfurdi ..... ii. 450
———Feddeni ..... ii. 450
———*Hodgei* ..... ii. 449
———Hodgsoni ..... ii. 449
———Javensis ..... ii. 450
———Jerdoni ..... ii. 450
thura, Carpodacus ..... ii. 320
——, Propasser ..... ii. 320
Tichodroma muraria ..... ii. 213
——— nipalensis ..... ii. 213
——— subhimalayana ..... ii. 213
tickelli, Anorrhinus ..... ii. 496
——, Hypsipetes ..... ii. 25
——, Iole ..... ii. 25
——, Ocyceros ..... ii. 496
——, Toccus ..... ii. 496
Tickelli, Arboricola ..... ii. 558
——, Drymocataphus ..... ii. 144
——, Iole ..... ii. 25
——, Orthorhinus ..... ii 105
——, Pellorneum ..... ii. 137
——, Pomatorhinus ..... ii. 105

PAGE

Tickelli, Toccus .....ii. 496
tickelliæ, Cyornis ..... i. 225
———, Siphia ..... i. 225
Tiga intermedia .....ii. 438
—— Javanensis .....ii. 438
—— rubropygialis .....ii. 433
—— Shorii .....ii. 438
tigrina, Columba.....ii. 515
———, Spilopelia .....ii. 515
tigrinus, Turtur .....ii. 515
Timalia bengalensis .....ii. 129
——— chatorhæa .....ii. 93
——— malcolmi .....ii. 95
——— nipalensis .....ii. 89
——— pellotis .....ii. 89
——— platyura..... i. 270
——— Somervillei.....ii. 123
——— subrufa .....ii. 92
TIMELIÆ .....ii. 129
Timelia hyperythra.....ii. 133
——— hypoleuca .....ii. 131
——— Jerdoni .....ii. 129
——— longirostris.....ii. 130
——— pileata .....ii. 129
TINAMIDÆ .....ii. 568
tinnuncula, Cerchneis ..... i. 77
Tinnunculus alaudarius ..... i. 77
———— Cenchris ..... i. 78
tinus, Cypselus .....ii. 391
tiphia, Ægithina .....ii. 9
———, Motacilla .....ii. 9
Toccus gingalensis .....ii. 492
——— griseus .....ii. 495
——— tickelli .....ii. 496
Todiramphus collaris .....ii. 484
torquata, Melanocorypha.....ii. 355
torquatus, Gampsorhynchus .....ii. 91
———, Palæornis .....ii. 467
———, Psittacus.....ii. 467
torqueola, Arboricola .....ii. 556
torquilla, Iynx .....ii. 433
———, Yunx .....ii. 433
torra, Ardea.....ii. 655
——, Herodias .....ii. 655
TOTANINÆ .....ii. 619
Totanus *calidris*.....ii. 622
——— canescens.....ii. 621

PAGE

Totanus dubius .....ii. 623
——— fuscus .....ii. 622
——— glareola .....ii. 620
——— *glottis* .....ii. 621
——— Haughtoni .....ii. 623
——— *hypoleucos* .....ii. 619
——— ochropus .....ii. 619
——— stagnatilis .....ii. 621
totanus, Scolopax .....ii. 621
Trachycomus ochrocephalus .....ii. 33
trailli, Oriolus..... i. 150
———, Pastor ..... i. 150
———, Psaropholus ..... i. 150
tranquebaricus, Turtur.....ii. 516
Treron apicauda.....ii. 503
——— fulvicollis ..... ii. 501
——— nipalensis .....ii. 497
——— vernans .....ii. 500
TRERONIDÆ.....ii. 497
Tribura luteoventris .....i. 262
Trichostoma abbotti .....ii. 140
———— bicolor .....ii. 142
———— ferruginosum .....ii. 142
———— leucoproctum ..... i. 233
———— minor .....ii. 144
———— minus .....ii. 144
———— olivaceum .....ii. 140
———— rostratum .....ii. 416
———— rubiginosa .....ii. 145
Tricholestes crinigera .....ii. 31
———— minutus.....ii. 31
Trichophorus gutturalis .....ii. 30
———— minutus .....ii. 31
———— striatus .....ii. 32
———— striolatus.....ii. 22
tricolor, Cittocincla .....ii. 68
———, Lanius .....ii. 207
———, Myristivora.....ii. 505
———, Siphia ..... i. 229
tridactyla, Alcedo .....ii. 486
————, Ceyx.....ii. 486
trigonostigma, Certhia .....ii. 245
————, Dicæum.....ii. 245
Tringa *alpina* .....ii. 615
——— *chirurgus* .....ii. 635
——— cinclus.....ii. 615
——— crassirostris .....ii. 613

PAGE
Tringa *damascensis* .....ii. 612
——— *glareola* .....ii. 620
——— helvetica .....ii. 583
——— *hypoleucos* .....ii. 619
——— interpres .....ii. 597
——— minuta.....ii. 611
——— *ochrophus* .....ii. 619
——— *ochropus* .....ii. 619
——— platyrhyncha .....ii. 610
——— *pugnax*.....ii. 616
——— *ruficollis* .....ii. 612
——— *salina* .....ii. 612
——— subarquata .....ii. 615
——— subminuta .....ii. 612
——— Temmincki .....ii. 613
Tringinæ .....ii. 610
Tringoides hypoleucos .....ii. 619
tristis, Acridotheris .....ii. 365
———, Brachypodius.....ii. 25
———, Criniger .....ii. 25
———, Melias .....ii. 429
———, Phyllopneuste ..... i. 246
———, Phylloscopus ..... i. 246
———, Picus .....ii. 460
———, Rhopodytes .....ii. 419
———, Zanclostomus .....ii. 419
trivialis, Alauda.....ii. 284
——— , Anthus .....ii. 284
——— , Pipastes .....ii. 284
trivirgatus, Astur ..... i. 17
————, Falco... ..... i. 17
————, Lophospizia ..... i. 17
Trochalopteron cachinnans .....ii. 84
——————— chrysopterum ...ii. 78
——————— erythrolæma .....ii. 78
——————— fairbanki.....ii. 85
——————— imbricatum.....ii. 87
——————— jerdoni.....ii. 84
——————— melanostigma ...ii. 80
——————— meridionale .....ii. 86
——————— phœniceum.....ii. 83
——————— ruficapillum .....ii. 78
——————— rufigulare .....ii. 80
——————— squamatum.....ii. 82
——————— subunicolor .....ii. 82
Trochalopterum affine .....ii. 76
——————— austeni.....ii. 83
Trochalopterum chrysopterum ...ii. 78
——————— cineraceum .....ii. 81
——————— erythrocephalum..ii. 77
——————— erythrolæma .....ii. 79
——————— lineatum.....ii. 86
——————— melanostigma ...ii. 80
——————— phœniceum.....ii. 83
——————— ruficapillum .....ii. 79
——————— rufigulare .....ii. 80
——————— squamatum .....ii. 82
——————— subunicolor.....ii. 82
——————— variegatum.....ii. 76
——————— virgatum.....ii. 88
Troglodytinæ .....ii. 48
Trogon asiaticus.....ii. 429
——— duvaucelli .....ii. 407
——— erythrocephalus .....ii. 405
——— hodgsoni .....ii. 405
——— maculatus .....ii. 415
——— malabaricus .....ii. 405
——— oreskios .....i . 406
Trogonidæ.....ii. 405
Tropicoperdix chloropus .....ii. 557
Trypanocorax frugilegus ..... i. 126
tschebaiewi, Calliope..... i. 317
————, Erithacus ..... i. 317
tukki, Meiglyptes .....ii. 461
———, Picus .....ii. 461
Turdidæ ..... i. 235
Turdinæ..... i. 293
Turdinulus murinus .....ii. 152
——————— Roberti .....ii. 152
Turdinus abbotti .....ii. 140
——— brevicaudatus .....ii. 150
——— crispifrons .....ii. 146
——— Darwini .....ii. 146
——— garoensis.....ii. 144
——— guttatus .....ii. 139
——— magnirostris .....ii. 141
——— nagaensis .....ii. 143
——— striatus .....ii. 151
——— Williamsoni .....ii. 151
Turdirostris umbratilis.....ii. 146
Turdulus cardis ..... i. 307
——— davisoni ..... i. 300
——— sibiricus ..... i. 300
Turdus albocinctus ..... i. 304

PAGE

Turdus analis .....ii. 38
——— atriceps .....ii. 26
——— atrigularis ..... i. 305
——— camtschatkensis ..... i. 315
——— canorus .....ii. 122
——— chalybeus .....ii. 371
——— citrinus ..... i. 298
——— cyanotus ..... i. 297
——— dauma, ... i. 294
——— daulias ..... i. 310
——— diardi .....ii. 109
——— dissimillis ..... i. 307
——— dubius..... i. 307
——— erythrogaster ..... i. 313
——— eunomus..... i. 306
——— fuscatus..... i. 306
——— hodgsoni ..... i. 302
——— iliacus..... i. 302
——— leschenaulti .....ii. 70
——— malabaricus.....ii. 14, 370
——— modestus ..... i. 309
——— mollisimus ..... i. 295
——— mystacinus..... i. 308
——— naumanni ..... i. 306
——— neilgherriensis ..... i. 295
——— nigropileus ..... i. 305
——— obscurus ..... i. 309
——— ochrocephalus .....ii. 33
——— pagodarum .....ii. 367
——— pallens ..... i. 309
——— pallidus ..... i. 310
——— pilaris..... i. 203
——— pœcilopterus... ..... i. 304
——— protomomelas ..... i. 307
——— rufulus ..... i. 309
——— saxatilis ..... i. 311
——— sibiricus..... i. 300
——— simillima ..... i. 305
——— strigatus .....ii. 371
——— tricolor .....ii. 68
——— viscivorus ..... i. 302
Turnix albiventris .....ii. 571
——— blanfordi.....ii. 570
——— cambayensis .....ii. 514
——— dussumieri.....ii. 569, 570
——— joudera .....ii. 569
——— maculatus .....ii. 570

PAGE

Turnix maculosa .....ii. 570
——— ocellatus.....ii. 568
——— plumbipes .....ii. 568
——— pugnax .....ii. 568
——— taigoor .....ii. 569
Turtur humilis .....ii. 516
——— humilior.....ii 516
——— meena.....ii. 513
——— pulchratus.....ii. 512
——— risorius .....ii. 515
——— rupicolus .....ii. 512
——— senegalensis .....ii. 513
——— suratensis .....ii. 514
——— *tranquebaricus*.....ii. 516
——— tigrinus .....ii. 515
Turturinæ .....ii. 512
tussalia, Coccyzura .....ii. 511
——— , Macropygia.....ii. 511
typhon, Ardea.....ii. 651
typhia, Iora.....ii. 9
typus, Chiquera ..... i. 74
Tytleri, Calornis.....ii. 371
———, Cisticola..... i. 293
———, Hirundo.....ii. 262
———, Myiagra ..... i. 202
———, Phylloscopus ..... i. 248

ubiquitarius, Cichlops .....ii. 291
umbratilis, Turdirostris .....ii. 146
umbrinus, Corvus ..... i. 127
undulata, Loxia .....ii. 342
———, Munia .....ii. 342
undulatus, Buceros .....ii. 494
——— , Rhyticeros .....ii. 494
——— , Rhytidoceros.....ii. 494
unicolor, Cyornis ..... i. 224
——— , Geocichla ..... i. 309
——— , Heteromorpha .....ii. 126
——— , Merula ..... i. 309
——— , Paradoxornis.....ii. 126
——— , Siphia ..... i. 224
——— , Sturnus .....ii. 364
——— , Suthora .....ii. 126
Unwinii, Caprimulgus .....ii. 401
Upupa Ceylonensis .....ii. 469, 470
——— epops .....ii. 469

PAGE

Upupa indica ..... ii. 469
—— longirostris ..... ii. 469
—— nigripennis ..... ii. 470
UPUPIDÆ ..... ii. 469
urbica, Chelidon ..... ii. 253, 254
——, Hirundo ..... ii. 253
Urocichla longicaudata ..... ii. 49
Urocissa flavirostris ..... i. 134
—— magnirostris ..... i. 133
—— occipitalis ..... i. 133
—— sinensis ..... i. 134
uropygialis, Garrulax ..... ii. 110
Urrua bengalensis ..... i. 84
—— coromanda ..... i. 85

vaillantii, Corvus ..... i. 131
valida, Drymœca ..... i. 281
VANELLINÆ ..... ii. 589
Vanellus cristatus ..... ii. 589
varians, Crypsirrhina ..... i. 138
variegatum, Cinclosoma ..... ii. 76
——, Trochalopteron ..... ii. 76
——, Trochalopterum ..... ii. 76
varius, Hierococcyx ..... ii. 412
velatum, Philentoma ..... i. 213
velox, Sterna ..... ii. 721
Venilia malaccensis ..... ii. 443
—— porphyromelas ..... ii. 442
—— pyrrhotis ..... ii. 441
ventralis, Hoplopterus ..... ii. 592
vernalis, Coryllis ..... ii. 463
——, Loriculus ..... ii. 463
——, Psittacus ..... ii. 463
vernans, Columba ..... ii. 500
——, Osmotreron ..... ii. 500
——, Treron ..... ii. 500
vespertinus, Erythropus ..... i. 79
vibrissa, Psittacus ..... ii. 464
Vieillotti, Euplocamus ..... ii. 544
——, Gallophasis ..... ii. 544
vigil, Buceros ..... ii. 491
——, Rhinoplax ..... ii. 491
vigorsi, Æthopyga ..... ii. 221
——, Cinnyris ..... ii. 221
——, Garrulus ..... i. 143
vinago, Sphenurus ..... ii. 502
vinipectus, Alcippe ..... ii. 166
——, Leiothrix ..... ii. 166
——, Proparus ..... ii. 166
——, Siva ..... ii. 166
virens, Bucco ..... ii. 426, 427
——, Megalæma ..... ii. 426, 427
virescens, Iole ..... ii. 23
viridescens, Iole ..... ii. 23
virgatus, Accipiter ..... i. 22
——, Falco ..... i. 22
virgatum, Trochalopterum ..... ii. 88
virginicus, Charadrius ..... ii. 585
virgo, Anthropoides ..... ii. 602
viridanus, Gecinus ..... ii. 448
——, Phyllopneuste ..... i. 241
——, Phylloscopus ..... i. 241
——, Picus ..... ii. 448
viridifrons, Crocopus ..... ii. 499
viridipennis, Phylloscopus ..... i. 246
——, Reguloides ..... i. 246
viridirostris, Zanclostomus ..... ii. 421
viridis, Budytes ..... ii. 281
——, Calyptomena ..... ii. 38
——, Cochoa ..... i. 167
——, Columba ..... ii. 500
——, Gecinulus ..... ii. 457
——, Megalæma ..... ii. 429
——, Merops ..... ii. 471
——, Motacilla ..... ii. 281
——, Osmotreron ..... ii. 500
——, Tetrao ..... ii. 561
viridissima, Ægithina ..... ii. 8
——, Iora ..... ii. 8
vittatus, Gecinus ..... ii. 448
——, Lanius ..... ii. 210
Vivia innominata ..... ii. 435
—— nepalensis ..... ii. 435
vivida, Cyornis ..... i. 232
——, Niltava ..... i. 232
Volvocivora avensis ..... i. 172
—— intermedia ..... i. 173
—— melaschistos ..... i. 171
—— neglecta ..... i. 172
—— saturata ..... i. 171
—— Sykesii ..... i. 181

PAGE

vulgaris, Sturnus .....ii. 363
vulpanser, Tadorna .....ii. 682
Vultur calvus..... ..... i. 9
——— monachus ..... i. 3
——— pondicerianus ..... i. 9
VULTURIDÆ ..... i. 2
VULTURINÆ ..... i. 2

Waldeni, Actinodura .....ii. 119
———, Æthopyga .....ii. 226
———, Buchanga ..... i. 155
Wallichi, Phasianus .....ii. 539
Wardi, Cichloselys..... i. 300
———, Geocichla ..... i. 300
———, Turdus ..... i. 300
———, Turdulus ..... i. 300
Williamsoni, Turdinus .....ii. 151
Wilsoni, Procellaria.....ii. 710
———, Thalassidroma .....ii. 710

xanthochlora, Anthreptes.....ii. 239
———, Erpornis .....ii. 174
xanthochloris, Allotrius .....ii. 201
———, Pterorythrius .....ii. 201
xanthogenys, Machlolophus .....ii. 184
———, Parus .....ii. 184
Xantholæma cyanotis .....ii. 432
——— hæmacephala .....ii. 431
——— indica .....ii. 431
——— malabarica .....ii. 432
xantholæmus, Brachypus .....ii. 41
———, Ixus.....ii. 41
———, Pycnonotus .....ii. 41
xantholeuca, Herpornis.....ii. 174
xanthonotus, Oriolus ..... i. 149
———, Indicator .....ii. 434
Xanthopygia fuliginosa ..... i. 204
xanthorhynchus, Chalcococcyx ...ii. 416
———, Chrysococcyx...ii. 416
———, Cuculus .....ii. 416
xanthoschistos, Abrornis..... i. 217
———, Phyllopneuste ... i. 217
Xenocichla icterica .....ii. 33

PAGE

Xenorhynchus asiaticus .....ii. 648
——— *australis* .....ii. 648
Xiphoramphus superciliaris.....ii. 106

Yuhina gularis .....ii. 171
——— nigrimentum.....ii. 172
——— occipitalis .....ii. 163, 172
——— pyrrhura.....ii. 173
YUNCINÆ.....ii. 433
Yungipicus canicapillus .....ii. 458
——— nanus .....ii. 468
yunnanensis, Hypsipetes .....ii. 19
Yunx torquilla..... .....ii. 433

Zanclostomus diardi .....ii. 420
——— Javanicus .....ii. 422
——— sirkeer .....ii. 425
——— tristis .....ii. 419
——— viridirostris.....ii. 421
Zapornis pygmæa .....ii. 640
zeylanicus, Rallus ..... ii. 631
zeylonensis, *Galloperdix* .....ii. 549
zeylonica, Certhia .....ii. 230
———, Cinnyris.....ii. 230
———, Leptocoma .....ii. 230
———, Nectarinia .....ii. 230
———, Nectarophila .....ii. 230
Zoothera marginata ..... i. 297
——— monticola ..... i. 293
Zosterops aureiventer .....ii. 246
——— Austeni .....ii. 243
——— Buxtoni .....ii. 243
——— chloropsis .....ii. 15
——— literalis .....ii. 243
——— nicobarica .....ii. 242
——— nicobariensis .....ii. 242
——— palpebrosa .....ii. 242
——— palpebrosa-nicobariensis ii. 242
——— Siamensis .....ii. 243
——— simplex .....ii. 242
Zosterops madraspatensis .....ii. 242
ZYGODACTYLI .....ii. 407

ENGLISH INDEX.

A

PAGE

Accentor, Black-throated .....ii. 190
———, Himalayan .....ii. 193
———, Jerdon's.....ii. 192
———, Large Himalayan.....ii. 193
———, Maroon-backed .....ii. 190
———, Robin .....ii. 191
———, Rufous-breasted .....ii. 191
Adjutant, The.....ii. 647
———, The Lesser .....ii. 648
Avocet, The.....ii. 631

B

Babbler, Abbott's Thrush .....ii. 140
——, Allied Tree .....ii. 155
——, Arrakan Scimitar .....ii. 104
——, Assam Ground .....ii. 138
——, „ Scimitar .....ii. 103
——, Austen's Scimitar .....ii. 101
——, Bengal .....ii. 122
——, Black-headed Ground ...ii. 143
——, Black-throated Tree .....ii. 138
——, Blyth's Thrush .....ii. 146
——, Brown-headed Tree .....ii. 141
——, Burmese-striated Groundii. 137
——, Ferruginous Scimitar.....ii. 102
——, „ Thrush .....ii. 142
——, Golden-headed Tree .....ii. 155
——, Hume's Ground .....ii. 143
——, „ Tree .....ii. 154
——, Jerdon's Grass.....ii. 131
——, Large Grey .....ii. 95
——, Larger Yellow-eyed .....ii. 130
——, Limestone Thrush .....ii. 146
——, Lloyd's Scimitar.....ii. 101
——, MacClelland's Scimitar...ii. 106
——, Nepalese Spotted Wren...ii. 134
——, Phayre's Scimitar .....ii. 102
——, Pinwill's „ .....ii. 100

PAGE

Babbler, Punjab Bush .....ii. 94
——, Red-billed Tree .....ii. 154
——, Red-capped Grass .....ii. 129
——, Red-headed Tree .....ii. 147
——, Red-winged „ .....ii. 149
——, Robert's Ground .....ii. 152
——, Rufous .....ii. 92
——, „ -backed .....ii. 92
——, „ -bellied .....ii. 133
——, „ Ground .....ii. 145
——, „ -headed Tree .....ii. 153
——, „ -necked Scimitar..ii. 104
——, „ -tailed .....ii. 123
——, Rusty-cheeked Scimitar .ii. 105
——, Sharpe's Assam Ground..ii. 144
——, „ Striated „ ..ii. 135
——, Short-tailed Thrush .....ii. 150
——, Slaty-headed Scimitar ...ii. 99
——, Slender-billed „ ...ii. 106
——, Southern „ ...ii. 100
——, Spiny.....ii. 89
——, Spotted Tree .....ii. 139
——, „ Wren .....ii. 136
——, Striated Bush .....ii. 93
——, „ Reed .....ii. 92
——, „ Thrush .....ii. 151
——, Sumatran Yellow-breasted Tree .....ii. 148
——, Tickell's Ground.....ii. 144
——, „ Scimitar .....ii. 105
——, White-headed .....ii. 122
——, White-throated,orBlyth'sii. 103
——, „ „ Bush ...ii. 94
——, „ „ Wren...ii. 132
——, Yellow-breasted Tree ...ii 148
——, „ -eyed.....ii
Barbet, Blue-eared .....
——, „ -faced .....
——, Brown ...
——, Comm

PAGE

Barbet, Crimson-breasted .....ii. 431
——, „ -throated .....ii. 432
——, Davison's .....ii. 430
——, Gaudy .....ii. 427
——, Great Chinese .....ii 427
——, „ Indian.....ii. 426
——, Hume's .....ii. 430
——, Lineated .....ii. 427
——, Malabar Green.....ii. 428
——, Ramsay's .....ii. 430
——, Small Green .....ii. 429
Bar-wing, Dafla .....ii. 120
——, Hoary .....ii. 120
——, Ogle's.....ii. 121
——, Ramsay's .....ii. 119
——, Rufous .....ii. 118
——, Walden's .....ii. 119
Bee-eater, Blue-necked.....ii. 474
——, „ -tailed .....ii. 471
——, Chestnut-headed.....ii. 472
——, Common Indian Green.ii. 471
——, European .....ii. 473
——, Persian .....ii. 473
——, Red-bearded.....ii. 474
Bittern, Blue .....ii. 660
——, Chestnut .....ii. 661
——, Little Green.....ii. 659
——, Little Yellow .....ii. 661
——, Little.....ii. 662
——, European .....ii. 662
——, Malay Tiger.....ii. 664
Blue-bird, Fairy..... i. 161
Blue-throat, Indian ..... i. 317
Booby, Brown.....ii. 735
——, Masked .....ii. 735
——, Red-legged .....ii. 735
Broad-bill, Black and Red .....ii. 387
——, „ and Yellow.....ii. 385
——, Dusky .....ii. 386
——, Gould's .....ii. 383
——, Green .....ii. 382
——, Hodgson's .....ii. 384
——, Horsfield's .....ii. 385
——, Long-tailed.....ii. 383
Xen daman Black-headed...ii. 27
ested Yellow .....ii. 46
.....ii. 26

PAGE

Bulbul, Blanford's.....ii. 41
——, Blue-whiskered Green ...ii. 17
——, Blyth's .....ii. 39
——, Bristle-backed .....ii. 31
——, Brown-eared.....ii. 20
——, Burmese Black .....ii. 19
——, „ Green .....ii. 16
——, „ Red-vented .....ii. 35
——, „ White-throated .ii. 30
——, Chinese Red-vented .....ii. 36
——, Common Dwarf .....ii. 9
——, „ Madras .....ii. 34
——, „ Red-vented ...ii. 37
——, Crested Brown .....ii. 25
——, Davison's .....ii. 40
——, „ Brown-eared ...ii. 22
——, Finch-billed .....ii. 48
——, Finlayson's .....ii. 40
——, Gold-fronted Green .....ii. 13
——, Green Dwarf.....ii. 8
——, Grey-bellied.....ii. 27, 47
——, „ -headed .....ii. 29
——, Hildebrandt's Brown-eared .....ii. 21
——, Himalayan Black.....ii. 18
——, Indian Ruby-throated ...ii. 47
——, Jerdon's or the Common Green .....ii. 15
——, „ Yellow-throated .ii. 41
——, Lafresnay's Dwarf. .....ii. 11
——, Large Olive .....ii. 42
——, Madras Red-whiskered ...ii. 44
——, Malabar Green .....ii. 14
——, Malachite-shouldered Green .....ii. 15
——, Malayan White-Throated ii. 30
——, Marshall's Dwarf.....ii. 10
——, Moore's Olive .....ii. 43
——, Orange-billed Green .....ii. 12
——, Red-Whiskered .....ii. 44
——, Rufous-bellied .....ii. 24
——, Small Olive .....ii. 23, 43
——, South Indian or Grey-headed .....ii. 28
——, Streaked.....ii. 22
——, Striated Green .....ii. 32
——, Sykes' Black.....ii. 19

	PAGE
Bulbul, Tenasserim Red-vented ...ii.	36
——, Tickell's ...ii.	25
——, White-cheeked Crested ...ii.	45
——, „ -cared ...ii.	38
——, „ eye-browed Bush ...ii.	39
——, „ -throated ...ii.	29
——, Yellow-browed ...ii.	33
——, „ -crowned ...ii.	33
——, „ -vented ...ii.	38
Bull-finch, Beavan's ...ii.	325
—— , Brown ...ii.	324
—— , Gold-headed Black ...ii.	316
—— , Orange ...ii.	325
—— , Red-headed Bull ...ii.	324
—— , Trumpeter, ...ii.	307
Bunting, Black-faced ...ii.	332
—— , „ -headed Corn ...ii.	329
—— , Chestnut ...ii.	331
—— , Crested Black ...ii.	337
—— , Dwarf ...ii.	327
—— , Grey-headed ...ii.	328
—— , „ -necked ...ii.	333
—— , Red-headed ...ii.	329
—— , Rosy Ortolan ...ii.	326
—— , Striolated ...ii.	335
—— , White-capped ...ii.	334
—— , „ -crowned ...ii.	334
—— , „ -necked ...ii.	333
—— , Yellow-breasted ...ii.	330
Bush-chat, Black and White ...i.	205
—— , Dark Grey ...i.	205
—— , Golden ...i.	201
—— , Indian ...i.	191
—— , Large ...i.	190
—— , Stolickza's ...i.	189
—— , White-tailed ...i.	192
Bustard, European ...ii.	572
——, Houbara ...ii.	575
——, Indian ...ii.	574
——, Lesser ...ii.	573
Buzzard, African ... i.	25
—— , Brown Eagle ... i.	26
—— , Grey-checked ... i.	50
—— , Harrier ... i.	25
—— , Honey ... i.	61
—— , Long-legged ... i.	23
—— , White-eyed ... i.	47

C

	PAGE
Chat, Black and White Bush ... i.	205
—— , Dark Grey Bush ... i.	205
—— , Golden Bush ... i.	201
—— , Himalayan Long-winged Blue ... i.	319
—— , Hooded Stone ...ii.	3
—— , Hume's Pied Stone ...ii.	2
—— , Indian Blue Robin or Wood ... i.	314
—— , „ Bush ... i.	191
—— , „ Chat-Robin or Brown ii.	1
—— , „ Stone ...ii.	3
—— , „ White-tailed Stone .ii.	4
—— , Large Bush ... i.	190
—— , „ Fairy Blue ... i.	233
—— , Pied Stone ...ii.	2
—— , Rufous-bellied Fairy-blue... i.	231
—— , „ „ Blue-wood... i.	200
—— , Rusty-Throated „ „ ... i.	199
—— , Small Fairy Blue ... i.	234
—— , Stolickza's Bush ... i.	189
—— , Swinhoe's Rufous-bellied Blue ... i.	232
—— , White-breasted Blue-Wood. i.	198
—— , „ -headed Stone ...ii.	4
—— , „ -tailed Blue ...ii.	59
—— , „ „ „ Bush... i.	233
—— , „ „ Bush ... i.	192
Chough, Alpine ... i.	144
—— , Himalayan ... i.	144
Cock, Himalayan Snow ...ii.	549
——, Thibetan ...ii.	549
Coot, Bald ...ii.	636
——, Purple ...ii.	635
Cormorant, Large ...ii.	738
—— , Little ...ii.	740
—— , White-tufted ...ii.	740
Coucal, Burmese ...ii.	423
——, Common or Crow Pheasant ...ii.	423
——, Lesser ...ii.	424
Crake, Ashy ...ii.	643
——, Baillon's ...ii.	645
——, Banded ...ii.	639
——, Little ...ii.	642
——, Malay Banded ...ii.	

