









# GENERAL HISTORY

OF

# BIRDS.

# BY JOHN LATHAM, M.D.

F.R.S. A.S. AND L.S.

ACAD, CES. NAT. CURIOS. REG. HOLM. ET SOC. NAT SCRUT. BEROLIN. &c. &c.

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## ORDER VIII. WITH PINNATED FEET.

### GENUS XCI.—PHALAROPE.

\* With slender Bills.

C Var.

A Var.

B Var.

C Var.

A Flat-billed

A Plain

Ferruginous

G Grey

A Flat-billed

Ferruginous

B Var.

B Var.

BILL straight. Nostrils minute.

Body and legs as in the Sandpiper, but rather compressed on the sides.

Toes furnished with a broad, and generally scolloped, membrane.

#### \* WITH SLENDER BILLS.

#### 1.—RED PHALAROPE.

Phalaropus hyperboreus, Ind. Orn. ii. 775. Muller, No. 196. Lin. Trans. xii. 535. Tem. Man. 457. Id. Ed. 2d. 709. Frankl. Narr. App. 690.

Tringa hyperborea, Lin. i. 249. Gm. Lin. i. 675.

Tringa lobata, Fn. Groenl. No. 75. Fn. suec. No. 179. first parag. Id. Retz. No. 152.

Phalaropus cinereus, Bris. vii. p. 15. Id. 8vo. ii. 362.

Phalaropus Williamsii, Lin. Trans. viii. p. 264.

Larus fidipes alter nostras, Raii, 132. A. 7. Will. 270.

Der Wassertretter, Schmid, Vog. 128. t. 111.

Johnson's Small-cloven-footed Gull, Will. Engl. 355. §. vii.

Phalarope de Siberie, Pl. enl. 766. Buf. viii. p. 224. Ph. cendré.

Cock Coot-footed Tringa, Edw. pl. 143.

Red Phalarope, Gen. Syn. v. 270. Br. Zool. ii. No. 219. pl. 76. Id. 1812. ii. p. 125. pl. 21. Bewick, ii. 139. Lewin, v. pl. 193. Walc. ii. pl. 127. Orn. Dict. & Supp.

LENGTH about seven inches. Bill one inch long, slender, and black; the general colour of the plumage above ash-colour, coming

forwards on the lower part of the neck; through the eyes, from the bill, a dusky stripe to the hindhead; behind the eyes a rufous one, reaching on the sides of the neck, and joining the other at the back part; rump, and upper tail coverts banded dusky and white; all the under parts of the body dusky white, but the sides marked with ash-coloured spots; under wing coverts crossed with lines of black, the upper ash-colour, the greater brown, tipped white, forming a band on the wing; scapulars margined with rufous; quills dusky, some of the secondaries tipped with white; tail dusky; legs dusky lead-colour.

The female has a mixture of rufous about the eyes; the rufous on the neck less extended, and mixing with the cinereous; the spots on the sides fewer, with some longitudinal streaks on the upper parts. The above seems to be descriptive of the two sexes in a complete state of plumage.

The Red Phalarope is very rare in England; one is mentioned, shot in Yorkshire, near Brignal; another on the banks of a fresh water pool, in the Isle of Stronsa, in May, 1769; and a specimen in the Leverian Museum, killed in England: is said to be more common on the Continent, being found in Siberia, and in the neighbourhood of the Caspian Sea; also in Scandinavia; comes into Greenland in April, and departs in September; generally found in pairs, and whilst swimming, frequently dips the bill into the water, after insects; for it is said not to be able to dive, or does so with difficulty: that described by Mr. Johnson was much on the wing; the wings sharp, and the cry like that of the Greater Tern.

Inhabits also America; comes into Hudson's Bay the beginning of June, and lays four eggs about the middle of the month, on a dry spot: the young fly in August, and they wholly depart in September; known there by the name of Occumushishisk, or A-coom-oo-shish.