	PAGE
Crake, Ruddy	ii. 642
——, Spotted	ii. 642
Crane, Common, The	ii. 601
——, Large White, Snow-wreath or Siberian	ii. 600
——, Demoiselle	ii. 602
——, Sarus	ii. 600
Creeper, Himalayan Tree	ii. 212
——, Nepaul „	ii. 212
——, Red-winged Wall	ii 213
——, Sikkim Tree	ii. 212
——, Spotted Grey	ii. 213
Cross-bill, Himalayan	ii. 323
Crow, Carrion	i. 130
——, Common Indian	i. 130
——, Great Corbie, or Raven	i. 127
——, Hooded	i. 129
——, Indian Jungle	i. 131
Cuckoo, Asiatic	ii. 408
——, Banded	ii. 410
——, Black Fork-tailed	ii. 414
——, Common Hawk	ii. 412
——, Emerald	ii. 415
——, European	ii. 408
——, Hodgson's Hawk	ii. 413
——, Hume's Hawk	ii. 412
——, Indian	ii, 410
——, „ Plaintive	ii. 414
——, „ Hawk	ii. 411
——, Pied-crested	ii. 417
——, Red-winged Crested	ii. 417
——, Rufous-bellied	ii. 413
——, Small or Hoary-headed	ii. 409
——, Violet	ii. 416
——, White-collared Violet	ii. 416
Cuckoo-shrike, Black-breasted	i. 182
——, „ -headed	i. 181
——, Blyth's	i. 172
——, Dark Grey	i. 171
——, Davison's	i. 172
——, Indian	i. 170
——, Nicobar	i. 182
——, Swinhoe's	i. 171
Curlew, Pigmy	ii. 624
——, Red-billed	ii. 631
——, The	ii. 630

D

	PAGE
Dipper, Brown-backed or White-throated	ii. 54
——, Himalayan	ii. 54
Dove, Ashy Turtle	ii. 512
——, Barred Ground	ii. 518
——, Bar-tailed Cuckoo	ii. 511
——, Emerald	ii. 517
——, Indian Ring	ii. 515
——, Little Brown	ii. 513
——, Malayan Spotted	ii. 515
——, Red Turtle	ii. 516
——, Rufous Turtle	ii. 513
——, Spotted	ii. 514
——, Tenasserim Cuckoo	ii. 512
Drongo, Andaman	i. 158
——, Bronzed	i. 153
——, Common, or King Crow	i. 154
——, Crow-billed	i. 151
——, Dark Ashy, or Long-tailed	i. 155
——, Great Racket-tailed	i. 159
——, Hair-crested	i. 152
——, Lesser Racket-tailed	i. 159
——, Malay	i. 154
——, Pale Ashy	i. 156
——, White-bellied	i. 157
——, „ -checked	i. 156
Duck, Stiff-tailed White-faced	ii. 703
——, The Comb	ii. 677
——, Brahminy	ii. 680
——, White-winged Wood	ii. 681
——, Burrow	ii. 681
——, Spot-billed	ii. 684
——, Pink-headed	ii. 685
Dunlin, The	ii. 615

E

	PAGE
Eagle, Changeable Hawk	i. 42
——, Common Serpent	i. 43
——, Crested Hawk	i. 40
——, „ Serpent	i. 44
——, Crestless Hawk	i. 36
——, Dwarf, or Booted	i. 37
——, Eastern White-tailed	i. 81
——, European White-tailed Sea	i. 51
——, Golden	i. 29

PAGE

Eagle, Imperial ..... i. 30
——, Lesser Sea ..... i. 82
——, Long legged ..... i. 34
——, Pied-crested Hawk ..... i. 41
——, Ring-tailed Sea ..... i. 54
——, Rufous-bellied Hawk ..... i. 38
——, Russian ..... i. 32
——, Southern, or Lesser Harrier i. 46
——, Spotted ..... i. 35
——, „ or Hodgson's Hawk i. 39
——, Tawny ..... i. 33
——, White-bellied Sea ..... i. 53
Egret, Ashy The.....ii. 656
——, „ Blue Reef .....ii. 657
——, „ Cattle.....ii. 657

F

Falcon, Barbary ..... i. 70
——, Cherrug ..... i. 76
——, Luggur ..... i. 72
——, Peregrine ..... i. 68
——, Shaheen ..... i. 69
——, Sooloo ..... i. 20
——, White-naped Pigmy ..... i. 65
——, Zuggur ..... i. 47
Falconet, Black-legged..... i. 66
——, Fielden's ..... i. 66
Fantail, Javan ..... i. 208
——, White-browed ..... i. 210
——, „ -spotted ..... i. 209
——, „ -throated..... i. 207
——, Yellow-bellied .... i. 206
Fieldfare, The..... i. 303
Finch, Adams' Mountain ..... ii. 303
——, Beautiful Rose-.....ii. 321
——, Beavan's Bull- .....ii. 325
——, Blanford's Mountain .....ii. 304
——, Brandt's Mountain .....ii. 306
——, Brown Bull- .....ii. 324
——, Caucasian Rose- .....ii. 317
——, Common Rose- .....ii. 316
——, Dark „ - .....ii. 299
——, Edward's „ - .....ii. 319
——, Gold-headed .....ii. 315
——, „ Black Bull- ii. 316

PAGE

Finch, Himalayan Gold- .....ii. 300
——, Himalayan Lark- .....ii. 305
——, Hume's Rose-.....ii. 321
——, Large Red-breasted .....ii. 322
——, Mountain- .....ii. 299
——, Orange Bull- .....ii. 325
——, Pale Rose- .....ii. 300
——, Pink-browed Rose- .....ii. 318
——, Red „ .....ii. 302
——, „ -headed Bull- .....ii. 324
——, „ „ Rose-.....ii. 326
——, „ -mantled Rose-.....ii. 318
——, „ -necked Mountain- .....ii. 304
——, „ -winged Rose-.....ii. 306
——, Rosy fronted Rose- .....ii. 320
——, Sikkim Lark-.....ii. 305
——, Spotted-winged Rose- .....ii. 318
——, Trumpeter Bull- .....ii. 307
——, White-browed Rose- .....ii. 320
Finfoot, The Masked.....ii. 637
Flamingo, The .....ii. 669
——, Lesser .....ii. 670
Floriken, Bengal .....ii. 577
——, Lesser .....ii. 578
Flower-pecker, Chestnut-eared ...ii. 165
——, „ -headed...ii. 163
——, „ „ ...ii. 164
——, Crimson-breasted .ii. 249
——, Davison's.....ii. 164
——, Fire-breasted .....ii. 246
——, „ -tailed .....ii. 173
——, Hume's.....ii. 252
——, Neilgherry .....ii. 247
——, Orange-bellied.....ii. 245
——, Plain-colored .....ii. 248
——, Scarlet-backed.....ii. 244
——, Small.....ii. 249
——, Striated..... .....ii. 165
——, Thick-bellied .....ii. 251
——, White „ .....ii. 174
——, „ -throated ...ii. 250
——, Yellow-bellied.....ii. 251
——, „ -naped .....ii. 162
——, „ -vented.....ii. 247
Fly-catcher, Allied Black-naped Blue ..... i. 202
——, Black-naped Blue ... i. 201

PAGE

Fly-catcher, Black and Orange ... i. 227
———, Brown ..... i. 185
———, Burmese Paradise ... i. 212
———, Chestnut-winged..... i. 214
———, Fawn-bellied ..... i. 230
———, Ferruginous ..... i. 184
———, Grey-headed ..... i. 215
———, Hodgson's Grey-headed ..... i. 218
———, Hume's White Gorgeted ..... i. 231
———, Lesser Black-browed i. 216
———, Little Blue and White i. 196
———, ,, Pied ..... i. 196
———, Mandell's ..... i. 228
———, Maroon-breasted..... i. 213
———, Neilgherry Blue ..... i. 222
———, Olive-backed ..... i. 229
———, ,, -brown..... i. 187
———, Orange-gorgeted ... i. 227
———, Pale Blue..... ..... i. 224
———, Paradise ..... i. 210
———, Pigmy Blue..... i. 199
———, Red-breasted ..... i. 187
———, Rufous-tailed ..... i. 228
———, Rusty-breasted ..... i. 194
———, Sapphire-headed..... i. 197
———, Slaty ..... i. 229
———, Sooty..... i. 183
———, Spotted Grey ..... i. 186
———, Verditer ..... i. 223
———, White-bellied Blue... i. 223
———, ,, -browed ,, ... i. 195
———, ,, -gorgeted ..... i. 230
———, ,, -tailed Robin.. i. 188
Forktail, Chestnut-backed .....ii. 73
——— , Gould's Spotted .....ii. 72
——— , Large Black-headed .....ii. 70
——— , Lesser Black-backed.....ii. 74
——— , Short-tailed .....ii. 74
——— , Slaty .....ii. 71
——— , Western Spotted .....ii. 73
——— , White-breasted .....ii. 70
Fowl, Common Jungle .....ii. 545
——, Grey Jungle .....ii. 546
——, Painted Spur .....ii. 548

PAGE

Frigate Bird .....ii. 734
Frogmouth, Hodgson's.....ii. 398
———, Wynaad.....ii. 397

G

Gadwal, The .....ii. 686
Godwit, Snipe-billed .....ii. 625
——— , Black-tailed .....ii. 626
——— , Bar-tailed .....ii. 627
Golden Eye or Garrot, The .....ii. 702
Gold-finch, Himalayan.....ii. 300
Goose, Barred-headed .....ii. 675
——— , Dwarf .....ii. 675
——— , Grey Lag.....ii. 673
——— , Pink-footed .....ii. 673
——— , Black-backed .....ii. 677
——— , White-fronted .....ii. 674
Goshawk, Crested ..... i. 17
———, The..... i. 16
Green Shanks, Little .....ii. 620
——— , The .....ii. 620
Griffon, Himalayan ..... i. 5
Grosbeak, Allied .....ii. 298
———, Black and Yellow .....ii. 297
———, Punjab .....ii. 296
———, Scarlet .....ii. 317
———, Spotted.....ii. 296
———, White-winged.....ii. 298
Grouse, Close-barred Sand .....ii. 526
———, Common Sand.....ii. 524
———, Coronated ,, ...ii. 520
———, Large ,, ...ii. 523
———, Painted ,, ...ii. 527
———, Pin-tailed ,, ...ii. 525
———, Spotted ,, ...ii. 521
———, Thibetan ,, ...ii. 528
Grebe, Crested..... .....ii. 707
———, Black-necked .....ii. 708
———, Little .....ii. 709
Gull, Yellow-legged Herring .....ii. 714
——, Lesser Herring .....ii. 715
——, Rosy Sea .....ii. 716
——, Hemprich's Sea.....ii. 716
——, Brown-headed .....ii. 717
——, Great Black-headed.....ii. 717

H

PAGE

Harrier, Hen ..... i. 10
———, Marsh ..... i. 16
———, Montague's ..... i. 18
———, Pale ..... i. 14
———, Pied ..... i. 12
Hawk, Besra Sparrow ..... i. 22
—— , European „ ..... i. 21
—— , Skikra or Brown ..... i. 18
Hawk-owl, Andaman ..... i. 107
——— , Brown ..... i. 108
Heron, Blue.....ii. 653
—— , Common.....ii. 652
—— , Dusky Grey .....ii. 652
—— , Giant .....ii. 651
—— , Great Slaty .....ii. 651
—— , Large White .....ii. 655
—— , Lesser White.....ii. 655
—— , Little Black-billed White..ii. 655
—— , Little Yellow-billed Whiteii. 656
—— , Blue Reef .....ii. 657
—— , Pond .....ii. 658
—— , Chinese Pond .....ii. 659
—— , Night .....ii. 663
Heteroglaux, Blewitt's..... i. 105
Hobby, Indian ..... i. 74
——— Red-legged..... i. 79
——— The ..... i. 73
Honey-sucker, Amethyst-rumped.ii. 230
———— , Black-breasted ...ii. 221
———— , Burmese Yellow-breasted .....ii. 233
———— , Darby's Scarlet ...ii. 227
———— , Fire-tailed Red.....ii. 224
———— , Large Purple .....ii. 229
———— , Maroon-backed ...ii. 225
———— , Purple .....ii. 228
———— , Short-billed Purple.ii. 228
———— , Tenasserim Yellow-backed .....ii. 222
———— , Tiny .....ii. 230
———— , Van Hasselt's .....ii. 232
———— , Violet-eared Red...ii. 221
Hoopoe, Burmese .....ii. 469
——— The.....ii. 469
Hornbill, Blyth's Wreathed .....ii. 493
——— , Bushy-Crested .....ii. 495

PAGE

Hornbill, Common Grey .....ii. 492
——— , Dehra-Doon .....ii. 491
——— , Great Pied.....ii. 489
——— , Jungle Grey.....ii. 492
——— , Malabar Pied .....ii. 490
——— , Malayan Wreathed .....ii. 494
——— , Rufous-necked .....ii. 494
——— , Small Pied.....ii. 490
——— , Solid Billed .....ii. 491
——— , Tickell's .....ii. 496

I

Ibis, Davison's Black .....ii. 668
—, Glossy .....ii. 669
—, Pelican .....ii. 665
—, Shell.....ii. 666
—, Warty-headed .....ii. 667
—, White .....ii. 667

J

Jacana, Bronze-winged .....ii. 633
———, Pheasant-tailed .....ii. 633
Jackdaw, The ..... i. 129
Jay, Black-headed ..... i. 141
— , „ -throated ..... i. 143
— , Burmese or White-eared ..... i. 142
— , Crested..... i. 167
— , Himalayan ..... i. 142
— , Green ..... i. 139
— , White-winged..... i. 140

K

Kestrel, Lesser ..... i. 79
——— , Naumann's ..... i. 78
——— , The ..... i. 77
King Crow, or Common Drongo Shrike .....ii. 154
Kingfisher, Banded .....ii. 486
——— , Black-capped Purple..ii. 483
——— , Broad-belted .....ii. 480
——— , Brown-headed .....ii. 487
——— , „ -winged Stork-billed .....ii. 487

PAGE

Kingfisher, Burmese Stork-billed .ii. 488
———— , European .....ii. 479
———— , Great Indian .....ii. 479
———— , Himalayan Spotted ...ii. 481
———— , Little Indian .....ii. 478
———— , Malayan .....ii. 479
———— ., Pied .....ii. 481
———— , Ruddy .....ii. 482
———— , Sumatran .....ii. 485
———— , Three-toed .....ii. 486
———— , White-breasted .....ii. 483
———— , „ -collared .....ii. 484
Kite, Black-crested ..... i. 62
—, „ -winged ..... i. 59
—, Ceylon Crested ..... i. 65
—, Common Pariah ..... i. 57
—, Large Pariah ..... i. 57
—, Malayan or Lesser Indian... i. 58
—, Maroon-backed ..... i. 56
—, Sumatran Crested ..... i. 63
Koel, Indian .....ii. 418
—, Malayan .....ii. 418

L

Lanner, Red-headed ..... i. 70
Lapwing, Black-sided .....ii. 590
————, Burmese .....ii. 593
————, Grey-headed .....ii. 591
————, Peewit or Crested .....ii. 589
————, Red-wattled, or " Did you do it." .....ii. 592
————, Spur-winged .....ii. 592
————, White-tailed .....ii. 591
————, Yellow-wattled .....ii. 593
Lark, Bengal Bush .....ii. 348
—, Black-bellied Finch .....ii. 352
—, „ -collared .....ii. 353
—, Desert .....ii. 361
—, Horned .....ii. 358
—, Indian, or Ganges Sand .....ii. 356
—, Indian Sky ..... ii. 359
—, Large Crested ..... ii. 360
—, Little Sand .....ii. 357
—, Madras Bush .....ii. 349
—, Pale Rufous Finch- .....ii. 351

PAGE

Lark, Pied .....ii. 355
—, Red-winged Bush- .....ii. 350
—, Rufous-tailed Finch- .....ii. 352
—, Short-toed, or Social .....ii. 355
—, Singing Bush... .....ii 350
—, Small Crested .....ii. 359
Lark-finch, Himalayan .....ii. 305
————, Sikkim .....ii. 305
Loriquet, Indian .....ii. 463

M

Magpie, Bayley's Blue Tree ..... i. 137
———— , Black-browed ..... i. 136
———— , „ Racket-tailed ..... i. 138
———— , Blue ..... i. 133
———— , Common Indian ..... i. 135
———— , Himalayan Tree ..... i. 136
———— , Hooded Racket-tailed ... i. 139
———— , The ..... i. 132
———— , White-bellied ..... i. 136
———— , Yellow-billed Blue ..... i. 134
Malkoha, Diard's Green-billed ...ii. 420
————, Greater Red-billed .....ii. 421
————, Large Green-billed .....ii. 419
————, Lesser Red-billed .....ii. 422
————, Small Green-billed .....ii. 419
————, Sumatran Green-billed .ii. 420
Mallard, The ..... ii. 684
Martin, Cashmere House .....ii. 254
————, Dusky Crag .....ii. 257
————, English House .....ii. 253
————, European Sand .....ii. 255
————, Indian Bank .....ii. 256
————, Little Himalayan .....ii. 255
————, Mountain Crag .....ii. 258
————, Pale Crag .....ii. 258
————, Siberian House .....ii. 254
Merganser, Common .....ii. 704
———— , Red-breasted .....ii. 704
Merlin, Red-headed ..... i. 74
————, The ..... i. 75
Mesia, Silver-eared, or Hill Tit ...ii. 178
Minivet, Andaman ..... i. 174
———— , Ashy ..... i. 176
———— , Davison's ..... i. 174

	PAGE
Minivet, Fiery	i. 175
——, Jerdon's	i. 180
——, Large	i. 173
——, MacClelland's	i. 174
——, Orange	i. 176
——, Red-tailed, or White-bellied	i. 179
——, Rosy	i. 178
——, Short-billed	i. 177
——, Small	i. 176
——, White-fronted	i. 180
——, Yellow-throated	i. 179
Moorhen, The	ii. 644
Mountain-Finch, Adam's	ii. 303
——, Blanford'	ii. 304
——, Brandt's	ii. 306
——, Red-necked	ii. 304
——, The	ii. 299
Munia, Barred	ii. 342
——, Black-headed	ii. 341
——, Chestnut-bellied	ii. 342
——, Green	ii. 346
——, Hodgson's	ii. 344
——, Plain Brown	ii. 345
——, Rufous-bellied	ii. 343
——, White-backed	ii. 344
——, „ -bellied	ii. 343
Mynah, Bank	ii. 365
——, Black-headed	ii. 367
——, „ -necked	ii. 375
——, Burmese Pied	ii. 364
——, Chestnut-throated	ii. 374
——, Chinese	ii. 368
——, Common	ii. 365
——, Daurian	ii. 368
——, Glossy-black	ii. 371
——, Grey-headed	ii. 370
——, Hume's	ii. 369
——, Jerdon's	ii. 369
——, Jungle	ii. 366
——, Malayan Talking	ii. 373
——, Pied	ii. 364
——, Siamese	ii. 367
——, Southern Hill	ii. 373
——, White-headed	ii. 371
——, „ -winged	ii. 371
——, Yellow-crowned	ii. 374

N

	PAGE
Night-jar, Burmese Eared	ii. 404
——, Common Indian	ii. 399
——, Franklin's	ii. 400
——, Ghaut	ii. 401
——, Japanese	ii. 403
——, Jungle	ii. 402
——, Large Bengal	ii. 400
——, Neilgherry	ii. 403
——, Sykes's	ii. 399
——, Unwin's	ii. 401
Noddy, Common	ii. 730
——, Grey-faced	ii. 730
——, White-faced	ii. 730
Nut-cracker, The	i. 132
Nut-hatch, Beautiful	ii. 218
——, Burmese	ii. 216
——, Cinnamon-bellied	ii. 217
——, Ferruginous „	ii. 217
——, Giant	ii. 215
——, Himalayan	ii. 215
——, Munipur	ii. 215
——, Velvet-fronted Blue	ii. 218
——, White-faced	ii. 217

O

Oriole, Andaman	i. 148
——, Black-headed	i. 149
——, „ -naped	i. 147
——, Burmese Black-naped	i. 147
——, Golden	i. 145
——, Indian	i. 146
——, Maroon	i. 150
——, Small Black-headed	i. 149
Osprey, The	i. 80
Ouzel, Black-capped	i. 305
——, Bourdillon's Travancore	i. 306
——, Cabanis's	i. 307
——, Dark	i. 309
——, Grey-headed	i. 306
——, „ -winged	i. 304
——, Neilgherry	i. 305
——, Pale	i. 310
——, Red-throated	i. 308
——, Tickell's	i. 309
Owl, Bay Screech	i. 124

PAGE

Owl, Ball's Scops ..... i. 100
——, Barefoot Scops..... i. 92
——, Brown Fish ..... i. 83
——, „ Hawk ..... i. 106
——, Dusky-horned ..... i. 85
——, Forest Eagle ..... i. 86
——, Grass ..... i. 123
——, Himalayan Wood..... i. 117
——, Hodgson's Scops ..... i. 93
——, Horsfield's Horned ..... i. 87
——, „ Scops ..... i. 96
——, Indian Scops..... i. 88
——, Indian Screech..... i. 122
——, Large Malaccan Scops ..... i. 100
——, Long-eared ..... i. 114
——, Malabar Scops ..... i. 98
——, Malayan Fish ..... i. 84
——, „ Wood..... i. 117
——, Mekran Wood ..... i. 116
——, Mottled Wood ..... i. 118
——, Nepal Brown Wood..... i. 120
——, „ Scops ..... i. 95
——, Plumefoot Scops ..... i. 95
——, Rock-horned..... i. 84
——, Rufous-winged ..... i. 89
——, Short-eared ..... i. 115
——, Southern Wood ..... i. 121
——, Striated Scops ..... i. 91
Owlet, Collared Pigmy..... i. 110
——, Jungle ..... i. 111
——, Large-barred..... i. 113
——, Lesser-spotted ..... i. 105
——, Malabar ..... i. 112
——, Spotted ..... i. 104
Oyster-catcher, The .....ii. 599

P

Parroquet, Blue-winged .....ii. 465
——, Burmese Rose-headed ii. 467
——, Large Burmese ..... ii. 465
——, Red-breasted .....ii. 464
——, Rose-winged .....ii. 467
——, Slaty-headed .....ii. 466
——, Western Rose-headed .....ii. 468
Parrot, Malayan.....ii. 462
Partridge, Arracan Hill.....ii. 558

PAGE

Partridge, Bhootan Hill .....ii. 559
——, Black.....ii. 550
——, „ -throated Hill ...ii. 556
——, Brown-breasted „ .....ii. 556
——, Chinese Francolin .....ii. 552
——, Chukor .....ii. 553
——, Common Grey.....ii. 554
——, „ Hill .....ii. 556
——, Ferruginous Wood.....ii. 560
——, Green-legged Hill .....ii. 557
——, Kyah..... .....ii. 555
——, Painted .....ii. 551
——, Red-crested Wood.....ii. 561
——, „ -throated Hill.....ii. 558
——, Seesee .....ii. 553
——, Snow .....ii. 550
——, Western Bamboo .....ii. 560
Pastor, Rose-colored.....ii. 372
Peacock, Burmese (Peafowl).....ii. 529
——, Common .....ii. 529
Pelican, Large-crested .....ii. 736
——, Grey .....ii. 737
——, Eastern White.....ii. 738
Petrel, The Cape.....ii. 710
——, Wilson's .....ii. 710
Pheasant, Anderson's Silver .....ii. 544
——, Argus.....ii. 530
——, Arracan Silver..... 543
——, Black-backed Kalij.....ii. 541
——, „ -breasted „ .....ii. 542
——, Cheer.....ii. 539
——, Green Blood.....ii. 536
——, Grey Peacock .....ii. 531
——, Hodgson's Eared.....ii. 533
——, Koklass.....ii. 538
——, Lineated Silver .....ii. 542
——, Monaul .....ii. 533
——, Nepal Kalij .....ii. 541
——, Nicobar Mound-bird, or Megapode .....ii. 532
——, Sclater's Crestless Monaul .....ii. 534
——, Sikkim Horned, or Indian Crimson Tragopan .....ii. 534
——, Simla Horned, or Western Tragopan .....ii. 535

PAGE
Pheasant, White-crested Kalij ...ii. 540
———, Vieillot's Fire-back ...ii. 544
Pigeon, Bengal Green .....ii. 498
———, Blue Hill .....ii. 509
———, Bronze-backed Imperial...ii. 504
———, Darjeeling Wood.....ii. 505
———, Grey-fronted, or Malabar Green .....ii. 500
———, „ -headed Imperial.....ii. 504
———, Hackled Ground .....ii. 518
———, Himalayan Cushat .....ii. 506
———, Imperial Green.....ii. 503
———, Indian Blue Rock .....ii. 507
———, Indian Stock.....ii. 507
———, Neilgherry Wood.....ii. 507
———, Orange-breasted Green ...ii. 499
———, Phayre's Green.....ii. 501
———, Pink-necked Green .....ii. 500
———, Pin-tailed „ .....ii. 503
———, Purple Wood .....ii. 509
———, Red Imperial.....ii 505
———, Rock Dove .....ii. 508
———, Ruddy Green .....ii. 501
———, Southern „ .....ii. 498
———, Speckled Wood .....ii. 510
———, Thick-billed Green .....ii. 497
———, Wedge-tailed Green, or Kokla .....ii. 502
———, White-bellied, or Imperial Rock .....ii. 509
———, Yellow-fronted Green.....ii. 499
———, „ „ „ .....ii. 502
Pintail, The.....ii. 690
Pipit, Blyth's .. ..ii. 290
——, Brown Rock.....ii. 288
——, Eastern Tree .....ii. 285
——, European, or Western Tree.ii. 284
——, Neilgherry Tree .....ii. 286
——, Red-throated .....ii. 292
——, Richard's, or Large Marsh.ii. 289
——, Rufous Rock .....ii. 287
——, Stone .....ii. 290
——, Upland .....ii. 295
——, Vinous-throated.....ii. 293
——, Water .....ii. 294
Pitta, Blue .....ii. 378
——, -naped .....ii. 376
Pitta, Giant.....ii. 377
——, Green-breasted .....ii. 381
——, Gurney's .....ii. 381
——, Indian .....ii. 380
——, Lesser Blue-winged .....ii. 379
——, Long-billed Blue-winged ...ii. 379
——, Malayan Scarlet.....ii. 380
——, Oates's .....ii. 377
——, Phayre's .....ii. 376
Plover, Bastard Floriken or Stone ii. 596
———, Collared Pratincole.....ii. 581
———, Crab .....ii. 598
———, Cream-colored Courier ...ii. 579
———, Double-banded.....ii. 580
———, Eastern Golden .....ii. 584
———, European „ .....ii. 584
———, Grey .....ii. 583
———, Indian Courier.....ii. 579
———, Kentish .....ii. 587
———, Large Sand .....ii. 585
———, „ Stone .....ii. 594
———, „ Swallow .....ii. 581
———, Lesser Ringed .....ii. 588
———, „ Sand .....ii. 586
———, Little Indian Ringed .....ii. 588
——, Small Swallow .....ii. 582
Pochard, Red-crested .....ii. 697
——, Tufted .....ii. 698
——, Scaup .....ii. 699
——, The Common.....ii. 700
——, White-eyed .....ii. 701

Q

Quail, Black-breasted Rain .....ii. 566
——, Blanford's, or Borneon Malayan Button .....ii. 570
——, Blue-breasted .....ii. 567
——, Common European, or Large Grey .....ii. 565
——, Eastern Painted Bush .....ii. 565
——, Indian Button .....ii. 569
——, Indo-Malayan Bustard.....ii. 568
——, Jungle Bush .....ii. 562
——, Little Button .....ii. 570
——, Mountain.....ii. 563
——, Nicobar Button .....ii. 571

PAGE

Quail, Painted, or Red-bellied Bush ..... ii. 564
—— , Rock Bush ....ii. 562
Quaker-Thrush, Black-headed.....ii. 169
———— , Bourdillon's .....ii. 169
———— , Burmese.....ii. 168
———— , Neilgherry.....ii. 167
———— , Nepal .....ii. 167
———— , The .....ii. 166
———— , Yellow-breasted .ii. 170

R

Rail, Blue-breasted Banded .....ii. 638
——, Indian Water .....ii. 638
Raven, Afghan Brown-necked ... i. 127
—— , Indian..... i. 128
—— , The ..... i. 127
Redbreast, Blue-throated ..... i. 225
————, Large-billed ..... i. 226
————, Tickell's Blue ..... i. 225
Red-Shank, The.....ii. 622
———— Spotted .....ii. 622
Red-Start, Blue-fronted ..... i. 323
———— , „ -headed ..... i. 325
———— , Daurian ..... i. 322
———— , Ehrenberg's..... i. 320
———— , European..... i. 319
———— , Eversmann's ..... i. 323
———— , Hodgson's ..... i. 321
———— , Indian ..... i. 320
———— , Slaty-headed ..... i. 324
———— , White-capped .....ii. 63
———— , „ -winged or Guldenstadt's..... i. 322
Reed-bird, Broad-tailed..... i. 270
————, Cinereous Long-tailed... i. 271
————, Long-tailed ..... i. 271
Robin, Brown-backed Indian .....ii. 64
—— , Indian Blue or Wood-chat ..... i. 314
—— , Indian Magpie, or Dhayal-bird .....ii. 66
—— , Indian Ruby-throated ... i. 316
—— Plumbeous Water ..... i. 204
—— , Siberian Blue..... i. 315
Ruby-throated ... i. 315
Robin, Thibetan Ruby-throated ...i. 317
—— , White-winged Black..... i. 193
Roller, Broad-billed .....ii. 477
—— , Burmese .....ii. 476
—— , European .....ii. 475
—— , Indian .....ii. 476
Rosefinch, Beautiful .....ii. 321
———— , Caucasian .....ii. 317
———— , Common ....ii. 316
———— , Dark..... .....ii. 299
———— , Edward's .....ii. 319
———— , Gold-headed .....ii. 300
———— , Hume's .....ii. 321
———— , Pale .....ii. 300
———— , Pink-browed .....ii. 318
———— , Red-browed.....ii. 302
———— , Red-headed.....ii. 326
———— , Red-mantled .....ii. 316
———— , Red-winged.....ii. 306
———— , Rosy-fronted .....ii. 320
———— , Spotted-winged .....i. 318
———— , White-browed.....ii. 320
Ruff, The .....ii. 616

S

Sand-piper, Broad-billed .....ii. 610
———— , Common .....ii. 619
———— , Green .....ii. 620
———— , Wood .....ii. 620
Sanderling, The .....ii. 617
Shama, The .....ii. 68
——, White-bellied .....ii. 69
Shearwater, Persian .....ii. 711
———— , Green-billed .....ii. 712
Shikra, Grey-faced..... i. 19
Short-wing, Barred .....ii. 62
————, Blue-fronted .....ii. 58
————, Hodgson's White-bellied .....ii. 67
————, Nepaul .....ii. 61
————, Rufous-flanked.....ii. 59
————, Rusty-bellied.....ii. 61
————, White „ .....ii. 58
————, „ -browed.....ii. 60
Shoveller, The .....ii. 682

PAGE

Shrike, Bay-backed .....ii. 210
———, Black-headed.....ii. 206
———, Black-breasted Cuckoo ... i. 182
———, „ -headed..... i. 181
———, Blyth's Cuckoo..... i. 172
———, Brown.....ii. 207
———, „ -backed Pied..... i. 165
———, Burmese.....ii. 210
———, Common Wood ..... i. 162
———, Dark Grey Cuckoo ..... i. 171
———, Davison's Cuckoo..... i. 172
———, Desert.....ii. 208
———, Grey-backed .....ii. 204
———, „ Wood..... i. 164
———, Horsfield's Obscure, or Pied ..... i. 165
———, Indian Cuckoo ..... i. 170
———, Indian Grey .....ii. 203
———, Malabar Wood ..... i. 163
———, Nepaul Wood ..... i. 163
———, Nicobar ..... i. 182
———, Pale Grey .....ii. 202
———, Phillipine .....ii. 207
———, Rufous-backed .....ii. 205
———, Swinhoe's Cuckoo..... i. 171
———, Sykes's Pied ..... i. 164
Shrike-tit, Black-headed .....ii. 67
Sibia, Assam .....ii. 97
——, Black-headed .....ii. 96
——, Fasciated .....ii. 98
——, Long-tailed .....ii. 95
——, Tickell's Short-tailed .....ii. 97
Sirkeer, Bengal .....ii. 425
——, Northern .....ii. 425
——, Southern .....ii. 425
Siskin, Collared.....ii. 314
———, Himalayan.....ii. 301
———, Thibetan .....ii. 301
Siva, Blue-winged .....ii. 176
——, Burmese Blue-winged.....ii. 177
——, Chestnut-tailed.....ii. 175
——, Stripe-throated.....ii. 175
Skimmer, Indian .....ii. 731
Skua, The .....ii. 713
Smew, The .....ii. 707
Snake-bird .....ii. 741
Snipe, Eastern Solitary .....ii. 605

PAGE

Snipe, Jack .....ii. 608
——, Painted .....ii. 609
——, Pin-tail.....ii. 605
——, The Common .....ii. 607
——, Wood .....ii. 604
Sparrow, Allied House .....ii. 312
———, Cinnamon-headed.....ii. 311
———, Common House .....ii. 310
———, Pegu House .....ii. 313
——— Red-headed, or Mountain .....ii. 309
———, Sind.....ii. 310
———, Willow .....ii. 311
———, Yellow-throated .....ii. 308
Sparrow-hawk, Besra..... i. 22
———, European .... i. 21
Spider-hunter, Giant Spine-tail ...ii. 391
———, Indian Giant Spine-tail.....ii. 392
———, Grey-breasted .....ii. 236
———, Large.....ii. 235
———, Lesser, or Yellow-eared .....ii. 237
———, Little.....ii. 234
Spoonbill, The.....ii. 665
Starling, Common .....ii. 363
———, Glossy Black .....ii. 364
———, Lesser .....ii. 363
Stilt, The .....ii. 632
Stint, Coot-footed .....ii. 618
——, Little.....ii. 611
——, Long-toed.....ii. 612
——, Spoon-billed.....ii. 611
——, White-tailed.....ii. 613
Sun-bird, Banded .....ii. 238
——— Gould's (Mrs.) .....ii. 226
——— Macklot's .....ii. 220
——— Malaccan Brown-throated .....ii. 240
——— Plain-colored..... ii. 239
——— Ruby-cheeked ....ii. 239
Stork, Black The . .....ii. 649
——, Black-necked .....ii. 648
——, White, The.....ii. 649
——, White-necked.....ii. 649
Swallow, American Barn .....ii. 262
——— , Common.....ii. 259

PAGE

Swallow, Indian Cliff .....ii. 268
———, Japanese Striped .....ii. 265
———, Neilgherry, or Tropical House .....ii. 263
———, Panayan.....ii. 261
———, Red-rumped .....ii. 266
———, Swinhoe's Streaked .....ii. 265
———, Tytler's.....ii. 262
———, Wire-tailed .....ii. 264
Swan, The Mute .....ii. 671
Swift, Alpine .....ii. 388
——, Common Indian .....ii. 388
——, Eastern Palm .....ii. 390
——, Indian-crested Tree .....ii. 395
——, Malayan-crested Tree .....ii. 396
——, Palm.....ii. 390
——, Pin-tailed.....ii. 389
——, Small Black.....ii. 392
——, Tufted Tree .....ii. 397
——, White-clawed .....ii. 390
——, „ -necked.....ii. 393
——, „ -rumped .....ii. 392
——, „ „ Barred .....ii. 389
——, „ „ Black .....ii. 389
Swiftlet, Horsfield's .....ii. 395
———, Hume's.....ii. 394
———, Indian Edible Nest .....ii. 393
———, Peale's.....ii. 394

T

Tailor-bird, Black-necked ..... i. 286
————, Golden-headed..... i. 287
————, Indian ..... i. 285
————, Red-headed ..... i. 287
Teal, Blue-winged .....ii. 693
——, Bronze-capped..... i. 695
——, Clucking ..... i. 694
——, Common ..... i. 692
——, Lesser Whistling.....ii. 678
——, Larger Whistling .....ii. 679
——, „ Marbled .....ii. 68
——, The Cotton .....ii. 677
Tern, Allied.....ii. 723
——, Black .....ii. 720
——, Black-bellied .....ii. 724
——, Black-headed .....ii 722
——, Black-naped .....ii. 723

PAGE

Tern, Caspian.....ii. 721
——, Eastern Little .....ii. 728
——, European .....ii. 726
——, Gull-billed.....ii. 720
——, Indian River ..... ii. 724
——, Large-crested Sea .....ii. 722
——, Panayan.....ii. 728
——, Saunder's Little .....ii. 727
——, Sooty .....ii. 729
——, Roscate .....ii. 725
——, White-winged Black .....ii. 719
——, Whiskered.....ii. 719
——, White-cheeked .....ii. 726
Thrush, Austen's Laughing.....ii. 83
———, Black-fronted Tit .....ii. 125
———, „ -gorgeted Laughingii. 110
———, „ -tailed „ ...ii. 76
———, „ -throated ..... i. 308
———, „ „ Laughing...ii. 115
———, Blue-headed Chat ..... i. 312
———, „ Rock..... i. 312
———, „ -winged Laughing . ii. 82
———, Bristly Laughing .....ii. 87
———, Brown Finch .....ii. 126
———, Brown-naped Laughing. .ii. 116
———, Burmese Whistling .....ii. 56
———, „ White-crested Laughing ...ii. 108
———, Chestnut-bellied Rock ... i 313
———, „ -headed Laughing.....ii. 80
———, „ -naped „ ...ii. 79
———, Cinereous „ ...ii. 81
———, Crimson-winged „ ...ii. 83
———, Dixon's ..... i. 296
———, Dusky ..... i. 306
———, Fairbank's Laughing .....ii. 85
———, Fulvous-fronted Tit .....ii. 127
———, Grey-eared „ .....ii. 125
———, „ -headed Finch .....ii. 126
———, „ -sided Laughing ...ii. 117
———, Ground, or Indian Pitta. ii. 380
———, Himalayan Ground ..... i. 294
———, „ Whistling .. ii. 55
———, Horsfield's .....ii. 57
———, Hume's Laughing .....ii. 118
———, Jerdon's .....

PAGE

Thrush, Long-billed Ground ..... i. 297
——, Munipur Laughing .....ii. 112
——, Missel ..... i. 302
——, Naga Laughing .....ii. 113
——, Necklaced Laughing .....ii. 111
——, Neilgherry Ground ..... i. 295
——, „ Laughing.....ii. 84
——, Orange-eared Tit .....ii. 124
——, Orange-headed Ground... i. 298
——, Plain-colored Laughing..ii. 82
——, Red-billed Jay.....ii. 123
——, „ -headed Finch .....ii. 125
——, „ „ Laughing.....ii. 77
——, „ „ Tit.....ii. 127
——, „ -throated Laughing ...ii. 79
——, „ Wing ..... i. 302
——, Rock ..... i. 311
——, Rufous-chinned Laughing ii. 81
——, „ -necked Laughing ii. 114
——, Saw-billed Ground ..... i. 296
——, Short-tailed ..... i. 295
——, Siamese White-crested Laughing .....ii. 109
——, Siberian Ground..... i. 300
——, Streaked Laughing .....ii. 83
——, Striated Jay.....ii. 114
——, Spotted-necked Finch.....ii. 128
——, Tenasserim Shrike .....ii. 91
——, Tickell's Laughing .....ii. 116
——, Travancore „ .....ii. 86
——, Variegated „ .....ii. 77
——, Ward's Pied Ground ..... i. 300
——, White-browed Laughing...ii. 117
——, „ -crested „ ...ii. 107
——, „ -headed Shrike .....ii. 91
——, „ -spotted Laughing..ii. 90
——, „ -throated „ ...ii. 109
——, „ -winged Ground ... i. 297
——, Wynaad Laughing.....ii. 112
——, Yellow-billed Finch .....ii. 128
——, „ -throated Laughing ii. 112
——, „ -winged „ ii. 78
Tit, Black-spotted Yellow.....ii. 185
—, Brown-crested.....ii. 188
—, „ -tailed Hill .....ii. 159
—, Chestnut-backed Shrike .....ii, 180
—, „ -headed Hill .....ii. 158

PAGE

Tit, Chestnut-throated Shrike ...ii. 201
—, Crested Black .....ii. 185
—, Dobson's ..... i. 169
—, Dusky Green Hill .....ii. 160
—, Flame-fronted .....ii. 196
—, Green-backed .....ii. 183
—, Green Thrush ..... i. 167
—, Himalayan Cole.....ii. 189
—, Hodgson's Shrike .....ii. 200
—, Hume's Hill .....ii. 161
—, „ Shrike .....ii. 200
—, Mandelli's Hill .....ii. 161
—, Plain Brown Hill .....ii. 166
—, Purple Thrush ..... i. 168
—, Red-billed Hill .....ii. 179
—, „ -tailed „ .....ii. 158
—, „ -winged Shrike .....ii. 198
—, Rufous-bellied Crested.....ii. 187
—, „ „ Shrike .....ii. 200
—, „ -naped.....ii. 186
—, „ -throated Hill .....ii. 160
—, Siamese White-eyed .....ii. 243
—, Southern Yellow .....ii. 185
—, Sultan Yellow .....ii. 182
—, Temminck's White-eyed .....ii. 243
—, Tickell's Shrike .....ii. 199
—, White-eyed .....ii. 242
—, „ -naped Black .....ii. 188
—, Yellow-browed .....ii. 188
—, „ -cheeked .....ii. 184
Tit-lark, Indian .....ii. 291
Tit-mouse, Grey Indian .....ii. 182
——, Red-headed.....ii. 194
——, Rufous-fronted .....ii. 195
——, White-throated .....ii. 196
Trogon, Duvaucell's.....ii. 407
——, Malabar .....ii. 405
——, Red-headed.....ii. 405
——, Yellow-breasted .....ii. 406
Tropic Bird, Red-tailed .....ii. 732
——, Shortt-ailed.....ii. 733
——, White .....ii. 732
Turnstone, The .....ii. 597

V

Vulture, The Bay ..... i. 5
——, Bearded, or Lammergeyer i. 28

PAGE

Vulture, Bengal, or Common Brown ..... i. 8
——, Black ..... i. 9
——, Crested, or Great Brown. i. 3
——, Long-billed ..... i. 6
——, „ „ Pale Brown. . i. 7
——, White Scavenger, or Pharoah's Hen of Bruce ..... i 9

W

Wag-tail, Black-backed Yellow ...ii. 280
——, „ -breasted.....ii. 283
——, „ -faced .....ii. 273
——, Grey-backed Yellow ...ii. 279
——, „ -headed.....ii. 281
——, „ and Yellow.....ii. 273
——, Hodgson's..... .....ii. 276
——, Indian Field.....ii. 282
——, Long-clawed Yellow ...ii. 281
——, Pied .....ii. 277
——, Swinhoe's.....ii. 272
——, White-faced.....ii. 269
Warbler, Allied or Anderson's ... i. 217
—— , „ Grey..... i. 236
—— , Anderson's Hill..... i. 279
—— , Arctic Willow ..... i. 239
—— , Beavan's Grass..... i. 291
—— , Black-breasted Hill, or Wren ..... i. 277
—— , Black-browed ..... i. 215
—— , „ -eared ..... i. 218
—— , Blanford's Hill..... i. 268
—— , Blyth's Crowned Willow. i. 245
—— , „ Reed ..... i. 258
—— , „ Willow ..... i. 243
—— , Booted Tree ..... i. 255
—— , Broad-billed ..... i. 221
—— , Brook's Barred Willow.. i. 252
—— , Brown Bush ..... i. 263
—— , „ Grass ..... i. 262
—— , „ Hill ..... i. 274
—— , Cetti's Bush ..... i. 266
—— , Chestnut-headed ..... i. 220
—— , Dark Ashy Wren ..... i. 282

PAGE

Warbler, Desert..... i. 237
—— , Desert Tree ..... i. 255
—— , Eastern Great Reed..... i. 257
—— , Eastern Orphean ..... i. 236
—— , Franklin's Grass ..... i. 290
—— , Golden-headed Grass ... i. 293
—— , Grass ..... i. 274
—— , Green Willow ..... i. 240
—— , Grey-backed ..... i. 238
—— , „ cheeked..... i. 220
—— , „ headed ..... i. 291
—— , „ „ Wren ..... i. 292
—— , Himalayan Bush ..... i. 268
—— , Hodgson's Barred Willow ... i. 250
—— , Hodgson's Grass ..... i. 261
—— , „ Hill ..... i. 267
—— , Hume's Barred Willow . i. 248
—— , „ Grass..... i. 264
—— , Indian Great Reed ..... i. 257
—— , „ Willow ..... i. 241
—— , „ Wren..... i. 279
—— , Jerdon's Crowned Willow ...i. 244
—— , „ Grass..... i. 262
—— , Jungle Wren ..... i. 280
—— , Khasia „ ..... i. 277
—— , Large-billed Willow..... i. 242
—— , „ Grass ..... i. 288
—— , Lesser Reed ..... i. 259
—— , Mindendorff's Willow... i. 241
—— , Moore's Bush..... i. 269
—— , Moustached Grass ..... i. 265
—— , Nepalese Bush ..... i. 269
—— , Olivaceous Tree ..... i. 253
—— , Orange-barred Willow.. i. 251
—— , Paddy-field ..... i. 258
—— , Pale-legged Willow..... i. 242
—— , Pallas's BarredWillow ..i. 250
—— , „ Grass ..... i. 261
—— , Radde's Bush ..... i. 263
—— , Rufous-fronted Wren ... i. 289
—— , „ Grass ..... i. 292
—— , Ruppel's Wren ..... i. 284
—— , Schrenck's Reed ..... i. 256
—— , Siberian Grasshopper ... i. 260
—— , „ Willow..... i. 246

PAGE

Warbler, Sind-barred Willow ..... i. 252
——— , Smoky Grass ..... i. 264
——— , Streaked Wren ..... i. 283
——— , Striated Marsh ..... i. 272
——— , Sykes's Tree ..... i. 254
——— , Temminck's Crowned Willow ..... i. 244
——— , ,, Grasshopper... i. 260
——— , Tickell's Willow ..... i. 247
——— , Tytler's ,, ... i. 248
——— , Wallace's Crowned Willow ..... i. 246
——— , White-throated..... i. 221
——— , ,, Hill Wren... i. 278
——— , Yellow-bellied ..... i. 219
——— , ,, ,, Wren ... i. 282
——— , ,, -browed-Barred Willow ..... i. 249
——— , ,, -throated ..... i. 222
Water Cock .....ii. 646
Water Hen, White-breasted .....ii. 645
Wax-bill, Green .....ii. 348
———, Horsfield's .....ii. 346
———, Red.....ii. 347
Weaver-bird, Baya.....ii. 339
———, Black-throated .....ii. 340
———, Common.....ii. 338
———, Golden .....ii. 340
———, Striated .....ii. 339
Wheat-ear, Black-throated .....ii. 5
———, Red-tailed .....ii. 5
———, The .....ii. 6
Whimbrel, The .....ii. 629
White-throat, European ..... i 235
———, Himalayan Lesser . i. 237
———, Hume's ,, ... i. 237
Wigeon, The .....ii. 691
Wood-chat, Indian Blue Robin ... i. 314
———, Rufous-bellied ..... i. 200
———, Rusty-throated Blue.. i. 199
———, White-breasted ..... i. 198
Woodcock .....ii. 603
Woodpecker, Bengal Rufous ...ii. 440
———, Black-backed .....ii. 452
———, ,, -naped Green.ii. 447
———, Blyth's Black and Green .....ii. 447
———, Blyth's Striated Green .....ii. 447
———, Blyth's Three-toed Green .....ii. 437
———, Brown-fronted .....ii. 457
———, Buff-necked Barred .....ii. 461
———, Burmese Grey-headed Pied .....ii. 458
———, Common Large Three-toed.....ii. 438
———, Common Wryneck,ii. 433
———, Crimson -necked Bay ...ii. 441
———, Crimson -necked Maroon...ii. 442
———, Darjiling Black ...ii. 455
———, ,, Pigmy .ii. 459
———, Golden-backed .....ii. 439
———, Gould's or Large Yellow-naped.....ii. 444
———, Great Black .....ii. 449
———, ,, Slaty .....ii. 450
———, Hargitt's Grey-headed Pied .....ii. 458
———, Heart-spotted .....ii. 453
———, Himalayan Pied ...ii. 454
———, ,, Pigmy...ii. 460
———, Horsfield's Barred ..ii. 460
———, ,, Yellow-naped .....ii. 444
———, Indian Fulvous-breasted Spotted .ii. 456
———, Lesser Black.....ii. 455
———, ,, Goldenbacked .....ii. 440
———, ,, Yellow-naped .....ii. 445
———, Malacca Yellow-naped .....ii. 443
———, Malayan Rufous ...ii. 441
———, Raffles' Three-toed Green .....ii. 436
———. Red-rumped Green.ii. 449
———, Rufous-bellied Piedii. 459
———, ,, Piculet .....ii. 436

PAGE

Woodpecker, Sind-pied .....ii. 455
———, Southern Golden-backed ii. 451
———, „ Indian rufous...ii. 441
———, „ Pigmy ii. 460
———, „ Yellow-naped...ii. 446
———, Speckled Piculet ...ii. 435
———, Spotted-breasted Pied.....ii. 456
———, Spotted - throated Yellow-naped.....ii. 443
———, Striated Green.....ii. 448
———, Stripe-breasted Pied .....ii 457
———, White-rumped Black .....ii. 450
———, Yellow - backed Honey-guide .....ii. 434
———, Yellow-fronted Piedii. 457
Wood-shrike, Common..... i. 162
———, Grey ..... i. 164

PAGE

Woop-shrike, Malabar ..... i. 163
———, Nepaul ..... i. 163
Wren, Brown Hill .....ii. 52
——, Chestnut-headed .....ii. 156
——, Himalayan Fire-crested ...ii. 197
——, Hume's Wedge-billed .....ii. 50
——, Long-billed .....ii. 153
——, „ -tailed.....ii. 49
——, Nepalese .....ii. 49
——, Scaly-breasted Hill .....ii. 52
——, Slaty-bellied .....ii. 157
——, Spotted .....ii. 50
——, Tailed Hill .....ii. 53

Y

Yellow Shank, Armstrong's.....ii. 623
———, Allied .....ii. 623
Yuhina, Blue-chinned .....ii. 172
——, Slaty-headed, or Orange-naped .....ii. 172
——, Stripe-throated .....ii. 171