That described by Mr. Simmonds, under the name of Phalaropus Williamsii, answered to the description above. He met with them in plenty at the edges of two or three fresh water lakes, in Sanda, and North Ronaldsha, the two most northerly of the Orkney Islands;

in their stomachs were found the remains of Monoculi and Onisci; but what appeared singular, the male had a great deficiency of feathers on the belly, and from the great difficulty of driving them from the tufts where the nests were supposed to be, it would seem probable, that the males principally perform the business of incubation.

#### PL. CLXIII.

A.—Phalaropus hyperboreus, Ind. Orn. ii. 775. B. Red Phalarope, Gen. Syn. v. 272. Var. A.—Pl. in frontispiece. Orn. Dict. Supp.

Length eight inches and a half. Bill black, slender; plumage on all the upper parts clouded brown, surrounding the breast, which is paler; chin white; belly and vent the same; on each side of the neck a large, irregular, deep ferruginous red spot; the greater wing coverts tipped with white, forming a bar; quills black; tail cinereous, but the two middle feathers dark, nearly black; legs dusky; toes furnished with a lobated membrane on the sides, as in the first described.—In the collection of Sir Joseph Banks. Found between Asia and America, from lat. 66. to 69.

One in Mr. Donovan's collection had the head nearly black; the chin white; the whole neck and sides of the breast red, but the middle of the last cinereous; belly white; upper part of the body dusky: an egg, exhibited with the bird, was much in colour like that of the Common Plover, but smaller.

B.—Phalaropus fuscus, Ind. Orn. ii. p. 776. Bris. vi. p. 18. Id. 8vo. ii. 363. Lin. Trans. xii. 535.

Tringa fusca rostro tenui, Klein, Av. 151. 3.

Tringa lobata, Brun. Orn. p. 51. N. 171.

Coot-footed Tringa, Edw. pl.46.

Brown Phalarope, Gen. Syn. v. 274. Arct. Zool. ii. 214.

Size of the others. Crown of the head black; plumage greatly similar, but most of the feathers, on the upper parts, fringed with

light rufous; fore part of the neck cinereous, with a slight tinge of blossom-colour; wing coverts and quills dusky, edged and tipped with white; across the wing a bar of white, but not so broad as in the first described; breast and under parts white, but the sides of the breast, and flanks are light ash, and on the sides of the neck a tinge of yellow; legs black.

Inhabits America; one of these flew on board a ship on the Coast of Maryland. It may appear to be a Variety only, if not a female; but Captain Sabine, who met with a small flock on the west Coast of Greenland, considers it as an immature bird.

C.-Phalaropus hyperboreus, Amer. Orn. ix. 75. pl. 73. f. 4.

The one figured in the Amer. Ornith. although bearing the same name, does not answer as to colour; it is said to be nine inches long, and fifteen broad. Bill orange, one inch long; throat, sides, neck, and lower parts white, thickly and irregularly barred with curving dashes of chocolate; the upper parts deep slate, streaked brownish yellow and black; the black scapulars broadly edged with brownish yellow; rump and wings dark slate; the primaries nearly black, crossed with white below the coverts; greater wing coverts broadly tipped with white, forming a large band; vent white; the feathers immediately next the tail reddish chocolate; legs black on the outside, yellowish within; middle toe small, and partly pinnate.

Inhabits America; found in Pennsylvania, but very rare.

## 2.—AMERICAN PHALAROPE.

Phalaropus Wilsoni, American Phalarope, Frankl. Nar. App. p. 691.

LENGTH ten inches and a half. Bill one inch and a quarter, black, narrow at the base, and slender, with a very slight general incurvation; forehead and crown clear, pale ash-colour; through





Red - necked Phalarope.

the eyes a narrow line to the side of the neck, where it widens considerably, and continues in a broad patch to the back; this mark is at first black, but half an inch beyond the eye deep chestnut; chin and sides of the head, between the above line, white; neck dingy white, slightly tinged with chestnut; belly and all beneath white; at the back of the neck, between the two dark markings, a white line; back and scapulars dark ash, with a little mixture of chestnut; wings dark ash, larger coverts and secondaries slightly edged with white; the two middle tail feathers ash-colour, the others the same on the outer web; mottled ash-colour and white on the inner; upper tail coverts ash-colour, under white; legs black, bare near an inch above the knee; toes lobed, the outer united to the middle one, at a short distance from the base, claws small, curved, black.