Distribution Table of the Birds of British India and its Dependencies.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1	1	Vultur monachus, *Lin.* ...	×	×	×	×	×	×	×	...	×	×	...	×	×	...	...	...	...	×
2	3*bis*.	Gyps fulvescens, *Hume.* ...	×	×	×	×	×	×	×	×	×	×	...	×	×	...	...	...	×	×
3	3*ter*.	Gyps himalayensis, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×
4	4	Gyps indicus, *Scop.*	...	...	..	...	...	...	...	...	×	...	×	...	...	×	×	×	×	×
5	4*bis*.	Gyps pallescens, *Hume.* ...	...	...	...	...	...	...	...	...	.	×	...	..	×	...	×	..	...	...
6	5	Pseudogyps bengalensis, *Gm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
7	2	Otogyps calvus, *Scop.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	.	×	×	×
8	6	Neophron ginginianus, *Lath.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	...	×
9	50	Circus cyaneus, *Lin*	...	...	...	...	×	×	×	...	...	...	×	...	...	...	×	...	...	×
10	53	Circus melanoleucus, *Forst.*	...	...	...	..	...	...	...	×	×	×	×	..	...	×	×	×	×	×
11	52	Circus pygargus, *Lin.*	×	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
12	51	Circus macrurus, *S.G. Gm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
13	54	Circus æruginosus, *Lin.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
14	21	Astur palumbarius, *Lin.* ...	...	...	×	..	...	...	...	...	.	..	...	...	...	...	...	×	..	×
15	22	Astur trivirgatus, *Tem.* ...	...	...	...	.	...	...	...	×	...	...	×	...	...	×	×	×	×	×
16	23	Astur badius, *Gm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
17	23*bis*.	Astur poliopsis, *Hume.* ...	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	...
18	23*ter*.	Astur soloensis, *Horsf.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
19	24	Accipiter nisus, *Lin.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
20	25	Accipiter virgatus, *Temm.* .	.	...	...	...	×	×	×	...	×	×	×	...	×	×	...	×	×	×
21	45	Buteo ferox, *S. G. Gm.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×
22	44*bis*.	Buteo desertorum, *Daud* ...	...	...	...	...	×	×	×	×	...	...	...	...	...	...	..	×	...	×
23	47	Buteo plumipes, *Hodgs.* ...	...	...	...	...	...	×	×	...	...	...	...	...	...	...	..	×	...	×
24	49	Archibuteo strophiatus *Hodgs.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	×
25	7	Gypaëtus barbatus, *Lin.* ...	×	×	×	×	×	×	×	...	...	...	...	...	...	...	...	...	...	×
26	26	Aquila chrysætus, *Lin.* ...	×	×	×	×	×	×	×	...	...	...	...	...	...	...	...	...	...	×
27	27	Aquila heliaca, *Savig.*	...	...	×	..	...	...	...	...	...	×	...	...	...	...	×	×	...	×
28	27*bis*.	Aquila mogilnik, *S.G. Gm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×	×
29	29	Aquila vindhiana, *Frankl.*..	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	...	×
30	30	Aquila hastata, *Less.*	...	...	...	...	×	×	×	...	...	×	...	...	...	...	×	×	...	×
31	28	Aquila clanga, *Pall.*.....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×	...	×
32	33	Nisaëtus fasciatus, *Vieill*...	×	×	×	×	×	×	×	...	×	×	×	×	×	×	×	×	...	×
33	31	Nisaëtus pennatus, *Gm.* ...	×	×	×	×	×	×	×	...	×	×	×	×	×	×	×	×	...	×
34	37	Lophotriorchis kieneri, *Geoff.*	...	...	...	...	...	...	...	...	...	×	...	...	...	...	..	×	×	...
35	32	Neopus malayensis, *Tem.*...	...	...	...	...	...	×	...	...	...	×	×	...	...	×	×	×	×	×
36	36	Spizaëtus nipalensis, *Hodg.*.	...	...	...	...	×	×	×	×	...	...	...	...	...	×	×	×	×	×
37	35	Spizaëtus cirrhatus, *Gm.*...	...	...	...	...	...	...	...	×	...	×	×	...	..	×	×	×	...	×
38		Spizaetus alboniger, *Bly*....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
39	34	Spizaëtus limnaëtus, *Horsf.*	...	...	...	...	...	...	...	×	...	...	...	...	...	×	×	×	×	...
40	38	Circaëtus gallicus, *Gm.* ...	×	...	×	...	×	×	×	×	×	×	×	×	×	×	×	×	..	×
41	39	Spilornis cheela, *Lath.*.....	...	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
42	39*bis*.	Spilornis melanotis, *Jerd*...	...	...	...	...	...	...	...	×	...	...	×	...	...	×	×	×	×	...
43	39*sex*.	Spilornis pallidus	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
44	48	Butastur teesa, *Frankl.* ...	×	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
45	48 *ter.*	Butastur liventer, *Tem.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
46	48 *bis.*	Butastur indicus, *Gm.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
47	42 *bis.*	Haliaëtus albicillus, *Lin.* ...	×	×	×	...	×	×	×	×	...	...	...	×	...	×	×	×	×	...
48	43	Haliaëtus leucogaster, *Gm.*.	×	...	...	...	×	×	×	×	×	..	...	×	×	×	...	×	×	...
49	42	Haliaëtus leucoryphus, *Pall.*	×	×	×	×	×	×	×	×	×	...	×	×	×	×	×	×	×	×
50	55	Haliastur indus, *Bodd.* ...	×	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
51	56	Milvus govinda, *Sykes*.....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
52	56 *bis.*	Milvus melanotis, *Tem.* ...	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
53	56 *ter.*	Milvus affinis, *Gould.*	×	...	...	...	×	×	×	×	...	...	×	...	...	...	...	...	×	...
54		Milvus korschum, *Gm.*.....	×	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55	59	Elanus cæruleus, *Desf.*.....	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
56		Machæramphus alcinus, *Westr.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
57	57 *ter.*	Pernis ptilorhynchus, *Tem.*	...	...	...	...	×	×	×	×	×	×	×	...	...	×	×	×	×	×
58	58	Baza lophotes, *Cuv.*	...	...	...	...	...	..	...	×	...	...	×	...	...	...	...	×	×	×
59	58 *bis.*	Baza sumatrensis, *Lafr* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
60		Baza ceylonensis, *Legge*. ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	20	Microhierax cærulescens, *Lin.*.....	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	×	×	×
62	20 *ter.*	„ fringillarius, *Drap.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
63	16 *bis.*	Poliohierax insignis, *Wald.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
64	8	Falco communis, *Gm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
65	9	Falco peregrinator, *Sund*...	...	...	×	×	×	×	×	...	...	×	×	...	...	...	×	×	×	×
66	12 *bis.*	Falco barbarus, *Lin.*	×	×	×	×	×	×	×	×	...	...	...	...	×	...	...	...	...	×
67	12	Falco babylonicus, *Gurn.*..	×	×	×	×	×	×	×	×	...	...	×	...	...	...	...	...	..	×
68	11	Falco jugger, *J. E. Gr.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×
69	13	Falco subbuteo, *Lin.*	×	...	×	×	×	×	×	×	...	...	×	...	×	×	×	...	...	×
70	14	Falco severus, *Horsf.*	...	...	...	...	×	×	×	×	...	...	...	...	...	...	...	×	×	×
71	16	Falco chiquera, *Daud.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×
72	15	Falco regulus. *Pall.*.....	×	...	×	×	×	×	×	...	...	...	...	...	...	..	...	...	...	...
73	10	Hierofalco sacer, *Gm.*	×	×	×	×	×	×	×	×	...	...	...	×	...	...	...	...	...	×
74	17	Cerchneis tinnuncula, *Lin*...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
75	18	Cerchneis naumanni, *Fleisch*	...	...	×	×	...	...	...	...	...	...	...	...	...	×	×	×	...	×
76	18 *bis.*	Cerchneis pekinensis, *Swinh.*	...	...	...	...	×	×	×	×	...	...	...	...	...	×	×	×	...	×
77	19 *bis.*	Cerchneis amurensis, *Radde*	...	...	...	...	×	×	...	...	...	×	...	...	...	×	×	...	×	×
78	40	Pandion haliaëtus, *Lin.* ...	×	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
79	41	Polioaëtus ichthyaëtus, *Horsf.*	...	..	...	...	×	×	×	×	×	×	×	×	...	×	...	...	×	×
80	41 *ter.*	Polioaëtus humilis, *S. Müll. & Schl.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	×
81	72	Ketupa ceylonensis, *Gm.* ...	×	×	..	×	×	×	×	×	×	×	×	...	...	×	×	×	×	×
82	73	Ketupa javanensis, *Less.* ...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
83	69	Bubo bengalensis, *Frankl.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
84	70	Bubo coromandus, *Lath.* ...	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
85	71	Bubo nipalensis, *Hodgs.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	×	×
86		Bubo orientalis, *Horsf.* ...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
87	74	Scops pennatus, *Hodgs.* ...	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Hutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
88	74*B.*	Scops rufipennis, *Sharpe*...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
89	74*sept*	Scops brucii, *Hume*.	×	×	...	×	...	...	...	...	...	...	...	...	...	×	×	×	...	...
90		Scops spilocephalus, *Bly*....	...	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...
91	74*bis.*	Scops sunia, *Hodgs*.....	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	×	...	×
92	74*bis.*	Scops plumipes, *Hume*.....	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×
93	75	Scops lettia, *Hodgs*.....	...	...	...	...	...	×	...	×	...	...	...	...	...	×	...	×	×	×
94	75*qnt.*	Scops lempiji, *Horsf.*	...	...	...	...	...	×	×	×	...	...	...	×	...	×	...	...	×	×
95	75 *qt.*	Scops malabaricus, *Jerd.* ...	×	...	...	×	×	×	×	×	...	×	...	...	×	×	×	×	...	...
96		Scops sagittatus, *Sharpe* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
97	74*oct.*	Scops balli, *Hume*.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
98	74*qnt.*	Scops modestus, *Wald*.. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
99	76	Carine brama, *Tem*.	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
100	76 *qt.*	Carine pulchra, *Hume*.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
101	76*qnt.*	Heteroglaux blewitti, *Hume*	...	...	...	...	...	...	...	...	×	×	...	...	...	...	...	...	...	...
102	81	Ninox lugubris, *Tick*.	...	...	...	×	×	×	×	...	...	×	...	...	...	×	×	...	...	×
103	81 *qt.*	Ninox affinis, *Tyt*.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
104	81*bis.*	Ninox scutulata, *Raffl*	...	...	...	×	×	...	×	×	×	...	...	...	...	×	×	×	×	×
105	81*qnt.*	Ninox obscura, *Hume*. ...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	×	...
106	80	Glaucidium brodiei, *Burt* ...	...	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	×	...
107	77	Glaucidium radiatum, *Tick*.	...	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	×	...
108	78	Glaucidium malabaricum, *Bly*	...	...	...	...	...	×	...	×	...	...	×	...	...	×	...	×	×	×
109	79	Glaucidium cuculoides, *Vig*.	...	...	...	...	×	×	...	×	...	...	×	...	...	...	...	×	...	...
110	67	Asio otus, *Lin*.....	×	×	×	×	×	×	×	...	...	...	×	...	...	...	...	...	×	×
111	68	Asio accipitrinus, *Pall.* ...	×	×	×	×	×	×	×	×	×	×	×	...	×	×	×	×	×	...
112	67*bis.*	Syrnium butleri, *Hume* ...	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
113	66	Syrnium nivicolum, *Hodgs.*	...	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	...	...
114	65*bis.*	Syrnium sinense, *Lath.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
115	65	Syrnium ocellatum, *Less* ...	...	...	...	...	...	×	×	...	...	×	×	...	×	×	×	×	...	...
116	64	Syrnium newarense, *Hodgs.*	...	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	×	×
117	63	Syrnium indranee, *Sykes*...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	×	×	...
118	60	Strix flammea, *Lin.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
119	61	Strix candida, *Tick*.....	...	...	...	...	×	×	×	×	...	×	×	...	...	...	×	×	×	...
120	62	Phodilus badius, *Horsf.* ..	...	...	...	...	...	...	...	×	×	...	...	...	...	...	...	...	×	×
121	664	Trypanocorax frugilegus, *Lin*.....	...	...	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...
122	657	Corvus corax, *Lin.*	×	...	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...
123	660*bis.*	Corvus umbrinus, *Hedenb*...	×	×	×	×	..	...	...	...	...	...	...	...	...	...	...	...	...	...
124	661	Corvus lawrencei, *Hume* ...	×	×	...	×	×	×	...	×	×	×	...	×	×	...	×	×	...	×
125	665	Colœus monedula, *Lin*.....	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...
126	659*bis.*	Corone cornix, *Lin.*	...	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...
127	663	Corone splendens, *Vieill*....	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
128	659	Corone corone, *Lin.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...
129	660*bis.*	Corone macrorhynchus, *Wagl*.....	×	...	...	...	×	×	×	×	×	×	×	...	...	×	×	×	×	×
130	666	Nucifraga hemispila, *Vig*...	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...
131	668*bis.*	Pica rustica, *Scop.*	..	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	×	×
132	671	Urocissa occipitalis, *Bly*....	..	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	×	...

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
133	672	Urocissa flavirostris, *Bly.*	...	...	...	.	×	×	...	×	...	...	...	...	...	...	...	...	×	×
134	674	Dendrocitta rufa, *Scop.* ...	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
135	677	,, frontalis, *Mc Clell.*	...	...	...	...	..	...	...	...	...	..	...	...	..	...	...	×	...	...
136	678	,, leucogastra, *Gould.*	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	×	...	...
137	676	,, himalayensis, *Bly.* .	...	...	...	...	...	×	×	×	...	...	...	...	...	...	...	×	×	...
138	678 *bis.*	,, bayleyi, *Tyt.*	..	...	...	...	...	...	...	...	...	...	...	...	...	..	..	...	×	×
139	678*qt.*	Crypsirhina varians, *Lath.*..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
140	678 *ter.*	Crypsirhina cucullata, *Jerd.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
141	673	Cissa chinensis, *Bodd.*	...	...	...	..	...	...	...	×	...	...	...	...	...	...	..	...	×	...
142	678*qnt.*	Platysmurus leucopterus, *Tem*	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	×	...
143		Garrulus atricapillus	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
144	669 *bis.*	Garrulus leucotis, *Hume* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
145	669	Garrulus bispecularis, *Vig.*	..	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	...	×
146	670	Garrulus lanceolatus, *Vig.*	..	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	...	×
147	679	Graculus eremita, *Lin.*	..	×	×	×	×	×	...	...	...	..	...	...	...	...	...	...	...	×
148	680	Pyrrhocorax alpinus, *Koch.*	...	...	...	..	×	×	...	...	...	...	...	...	...	...	...	...	...	×
149	470*bis.*	Oriolus galbula, *Lin.*	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
150	470	Oriolus kundoo, *Sykes.* ...	×	...	...	×	×	×	×	...	×	×	×	×	×	×	×	×	×	×
151	473*bis.*	Oriolus diffusus, *Sharpe* ...	...	...	...	...	...	...	...	×	...	...	...	...	...	×	...	×	×	...
152	471*ter.*	Oriolus tenuirostris, *Bly.*...	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	×
153	471*bis.*	Oriolus andamanensis, *Tyt.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
154		,, xanthonotus, *Horsf.*.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
155	472	Oriolus melanocephalus, *Lin*	...	...	...	...	×	×	×	×	...	×	...	...	...	×	×	×	×	×
156	474	Oriolus trailli, *Vig.*	...	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	×	×
157	279	Dicrurus annectans, *Hodgs.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	×
158	286	Chibia hottentottus, *Lin.* ...	..	...	...	...	...	×	...	...	...	...	×	...	...	×	...	×	×	×
159	282	Chaptia ænea, *Vieill.*	...	...	...	...	...	...	...	×	...	...	×	...	...	×	×	×	×	×‡
160	282*bis.*	Chaptia malayensis, *Hay.*..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
161	278	Buchanga atra, *Herm.*.....	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
162	280	Buchanga longicaudata, *Hay*.....	..	...	...	...	...	...	...	...	×	×	...	...	...	...	×	..	×	×
163	280*bis.*	Buchanga cineracea, *Sharpe*	...	...	...	...	...	...	...	×	...	×	...	...	..	...	...	×	×	×
164	280*qnt.*	Buchanga leucogenys, *Wald.*.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
165	281*	Buchanga cærulescens, *Lin,*	...	...	...	...	...	×	×	...	...	×	...	...	...	...	...	×	...	×
166	283*ter.*	Dissemuroides andamanensis, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
167	283	Bhringa remifer, *Tem.*.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
168	285	Dissemurus paradiseus, *Lin.*	...	...	...	...	...	×	×	...	...	...	...	...	...	...	...	×	...	×
169	469	Irena puella, *Lath*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	...
170	265	Tephrodornis pondicerianus, *Gm.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
171	263	Tephrodornis pelvica, *Hodgs.*	...	...	...	...	..	×	×	...	...	...	...	...	...	...	...	...	×	×
172	264	Tephrodornis sylvicola, *Jerd.*	...	...	..	...	...	.	...	×	...	..	...	...	...	...	...	×	×	...
173	..	Tephrodornis grisola	...	...	...	...	...	..	...	×	...	...	...	...	...	...	...	...	×	...

‡ Also the Malabar Coast.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burma.	Nepaul.
174	267	Hemipus picatus, *Sykes* ...	...	...	...	...	×	×	×	×	...	...	×	...	...	...	...	×	×	...
175		Hemipus obscurus, *Horsf*...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
176	267 *A.*	Hemipus capitalis, *McClell.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	×	×
177	269 *qt.*	Hypocolius ampelinus, *Bp.*	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
178	668*ter.*	Platylophus ardesiacus, *Cab.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
179	608	Cochoa viridis, *Hodgs.* ...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×
180	607	Cochoa purpurea, *Hodgs*...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	×	×
181	270*ter.*	Artamides dobsoni, *Ball*....	...	...	...	...	...	...	...	×†	...	...	...	...	...	...	...	...	×	...
182	270	Graucalus macii, *Less.* ...	...	...	...	...	×	×	×	...	×	×	×	...	...	...	...	×	×	×
183	269	Campophaga lugubris, *Sund*	...	...	...	...	...	×	×	...	...	×	...	...	...	...	...	...	...	×
184	269*bis.*	Campophaga intermedia, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
185	268*bis.*	Campophaga melanoptera, *Rupp.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
186	268 *qt*	Campophaga neglecta, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
187	271	Pericrocotus speciosus, *Lat.*	...	...	...	...	...	×	×	×	...	×	×	...	...	...	...	...	...	×‡
188	271*ter.*	Pericrocotus elegans, *McClell.*.....	...	...	...	...	...	...	×	†	...	...	...	...	...	...	...	...	×	...
189	271*bis.*	Pericrocotus andamanensis, *Tyt.*	...	...	...	...	...	...	...	×†	...	...	...	...	...	...	...	...	×	...
190	273 *qt*	Pericrocotus flammifer, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
191	272	Pericrocotus flammeus, *Forst.*	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	×‡	...	...
192		Pericrocotus igneus, *Bly* ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
193		Pericrocotus cinereus, *Laf.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
194	276	Pericrocotus peregrinus, *Lin.*	×	...	...	...	×	×	×	×†	×	×	×	×	×	×	×	×	×	×
195	273	Pericrocotus brevirostris, *Vig.*	×	×	...	...	×	×	×	×	×	×	×	×	×	...	×	...	×	×
196	273*ter.*	Pericrocotus neglectus, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
197	275	Pericrocotus roseus, *Vieill.*	...	...	...	...	×	×§	×	×	...	...	...	...	...	...	...	×	×	×
198	274	Pericrocotus solaris, *Bly*....	...	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	×	×‡
199	277	Pericrocotus erythropygius, *Jerd.*.....	...	...	...	...	...	×	×	...	...	×	×	×	×	...	×	×	...	...
200	277*bis.*	Pericrocotus albifrons, *Jerd.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
201	277*ter.*	Pericrocotus immodestus, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
202	268	Lalage sykesi, *Strickl*.....	...	...	...	...	...	...	...	×	...	×	...	...	...	×	×	×	×	...
203		Lalage melanothorax, *Sharpe*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	...
204	269*ter.*	Lalage terat, *Bodd.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
205	296	Hemichelidon sibirica, *Gm.*	...	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	×	×‡
206	299	Hemichelidon ferruginea, *Hodgs.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	×	×‡

† Andamans. § Assam. ‡ Sikkim.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
207	297	Alseonax latirostris, *Raffl.*	...	...	...	...	×	×	×	...	...	×	...	...	...	×*	×	×	×	×
208		Muscicapa grisola, *Lin.*	×	×	×	×	...	×	...	×	×	...	...	×	×	×	×	...	...	...
209		„ sordida, *God.-Aust*	...	...	...	...	...	...	...	§	...	...	...	...	...	...	...	...	...	...
210	323*bis.*	Muscicapa parva, *Bechst.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
211	323	Muscicapa albicilla, *Pall.*	...	...	...	...	...	×	×	×	...	×	...	...	...	×	...	...	×	×
212	323*ter.*	Muscicapa hyperythra, *Cab.*	...	...	...	...	...	×	...	..	...	×	...	...	...	...	...	...	...	...
213	485*bis.*	Pratincola macrorhyncha, *Stol.*	×	×	...	×	×	×	×	...	×	...	...	×	×	...	...	×	...	...
214	485	Pratincola insignis, *Hodgs.*	...	..	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	×
215	483	Pratincola maura, *Pall.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
216	484	Pratincola leucura, *Bly.*	×	..	...	...	×	×	×	×	...	...	...	..	...	...	...	...	×	×
217	481	Pratincola caprata, *Lin.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...
218	322	Poliomyias hodgsoni, *Verr.*	...	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	×	×†
219	310	Muscicapula superciliaris, *Jerd.*	...	...	...	...	×	×	×	×	...	...	×	...	...	...	...	...	×	×
220	311	Muscicapula astigma, *Hodgs*	...	..	...	...	...	×	×	×	...	...	×	...	...	...	...	...	...	×
221	326	Muscicapula maculata, *Tick.*	...	...	...	...	...	×	...	×	...	×	...	...	...	...	...	...	×	×‡
222	312	Muscicapula sapphira, *Tick.*	...	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...	×‡
223	508	Tarsiger rufilatus, *Hodgs.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡
224	509	Tarsiger hyperythrus, *Bly.*	...	...	...	...	..	×	...	...	...	...	...	...	...	...	...	...	...	×‡
225	313	Tarsiger hodgsoni, *Moore*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡
226	510	Tarsiger indicus, *Hodgs.*	...	...	...	..	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡
227	511	Tarsiger chrysæus, *Hodgs.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡
228	290	Hypothymis azurea, *Bodd.*	...	...	...	...	×	×	×	×	...	×	×	...	...	×	×	×	×	×‡
229	290 *bis.*	Hypothymis occipitalis, *Vig*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×†	...
230		Xanthopygia fuliginosa, *Vig*	...	...	...	...	...	...	×	×†	...	...	...	...	...	...	...	...	×	...
231	487	Oreicola jerdoni, *Bly.*	...	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	×	...
232	486	Oreicola ferrea, *Hodgs.*	...	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	×	×‡
233	294	Chelidorhynx hypoxantha, *Bly.*	...	...	...	...	...	...	...	×	×	...	...	...	...	...	...	...	×	×‡
234	291	Rhipidura albicollis, *Vieill.*	...	...	...	...	×	×	×	×	...	×	...	...	...	..	×	×	×	×‡
235	293 *bis.*	Rhipidura javanica, *Sparrm.*	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	×	...
236	293	Rhipidura pectoralis, *Cuv.*	...	...	...	...	...	...	...	...	...	...	...	...	×	...	×	×	...	...
237	292	Rhipidura albifrontata, *Sharpe*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	...
238	288	Terpsiphone paradisi, *Lin.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×
239	289	„ affinis, *Hay.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×
240		Philentoma velatum, *Tem.*	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	×	...
241		„ pyrrhopterum, *Tem*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
242	295	Culicicapa ceylonensis, *Sws.*	...	...	...	...	...	×	×	×†	...	×	×	...	...	...	...	×	×	×
243	569	Cryptolopha burkii, *Burt.*	...	...	...	...	...	×	×	×	...	...	...	..	...	...	...	...	..	×‡
244	570	„ cantatrix, *Tick.*	...	...	...	...	...	...	...	×	...	×	...	...	...	...	...	...	×	×‡
245	576	„ affinis, *Hodgs.*	...	...	...	..	...	...	...	×	...	×	...	...	...	...	...	...	×	×‡
246	572*et.* 573	„ xanthoschista, *Hodgs*	...	...	...	...	×	×	...	×	...	×	...	...	...	...	...	...	×	×‡
247	571	„ schisticeps, *Hodgs*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡

* Malabar Coast. Andamans. ‡ Sikkim. § Assam.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Beng'l.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
248	574	Cryptolopha superciliaris, *Tick*								×									×	×‡
249	575	,, poliogenys, *Bly.*								×										×‡
250	578	,, castaneoceps, *Hodgs.*								×										×‡
251	577	,, albigularis, *Hodgs.*																		×‡
252	579	,, hodgsoni, *Moore*																		‡
253		,, flavigularis, *Godwin-Austen.*								×†										
254	302	Stoporala albicaudata, *Jerd.*																×		
255	301	,, melanops, *Vig.*					×				×					×	×	×	×	×‡
256	309	Siphia pallidipes, *Sharpe*														×		×		×‡
257	303	,, unicolor, *Bly.*																		‡
258	304	,, rubeculoides, *Vig*				×	×	×	×										×	×‡
259	306 / 305	,, tickelliæ, *Bly*					×	×	×	×	×	×		×	×*	×	×	×		
260	308	,, magnirostris, *Bly*							×										×	‡
261	300	,, nigrorufa, *Jerd.*																×		
262	319	,, strophiata, *Hodgs.*					×		×§										×	×†
263	307	,, ruficauda, *Swo.*				×	×									×	×	×	×	
264	307 *bis.*	,, mandellii, *Hume.*																		×‡
265	307 *ter.*	,, olivacea, *Hume.*																	×	
266	320	Digenea leucomelanura, *Hodgs.*					×	×												×‡
267		,, cerviniventris, *Sharpe*							†											
268	317	,, moniliger, *Hodgs.*					×		§										×	×
269	317 *bis.*	,, submoniliger, *Hume*																	×	
270	314	Niltava sundara, *Hodgs.*				×	×	×	§										×	×‡
271		,, vivida, *Swinh*																	×	
272	316	,, grandis, *Bly.*					×	×	×†	×	×	×							×	×‡
273		,, leucoprocta, *Tweed.*																	×	
274	315	,, macgrigoriæ, *Burt.*					×	×	×†										×	
275		Sylvia cinerea	×		×	×	×	×		×				×	×		×	×		×‡
276	581	,, jerdoni, *Bly.*	×	×	×	×	×	×	×	×		×	×	×	×	×	×	×		
277	582	,, affinis, *Bly.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
278	582 *ter.*	,, althæa, *Hume.*	×				×	×	×			×		×	×	×				
279	582 *bis.*	,, minuscula, *Hume*	×	×		×	×	×			×			×	×					
280	583 *bis.*	,, nana, *Hemp*	×	×	×		×	×			×									
281		,, familiaris, *Mene.*	×	×	×	×					×			×	×					
282	556 *bis.*	Phylloscopus borealis, *Blas.*																	×	
283	559	,, nitidus, *Bly.*	×	×				×	×	×		×						×		×
284	560	,, viridanus, *Bly.*						×	×	×		×						×	×	×
285	558 *bis.*	,, plumbeitarsus, *Swinh.*																	×	
286	556 *qt.*	,, tenellipes, *Swinh*																	×	
287	556	,, magnirostris, *Bly*					×	×	×	×		×	×			×	×	×	×	×

§ Assam. ‡ Sikkim.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
288	558	Phylloscopus lugubris, *Bly.*	...	...	...	...	...	×	...	×§	...	...	...	..	...	...	...	×	×	×‡
289	563	„ occipitalis, *Jerd.*	×	...	...	...	×	×	×	×	...	×	×	...	...	...	...	×	×	×
290	564	„ coronatus, *Tem.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
291	564	„ reguloides, *Bly*	...	...	.	...	...	×	×	×	...	...	...	...	...	...	...	...	×	×‡
	567																			
292		„ viridipennis, *Bly.*	..	...	...	..	...	...	...	×	...	...	...	...	...	...	...	...	×	×
293	554	„ tristis, *Bly*....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
294	561	„ affinis, *Tick*...	...	...	...	...	...	×	...	×	...	...	...	...	..	...	...	×	×	×‡
295	560*bis*.	„ tytleri, *Brooks*.	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	×	...	×‡
296	565*bis*.	„ humii, *Brooks*.	...	...	...	×	×	×	×	×	×	×	×	...	..	...	...	...	...	×
297	565	„ superciliosus, *Gm*.....	..	...	..	...	×	×	×	×†	...	×	...	...	...	..	...	*	×	‡
298	566*ter*.	„ maculipennis, *Blyth* ...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡
299	566	„ proregulus, *Pall*.....	...	...	...	...	..	×	...	×	...	...	...	...	...	...	...	...	×	×
300	568	„ pulcher, *Hodgs*	...	...	...	..	...	×	×	...	...	...	...	...	...	...	...	...	×	×‡
301	566*bis*.	„ subviridis, *Brooks*...	×	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...		×
302		„ sindianus, *Brooks*.	×	...	...	...	...	...	...	...	..	...	...	..	...	...	...	...	...	...
303	553*ter*.	Hypolais pallida, *Hemp*. ..	×	×	×	×	..	...	...	...	...	...	...	...	...	...	...	...	...	...
304	553	„ rama, *Sykes*. ...	×	×	×	×	×	×	×	...	×	×	×	×	×	×	×	×	...	...
305	553*bis*.	„ caligata, *Licht*....	×	×	×	×	×	×	×	...	...	×	×	×	×	×	×	×	...	...
306	517*bis*.	„ obsoleta, *Severtz*	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
307		Acrocephalus bistrigiceps, *Swinh* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
308	515*bis*.	„ orientalis, *Tem.*	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	×	...
309	515	„ stentoreus, *Hemp*. ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
310	516	„ dumetorum, *Bly*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
311	517	„ agricola, *Jerd.*	×	×	...	×	×	×	×	×	...	×	×	×	×	×	×	×	×	×
312	520	Locustella certhiola, *Pall.*	...	..	...	...	...	×	×	×	..	×	...	...	...	...	...	...	×	...
	521																			
313		„ traminea, *Severtz.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...
314		„ lanceolata, *Tem*...	...	...	...	...	...	...	...	†	...	...	...	...	...	...	...	...	×	...
315	518	Lusciniola ædon, *Pall.* ...	...	...	...	...	×	×	×	×	...	...	...	...	...	×	...	...	×	×
316	519*bis*.	„ thoracica, *Bly*...	...	..	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	×
317	522	„ luteiventris, *Hodgs* ...	...	...	...	..	...	×	...	...	...	...	...	...	...	...	...	...	...	×
318	562	„ indica, *Jerd.* ...	...	...	...	...	...	×	×	×	...	×	×	...	...	×	...	...	...	..
319	555	„ fuscatus, *Bly*....	...	...	...	...	...	×	×	×	...	...	...	...	..	...	...	...	×	×
320	556*ter*.	„ schwarzi, *Radde*.	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	×	...
321		„ fuliginiventris, *Hodgs*. ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
322	554*bis*.	„ neglectus, *Hume*,	×	×	×	...	×	×	...	...	...	...	...	...	...	...	...	...	...	...