Inhabits North America. Received in a collection dispatched from Cumberland House, in the spring, 1820.

#### \*\* WITH FLAT BILLS.

#### 3.—GREY PHALAROPE.

Phalaropus lobatus, Ind. Orn. ii. 776. Amer. Orn. ix. 92. pl. 73. f. 3.

Tringa lobata, Lin. i. 249. Gm. Lin. i. 674. Muller, No. 195.

Phalaropus, Bris. vi. p. 12. Id. 8vo. ii. 361. Fn. suec. No. 179.

Phalaropus platyrhynchos, Tem. Man. 459. Id. Ed. 2d. 712. Parry's App. p. cci.

Tringa cinerea gutture albo, White-throated Coot-footed Tringa, Bartr. Trav. p. 302.

Le Phalarope à festons dentelés, Buf. viii. 226.

Grey Coot-footed Tringa, Edw. pl. 308. Phil. Trans. L. p. 255. pl. 6.

Grey Phalarope, Gen. Syn. v. 272. Br. Zool. No. 218. pl. 76. Id. fol. 126. pl. E.

1. f. 3. Id. 1812. ii. p. 123. pl. 21. Arct. Zool. ii. No. 218. Bewick, ii. pl. p.

140. Lewin, v. pl. 194. Orn. Dict.

LENGTH seven inches and a half, extent sixteen; weight one ounce and three quarters. Bill black, flattened near the point, about

one inch long; irides dark; hind part of the head and neck dusky brown, dashed with ash-colour; upper parts of the body, scapulars, and wing coverts, cinereous grey, the feathers of the last darkest, and edged with white; forehead, crown, chin, and all the under parts, pure white, except the bend of the wing, and the sides of the breast, which are cinereous; on the cheek a dusky spot; quills black; tail dusky, edged with ash; legs compressed like those of the Diver, and pale; toes scolloped, membranes serrated on their margins. This description is taken from a specimen killed in a pond at Alderton, in Wiltshire, in the collection of the late Col. Montagu; that of the Br. Zool. had the forehead white; crown dusky, hind part of the neck light grey; the rest of the parts above deep dovecolour, marked with dusky spots; scapulars édged with white; breast and belly white; tail dusky, the feathers edged with ash-colour. This was shot in Yorkshire, and communicated by Mr. Edwards. Another, in my own collection, had the whole of the top of the head, sides, chin, and neck white; hindhead and neck dusky; prime quills plain; the secondaries margined with white; the scolloped membranes yellowish. I have likewise met with another, with the whole head and neck brown; the chin alone being white.

The above mostly inhabits the northern parts of Europe, Iceland, and Greenland; is frequent throughout Siberia, about lakes and rivers, especially in autumn; has also been met with among the ice between Asia and America, and, if the same as that in the *Phil.* Trans. is found in the salt marshes, and in flocks about the borders of the Caspian Sea: as to England, it is a rare species.

## 4.—FLAT-BILLED PHALAROPE.

Tringa fulicaria, Lin. i. 249. Fn. Groenl. No. 76. Brun. No. 172. Muller, No. 195. Tringa hyperborea, Gm. Lin. i. p. 676. Var. β.

Phalaropus Platyrhynchos, Flat-billed Phalarope, Lin. Trans. xii. p. 536.

Phalaropus rufescens, Bris. vi. 20. Id. Svo. ii. 363.

Tringa rufa, Red Coot-footed Tringa, Bartr. Trav. 292. Edw. pl. 142. Red Phalarope (female), Gen. Syn. v. p. 271. Br. Misc. i. t. 10.

SIZE of the former. Bill the same; head, throat, hind part of the neck, back, scapulars, and upper tail coverts black, margined with rufous; over the eye a pale rufous streak; rump white, spotted with dusky; beneath, from the throat, dusky red, with a mixture of white; wings and tail as before.