* Malabar Coast. † Andamans. ‡ Sikkim. § Assam.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
323		Lusciniola melanopogon, *Tem.*	×	×	×	×	×	×	×											
324		Cettia cetti, *Marm.*	×	×	×	×														
325	526	Cettia fortipes, *Hodgs.*								× §									×	× ‡
326	552	Cettia flavo-olivacea, *Hodgs.*																		×
327		Cettia pallidipes, *Blanf.*																	×	‡
328	527	Cettia brunneifrons, *Hodgs.*																		
329	529	Cettia major, *Hodgs*																		× ‡
330	442	Schœnicola platyura, *Jerd.*																×		
331	443	Laticilla burnesi, *Blyth.*	×				×	×	×	×										
332		Laticilla cinerascens, *Wald.*								×										
333	440	Megalurus palustris, *Horsf.*					×	×	×	× §		×	×						×	
334	441	Chætornis locustelloides, *Blyth.*								×		×						×		
335	547	Suya crinigera, *Hodgs.*	×				×	×	×										×	× ‡
336	549	Suya atrigularis, *Hodgs.*																		× ‡
337		Suya khasiana, *Godw.-Aust.*								‖										
338		Suya albigularis, *Hume.*																	×	
339		Suya superciliaris, *Anderson*																	×	
340	543, 544	Prinia inornata, *Sykes*	×	×			×	×	×	× §	×	×	×	×	×	× *	×	×	×	×
341	545	Prinia sylvatica, *Jerd.*	×				×	×	×	× §	×	×	×	×	×	×	×	×		×
342	532	Burnesia flaviventris, *Deless.*	×					×	×	× §										
343	534, 535	Burnesia socialis, *Sykes.*					×	×	×	× §	×	×	×			×	×	×		×
344	550	Burnesia lepida, *Blyth.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
345		Scotocerca inquieta, *Sund.*	×	×	×	×		×												
346	530	Sutoria sutoria, *Forst*	×	×		×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
347		Sutoria atrigularis, *Tem.*								×									×	
348		Sutoria ruficeps, *Less.*																	×	
349	531	Phyllergates coronatus, *Jerd. and Blyth.*								×									×	× ‡
350	542	Graminicola bengalensis, *Jerd.*								× §										
351	551	Cisticola buchanani, *Blyth.*	×				×	×	×	×	×	×	×	×	×	×	×	×		
352	536	Cisticola gracilis, *Franklin.*								×		×	×			×	×		×	×
353		Cisticola beavani, *Wald.*																	×	× ‡
354		Cisticola cinereicapilla, *Moore.*					×													×
355	537	Cisticola poliocephala, *Anderson.*					×													×
356	539	Cisticola cisticola, *Tem.*	×				×	×				×	×	×	×	×	×		×	×
357	540	Cisticola exilis, *Vig. and Horsf.*								×			×				× *	×	×	
358	371	Geocichla dauma, *Lath.*					×	×	×	×		×	×						×	× ‡
359	372	Geocichla nilgiriensis, *Bly.*																×		
360	370	Geocichla mollissima, *Bly.*					×													× ‡
361		Geocichla dixoni, *Seebh.*										×								× ‡
362	350	Geocichla monticola, *Vig.*					×			§										×

* Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No in Avifauna.	Jerdon's Nos.	Species.	Sind	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.W.-Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
363		Geocichla marginata, *Bly*...				×				§									×	×‡
364	354	Geocichla cyanonotus, *Lath.*								×		×				×	×	×		
365	355	Geocichla citrina, *Bly*.....								×			×					×	×	×‡
366	357	Geocichla wardi, *Jerd*.....					×	×										×		×
367		Geocichla sibirica, *Pall* ...																	×	
368	369	Turdus iliacus, *Lin*.....						×												
369	368	Turdus viscivorus, *Lin*					×	×	×											×
370	367	Turdus pilaris, *Lin*						×												
371	362	Merula albocincta, *Royl*....						×		×										×‡
372	361	Merula boulboul, *Lath.* ...						×		§										×‡
373	359	Merula nigropilea, *Lafr.* ...								×						×		×		
374	360	Merula simillima, *Jerd.*																×		
375		Merula Bourdilloni, *Seebh.*.																×		
376	363	Merula castanea, *Gould.* ...						×												×‡
377		Merula fuscata, *Bechst.* ...						×		§										×
378		Merula protomomelæna, *Cab.*.						×												
379	365	Merula atrigularis, *Tem.* ...	×	×	×	×	×	×	×	×										×
380	364	Merula ruficollis, *Pall*.....						×		§										×
381	356	Merula unicolor, *Tick*.....	×				×	×	×		×	×						×	×	×
382		Merula obscurus, *Gmel.* ...						×		§									×	
383		Merula pallida, *Gmel*								× §									×	×
384		Monticola saxatilis, *Lin.* ...			×	×		×											×	
385	351	Monticola cyanus, *Lin.*. ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
386	353	Monticola cinclorhynchus, *Vig.*	×				×	×	×	×	×	×	×	×	×	×	×	×	×	×
387	352	Monticola erythrogaster, *Vig.*					×	×		§ ‖									×	×‡
388	507	Erithacus brunneus, *Jerd*...						×		×								×		×‡
389		Erithacus cyaneus, *Pall* ...						×											×	
390	512	Erithacus calliope, *Gmel*....								×		×					×		×	×
391	513	Erithacus pectoralis, *Gould.*					×	×		§										×
392		Erithacus tschebaiewi, *Prejv*.....																		‡
393	514	Erithacus cæruleculus, *Jerd.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
394	478	Sialia cœlicolor, *Hodgs.* ...						×												×
395	495	Ruticilla phœnicurus, *Lin*...			×	×	×	×												
396		Ruticilla mesoleuca, *Hemp.*	×		×															
397	497	Ruticilla rufiventris, *Vieill.*	×	×	×	×	×	×	×		×	×	×	×	×	×	×	×		×
398	498	Ruticilla Hodgsoni, *Moore.*			×	×				§										×‡
399	500	Ruticilla aurorea, *Gmel.* ...								× §									×	
400	499	Ruticilla erythrogastra, *Güld.*						×												×
401		Ruticilla erythronota, *Eversm.*			×	×		×												×
402	503	Ruticilla frontalis, *Vig*.....					×	×		§										×‡

‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
403	501	Ruticilla schisticeps, *Hodgs.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	× ‡
404	504	Ruticilla cæruleocephala, *Vig.*	...	...	...	×	...	×	...	...	...	...	...	...	...	...	...	...	...	×
405	494	Myrmecocichla fusca, *Blyth*	...	...	...	...	×	×	×	×	×	×	...	...	...	...	...	...	...	...
406		Saxicola albonigra, *Hume.*	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...
407	489	Saxicola picata, *Ely.* ...	×	×	×	×	×	×	×	...	×	×	×	×	×	...	...	...	...	...
408		Saxicola capistrata, *Hemp.*	×	×	×	...	...	×	...	...	...	×	...	...	...	...	...	...	...	...
409		Saxicola monacha, *Rüpp.* ...	×	×	×	×	...	..	...	...	...	...	...	...	...	...	...	...	...	...
410		Saxicola morio, *Hemp. et Ehr.*	×	×	×	×	..	...	...	...	..	...	...	...	...	...	...	...	...	...
411	488	Saxicola opistholeuca, *Strickl.*	×	×	...	×	×	×	×	..	×	×	×	×	×	...	...	...	...	...
412	492	Saxicola deserti, *Rüpp.* ...	×	×	×	×	×	×	×	...	×	×	×	×	×	×	×	...	...	...
413		Saxicola chrysopygia, *DeF.*	×	×	×	×	×	×	...	...	×	×	×	×	×	..	...	...	...	...
414	491	Saxicola isabellina, *Rüpp.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×	...	...	...
415		Ægithina viridissima, *Tem.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
416	468	Ægithina tiphia, *Lin.*	...	...	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	× ‡
417		Ægithina nigrolutea, *Marsh.*	...	...	...	×	×	×	×	...	×	×	×	×	...	...	...	...	...	...
418		Aethorhynchus Lafresnayii, *Hartl.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
419	456	Chloropsis Hardwickii, *Jerd.*	...	...	..	...	...	×	...	§ ×	‖ ...	...	...	...	...	..	...	...	×	× ‡
420	465	Chloropsis aurifrons, *Tem.*	...	...	.	...	...	×	...	§ ×	‖ ...	...	...	...	...	...	...	...	×	×
421	464	Chloropsis malabaricus, *Gm.*	...	...	...	...	...	...	...	...	...	×	...	...	...	...	×	×	...	...
422		Chloropsis zosterops, *Vig.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
423	463	Chloropsis Jerdoni, *Bly.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	×	...	...
424		Chloropsis chlorocephala, *Wald.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
425		Chloropis cyanopogon, *Tem.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
426	444	Hypsipetes psaroides, *Vig.*	...	...	...	...	×	×	×	× §	...	...	...	...	...	...	...	...	×	× ‡
427		Hypsipetes concolor, *Bly.*	...	...	...	...	...	...	...	‖	...	...	...	...	...	...	...	...	×	...
428	446	Hypsipetes ganeesa, *Sykes.*	...	...	...	..	...	...	...	...	...	...	...	...	...	×	×	×	...	...
429	448	Hemixus flavala, *Hodgs.* ...	...	..	...	..	...	×	...	× §	...	...	...	...	...	..	...	...	×	...
430		Hemixus hildebrandti, *Hume.*	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
431		Hemixus Davisoni, *Hume.*	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	×	...
432		Hemixus malaccensis, *Blyth*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
433		Iole viridescens, *Bly.*	..	...	...	...	...	...	...	‖	...	...	...	...	...	...	...	...	×	...
434	447	Iole MacClellandi, *Horsf.* ..		...	...	...	×	×	§ ‖	...	...	...	...	...	...	...	...	...	×	× ‡
435		Iole Tickelli, *Bly.*	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
436		Pinarocichla euptilosa, *Jard. & Selb.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	×	...
437		Micropus melanocephalus, *Gmel.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
438		Micropus fusciflavescens, *Hume*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	†	...

† Andamans. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N. W.-Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kuch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
439		Micropus cinereiventris, *Blyth.*																	×	
440	457	Micropus phæocephalus, *Jerd.*														*		×		
441		Criniger phæocephalus, *Hartl.*																	×	
442	451	Criniger flaveolus, *Gould.*								§‖										×‡
443		Criniger griseiceps, *Hume.*																	×	
444		Criniger gutturalis, *Bp.*																	×	
445		Tricholestes criniger, *Bly.*																	×	
446	449	Alcurus striatus, *Bly.*								×‖									×	×‡
447		Trachycomus ochrocephalus, *Gmel.*																	×	
448	450	Xenocichla icterica, *Strickl.*														*		×		
449	462	Pycnonotus hæmorrhous, *Gm.*	×			×	×	×	×	×	×	×	×	×	×	×	×			
450		Pycnonotus burmanicus, *Sharpe.*																	×	
451		Pycnonotus nigripileus, *Bp.*																	×	
452		Pycnonotus atricapillus, *Vieil.*																	×	
453	461	Pycnonotus pygæus, *Hodgs.*				×	×	×	×	×§‖	×					*			×	×‡
454	459	Pycnonotus leucotis, *Gould.*	×	×	×	×	×	×	×		×	×	×	×	×	×	×	×		
455		Pycnonotus analis, *Horsf.*																	×	
456		Pycnonotus flavescens, *Bly.*									‖								×	
457	452	Pycnonotus luteolus, *Less.*								×	×					*		×		
458		Pycnonotus Finlaysoni, *Stricklo*																	×	
459		Pycnonotus Davisoni, *Hume*																	×	
460	453	Pycnonotus xantholæmus, *Jerd.*																×		
461		Pycnonotus Blanfordi, *Jerd.*																	×	
462		Pycnonotus plumosus, *Blyth*																	×	
463		Pycnonotus simplex, *Less.*																	×	
464		Pycnonotus salvadorii, *Sharpe*																	×	
465	460	Otocompsa jocosa, *Lin.*				×	×	×	×§‖							×			×†	×‡
466		Otocompsa emeria, *Lin.*												×		×*	×	×		
467	458	Otocompsa leucogenys, *E. Gr.*							×											×‡
468	456	Otocompsa flaviventris, *Tick*					×	×	‖§		×					*			×	×‡
469	455	Rubigula gularis, *Gould*																×		
470		Rubigula cyaniventris, *Bly.*																	×	
471		Spizixus canifrons, *Bly.*							‖											
472	332	Urocichla longicaudata, *Moore*																		

* Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Beng'.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
473	333	Anorthura nipalensis, *Hodys.*						×												×‡
474		Anorthura formosa, *Wald*								§										
475		Sphenocichla humii, *Mandell*																		‡
476	329	Pnoepyga albiventris, *Hodys*						×											×	×‡
477	330	Pnoepyga pusilla, *Hodys*																	×	×
478	331	Pnoepyga caudata, *Bly.*						×												×‡
479	348	Cinclus cashmeriensis, *Gould*			×															×‡
480	347	Cinclus asiaticus, *Swains*				×	×	×	×											×
481	343	Myiophoneus Temmincki, *Vig.*				×		×												×‡
482		Myiophoneus Eugenii, *Hume.*																	×	
483	342	Myiophoneus Horsfieldi, *Vig.*									×	×					×			‡
484	440	Callene frontalis, *Blyth.*																		
485		Callene albiventris, *Blanf*															×			
486	339	Callene rufiventris, *Jerd.*															×			
487	477	Notodela leucura, *Hodys*								‖									×	×‡
488	338	Brachypteryx cruralis, *Hodys.*																	×	×‡
489	337	Brachypteryx hyperythra, *Jerd. and Bly*										a								‡
490	336	Brachypteryx nipalensis, *Moore*								‖									×	×‡
491		Brachypteryx stellata, *Gould*																		‡
492	506	Chimarrhornis leucocephala, *Vig.*				×	×													×‡
493	479	Thamnobia fulicata, *L.*									×				×	×	×			
494	480	Thamnobia cambaiensis, *Lath.*	×			×	×	×	×	×	×	×	×	×	×					×
495	475	Copsychus saularis, *L.*					×	×		×§		×	×			×	×	×	×	×‡
496	613	Lioptila annectens, *Blyth*								‖									×	‡
497	341	Hodgsonius phœnicuroides, *Hodgs.*						×	×											×
498	476	Cittocincla tricolor, *Vieill.*								×§		×			*			×	×	×‡
499		Cittocincla albiventris, *Blyth.*								†										
500		Henicurus leschenaulti, *Vieill.*								§										×

* Malabar † Andamans. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
501	585	Henicurus immaculatus, *Hodgs.*								=	§								×	×
502	586	Henicurus schistaceus, *Hodgs.*																	×	×‡
503		Henicurus guttatus, *Gould.*								=									×	×‡
504	584	Henicurus maculatus, *Vig.*						×		§									×	†
505		Hydrocichla ruficapilla, *Temm.*																	×	
506		Hydrocichla frontalis, *Blyth.*																	×	
507	587, 588	Microcichla scouleri, *Vig.*						×		§										×
508	419	Trochalopterum affine, *Blyth.*								§										×‡
509	418	Trochalopterum variegatum, *Vig.*					×	×												×
510	415	Trochalopterum erythrocephalum, *Hodgs.*						×												×
511	416	Trochalopterum chrysopterum, *Gould.*						×												×‡
512		Trochalopterum ruficapillum, *Blyth,*								‖										
513		Trochalopterum erythrolæma, *Hume.*								¶										
514		Trochalopterum melanostigma, *Blyth.*																	×	
515	421	Trochalopterum rufigulare, *Gould.*					×	×		‖										×‡
516		Trochalopterum cinereaceum, *Godw.-Aust.*								¶										
517	420	Trochalopterum squamatum, *Gould.*																		×‡
518	417	Trochalopterum subunicolor, *Blyth.*																		×‡
519		Trochalopterum austeni, *Jerd.*								A										
520	422	Trochalopterum phœniceum, *Gould,*																		×‡
521	423	Trochalopterum cachinans, *Jerdon.*																×		
522	424	Trochalopterum Jerdoni, *Blyth.*																×		
523		Trochalopterum Fairbanki, *Blanf.*																×		
524		Trochalopterum meridionale, *Blanf.*																×		
525	425	Trochalopterum lineatum, *Vig.*						×												×

A. N. E. Bengal Hills. * Andamans. † Sikkim. § Assam. ‖ Khasia Hills. ¶ Munipur Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
526	426	Trochalopterum imbricatum, *Blyth.*								B										
527		Trochalopterum virgatum, *Godw.-Aust.*								¶	D									
528	431	Acanthoptila nipalensis, *Hodgs.*						×												×
529	414	Ianthocincla ocellata, *Vig.*																		×‡
530	384	Gampsorhynchus rufulus, *Blyth.*																	×	×
531		Gampsorhynchus torquatus, *Hume.*																	×	
532	437	Argya subrufa, *Jerd.*														×	×	×		
533		Argya hyperythra, *Sharpe.*																×		
534	439	Argya earlii, *Blyth*	×							×									×	×
535	438	Argya caudata, *Drap.*	×			×	×	×	×	×§	×	×	×	×	×	×	×	×	×	
536		Argya eclipes, *Hume.*					×													
537		Argya gularis, *Blyth.*																	×	
538	436	Argya Malcolmi, *Sykes.*	×				×	×	×	×	×	×	×	×	×	×	×			
539	430	Sibia picoides, *Hodgs.*								‖									×	×‡
540	429	Malacias capistrata, *Vig.*						×												×‡
541		Malacias melanoleuca, *Blyth.*																	×	
542		Malacias gracilis, *McClell.*								‖										
543		Malacias pulchella, *Godw.-Aust.*								D										×‡
544	402	Pomatorhinus schisticeps, *Hodgs.*								§ B									×	
545		Pomatorhinus pinwilli, *Sharpe*						×												
546	404	Pomatorhinus Horsfieldi, *Sykes.*															×			
547		Pomatorhinus ochraceiceps, *Wald.*																	×	
548		Pomatorhinus Austeni, *Hume.*								¶										
549	401	Pomatorhinus ferruginosus, *Hodgs.*																		×‡
550		Pomatorhinus Phayrii, *Blyth*								‖ ¶										
551		Pomatorhinus albigularis, *Blyth.*																	×	
552		Pomatorhinus stenorhynchus, *Godw.-Aust.*								§										
553	400	Pomatorhinus ruficollis, *Hodge.*								‖ B										×‡

B. Bhootan. D. Naga Hills. ‡ Sikkim. § Assam ‖ Khasia Hills. ¶ Munipur Hills.

No. in Avifauna.	Jerdon's Nos.	Species	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
554		Pomatorhinus hypoleucus, *Blyth.*								=									×	
555		Pomatorhinus Tickelli, *Blyth.*																	×	
556	405	Pomatorhinus erythrogenys, *Vig.*					×	×	×	× =									×	× B
557		Pomatorhinus Maclellandi, *Jerd.*								§										
558	406	Xiphoramphus superciliaris, *Blyth.*																		‡
559	407	Garrulax leucolophus, *Hardw.*						×											×	
560		Garrulax belangeri, *Less.*																	×	
561		Garrulax diardi, *Less.*																	×	
562	411	Garrulax albigularis, *Gould.*						×		B										× ‡
563	412	Garrulax pectoralis, *Gould.*								E									×	× ‡
564	413	Garrulax moniliger, *Hodgs.*								‖									×	×
565		Garrulax galbanus, *Godw.-Aust.*								¶										
566		Garrulax gularis, *McClell.*								‖ §										
567	409	Garrulax delesserti, *Jerd.*																×		
568		Stactocichla merulina, *Blyth.*								D										
569	382	Grammatoptila striata, *Vig.*					×	×		‖ B										× ‡
570	410	Dryonastes ruficollis, *Jard & Selb.*								§									×	× ‡
571		Dryonastes chinensis, *Scop.*																	×	
572		Dryonastes nuchalis, *Godw.-Aust.*								D										
573		Dryonastes strepitans, *Tick.*																	×	
574		Dryonastes sannio, *Swinh.*								‖										
575	408	Dryonastes cærulatus, *Hodgs.*								D §										× ‡
576		Dryonastes subcærulatus, *Hume*								‖ D										
577	427	Actinodura Egertoni, *Gould.*								‖										× ‡
578		Actinodura Ramsayi, *Wald.*																	×	
579		Actinodura Waldeni, *Godw.-Aust*								¶									×	
580	428	Actinodura nipalensis, *Hodgs.*								§										× ‡
581		Actinodura Daflaensis, *Godw.-Aust.*								K										
582		Actinodura Oglei, *Godw.-Aust.*								§								×		
583	432, 434	Crateropus canorus, *Linn.*	×				×	×	×	×								×		
584	433	Crateropus griseus, *Gmel.*														×	×			

D. Naga Hills. E. Garo Hills. B. Bhootan. K. Dafla Hills,
‡ Sikkim. § Assam. ‖ Khasia Hills. ¶ Munipur Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah	Nepaul.
585	435	Crateropus Somervillii, *Sykes.*														×	×			
586	381	Conostoma æmodium, *Hodgs.*																		×‡
587		Suthora Humii, *Sharpe*																		×‡
588	379	Suthora poliotis, *Blyth.*							D	P	K									×‡
589	378	Suthora nipalensis, *Hodgs.*																		×‡
590	375	Suthora ruficeps, *Blyth.*								B									×	×‡
591	374	Suthora gularis, *Gray*								=										×‡
592	376	Suthora unicolor, *Hodgs*																		×‡
593	377	Chleuasicus ruficeps, *Blyth.*								§L										‡
594	380	Chleuasicus fulvifrons, *Hodgs.*																		×‡
595	373	Paradoxornis flavirostris, *Gould.*								†L§										×‡
596		Paradoxornis guttaticollis, *David.*								×D	‖§	L								
597	396	Timelia pileata, *Horsf.*								×§	B	‖							×	×‡
598		Timelia longirostris, *Moore.*							×	B	L	P	‖							×
599	385	Pyctorhis sinensis, *Gmel.*	×				×	×	×	×	×	×	×	×	×	×	×	×	×	×
600	386	Pyctorhis altirostris, *Jerd.*								§	B								×	
601	398	Dumetia albigularis, *Blyth.*													×		×	×		
602	397	Dumetia hyperythra, *Frankl.*											×			×				‡
603		Pellorneum nipalense, *Hodgs.*							×	‖B										×‡
604		Pellorneum intermedium, *Sharpe*								L									×	
605	399	Pellorneum ruficeps, *Swains.*														×	×	×		
606		Pellorneum subochraceum, *Swinh.*																	×	
607		Pellorneum palustre, *Gould.*								§‖										
608	391	Stachyris nigriceps, *Hodgs.*								‖	B								×	
609		Stachyris guttata, *Blyth*																	×	
610	387	Turdinus Abbotti, *Blyth*								×‖									×	×
611		Turdinus maguirostris, *Moore*																	×	
612		Erythrocichla bicolor, *Less.*																	×	
613		Drymocataphus nigricapitatus, *Eyton*																	×	
614		Drymocataphus ignotus, *Hume.*								×‖										
615		Drymocataphus Assamensis, *Sharpe*								§										
616		Drymocataphus Tickelli, *Blyth.*																	×	

D. Naga Hills. P. K. Dafla Hills. L. Cachar. B. Bhootan.
* Malabar. † Andamans. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
617		Drymocataphus rubiginosus, *Wald.*																	×	
618		Gypsophila crispifrons, *Blyth.*																	×	
619		Trichostoma rostratum, *Blyth.*																	×	
620		Malacopterum magnum, *Eyton.*																	×	
621		Mixornis gularis, *Raffles*																	×	
622	395	Mixornis rubricapilla, *Tick.*								B L									×	×
623		Mixornis erythroptera, *Blyth.*																	×	
624		Corythocichla brevicaudata, *Blyth.*																	×	
625		Corythocichla striata, *Wald.*								‖										
626		Turdinulus murinus, *Blyth.*								¶									×	
627	335	Rimator malacoptilus, *Blyth.*																		×‡
628	393	Stachyridopsis ruficeps, *Blyth.*								‖										×‡
629		Stachyridopsis rufifrons, *Hume*								B L									×	
630	392	Stachyridopsis pyrrhops, *Hodgs.*						×												×
631	394	Stachyridopsis chrysea, *Hodgs.*								‖									×	×‡
632		Stachyridopsis assimilis, *Wald.*																	×	
633	327	Oligura castaneocoronata, *Burt.*								‖										×‡
634	328	Oligura cyaniventris, *Hodgs.*								‖										×‡
635	618	Minla igneotincta, *Hodgs.*								‖										×‡
636	619	Minla castaneiceps, *Hodgs.*								‖										×‡
637		Minla brunneicauda, *Sharpe.*								‖										
638	620	Minla cinerea, *Blyth.*																		×‡
639		Minla rufigularis, *Mandelli.*								B										
640		Minla mandelli, *Godwin-Austen*								×										
641		Minla dubia, *Hume*																	×	
642	623	Ixulus flavicollis, *Hodgs.*						×	B	‖										×‡
643	624	Ixulus occipitalis, *Blyth.*								‖										×‡
644		Ixulus humilis, *Hume*																	×	
645		Staphidea castaneiceps, *Moore*								‖										
646		Staphidea rufigenis, *Hume.*																		‡
647	625	Staphidea striata, *Blyth.*						×											×	
648	622	Alcippe vinipectus, *Hodgs.*						×												×‡

B. Bhootan. L. Cachar. ‡ Sikkim. ‖ Khasia Hills. ¶ Munipur Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
649	388	Alcippe nipalensis, *Hodgs.*						?		=	L	B							×	
650	389	Alcippe phæocephala, *Jerd.*									×						×	×		
651		Alcippe Phayrii, *Blyth.*																	×	
652	390	Alcippe atriceps, *Jerd.*																×		
653		Alcippe Bourdilloni, *Hume.*																×		
654	621	Alcippe chryseus, *Hodgs.*																		×‡
655	626	Yuhina gularis, *Hodgs.*								‖	B								×	×‡
656	627	Yuhina occipitalis, *Hodgs.*									B									×‡
657	628	Yuhina nigrimentum, *Hodgs.*						×			D									×‡
658	629	Myzornis pyrrhura, *Hodgs.*																		×‡
659	630	Herpornis xantholeuca, *Hodgs.*									‖								×	×‡
660	616	Siva strigula, *Hodgs.*						×												×‡
661		Siva castaneicauda, *Hume.*									B								×	
662	617	Siva cyanuroptera, *Hodgs.*									§									×‡
663		Siva sordida, *Hume*																	×	
664	615	Mesia argentauris, *Hodgs.*									‖								×	×‡
665	614	Liothrix lutea, *Scop.*						×			B								×	×‡
666	612	Cutia nipalensis, *Hodgs.*									B K								×	×‡
667	650	Parus sultaneus, *Hodgs.*								§×										×‡
668		Parus cinereus, *Bonn. et Vieil.*				×	×	×	×	§ B		×	×					×	×	×
669	644	Parus monticolus, *Vigors.*					×	×		B	‖									×‡
670	647	Parus xanthogenys, *Vigors.*				×	×					×								×
671	648	Parus haplonotus, *Jerd.*										×						×		
672	649	Parus spilonotus, *Blyth.*								§	B ‖								×	×‡
673	638	Parus melanolophus, *Vigors.*				×	×	×												×‡
674	640	Parus rufonuchalis, *Blyth.*									‖									×‡
675	640	Parus rubidiventer, *Blyth.*																		×
676	637	Parus dichrous, *Hodgs.*						×												×‡
677	632	Parus modestus, *Burton.*										×								‡
678		Parus nuchalis, *Jerd.*																×		
679	642	Parus æmodius, *Hodgs.*																		×‡
680	651	Accentor immaculatus, *Hodgs.*																		×‡
681	655	Accentor atrigularis, *Brandt.*				×	×	×												×‡
682	656	Accentor rubeculoides, *Moore.*																		‡
683	654	Accentor strophiatus, *Hodgs.*																		×‡
684		Accentor Jerdoni, *Brooks.*					×													×
685	653	Accentor altaicus, *Brandt.*					×	×												×
686	652	Accentor nipalensis, *Hodgs.*						×												
687	634	Acredula erythrocephala, *Vigors.*				×	×	×		§‖									×	×‡

B. Bhootan. D. Naga Hills. ‡ Sikkim. § Assam. ‖ Khasia Hills.
L. Cachar. K. Dafla Hills.

No: in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
688	635	Acredula Jouschistos, *Hodgs.*	..	...	...	...	...	...	...	B	...	...	...	...	...	...	...	...	...	×‡
689	636	Acredula niveogularis, *Moore*	...	...	...	...	...	×	...	..	...	...	...	...	...	...	...	...	...	...
690	633	Ægithalus flammiceps, *Burton*...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	...	...	...	×
691	580	Regulus cristatus, *Koch*....	...	..	...	...	...	?	...	...	...	...	...	..	...	...	...	...	...	×‡
692	609	Pterorythrius erythropterus, *Vigors.*	...	...	...	...	×	×	§	B	...	...	..	...	..	...	...	...	...	×‡
693		Pterorythrius æralatus, *Tickell.*.....	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
694	610	Pterorythrius rufiventer, *Blyth.*	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	×‡
695		Pterorythrius intermedius, *Hume.*	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	...	×	...
696	611	Pterorythrius melanotis, *Hodgs.*	...	...	..	...	...	...	...	B ‖	...	...	...	...	...	...	..	...	×	×‡
697		Pterorythrius xanthochloris, *Hodgs*.....	...	...	...	...	...	...	...	‖ B	...	...	...	...	...	...	...	...	...	×‡
698		Lanius fallax, *Finsch*.....	?	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...
699		Lanius assimilis, *Brehm.* ...	×	...	...	×	×	...	...	...	...	...	...	...	...	...	...	×	...	...
700	256	Lanius lahtora, *Sykes*.....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
701	258	Lanius tephronotus, *Vigors.*	...	...	...	...	...	...	...	×B	§	...	...	...	...	...	...	...	×	×‡
702	257	Lanius erythronotus, *Vigors.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×	
703	259	Lanius nigriceps, *Frankl*...	...	...	...	...	...	×	‖	B ×	§	×	...	...	...	...	...	...	×	×‡
704	261	Lanius cristatus, *Lin.*	×	×	...	...	×	×	×	×	B	§	...	...	...	...	...	×	×	×
705		Lanius lucionensis, *Lin.* ...	...	..	...	...	...	...	...	...	...	†	...	...	...	...	...	×	...	
706	262	Lanius isabellinus, *Ehrenb.*	×	×	×	×	×	×	×	×	×	...	...	×	...	...	...	...	...	...
707		Lanius phœnicuroides, *Severtz*.....	×	×	×	×	×	×	×	×	×	...	..	...	...	...	...	...	...	...
708	260	Lanius vittatus, *Valenc.* ...	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	...	×	
709		Lanius collyrioides, *Less*...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	
710	243	Certhia himalayana, *Vigors.*	...	...	...	×	×	...	...	§	...	...	...	...	...	...	...	...	...	×
711	245	Certhia discolor, *Blyth.* ...	...	...	..	...	...	...	...	B	...	...	...	...	...	...	...	...	...	×‡
712	244	Certhia nipalensis, *Hodgs.*	...	...	...	...	...	...	...	B	§	...	...	...	...	...	...	...	...	×‡
713	246	Salpornis spilonotus, *Frankl.*	...	...	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...
714	247	Tichodroma muraria, *Lin*...	...	...	...	×	×	×	...	...	...	..	...	...	...	...	...	...	...	×
715		Sitta nagaensis, *Godw-Austen*.....	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...
716		Sitta magna, *Wardlaw-Ramsay*.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
717		Sitta himalayensis, *Jard. et Selby*.	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	...	...	×‡
718		Sitta neglecta, *Wald.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
719	250	Sitta castaneoventris, *Frankl*.....	...	...	...	...	...	...	...	...	×	×	...	...	...	...	*	×	...	...

B. Bhootan. ‡ Sikkim. § Assam. ‖ Khasia Hills. † Andamans. * Malabar.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
720	251	Sitta cinnamomeiventris, *Blyth.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	..	...	×	×
721	249	Sitta leucopsis, *Gould.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	..	...	×	×
722	252	Sitta formosa, *Blyth.*	...	...	...	...	...	×	...	×	...	...	...	...	...	...	...	...	...	...
723	253	Sitta frontalis, *Swains*	...	...	...	...	...	...	...	×	...	×	×	...	...	×	×	* ×	×	...
724		Chalcostetha insignis, *Jard.*	...	...	...	...	...	...	...	...	...	..	..	...	...	...	...	...	×	...
725	231	Æthopyga saturata, *Hodgs.*	...	...	...	...	...	...	...	§	B	...	...	...	...	...	...	...	...	×‡
726	226	Æthopyga Vigorsi, *Sykes.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	...	...
727	225	Æthopyga seheriæ, *Tickell.*	...	...	...	...	...	×	...	§	B	...	...	...	...	...	...	...	×	×‡
728	228	Æthopyga ignicauda, *Hodgs.*	...	...	...	...	...	×	...	B	...	...	...	...	...	...	...	...	...	×‡
729	230	Æthopyga nipalensis, *Hodgs.*	...	...	...	...	...	×	...	‖	...	...	...	...	...	...	...	...	...	×‡
730		Æthopyga sanguinipectus, *Wald.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	
731	227	Æthopyga gouldiæ, *Vigors.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×‡
732		Æthopyga dabryi, *J. Verr.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
733	234	Cinnyris asiatica, *Lath.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
734		Cinnyris brevirostris, *Blanf.*	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
735	235	Cinnyris lotenia, *Linn.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	...	...
736	233	Cinnyris minima, *Sykes*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	...	...
737	232	Cinnyris zeylonica, *Lin.*	...	...	...	...	...	...	...	§ ×	...	..	...	...	...	...	×	×	...	...
738		Cinnyris Hasseltii, *Temm.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
739		Cinnyris flammæmaxillaris, *Blyth.*	...	...	...	...	...	...	...	†	...	...	...	...	...	...	...	...	×	...
740	224	Arachnothera longirostris, *Vieil.*	...	...	...	...	...	...	...	×	†	...	..	...	...	...	...	* ×	×	...
741	223	Arachnothera magna, *Hodgs.*	...	...	...	...	...	...	...	§	‖	...	...	...	...	...	..	...	×	×‡
742		Arachnothera modesta, *Eyton*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
743		Arachnothera chrysogenys, *Temm.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
744		Anthothreptes hypogrammica, *S. Mull.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
745		Anthothreptes simplex, *S. Mull.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
746		Anthothreptes phœnicotis, *Temm.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
747		Anthothreptes malaccensis, *Scop.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
748	631	Zosterops palpebrosa, *Temm.*	×	...	...	...	×	×	×	×	×	×	×	...	...	×	×	×	×	×
749		Zosterops aureiventer, *Hume.*	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	×	
750		Zosterops siamensis, *Blyth.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
751	236	Dicæum cruentatum, *Linn.*	...	...	...	...	...	...	...	× §	...	...	...	...	...	...	..	...	×	×
752		Dicæum trigonostigma *Scop.*	...	...	...	...	...	...	...	▲ ×	...	...	...	...	...	...	...	...	×	...

B. Bhootan. * Malabar. † Andamans. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
753	241	Dicæum ignipectus, *Hodgs.*	...	..	...	...	...	×	...	AB‡	...	...	...	...	...	...	..	...	×	×
754	237	Dicæum chrysorrhæum, *Temm.*	...	...	...	...	...	×	...	A×	.	...	...	...	...	...	...	...	×	×
755	239	Dicæum concolor, *Jerd.*	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	*×	...	...
756		Dicæum inornatum, *Hodgs.*	...	...	...	...	...	...	...	B	...	..	...	...	...	...	...	...	×	×
757	238	Dicæum erythrorhynchum, *Lath*	...	...	...	..	...	...	...	×§	...	×	×	..	...	×	×	×	×	×
758		Prionochilus ignicapillus, *Eyton.*	...	...	...	...	...	...	...	...	...		...	...		...	...	...	×	...
759		Prionochilus maculatus, *Tem.*	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
760	242	Prionochilus melanoxanthus, *Hodgs.*	...	..	...	...	...	...	...	§	..	...	...	...	...	...	...	...	...	×
761	240	Prionochilus squalidus, *Burton*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	×	×
762		Prionochilus modestus, *Hume.*	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	...	×	...
763	92	Chelidon urbica, *Linn.*	...	...	×	...	...	×	...	...	...	...	...	...	...	...	...	×	...	...
764	93	Chelidon cashmiriensis, *Gould.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...
765		Chelidon lagopus, *Pallas*	...	..	...	...	...	...	...	..	...	...	...	...	...	...	...	...	×	...
766	94	Chelidon nipalensis, *Hodgs.*	...	...	...	...	...	...	...	‡×	...	...	...	...	...	...	...	...	...	×
767	87	Cotile riparia, *Linn.*	×	×	...	×	×	...	...	...	...	...	...	×	...	...	...	×	×	...
768	88·89	Cotile sinensis, *J. E. Gray.*	×	...	...	...	×	×	...	×	...	...	...	×	×	×	×	...	×	×
769	90	Cotile concolor, *Sykes*	...	...	...	...	×	×	...	×	...	×	×	×	×	×	×	*×	...	...
770	91	Cotile rupestris, *Scop.*	...	...	...	...	×	×	..	B×	§...	×	×	...	...	...	..	*×	...	×
771		Cotile obsoleta, *Cab.*	×	×	...	...	...	...	...	...	...	...	...	×	×	...	..	...	...	...
772	82	Hirundo rustica, *Lin.*	×	×	×	×	×	×	×	§	×	×	×	×	×	×	×	×	×	×
773		Hirundo gutturalis, *Scop.*	...	...	..	...	...	×	..	B §	...	×	...	...	×	...	×	×	×	×
774		Hirundo erythrogastra, *Bodd.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
775		Hirundo tytleri, *Jerd.*	.	...	...	...	...	...	...	‡×	‖...	...	...	...	...	...	...	...	×	...
776	83	Hirundo javanica, *Sparrm.*	..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	×	×	...
777	84	Hirundo smithi, *Leach.*	×	×	×	×	×	×	×	×	×	×	×	?	×	×	×	×	×	×
778		Hirundo nipalensis, *Hodgs.*	...	...	...	...	...	×	...	§×	...	...	...	...	...	..	...	...	×	×
779		Hirundo japonica, *Tem.*	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	..	×	...
780	85	Hirundo erythropygia, *Sykes.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	..	×
781	86	Petrochelidon fluvicola, *Blyth*	...	..	...	...	×	×	×	...	×	×	×	×	×	...	...	...	...	...
782		Motacilla alba, *Linn.*	×	×	×	×	×	×	...	...	...	...	...	...	...	×	×	...	×	...
783		Motacilla ocularis, *Swinh.*	...	...	..	...	...	...	...	×	..	...	...	...	...	...	...	...	×	×
784	591	Motacilla personata, *Gould.*	×	×	×	×	×	×	...	...	×	...	...	..	...	...	...	...	...	...
785	590	Motacilla leucopsis *Gould.*	...	...	...	...	...	...	..	‡×	§...	...	...	...	...	...	...	...	×	×
786		Motacilla hodgsoni, *Blyth.*	...	..	...	...	...	...	...	B §	...	...	...	...	...	...	...	...	×	×
787	589	Motacilla madraspatensis, *Gm.*	×	×	...	...	×	×	...	×‡	×	×	×	×	×	×	×	×	...	×
788	592	Motacilla melanope, *Pall.*	×	×	×	×	×	×	×	×	×	×	×	...	...	...	...	×	×	×

B. Bhootan. * Malabar. † Andamans. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
789		Motacilla citreola, *Pall.* ...	×	×	×	×	×	×	×	†×	×	×	×	×	×	...	×	...	×	×
790	594	Motacilla citreoloides, *Hodgs.* ...	×	×	...	×	...	...	...	§×	×	...	...	..	...	...	×	...	...	×
791		Motacilla beema, *Sykes.* ..	×	×	×	...	...	...	...	‡	...	×	×	...	...	...	...	...	...	×
792	593	Motacilla borealis, *Sundev.*.	×	×	...	×	×	×	...	×§	...	×	×	...	...	...	×	×	×	×
793		Motacilla Feldeggi, *Mich.*..	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
794	595	Limonidromus indicus, *Gould.* ...	...	..	...	...	...	...	...	×§	..	...	...	...	...	...	...	*×	...	...
795	597	Anthus trivialis, *Linn.*.....	×	×	×	×	×	×	×	×§	×	×	×	×	×	×	×	×	×	×
796	596	Anthus maculatus, *Hodgs.*..	...	...	...	...	×	×	×	‖×	×	×	×	...	...	...	...	×	×	×
797	598	Anthus nilgheriensis, *Sharpe.* ...	...	...	...	...	..	...	...	B	..	...	..	..	...	...	...	×	...	...
798	604	Anthus sordidus, *Rupp.* ...	...	...	...	...	...	×	...	...	...	...	..	...	...	...	...	×	...	...
799	603	Anthus Jerdoni, *Finch.* ...	×	×	×	×	×	×	×	×	...	...	...	...	×	..	×	...	...	...
800	599	Anthus Richardi, *Vieill.* ...	...	...	×	...	..	...	...	×	...	...	...	...	...	...	...	×	×	×
801	601	Anthus striolatus, *Blyth.*...	...	...	...	...	×	×	...	‡	...	×	×	...	...	...	...	×	×	×
802	602	Anthus campestris, *Linn* ...	×	×	×	×	×	×	×	×§	×	×	×	×	×	×	×	...	×	×
803	600	Anthus rufulus, *Vieill.* ...	×	×	×	×	×	×	×	×§	...	...	...	...	..	×	×	...	×	×
804		Anthus cervinus, *Pall.* ...	..	×	×	×	×	×	..	..	..	...	...	...	...	.	...	...	×	...
805	605	Anthus rosaceus, *Hodgs.* ..	...	...	...	×	×	×	...B	‖×	‡	...	×	.	...	...	...	...	...	×
806		Anthus spipoletta, *Linn.* ...	×	×	×	×	×	×	..	...	...	...	...	...	...	...	...	...	...	...
807	606	Oreocorys sylvanus, *Hodgs.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×
808		Coccothraustes humii, *Sharpe*	...	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	...	...
809	727	Mycerobas melanoxanthus, *Hodgs.*	...	..	...	...	...	×	..	‡	...	...	...	...	...	...	...	...	...	×
810	725	Pycnoramphus icterioides, *Vigors.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	×
811	726	Pycnoramphus affinis, *Blyth.*	...	..	...	...	×	×	×	‡	...	...	...	...	...	...	...	..	...	×
812	728	Pycnoramphus carneipes, *Hodgs.*	...	...	...	...	×	×	...	‡	...	...	...	...	...	...	...	...	...	×
813	752	Fringilla montifringilla, *Linn.*	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...
814	746	Procarduelis nipalensis, *Hodgs.*	...	...	...	..	×	×	...	‡ B	...	...	...	...	...	...	...	...	...	×
815		Procarduelis rubescens, *Blanf.*	...	...	...	...	...	...	...	‡	...	..	...	...	...	...	...	...	...	×
816	749	Carduelis caniceps, *Vigors.*	...	...	...	×	×	×	...	...	...	...	...	...	.	...	...	...	...	...
817	750	Chrysomitris spinoides, *Vigors*	...	..	...	...	×	×	...	‡	...	...	...	...	...	...	...	..	...	...
818		Chrysomitris thibetana, *Hume.*	...	...	..	...	..	...	...	‡	...	...	...	...	...	...	...	...	...	...
819	748	Callacanthis Burtoni, *Gould.*	..	...	..	..	?	×	...	...	...	...	...	...	...	..	...	...	...	...
820		Acanthis brevirostris, *Bp.*..	...	...	...	...	...	×	...	..	...	...	...	..	...	...	...	...	...	...
821		Acanthis fringillirostris, *Bp.*	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

B. Bhootan. * Malabar. † Andamans. ‡ Sikkim. § Assam. ‖ Khasia Hills.

No in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
822		Montifringilla Adamsi, *Moore.*	E				×	×												
823		Montifringilla ruficollis, *Blanf.*						×		‡										
824		Montifringilla blanfordi, *Hume.*								‡										
825	745	Montifringilla sordida, *Stol.*				×	×	×		‡										
826	753	Montifringilla nemoricola, *Hodgs.*								B ‡										×
827		Montifringilla Brandti, *Bp.*						×		‡										
828		Rhodopechys sanguinea, *Gould.*	×		×	×														?
829		Erythrospiza githaginea, *Licht.*	×	×	×	×	×	×			×			×						
830	711	Petronia flavicollis, *Frankl.*	×	×	×	×	×	×	×		×	×	×	×	×	×	×	* ×		
831	710	Passer montanus, *Koch.*	×	×	×	×				§‡							×		×	×
832	706	Passer domesticus, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
833	709	Passer pyrrhonotus, *Blyth.*	×																	
834	707	Passer hispaniolensis, *Tem.*	×	×	×	×	×	×			×			×						
835	708	Passer cinnamomeus, *Gould.*				×	×	×	×	‡§B										×
836		Passer assimilis, *Walden.*																	×	
837		Passer flaveolus, *Blyth.*																	×	
838		Serinus pectoralis, *Murray.*	×																	
839	751	Serinus pusillus, *Pall.*		×	×	×	×	×												
840	733	Pyrrhoplectus epauletta, *Hodgs*																		×‡
841	738	Carpodacus erythrinus, *Pall.*	×	×	×	×	×	×	×	§		×						×	×	×‡
842	735	Carpodacus sipahi, *Hodgs.*																		×‡
843	737	Carpodacus rubicilla, *Gould.*					×													×
844	741	Carpodacus grandis, *Blyth.*				×	×													‡
845	742	Carpodacus rhodochrous, *Vigors.*				×														×
846	739	Carpodacus rhodopeplus, *Vigors*				×	×													×‡
847		Carpodacus Edwardsi, *Verr.*								B										×‡
848	740	Carpodacus thura, *Bp. & Schleg.*																		×‡
849	744	Carpodacus dubius, *Pryr.*																		×‡
850		Carpodacus ambiguus, *Hume.*					×													×
851	743	Carpodacus pulcherrimus, *Hodgs.*						×												×‡
852	747	Pyrrhospiza punicea, *Hodgs.*																		×‡
853	734	Loxia curvirostra, *Lin.*																		×

B. Bhootan. E. Indus Valley. ‡ Sikkim. § Assam. * Malabar.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
854	729	Pyrrhula erythrocephala, *Vigors.*					×	×												×‡
855	731	Pyrrhula nipalensis, *Hodgs.*																		×‡
856	730	Pyrrhula erithacus, *Blyth.*																		+‡
857	732	Pyrrhula aurantiaca, *Gould.*					×	×												
858	736	Propyrrhula subhimalayensis, *Hodgs.*																		×‡
859		Emberiza schœniclus, *Lin.*				×	×	×												
860	720	Emberiza pusilla, *Pall.*								‖§									×	×‡
861	719	Emberiza fucata, *Pall.*					×	×											×	×
862	721	Emberiza melanocephala, *Scop.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
863	722	Emberiza luteola, *Sparrm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
864	723	Emberiza aureola, *Pall.*								§									×	×‡
865		Emberiza rutila, *Pall.*								B									×	×‡
866	717	Emberiza spodocephala, *Pall.*								§B									×	×
867	716	Emberiza buchanani, *Blyth.*	×	×	×	×	×	×	×			×		×	×	×	×			
868	714	Emberiza Stracheyi, *Moore.*	×	×			×	×												
869	718	Emberiza Stewarti, *Blyth.*	×	×	×	×	×	×	×											
870	712	Emberiza leucocephala, *Gm.*		×		×	×	×	×											
871		Fringillaria striolata, *Licht.*	×	×	×	×	×	×	×		×				×	×				
872	724	Melophus melanicterus, *Gm.*	×							×	×	×	×	×	×	×	×	×	×	×
873	694	Ploceus philippinus, *Lin.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
874		Ploceus baya, *Blyth.*								×									×	×
875	695	Ploceus manyar, *Horsf.*	×				×	×	×	×§		×	×	×	×	×				
876		Ploceus bengalensis, *Lin.*	×				?	?		§×									×	
877	696	Ploceus javanensis, *Less*																	×	
878	697	Amadina malacca, *Lin.*								×		×				*		×		
879	698	Amadina atricapilla, *Vieill.*					×	×	×	§								×	×	
880	699	Amadina punctulata, *Lin.*	×				×	×	×	§	×	×	×			×		×	×	
881	700	Amadina pectoralis, *Jerd.*																×		
882		Amadina leucogastra, *Blyth.*																	×	
883	702	Amadina acuticauda, *Hodgs.*								§									×	‡
884	701	Amadina striata, *Linn.*								×			×			*		×	×	
885	703	Amadina malabarica, *Linn.*	×	×			×	×	×	×	×	×	×	×	×	×	×	×		
886		Erythrura prasina, *Sparrm.*																	×	
887		Estrilda punicea, *Horsf.*																	×	
888	704	Estrilda amandava, *Linn.*	×	×	×	×	×	×	×	§×	×	×	×	×	×	×	×	×		
889	705	Estrilda formosa, *Lath.*										×	×							
890	754	Mirafra assamica, *McClell.*						×	×	×§		×	×							
891	755	Mirafra affinis, *Jerd.*								×						*		×	×	
892	756	Mirafra erythroptera, *Jerd.*	×	×			×	×	×	×	×	×	×	×	×	×	×	×		
893	757	Mirafra cantillans, *Jerd.*					×	×	×	×		×	×							
894	759	Ammomanes lusitania, *Gm.*	×	×	×	×	×	×	×											

* Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hills. B. Bhootan.

No. in Avifauna.	Jerdon's Nos.	Species	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajpútana.	Central India.	Central Prov.	Kutch.	Gujerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
895	758.	Ammomanes phœnicura, *Frankl.*	...	...	...	...	...	×	×	×	...	×	...	...	...	...	×	×	...	...
896	760	Pyrrhulauda grisea, *Scop*,	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	...	...
897		Pyrrhulauda melanauchen, *Cab.*	×	×	×	..	...	...	...	...	×	...	...	×	...	...	...	...	...	...
898	761	Calandrella brachydactyla, *Leisl.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
899		Melanocorypha bimaculata, *Menetr.*	×	×	×	×	...	...	...	...	...	...	...	...	...	...	.	...	...	...
900	762	Alaudula raytal, *Blyth* ...	×	..	...	..	...	...	...	§×	..	...	×	..	...	...	...	...	×	...
901		Alaudula Adamsi, *Hume*...	×	...	...	...	×	×	×	...	...	...	...	...	...	..	...	...	...	...
902	763	Otocorys penicillata, *Gould.*	.	..	...	.	×	×	...	...	...	...	...	...	...	...	...	...	...	×
903	765	Spizalauda deva, *Sykes.* ...	...	...	...	...	×	×	×	..	...	×	×	...	...	...	×	×	...	...
904	767	Alauda gulgula, *Frankl*...	×	...	...	..	×	×	×	×	×	×	×	×	×	×	×	×	×	×
905	769	Galerida cristata, *Lin.* ..	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
906	770	Certhilauda desertorum, *Stanley.*	×	×	×	×	×	×	×	...	..	..	..	...	...	...	...	...	...	...
907	681	Sturnus vulgaris, *Lin.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×
908		Sturnus minor, *Hume.* ...	×	...	...	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...
909	682	Sturnus unicolor, *Marmora.*	×	×	...	×	×	×	...	...	...	...	...	...	...	..	...	...	...	...
910		Sturnopastor superciliaris. *Blyth.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	•	...
911	683	Sturnopastor contra, *Lin.*	...	...	...	...	×	×	×	×	×	×	×	...	...	...	.	...	...	...
912	684	Acridotheres tristis, *Lin.*	×	×	×	×	×	×	×	§×	×	×	×	×	×	×	×	×	×	...
913	685	Acridotheres ginginianus, *Lath.*	×	×	×	×	×	×	×	§×	×	×	×	×	×	×	×	×	×	...
914	686	Acridotheres fuscus, *Tem.*	×	...	...	...	×	×	...	§×	×	×	×	×	×	×	×	×	×	×
915		Acridotheres siamensis, *Swinh.*	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
916	687	Sturnia pagodarum, *Gmel.*	×	...	..	...	×	×	×	§×	...	.	...	...	...	×	×	×	×	...
917		Sturnia sturnina, *Pall.* ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	×	...
918		Sturnia sinensis, *Gmel.* ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	×	...
919		Sturnia Burmannica, *Jerd.*	...	...	...	...	...	...	...	..	..	...	...	...	...	...	...	...	×	*
920		Sturnia leucocephala, *Gigl. & Salv.*	...	...	...	.	...	..	...	...	..	...	...	...	...	..	...	...	×	...
921	688	Sturnia malabarica, *Gmel.*	...	...	..	...	×	×	×	×	§	×	...	...	...	×	×	×	×	...
922	689	Sturnia Blythi, *Jerd.*	...	...	...	.	...	...	...	...	...	...	...	...	...	...	*	×	..	...
923		Sturnia nemoricola, *Jerd.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
924		Calornis chalybea, *Horsf.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	...
925	690	Pastor roseus, *Lin.*	×	×	×	×	×	×	×	×	§×	×	×	×	×	×	×	×	×	...
926	693	Gracula intermedia, *A. Hay.*	...	...	...	...	...	...	...	...	×	...	×	×	...	...	...	...	×	...
927	692	Gracula religiosa, *Lin*	...	...	...	...	...	...	...	...	...	...	...	...	...	*	...	×	...	...
928	691	Saraglossa spiloptera, *Vigors.*	...	...	...	×	×	...	...	...	...	...	..	...	...	...	...	...	×	...
929		Ampeliceps coronatus, *Blyth.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
930		Gracupica nigricollis, *Payk.*	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	×	...

* Malabar. § Assam.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
931		Anthocincla Phayrii, *Blyth.*																	×	
932	344	Pitta nipalensis, *Hodgs.*									‖§								×	×
933		Pitta Oatesi, *Hume*																	×	
934		Pitta cærulea, *Raffles.*																	×	
935		Pitta cyanea, *Blyth.*									B								×	
936		Pitta cyanoptera, *Tem.*																	×	
937		Pitta megarhyncha, *Schl.*																	×	
938	345	Pitta brachyura, *Lin.*					×	×	×	×	×	×	×		×	×	×	*	×	‡
939		Pitta coccinea, *Eyton*																	×	
940	346	Pitta cucullata, *Hartl.*									§‖								×	‡×
941		Eucichla Gurneyi, *Hume.*																	×	
942		Calyptomena viridis, *Raffles.*																	×	
943	138	Psarisomus Dalhousiæ *Jameson.*					×	×		B	§								×	×‡
944		Serilophus lunatus, *Gould.*																	×	
945	139	Serilophus rubropygius, *Hodgs.*								‖§	§									×‡
946		Eurylæmus javanicus, *Horsf.*																	×	
947		Eurylæmus ochromelas, *Raffles.*																	×	
948		Corydon sumatranus, *Raffles.*																	×	
949		Cimborhynchus macrorhynchus, *Gm.*																	×	
950	98	Cypselus melba, *Lin.*	×	×	×	×	×	×	×					×	×	×	×	×		
951	99	Cypselus apus, *Lin.*	×	×	×	×	×	×	?		×			×						
952	100	Cypselus affinis, *Gray.*	×	×	×	×	×				×			×	×	×	×			×
953		Cypselus acuticaudus, *Blyth.*						×												
954		Cypselus pacificus, (*Lath.*)																	×	
955		Cypselus subfurcatus, *Blyth.*								‖									×	
956	101	Cypselus leuconyx, *Blyth.*														*	×			
957	102	Cypselus batassiensis, *Gray.*					×		×§			×				*	×			
958		Cypselus infumatus, *Sclater.*								§‖									×	
959		Hirundinapus giganteus, *Van Hass.*																	×	
960	96	Hirundinapus indicus, *Hume.*														*		×	×	
961		Hirundinapus leucopygialis, *Blyth.*																	×	
962	95	Hirundinapus sylvatica, *Tick.*					×	×				×						×		

* Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hill. B. Bhootan.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Bajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan	S. India.	British Burmah.	Nepaul.
963	97	Hirundinapus caudacuta, *Lath.*		•						B										
964	103	Collocalia unicolor, *Jerd.*								§							*	×		‡
965		Collocalia innominata, *Hume.*																	×	
966		Collocalia spodiopygia, *Peale.*																•	×	
967		Collocalia Linchi, *Horsf. & Moore.*																	×	
968		Dendrochelidon coronatus, *Tick.*					×				×	×					*	×	×	‡
969		Dendrochelidon longipennis, *Rafin.*																	×	
970		Dendrochelidon comatus, *Tem.*																	×	
971	105	Batrachostomus moniliger, *Blyth.*										×					*	×		
972	106	Batrachostomus affinis, *Blyth.*																	×	‡
973	112	Caprimulgus asiaticus, *Lath.*	×			?				×			×	×	×	×			×	
974	113	Caprimulgus mahrattensis, *Sykes.*	×	×		×	×			×	×		×	×	×	×				
975	114	Caprimulgus monticolus, *Frankl.*									×								×	
976	109	Caprimulgus albonotata, *Tick.*					×			×									×	‡
977	111	Caprimulgus atripennis, *Jerd.*															*	×		
978		Caprimulgus Unwini, *Hume.*	×	×	×	×														×
979	107	Caprimulgus indicus, *Lath.*																×		
980		Caprimulgus Kelaarti, *Blyth.*										×						×		
981		Caprimulgus jotaka, *Tem.*																	×	×
982		Lyncornis cerviniceps, *Gould.*																	×	
983	115	Harpactes fasciatus, *Gmel.*									×						*			
984	116	Harpactes erythrocephalus, *Gould.*								§									×	×‡
985		Harpactes oreskios, *Tem.*																	×	
986		Harpactes Duvaucelli, *Temm.*																	×	
987	199	Cuculus canorus, *Lin.* ..	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
988	200	Cuculus striatus, *Drap.*								‖§									×	×‡
989	201	Cuculus poliocephalus, *Lath.*															×	×		×
990	202	Cuculus sonneratti, *Lath.*															*	×	×	

* Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hill. B. Bhootan.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
991	203	Cuculus micropterus, *Gould.*								×§		×					*	×	×	
992	207	Hierococcyx sparverioides, *Vigors.*																×	×	×
993	209	Hierococcyx varius, *Vahl.*						×		×								×		
994		Hierococcyx nanus, *Hume.*																	×	
995	206	Hierococcyx nisicolor, *Hodgs.*																	×	×
996		Cacomantis threnodes, *Cab. et Hein.*							×										×	
997	208	Cacomantis nigra, *Jerd.*							×		×							×		
998	210	Surniculus lugubris, *Horsf.*									×						*		×	‡
999	211	Chrysococcyx maculatus, *Gm.*									×								×	‡
1000		Chrysococcyx xanthorhynchus, *Horsf.*																	×	
1001		Chrysococcyx Limborgi, *Tweed*																	×	
1002	212	Coccystes Jacobinus, *Bodd.*	×				×	×	×	×	×	×	×	×	×	×	×	*		×
1003	213	Coccystes coromandus, *Linn*								×	×	×	×				*		×	
1004	214	Eudynamys honorata, *Linn.*												×	×	×	×		×	×
1005		Eudynamys malayana, *Cab. et Hein*								×									×	
1006		Rhinortha chlorophæa, *Raffles*																	×	
1007	215	Rhopodytes tristis, *Less.*								×§		×							×	‡
1008		Rhopodytes diardi, *Less*																	×	
1009		Rhopodytes sumatranus, *Raffles*																	×	
1010	216	Rhopodytes viridirostris, *Jerd*															×	×		
1011		Rhamphoeoccyx erythrognathus, *Hartl.*																	×	
1012		Zanclostomus Javanicus, *Horsf.*																	×	
1013		Centrococcyx maximus, *Hume.*	×				×	×	×											
1014	217	Centrococcyx rufipennis, *Illigr.*									×	×	×	×	×	×	×	×		
1015		Centrococcyx intermedius, *Hume.*								×									×	
1016	218	Centrococcyx bengalensis, *Gmel.*								×	×		×					×	×	
1017	219	Taccocua Leschenaulti, *Less.*															×	×	×	
1018	220	Taccocua sirkeer, *Gray.*	×				×	×	×	×		×		×	×	×	×			
1019	221	Taccocua infuscata, *Blyth.*						×												×‡

* Malabar. ‡ Sikkim. § Assam.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1020		Megalæma marshallorum, *Swinh.*								×									×	
1021		Megalæma virens, *Bodd*																	×	
1022		Megalæma mystacophanus, *Tem.*																	×	
1023	192	Megalæma Hodgsoni, *Bonap.*								×	§								×	‡×
1024	193	Megalæma caniceps, *Frankl.*					×	×	×	×		×		×						
1025		Megalæma inornata, *Wald.*										×					*	×		
1026	194	Megalæma viridis, *Gmel.*															*	×		
1027	195	Cyanops asiatica, *Lath.*						×		×	§								×	‡
1028		Cyanops Davisoni, *Hume*																	×	
1029		Cyanops incognita, *Hume.*																	×	
1030		Cyanops Ramsayi, *Wald.*																	×	
1031	197	Xantholæma hæmacephala, *P. L. S. Mull.*	×	?			×	×	×	×	×	×	×	×	×	×	×	×	×	×
1032	198	Xantholæma malabarica, *Blyth.*															*	×		
1033		Xantholæma cyanotis, *Blyth.*								×	§								×	
1034		Caloramphus Hayi, *Gray*																	×	
1035	188	Yunx torquilla, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	
1036	190	Indicator xanthonotus, *Blyth.*																		‡×
1037	186	Vivia innominata, *Burton.*								||	ores						×	×	‡×
1038	187	Sasia ochracea, *Hodgs.*								||×	ores							×	×
1039		Gauropicoides Rafflesi, *Vigors.*																	×	
1040	177	Gecinulus Grantia, *McClell*									§									×
1041		Gecinulus viridis, *Blyth.*																	×	
1042	184	Tiga Javanensis, *Ljungh.*										×					*	×	×	×
1043	180, 182	Brachypternus aurantias, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1044	181	Brachpyternus chrysonotus, *Less.*														×	*	×		
1045	178	Micropternus phæoceps, *Blyth.*								×§		×	×						×	‡×
1046		Micropternus brachyurus, *Vieil.*																	×	
1047	179	Micropternus gularis, *Jerd.*															×	*		
1048	176	Venilia pyrrhotis, *Hodgs*								×§									×	‡×
1049		Venilia porphyromelas, *Boie.*																	×	
1050		Callolophus mentalis, *Tem.*																	×	
1051		Callolophus malaccensis, *Lath.*																	×	
1052		Callolophus puniceus, *Horsf.*																	×	

* Malabar. ‡ Sikkim. § Assam. || Khasia Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1053	173	Chrysophlegma flavinucha, *Gould.*	...	...	...	...	...	...	...	×	§	×§	...	...	...	...	...	...	×	‡×
1054	174	Chrysophlegma chlorolophus, *Vieill.*	...	...	...	...	..	...	..	×	§	×§	...	.	..	..	...	...	×	‡×
1055	175	Chrysophlegma chlorigaster, *Jerd.*	...	...	...	...	..	...	...	...	.	...	...	...	...	...	*	×	...	...
1056	170	Gecinus squamatus, *Vigors*	...	...	...	×	×	×	×	..	...	...	..	...	...	...	...	...	...	...	×
1057	171	Gecinus striolatus, *Blyth.*	...	...	..	×	×	×	×	×	§	×§	..	..	×	...	..	×	×	×	×
1058	172	Gecinus occipitalis, *Vigors.*	...	...	...	×	...	×	×	§	B	...	...	...	...	...	...	...	×	×‡
1059		Gecinus viridanus, *Blyth.*	...	...	...	...	..	...	...	...	...	...	..	..	...	...	...	...	×	...
1060		Gecinus erythropygius, *Elliot.*	...	...	...	...	...	...	...	...	..	...	...	...	...	...	*	..	×	...
1061	169	Thriponax hodgsoni, *Jerd.*	...	...	...	...	..	...	...	...	...	...	..	...	...	...	*	×	...	...
1062		Thriponax Javensis, *Horsf.*	...	...	...	...	...	..	...	...	...	...	..	...	...	...	..	...	×	...
1063		Thriponax Feddeni, *Blanf.*	...	...	..	...	...	...	...	...	...	...	..	...	...	...	...	...	×	...
1064	168	Mulleripicus pulverulentus, *Tem.*	...	...	...	...	.	×	×	‖	...	...	...	..	...	...	...	...	×	×
1065	166	Chrysocolaptes strictus, *Horsf.*	...	...	...	...	×	×	×	×	×	§	×	×	...	..	*	×	×	×‡
1066	167	Chrysocolaptes festivus, *Bodd.*	...	...	...	...	...	...	...	...	×	×	...	...	...	...	×	×	...	...
1067	165	Hemicercus cordatus, *Jerd.*	...	...	...	...	...	...	...	..	..	×	×	...	...	*	×	×	×	...
1068		Hemicercus sordidus, *Eyton.*	...	...	...	...	..	...		...	...	...	...	...	...	...	...	...	×	...
1069	154	Picus himalayanus, *Jard. and Selby.*	...	..	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...	×‡
1070	155	Picus majoroides, *Hodgs.*	...	..	...	...	.	.	...	...	...	...	...	...	...	...	...	...	...	×‡
1071	156	Picus cathpharius, *Hodgs.*	...	..	...	...	...	..	...	...	...	...	...	B	...	...	...	...	...	×‡
1072	158	Picus scindianus, *Gould.*	×	×	×	×	×	×	×	...	...	●	...	...	...	...	..	...	...	...	...
1073	157	Picus macii, *Vieill.*	...	...	...	...	×	×	×	×	...	...	...	...	...	...	...	...	×	...	...
1074		Picus analis, *Tem.*	...	...	...	...	...	...	...	...	..	...	...	.	...	...	...	...	×	...	...
1075		Picus atratus, *Blyth.*	..	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
1076	159	Picus brunneifrons, *Vigors.*	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...	...	×
1077	160	Picus mahrattensis, *Lath.*	×	×	...	..	×	×	×	...	×	×	..	×	×	×	×	...	×	...	...
1078		Picus canicapillus, *Blyth.*	..	...	...	...	...	...	...	×	§	...	...	...	...	...	...	...	×	...	...
1079		Picus pumilus, *Hargitt.*	..	...	...	...	...	...	...	...	...	...	..	...	...	...	..	...	×	...	...
1080	161	Hypopicus hyperythrus, *Vigors.*	...	..	...	..	×	×	...	...	.	...	...	...	...	...	...	...	...	...	...
1081	162	Iyngipicus rubricatus, *Blyth.*	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×‡
1082	163	Iyngipicus pygmæus *Vigors*	...	..	...	..	×	×	...	...	...	...	...	...	...	...	...	...	...	...	×
1083	164	Iyngipicus Hardwickii, *Jerd.*	...	...	...	...	×	×	×	...	...	×	...	...	...	...	...	×	...	...	...
1084		Meiglyptes grammithorax, *Mesh.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
1085		Meiglyptes jugularis, *Blyth.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...

* Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hills. B. Bhootan.

No in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1086		Meiglyptes tukki, *Less.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1087		Psittinus incertus, *Shaw.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1088	153	Loriculus vernalis, *Sparrm*	...	...	...	...	×	×	×	×	§	B	...	...	×	...	*×	×	×	×‡
1089	152	Palæornis fasciatus, *P.L.S. Mull.*	...	...	...	...	×	×	×	×	§	...	...	...	...	...	...	...	×	...
1090	151	Palæornis columboides, *Vigors*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*	×	...	...
1091	147	Palæornis indoburmannicus *Hume*	...	...	...	...	×	×	×	×	..	...	×	...	...	*	×	×	×	‡
1092	150	Palæornis schisticeps, *Hodgs.*	..	...	...	...	×	×	×	×	§	...	...	...	...	...	...	...	×	...
1093	148	Palæornis torquatus, *Bodd.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1094		Palæornis cyanocephalus, *Lin.*	...	...	...	...	×	×	×	×	..	...	...	...	...	...	...	...	×	×
1095	149	Palæornis rosa, *Bodd.*	...	...	...	...	×	×	×	×	×	§×	×	×	×	×	×	×	×	×
1096	254	Upupa epops, *Linn.*	×	×	×	×	×	×	...	×	×	×	×	×	×	×	×	*×	×	×
1097		Upupa longirostris, *Jerd.*	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	×	...
1098	255	Upupa ceylonensis, *Reich.*	...	...	...	×	×	..	...	...	...	...	...	...	...	...	...	×	...	...
1099	117	Merops viridis, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1100	118	Merops phillipinus, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1101	119	Merops Leschenaulti, *Vieill.*	...	...	...	...	...	...	...	×	..	...	...	...	...	..	..	×	×	×
1102	120	Merops persicus, *Pall.*	×	×	×	×	×	?	...	..	...	...	...	...	...	..	...	×	×	...
1103	121	Merops apiaster, *Linn.*	×	×	×	×	×	×	...	..	...	...	...	...	...	...	...	...	...	...
1104	122	Nyctiornis Athertoni, *Jard and Selb.*	...	...	...	...	...	×	×	§	...	...	...	...	...	...	...	×	×	...
1105		Nyctiornis amicta, *Tem.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1106	125	Coracias garrula, *Linn.*	×	×	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...
1107	123	Coracias indica, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1108		Coracias affinis, *McClell.*	...	...	...	...	...	...	-	×	§	...	...	...	...	...	...	...	×	...
1109	126	Eurystomus orientalis, *Linn.*	...	...	...	...	...	×	×	×	§	...	...	...	...	...	...	...	×	...
1110	134	Alcedo bengalensis, *Gm.*	×	×	..	×	×	×	.	...	×	×	×	×	×	×	×	×	...	...
1111		Alcedo grandis, *Blyth*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1112		Alcedo ispida, *Linn.*	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	‡
1113		Alcedo asiatica, *Sws.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1114		Alcedo euryzona, *Tom*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1115	137	Ceryle guttata *Vig.*	...	...	...	...	×	×	×	×	×§	...	...	...	...	...	...	...	×	...
1116	136	Ceryle rudis, *Linn.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1117	131	Halcyon coromanda, *Lath.*	...	...	...	...	...	×	×	...	...	...	...	...	...	...	...	×	×	×
1118	129	Halcyon smyrnensis, *Linn.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×‡
1119	130	Halcyon pileata, *Bodd.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	*	×	×	×‡
1120	132	Halcyon chloris, *Bodd.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	...
1121		Halcyon concreta. *Tem.*	...	...	...	...	...	...	...	×	...	...	...	...	×	...	...	...	...	...
1122		Carcineutes pulchellus, *Horsf.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1123	133	Ceyx tridactyla, *Pall.*	...	...	...	...	...	...	...	×	...	...	...	...	×	×	×	...	...	...

* Malabar. ‡ Sikkim. § Assam. B. Bhootan.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N. W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan	Deccan.	S. India.	British Burmah.	Nepaul.
1124	127	Pelargopsis gurial, *Pearson.*					×		×		×	×			*		o×			
1125	128	Pelargopsis amauroptera, *Pearson.*							×								o×	×		
1126		Pelargopsis burmanica, *Sharpe*																×		
1127	140	Dichoceros bicornis, *Linn.*						§	×						×		*×	×		
1128	141	Anthracoceros coronatus, *Bodd.*								×							*×			
1129	142	Anthracoceros albirostris, *Shaw.*				×		§×	×									×		
1130	143	Anthracoceros affinis, *Hutton.*					×													
1131		Rhinoplax vigil, *J. R. Forst.*																×		
1132	145	Rhinoplax griseus, *Lath.*													*		×?			
1138	144	Ocyceros birostris, *Scop.*														*×	×			
1134		Rhytidoceros subruficollis, *Blyth.*																×		
1135		Rhytidoceros undulatus, *Shaw.*																×		
1136		Aceros nipalensis, *Hodgs.*				×	×	?	×									×	+×	
1137		Anorrhinus comatus, *Raffles.*																×		
1138		Anorrhinus galeritus, *Tem.*																×		
1139		Anorrhinus Tickelli, *Blyth.*																×		
1140	771	Treron nipalensis, *Hodgs.*						§×										×	×	
1141	772	Crocopus phœnicopterus, *Lath.*				×	×	×	×§	×	×									
1142	773	Crocopus chlorigaster, *Blyth.*	×					×	×		×			×		×	×			
1143		Crocopus viridifrons, *Blyth.*																×		
1144	774	Osmotreron bicincta, *Jerd.*						×	×	§	×	×					C	×	×	
1145		Osmotreron vernans, *Linn.*																×		
1146	775	Osmotreron malabarica, *Jerd.*													×		*×			
1147	776	Osmotreron Phayrii, *Blyth.*							×	§								×		
1148		Osmotreron fulvicollis, *Wagl.*																×		
1149	777	Osmotreron pompadoura, *Gmel.*															×			
1150	778	Sphenocercus sphenurus, *Vigors.*				×	×		§									×		
1151	779	Sphenocercus apicaudus, *Hodgs.*							×§										×	
1152	780	Carpophaga ænea, *Linn.*							×		×	×			*		c×	×	×	

No. in Avifauna.	Jerdon's Nos.	SPECIES.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah	Nepaul.
1153	781	Carpophaga insignis, *Hodgs.*	...	...	...	...	...	...	...	...	‖	...	...	...	...	...	...	×	...	...
1154		Carpophaga griseicapilla, *Wald.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1155		Carpophaga bicolor, *Scop.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.	...
1156	785	Palumbus pulchricollis, *Hodgs.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×‡
1157	784	Palumbus casiotis, *Bonap.*	×	×	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	×
1158	786	Palumbus Elphinstonei, *Sykes.*	...	...	...	...	...	...	...	...	...	...	...	...	×	×	×	...	...	...	...
1159	787	Palumbæna Eversmanni, *Bp.*	×	...	...	...	...	...	...	...	...	×	...	...	...	...	×	...	...	...	...
1160	788	Columba intermedia, *Strickl.*	×	×	×	×	×	×	×	×§	×	×	×	×	×	×	×	c×	×	×	×‡
1161		Columba livia, *Bonap.*	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
1162	789	Columba rupestris, *Pall.*	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...
1163	790	Columba leuconota, *Vigors.*	...	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...
1164	782	Alsocomus puniceus, *Tickell.*	...	...	...	...	...	...	...	×	§	×	×	...	...	...	...	C.	×	...	...
1165	783	Alsocomus Hodgsoni, *Vigors.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...	×
1166	791	Macropygia leptogrammica, *Temm.*	...	...	...	...	...	...	...	×B	‖	...	...	...	...	...	...	...	×	×‡	
1167		Macropygia assimilis, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	
1168	792	Turtur pulchratus, *Hodgs.*	...	...	...	×	×	×	×	...	...	×	×	...	...	...	...	...	...	...	×‡
1169	793	Turtur meena, *Sykes.*	...	...	...	...	...	...	...	×‖	§	...	...	...	×	×	×	c×	×	×	
1170	794	Turtur senegalensis, *Linn.*	×	×	×	×	×	×	×	...	×	×	×	×	×	×	×	×	...	...	
1171	795	Turtur suratensis, *Gmel.*	×	...	...	×	×	×	×	×	×	×	×	×	×	*×	×	×	...	...	
1172		Turtur tigrinus, *Tem.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	
1173	796	Turtur risorius, *Linn.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	c×	×	...	
1174	797*bis*.	Turtur humilis, *Tem.*	×	×	...	...	×	×	×	×	×	×	×	×	×	×	×	C.	×	...	
1175	798	Chalcophaps indica, *Linn.*	...	...	...	...	...	?	...	§×	A.	N.	...	...	...	...	?	c×	×	...	
1176		Geopelia striata, *Linn.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	
1177		Calœnas nicobarica, *Linn.*	...	...	...	...	...	...	...	...	...	M.	N.	...	...	...	...	...	...	...	
1178	801*ter*.	Pterocles coronatus, *Licht.*	×	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	
1179	801*bis*.	Pterocles senegallus, *Linn.*	×	×	...	...	×	...	...	...	×	...	...	×	×	...	...	...	...	...	
1180	799	Pterocles arenarius, *Pall.*	×	×	×	×	×	×	×	×	×	..	...	×	×	...	...	...	...	...	
1181	802	Pterocles exustus, *Tem.*	×	×	.	×	×	×	×	×	×	×	...	×	×	×	×	...	×	...	
1182	801	Pterocles alchata, *Linn.*	×	×	×	×	×	×	...	...	×	...	...	...	...	...	...	...	...	...	
1183	800*bis*.	Pterocles Lichtenstenii, *Tem.*	×	×	...	...	×	..	...	..	...	..	...	...	...	...	...	...	...	...	
1184	800	Pterocles fasciatus, *Scop.*	×	...	...	...	×	×	×	..	×	×	...	...	×	...	×	...	...	...	
1185		Syrrhaptes thibetanus, *Gould.*	...	...	...	...	...	×	...	...	...	...	...	...	..	...	...	...	...	×	
1186	803	Pavo cristatus, *Linn.*	×	...	...	..	×	×	×	×§	×	×	×	×	×	×	×	c×	...	...	
1187		Pavo muticus, *Linn.*	...	...	...	...	...	...	...	..	...	...	...	...	..	...	...	...	×	...	
1188		Argusianus argus, *Linn.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	

—Malabar. ‡ Sikkim. § Assam. ‖ Khasia Hills. C. Ceylon.
M. Mergui Archipel. A. Andamans. N. Nicobars.

No. in Avifanna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N. W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1189		Polyplectron thibetanum, *Gm.*									B.	‖							×	
1190		Megapodius nicobariensis, *Blyth.*									N									
1191		Crossoptilon thibetanum, *Hodgs.*																		×
1192	804	Lophophorus Impeyanus, *Lath.*						×			B.									
1193		Lophophorus Sclateri, *Jerd.*									S.									×‡
1194	~~805~~	Ceriornis satyra, *Linn.*					×	×			B.									
1195	806	Ceriornis melanocephalus, *Gray.*					×	×												×‡
1196	807	Ithaginis cruentus, *Hardw*																		×‡
1197	808	Pucrasia macrolopha, *Lesson.*						×			B									×
1198	809	Phasianus Wallichi, *Hardw.*					×	×												×
1199	810	Euplocamus albocristatus, *Vigors.*					×	×												×
1200		Euplocamus leucomelanus, *Lath.*																		×
1201	811	Euplocamus melanonotus, *Blyth.*									B.									‡
1202		Euplocamus horsfieldi, *G. R. Gray*									‖	§	S.							
1203		Euplocamus lineatus, *Elliot.*																	×	
1204		Euplocamus Cuvieri, *Temm.*									H.									
1205		Euplocamus Andersoni, *Elliot.*																	×	
1206		Euplocamus, Vieilloti, *G. R. Gray.*																	×	
1207	812	Gallus ferrugineus, *Gm.*					×	×	§×	H×	×	×	×					×	×	
1208	813	Gallus sonnerati, *Tem.*											×		×			×		
1209	814	Galloperdix spadiceus, *Gmel.*										×	×		×	×		×		×
1210	815	Galloperdix lunulatus, *Valenc.*								×								×		
1211	816	Tetraogallus Himalayensis, *G. R. Gray.*						×												
1212		Tetrao thibetanus, *Gould.*						×												
1213	817	Lerwa nivicola, *Hodgs.*						×												
1214	818	Francolinus vulgaris, *Steph.*	×	×	×	×	×	×	×	×	×	×	×	×	×					×‡
1215	819	Francolinus pictus, *Jard. and Selby.*										×	×		×		×	×		
1216		Francolinus chinensis, *Osb.*																	×	
1217	820	Caccabis chukor, *Gray.*	×	×	×	×	×	×												×

‡ Sikkim. § Assam. ‖ Khasia Hills. B. Bhootan. N. Nicobars.
S. Sadya. H. Arracan Hills.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.W. Provinces	Oudh.	Bengal	Rajputana.	Central India.	Central Prov.	Kutch	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1218	821	Ammoperdix bonhami, *Gray.*	×	×	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...
1219	822	Ortygornis ponticeriana, *Gmel.*	×	×	×	×	×	×	×	...	×	×	×	×	×	...	×	c×	...	...
1220	823	Ortygornis gularis, *Tem.*	...	...	...	...	...	...	×	×	§	...	...	...	...	...	...	...	...	...
1221	824	Arboricola torqueola, *Valenc.*	...	...	...	...	...	×	...	B.	...	...	...	...	...	...	...	...	..	×‡
1222		Arboricola atrogularis, *Blyth.*	...	...	...	...	...	...	...	...	§	Sy.	Ch.	T.	G.	...	...	...	..	...
1223		Arboricola brunneipectus, *Tick.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	..
1224		Arboricola chloropus, *Tick.*	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...	×	...
1225		Arboricola intermedia, *Blyth.*	...	...	...	...	...	...	...	...	A.	N.	...	...	...	...	...	...	...	...
1226	825	Arboricola rufogularis, *Blyth.*	...	...	...	...	...	...	...	...	§	...	...	...	...	...	...	...	×	...
1227		Arboricola mandelli, *Hume.*	...	...	...	...	...	...	...	.	B.	...	...	...	...	...	...	...	.	...
1228		Bambusicola Fytchi, *Andr.*	...	...	...	...	...	...	...	§	‖	G.	N.	...	...	...	...	...	×	...
1229		Caloperdix oculea, *Tem.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1230		Rollulus roulroul, *Scop.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1231	826	Perdicula asiatica, *Lath.*	...	...	...	...	×	×	×	×	...	×	×	...	×	×	×	c×	...	...
1232	827	Perdicula argoondah, *Sykes.*	...	...	...	...	×	×	×	...	×	×	×	×	×	?	×	...	...	...
1233		Ophrysia superciliosa, *J. E. Gray,*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...
1234	828	Microperdix erythrorhyncha, *Sykes.*	...	...	...	...	...	...	...	...	...	...	...	...	...	×	×	×	...	...
1235		Microperdix Blewitti, *Hume.*	..	...	.	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...
1336	829	Coturnix communis, *Linn.*	×	×	×	×	×	×	×	Sy.	×	A.	×	×	×	×	×	×	×	×
1237	830	Coturnix coromandelica, *Gmel.*	×	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1238		Excalfactoria chinensis *Linn.*	...	...	...	..	...	...	...	§×	‖	×	×	Sy.	...	...	...	C.	×	×‡
1239	{832} {833}	Turnix plumbipes, *Hodgs.*	...	...	...	...	×	×	×	...	..	...	...	...	...	...	...	C.	×	...
1240	834	Turnix joudera, *Hodgs.*	×	...	...	...	×	×	×	×	×	...	...	×	×	×	×	c×	...	...
1241	835	Turnix Dussumieri, *Tem.*	×	..	...	...	×	×	×	×	×	...	...	×	×	×	×	×	...	...
1242		Turnix maculosa, *Tem.*	...	...	...	...	...	...	...	...	A.	...	T.	...	...	...	...	...	×	...
1243		Turnix albiventris, *Hume.*	..	...	...	...	...	...	...	...	...	Nicobars and Andamans.								
1244		Otis tarda, *Linn.*	...	...	...	...	Hastnagur.				...	...	...	...	...	...	...	...	...	...
1245		Otis tetrax, *Linn.*	...		...	?	×	×	...	...	...	...	...	...	.	...	...	...	..	...
1246	836	Eupodotis Edwardsi, *Gray*	×	..	...	...	×	×	...	...	×	...	×	×	×	...	×	...	...	...
1247	837	Houbara Macqueenii, *Gray*	×	×	×	×	×	×	×	...	×	×	×	×	×	...	...	...	...	...
1248	838	Sypheotides bengalensis, *Gmel.*	.	..	...	...	×	×	×	×	I.	Sy.	§	...	...	...	...	...	...	...
1249	839	Sypheotides auritus, *Lath.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	...	...

‡ Sikkim § Assam. ‖ Khasia Hills. A. Arracan. B. Bhootan. C. Ceylon.
Sy. Sylhet. G. Garo Hills. T. Tipperah. Ch. Chittagong.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1250	840	Cursorius coromandelicus, *Gmel.*	×	×	...	...	×	×	×	×	×	...	?	×	×	×	×	×	...	...
1251	840*bis.*	Cursorius gallicus, *Gmel.*	×	×	×	×	×	×	×	...	×	...	...	×	×	...	...	...	...	...
1252	841	Rhinoptila bitorquata, *Jerd.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...	...
1253	842	Glareola orientalis, *Leach.*	×	...	...	...	...	...	...	×	...	...	...	...	...	...	×	C.	×	...
1254	842*bis.*	Glareola pratincola, *Linn.*	×	...	×	×	...	...	...	...	...	...	...	...	...	...	×	...	...	...
1255	843	Glareola lactea, *Tem*	×	...	...	...	×	×	...	...	...	...	...	...	...	...	×	...	×	...
1256	844	Squatarola helvetica, *Linn.*	×	×	...	...	...	...	...	×	...	..	...	×	...	...	...	×	×	...
1257	845	Charadrius fulvus, *Gm.*	×	...	...	...	×	×	...	?	...	...	...	×	...	...	×	×	×	...
1258	845*bis.*	Charadrius pluvialis, *Linn.*	×	×	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...
1259	846	Ægialitis Geoffroyi *Wagl.*	×	×	×	...	...	...	...	×	×	...	...	×	...	×	...	×	×	...
1260	847	Ægialitis mongolica, *Pall.*	×	×	×	×	...	...	...	×	...	...	...	×	...	×	...	×	×	...
1261	848	Ægialitis cantiana, *Lath.*	×	×	×	×	×	×	×	×	×	...	...	×	×	×	×	c×	×	...
1262	849	Ægialitis dubia, *Scop.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	c×	×	×
1263	850	Ægialitis Jerdoni, *Legge* ...	×	...	...	...	...	...	...	×	...	...	...	×	×	...	...	C.	×	...
1264	851	Vanellus cristatus, *Meyer*	×	×	×	×	×	×	...	...	...	...	...	...	...	...	×	...	...	×
1265	852	Chettusia gregaria, *Pall.* ...	×	×	×	×	×	×	×	...	×	×	...	×	...	×	...	...	...	...
1266	853	Chettusia leucura, *Licht* ..	×	×	×	×	×	×	×	×	×	×	×	×	×	×	? ×	...	...	...
1267	854	Chettusia cinerea, *Blyth*	×	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	×	...
1268	857	Hoplopterus ventralis, *Linn.*	×	...	...	...	×	×	×	×	...	×	...	...	...	...	...	...	×	×
1269	855	Lobivanellus indicus, *Bod.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×	×	×
1270	855*bis.*	Lobivanellus, atronuchalis, *Blyth*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1271	856	Sarciophorus bilobus, *Gmel.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	c×	×	×
1272	858	Æsacus recurvirostris, *Cuv.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	c×	×	...
1273	859	Œdicnemus crepitans, *Tem.*	×	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1274	860	Strepsilas interpres, *Linn.*	×	×	×	...	...	...	...	...	×	...	...	...	...	...	×	c×	...	...
1275	861	Dromas ardeola, *Paykull* ...	×	×	×	...	...	...	...	...	...	...	...	×	×	×	...	C.	...	...
1276	862	Hæmatopus, ostralegus, *Linn.*	×	×	×	×	...	...	...	×	...	...	...	×	...	×	...	c×	...	...
1277	863	Grus antigone, *Linn.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1278	864	Grus leucogeranus, *Pall.* ...	×	...	...	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...
1279	865	Grus cinerea, *Bechst.*	×	..	...	.	×	×	×	×	×	×	×	×	×	×	×	.	...	...
1280	866	Anthropoides virgo, *Linn.*	×	×	?	×	×	×	×	§	×	×	×	×	×	×	×	×	...	...
1281	867	Scolopax rusticola, *Linn.* ...	×	×	×	×	×	×	×	×	...	...	...	...	...	×	...	×	...	×
1282	868	Gallinago nemoricola, *Hodgs.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	c×	...	...
1283	869	Gallinago solitaria, *Hodgs,*	...	...	...	...	..	×	...	...	B.	...	...	...	...	...	...	C.	...	×
1284	870	Gallinago stenura, *Kuhl* ...	×	×	...	×	×	×	..	×	A×	N×	...	×	×	×	×	C.	×	...
1285	871	Gallinago scolopacina, *Bonap.* ..... × ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	c×	×	...
1286	872	Gallinago gallinula, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1287	873	Rhynchœa capensis, *Linn.*	×	×	×	...	×	×	×	...	×	×	×	×	×	...	...	c×	×	...
1288	886	Limicola platyrhyncha, *Tem.*	×	×	...	...	...	...	...	×	...	...	...	×	×	×	...	×	×	...

Bhootan. C. Ceylon. § Assam.

Note.—Marks in the columns Beloochistan and Persia refer chiefly to the coast and gulf of those countries.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Bajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul
1289	887	Eurynorhynchus pygmæus, *Linn.*	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	C.	...	...
1290	884	Tringa minuta, *Leisl.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1291		Tringa subminuta, *Midd.*	×	...	...	...	...	...	...	×	...	...	...	...	...	...	...	cx	×	...
1292	885	Tringa temminckii, *Leisl.*	×	...	...	...	...	...	...	×	...	...	...	...	...	...	...	cx	×	...
1293		Tringa crassirostris, *Tem. Schleg*	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...		×	...
1294	882	Tringa subarquata, *Gould.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	×
1295	883	Tringa cinclus, *Linn.*	×	...	...	...	×	×	×	×	×	...	...	×	×	...	...	...	...	...
1296	880	Machetes pugnax, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	×
1297	888	Calidris arenaria, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	×
1298	890	Phalaropus hyperboreus, *Linn.*	×	×	×	×	...	...	...	...	...	...	...	...	...	...	...	C.	...	...
1299	889	Phalaropus fulicarius, *Linn.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	C,	...	...
1300	893	Actitis hypoleucos, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1301	892	Actitis ochropus, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1302	891	Totanus glareola, *Gmel*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1303	894	Totanus canescens, *Gmel.*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1304	895	Totanus stagnatilis, *Bechst*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	cx	...	...
1305	897	Totanus calidris, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	×
1306	896	Totanus fuscus, *Linn.*	×	×	...	...	...	...	...	×	...	..	..	×	×	×		cx	×	...
1307		Totanus Haughtoni, *Hume.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	...
1308		Totanus dubius, *Murray*	×	..	...	...	...	...	...	...	...	...	...	.	...	.	...	...	...	...
1309	876	Terekia cinerea, *Gould.*	×	×	...	...	...	×	...	×	...	...	...	×	×	×	...	cx	×	...
1310	874	Pseudoscolopax semipalmatus, *Jard.*	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	×	...
1311	875	Limosa ægocephala, *Linn.*	×	×	×	×	..	...	...	...	×	...	...	×	×	×	...	cx	×	...
1312		Limosa lapponica, *Linn.*	×	×	×	×	...	...	...	...	...	...	...	×	×	×	...	cx	×	...
1313	878	Numenius phæopus, *Linn.*	×	×	×	...	...	...	...	×	...	...	...	×	×	×	..	cx	×	...
1314	877	Numenius arquatus, *Linn.*	×	×	×	×	×	×	×	×	×	...	...	×	×	×	×	cx	×	...
1315	879	Ibidorhynchus Struthersii, *Vig.*	...	...	...	..	...	...	...	...	...	..	...	...	...	...	...	...	...	×
1316	899	Recurvirostra avocetta, *Linn.*	×	×	×	×	×	×	×	×	×	...	...	×	×	×	×	×	×	...
1317	898	Himantopus candidus, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1318	900	Metopodius indicus, *Lath.*	...	...	...	...	..	...	..	×	...	×	×	×	×	×	×	×	×	...
1319	901	Hydrophasianus chirurgus, *Scop.*	×	...	...	...	×	×	×	×	×	×	×	×	...	...	...	cx	B.	...
1320	902	Porphyrio poliocephalus, *Lath.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	cx	×	...
1321	903	Fulica atra, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1322		Podica personata, *G.R.Gray*	...	...	...	...	...	...	...	§	...	...	...	...	...	...	...	...	×	...
1323	913	Hypotænidia striata, *Linn.*	...	...	...	...	...	...	§	×	syl	...	‖	...	...	×	*	cx	...	...
1324	914	Rallus indicus, *Blyth.*	...	...	...	...	...	..	..	§	×	syl	×	..	...	...	...	...	cx	×	×
1325	912	Rallina euryzonoides, *Lafresn.*	...	...	...	...	×	×	‡	×	B	...	..	...	...	...	...	...	cx	×	×

C. Cashmere.

Note.—Marks in the columns Beloochistan and Persia refer chiefly to the coast and gulf of those countries.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1326		Rallina fasciata, *Raffl.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1327		Rallina Canningi, *Tytler* ...	...	...	...	...	...	...	A	...	...	...	...	...	...	...	...	...	?	...
1328	910	Porzana Bailloni, *Vieill.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1329	906	Porzana maruetta, *Linn.* ...	×	×	×	×	×	×	×	×	?	?	×	×	×	×	×	×	×	?
1330	911	Porzana fusca, *Linn.*		...	...	...	×	×	...	×	×	×	...	C	...	...	...	×c	...	...
1331		Porzana minuta, *Pall.* ...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1332	908	Porzana akool, *Sykes*	...	...	...	...	×	×	×	×	×	×	×	...	×	...	...	...	...	...
1333	905	Gallinula chloropus, *Linn.*	×	×	×	×	×	×	×	×	×	?	×	×	×	×	×	×	×	×
1334	907	Gallinula phœnicura, *Penn.*	×	×	...	...	×	×	×	×	×	...	...	×	×	×	×	×c	×	...
1335	904	Gallicrex cinereus, *Gm.* ...	×	...	...	...		...	...	×	...	×	...	...	...	...	...	×c	×	...
1336	915	Leptoptilos argala, *Lath.* ..	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1337	916	Leptoptilos javanicus, *Horsf.*	...	...	...	...	×	?	?	×	×	×	×	...	...	...	...	×c	×	...
1338	917	Xenorhynchus asiaticus, *Lat*	×	...	...		×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1339	918	Ciconia nigra, *Linn.*	×	×	...	×	×	×	×	×	×	×	×	×	×	×	×	...	...	...
1340	919	Ciconia alba, *Belon*	×	...	...	...	×	×	×	×	×	×	×	×	×	×	×	...	...	...
1341	920	Ciconia leucocephala, *Gm*	×	...	...	...	×	×	×	×	?	×	..	?	×	×	×	×c	×	...
1342	921	Ardea goliath, *Temm.*		...	...	...	...	..	...	..	‖	..	...	...	...	...	...	...	...	...
1343		Ardea sumatrana, *Raf.* ...	...	...	...	...	...	...	...	..	..	...	...	..	..	...	...	...	×	...
1344	922	Ardea insignis, *Hodyson* ..		...	...	...	...	...	...	×	§	...	..	..	...	...		...	...	×
1345	923	Ardea cinerea, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1346	924	Ardea purpurea, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1347	925	Herodias alba, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1348	926	Herodias intermedia, *Von Hasselt.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1349	927	Herodias garzetta, *Linn.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1350		Herodias eulophotes, *Swinh.*	...	...	...	...	...	...	...	..	.	...	..	...	...	...	...	..	×	...
1351	928	Demi-egretta gularis, *Bosc.*	×	×	...	...	...	..	...	×	...	...	...	×	...	...	...	×c	...	...
1352		Demi-egretta sacra, *Gmel*	...	...	...	...	...	...	...	N	A	...	...	..	...	...	...	...	×	...
1353	929	Bubulcus coromandus, *Bodd.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1354	930	Ardeola grayi, *Sykes*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1355		Ardeola prasinoceles, *Swinh.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1356	931	Butorides javanica, *Horsf.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1357	932	Ardetta flavicollis, *Lath.* ..	×	...	...	..	×	×	×	×	...	...	...	×	×	×	×	×c	×	...
1358	933	Ardetta cinnamomea, *Gmel.*	×	...	...	...	×	×	×	×	...	...	...	×	×	×	×	×c	×	...
1359	934	Ardetta sinensis, *Gmel*	×	..	...	...	×	×	×	×	...	...	...	×	×	×	×	×c	×	...
1360	935	Ardetta minuta, *Linn.*	×	×	×		×	×	...	×	...	...	...	...	...	...	...	...	...	...
1361	936	Botaurus stellaris, *Linn.* ..	×	×	×	×	×	×	×	×	...	...	...	×	..	×	×	×c	×	...
1362	937	Nycticorax griseus, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1363		Gorsachius melanolophus, *Raf.*	..	..	...	...	...	..	...	N	...	...	...	...	...	...	...	×c	...	...
1364	938	Tantalus leucocephalus, *Penn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1365	939	Platalea leucorodia, *Linn.*	×	×	×	×	×	×	×	×	×	...	..	×	×	×	×	×c	×	...

Note.—Marks in the columns Beloochistan and Persia refer chiefly to the coast and gulf of those countries.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces	Oudh.	Bengal.	Bajputana.	Central India.	Central Prov.	Kutch-	Guzerat.	Concan.	Deccan.	S. India.	British Burmah	Nepaul
1366	940	Anastomous oscitans, *Bodd.*	×	×	×	..	×	×	×	×	×	×	×	×	×	×	×	×	×	...
1367	938	Threskiornis melanocephalus, *Lath.*	×	×	×	...	×	...	...	×	×	...	..	×	×	×	×	× c	×	...
1368	942	Geronticus papillosus, *Temm.*	×	×	×	...	×	×	×	×	×	×	...	×	×	×	×	× c	×	...
1369		Graptocephalus Davisoni, *Hume.*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	..
1370	943	Falcinellus igneus, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×	× c	×	...
1371	944	Phœnicopterus antiquorum, *Temm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	× c	×	...
1372		Phœnicopterus minor, *Geof. St. Hil.*	×	...	×	...	×	×	...	...	×	...	...	...	×	...	×	...	...	...
1373		Cygnus olor, *Gm.*	×	...	..	×	×	...	...	...	...	...	×	..	...	...	...	...	...	..
1374	945	Anser cinereus, *Meyer.*	×	×	×	×	×	×	×	×	×	...	..	×	×	...	...	...	...	...
1375	946	Anser brachyrrhynchus, *Baillon*	...	...	...	...	×	×	...	...	...	...	...	...	...	...	...	...	...	...
1376	947	Anser albifrons, *Gm.*	×	×	×	×	×	×	×		...	...	...	...	...	..	...	...	...	...
1377	948	Anser erythropus, *Linn.*	...	...	...	...	...	×	×	..	..	...	..	..	.	...	.	...	...	...
1378	949	Anser indicus, *Lath.*	×	...	...	...	×	×	×	×	...	...	×	...	.	..	...	...	...	..
1379	950	Sarkidiornis melanonotus, *Pen.*	×	...	..	...	×	×	×	×	×	...	...	×	×	×	×	× c	×	..
1380	951	Nettapus coromandelianus, *Gmel.*	×	×	...	...	×	×	×	×	×	×	×	×	×	×	×	× c	×	..
1381	952	Dendrocygna javanica, *Horsf.*	×	...	...	...	×	×	×	×	...	×	×	×	×	×	×	× c	×	...
1382	953	Dendrocygna fulva, *Gmel.*	×	...	...	...	×	×	×	×	...	×	×	×	×	×	×	× c	×	...
1383	954	Casarca rutila, *Pall*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	× c	×	×
1384	955	Casarca scutulata, *Mull.*	...	...	...	...	...	...	...	×	§	...	...	...	...	...	...	...	×	...
1385	956	Tadorna cornuta. *Gm*	×	×	×	×	×	×	×	×	..	...	...	×	×	...	..	...	..	...
1386	957	Spatula clypeata, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	× c	.	×
1387	958	Anas boscas, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	..	...	...
1388	959	Anas pœcilorhyncha, *Forst.*	×	×	×	×	×	×	×	...	...	...	×	×	×	×	×	× c	×	...
1389	960	Anas caryophyllacea, *Lath.*	...	...	...	...	...	...	...	§	Arr	...	...	...	...	..	...	...	×	...
1390	961	Chaulelasmus streperus *Lin.*	×	×	×	×	×	×	×	×	...	×	×	×	×	×	×	...	×	×
1391		Chaulelasmus rufiventris, *Sp. Nov* ...	...	×	..	...	...	...	..	Syl	...	...	...	...	..	..	...	..	...	...
1392		Chaulelasmus angustirostris, *Menetries*	×	×	×	×	×	×	×	×	...	..	...	..	...	..	...	.	...	
1393	962	Dafila acuta, *Linn.*	×	×	×	×	×	×	×	×	...	×	×	×	×	×	×	× c	×	...
1394	963	Mareca penelope, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	..
1395	964	Querquedula crecca, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	× c	×	..
1396	965	Querquedula circia, *Linn*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	× c	×	..
1397	966	Querquedula formosa, *Georgi.*	×	...	...	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...
1398		Querquedula falcata, *Georgi.*	...	...	...	...	×	×	...	×	...	...	...	...	...	.	...	...	...	...
1399	967	Fuligula rufina, *Pall*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...	...

Note.—Marks in the columns Beloochistan and Persia refer chiefly to the coast and gulf of those countries.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.-W. Provinces.	Oudh.	Bengal	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan.	S. India.	British Burmah.	Nepaul.
1400	971	Fuligula cristata, *Linn.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
1401	970	Fuligula marila, *Linn.*.....	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×
1402	968	Fuligula ferina, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	...
1403	969	Fuligula nyroca, *Gould.* ...	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	...	×
1404		Clangula glaucion, *Linn*...	×	...	...	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...
1405		Erismatura leucocephala, *Scop.*	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...	...	...
1406		Mergus serrator, *Linn*.....	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1407	972	Mergus merganser, *Linn*...	×	×	×	...	×	×	...	×	...	...	...	...	...	...	...	...	...	...
1408	973	Mergellus albellus, *Linn*...	×	×	×	×	×	×	×	...	...	...	...	×	...	...	...	...	...	...
1409	974	Podiceps cristatus *Linn*....	×	×	×	...	×	×	×	×	...	...	...	×	×	...	...	...	...	...
1410		Podiceps nigricollis, *Sund*	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1411	975	Podiceps minor, *Linn*.....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1412	976	Oceanites oceanica, *Kuhl* ..	×	×	...	...	...	...	...	×	...	...	...	...	...	...	...	...	×	...
1413		Daption capensis, *Linn.* ...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	C	...	...
1414		Puffinus persicus, *Hume* ..	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1415		Puffinus chlororhynchus, *Lesson.*.....	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	C	×	...
1416		Stercorarius asiaticus, *Hume.*	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1417		Larus cacchinans, *Pall*...	×	×	×	...	×	×	...	...	×	...	...	...	...	...	...	...	...	...
1418		Larus affinis, *Reinh.*	×	×	...	...	...	...	...	...	...	...	...	×	×	×	×	...	...	...
1419		Larus gelastes, *Licht*.....	×	×	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1420		Larus hemprichi, *Bp.*	×	×	×	...	...	...	...	...	...	...	...	×	×	×	×	...	...	...	...
1421	980	Larus brunneicephalus *Jerdon*.....	×	×	×	...	...	..	...	×	...	...	...	×	×	...	×	C	×	...
1422	979	Larus ichthyætus, *Pall.* ...	×	×	×	..	×	×	...	×	...	...	...	...	...	×	...	×	...	...
1423	981	Larus ridibundus, *Linn.* ...	×	×	×	..	×	...	..	×	...	...	...	...	...	×	...	...	...	...
1424	984	Hydrochelidon hybrida, *Pall*.....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1425		Hydrochelidon leucoptera, *Meisn and Schinz.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
1426		Hydrochelidon nigra, *Lin*..	×	...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1427	983	Gelochelidon anglica, *Mont.*	×	×	×	...	...	...	...	×	×	...	...	×	...	×	×	...	×	...
1428	982	Sterna caspia, *Pall*.....	×	×	×	..	×	×	×	...	...	...	...	...	...	...	...	C	...	...
1429	989	Sterna Bergii, *Licht.*	×	×	×	...	...	...	...	×	...	...	...	×	...	×	...	c×	×	...
1430		Sterna cantiaca, *Gm.*	×	×	×	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
1431	990	Sterna media, *Horsf.*	×	×	..	...	...	...	...	×	...	...	...	...	...	×	...	×c	×	...
1432	991	Sterna melanauchen, *Temm.* ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	×	...
1433	985	Sterna seena, *Sykes*.....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1434	987	Sterna melanogastra, *Temm.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	...
1435		Sterna Dougalli, *Mont.* ...	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	C	×	...
1436	986	Sterna hirundo, *Linn.*	×	...	...	...	×	...	...	...	...	...	...	...	...	...	...	c×	...	...
1437		Sterna albigena, *Licht*.....	×	×	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1438		Sterna Saundersii, *Hume*...	×	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1439	988	Sterna sinensis, *Gm.*	×	..	...	...	...	..	...	×	...	...	...	...	...	...	...	C	×	...
1440	992	Sterna anæsthetus, *Scop*...	×	×	×	...	...	...	...	...	...	...	...	...	...	×	...	C	×	...

Note.—Marks in the columns Beloochistan and Persia refer chiefly to the coast and gulf of those countries.

No. in Avifauna.	Jerdon's Nos.	Species.	Sind.	Beloochistan.	Persia.	Afghanistan.	Punjab.	N.W. Provinces.	Oudh.	Bengal.	Rajputana.	Central India.	Central Prov.	Kutch.	Guzerat.	Concan.	Deccan	S. India.	British Burmah.	Ne Zul.
1441		Sterna fuliginosa, *Gm.*	×	×	×	...	...	...	...	...	...	...	...	...	...	*	...	C	...	...
1442	993	Anous stolida, *Linn.*	×	×	...	...	...	...	..	×	...	...	...	...	...	...	...	..	...	...
1443	994	Anous tenuirostris, *Tem.*	...	...	...	...	...	...	...	×	...	...	...	...	...	..	...	..	...	...
1444		Anous leucocapillus, *Gould.*	...	...	...	...	...	...	..	×	...	...	..	...	..	...	...	...	..	...
1445	995	Rhynchops albicollis. *Swains.*	×	×	×	...	..	...	...	×	...	...	...	×	...	×	...	×	×	...
1446	996	Phæton rubricauda, *Bodd.*	...	...	...	...	..	...	...	×	...	...	...	...	...	...	...	...	...	...
1447	997	Phæton flavirostris, *Brand.*	...	...	...	...	...	...	...	×	...	...	...	...	...	...	...	...	...	...
1448		Phæton indicus, *Hume.*	×	×	...	...	...	...	...	×	...	...	...	...	...	...	..	...	...	...
1449	1000	Fregata aquila, *Linn.*	...	...	...	...	...	...	...	×	...	...	...	...	...	*	...	C	...	...
1450		Sula cyanops, *Sundev.*	×	×	...	...	...	...	...	×	...	...	...	...	...	×	...	C	...	...
1451	998	Sula australis, *Steph.*	...	...	...	...	...	...	...	×	..	...	...	...	..	...	...	...	×	...
1452	999	Sula piscator, *Linn.*	...	...	...	...	...	...	...	×	..	...	...	...	...	...	...	...	...	...
1453		Pelicanus crispus, *Bruch.*	×	×	...	...	×	×	×	...	...	...	...	...	...	...	...	...	...	...
1454	1004	Pelicanus manillensis, *Gm.*	×	...	×	...	...	...	...	×	×	...	...	×	×	...	×	×c	×	...
1455	1001 1003	Pelicanus roseus, *Gm.*	×	...	×	...	...	...	...	×	×	...	...	×	×	...	×	×c	×	...
1456	1005	Phalacrocorax carbo, *Linn.*	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×c	×	×
1457	1006	Phalacrocorax fuscicollis *Steph.*	×	...	...	...	...	...	...	...	×	...	...	×	×	...	×	C	×	...
1458	1007	Phalacrocorax pygmæus *Pall.*	×	...	...	...	...	...	...	...	×	...	...	×	×	...	×	C	×	...
1459	1008	Plotus melanogaster, *Penn.*	×	...	...	...	...	...	...	×	×	...	...	×	×	×	×	C	×	...

Note.—Marks in the columns Beloochistan and Persia refer chiefly to the coast and gulf of those countries.

IMPERIAL LIBRARY.

78