The above was killed on the 10th of June, out of a flock of four, on the west Coast of Greenland, in lat. 68°; they were swimming in the sea, amongst icebergs, three or four miles from shore. This appears to be in the summer plumage, at which time it is probably in its most perfect state: this and the last appear to be related.

#### 5.—PLAIN PHALAROPE.

Phalaropus glacialis, Ind. Orn. ii. 776. Lin. Trans. xii. p. 536. Tringa glacialis, Gm. Lin. i. 675. Plain Phalarope, Gen. Syn. v. 273. Arct. Zool. ii. No. 415.

BILL black, slender, dilated at the end; crown dusky and dull yellow; across each eye a black line; cheeks, and neck before, clay-colour; breast and belly white; back and tertials dusky, edged with dull yellow; wing coverts, primaries, and tail cinereous; the last edged like the tertials; legs yellowish; the toes bordered with a plain, or unscolloped membrane.

This was taken in the Frozen Sea, in lat.  $69\frac{1}{2}^{\circ}$  long.  $191\frac{1}{2}^{\circ}$  and supposed to be in incomplete plumage. In Capt. Sabine's Memoir, it is set down as belonging to his Flat-billed Species, in change of feather; on which we have only to observe, that if birds, in such a dress, should be found hereafter, and the whole of them wanting the serratures on the lobated toes, it is possible that the bird here described may prove distinct: but Colonel Montagu mentions the probability

of the toes having been so much contracted in drying, at to make the matter undetermined, though he gives his opinion of the bird being only the young of the Grey Species.

#### 6.—FERRUGINOUS PHALAROPE.

LENGTH seven inches and a half. Bill nearly one inch, brown, with a blackish tip, and broader towards that part; plumage above brown, the edges of the feathers ferruginous, appearing in streaks; behind the eye a patch of white; chin dusky; under parts from chin to vent ferruginous, mottled under the wings with dusky; wings fine ash-colour; shafts of the quills white; ends of the greater wing coverts white, forming an oblique band on the wing; scapulars as the back, and nearly as long as the quills; as are the under tail coverts, in respect to the tail; middle of the belly whitish; tail two inches long, rounded, brown; the wings, when closed, nearly reach to the end of it; legs dusky, toes furnished with a finely scolloped, brown membrane; claws black.

A fine, and perfect specimen of this was in the collection of Mr. Bullock, shot near London, but the time of the year not ascertained; nor are we assured that it is distinct as a species; we have, however, thought right to repeat the various descriptions before detailed in the Synopsis, as well as recorded by other authors, to give the reader a clearer view; yet we are by no means averse to join in opinion of compressing them into two Species only, according to the sentiments of Col. Montagu and Mr Sabine,\* and, indeed, from so few having fallen under our own observation, we do not feel ourselves competent to decide.

<sup>\*</sup> M. Temminck is of the same opinion, see Man. d'Orn. 456, 459.

### 7.—BARRED PHALAROPE.

Phalaropus cancellatus, Ind. Orn. ii. 777. Tringa cancellata, Gm. Lin. i. 675. Barred Phalarope, Gen. Syn v. 274.

LENGTH seven inches and a half. Bill one inch, black, shape uncertain; feathers on the upper parts of the body brown, edged with white; under parts white, transversely barred with dusky; quills dusky, with brown ends, the margins and tips very pale; tail the same, spotted on both webs with white; legs dusky.

 $\mathbf{C}$ 

Inhabits Christmas Island.—Sir Joseph Banks.

VOL. X.

#### GENUS XCH.-FINFOOT.

1 African Finfoot

2 American Finfoot

BILL moderately curved, pointed, and elongated.

Nostrils linear.

Body depressed.

Tail somewhat cuneiform.

Legs short. Toes four in number, three placed before, and one behind; and furnished with an indented, or scolloped membrane; claws sharp, and bent.

### 1.—AFRICAN FINFOOT.—PL. CLXIV.

SIZE of a Coot; length eighteen inches. Bill one inch and three quarters in length, brown, formed like that of a Diver, somewhat bent, especially towards the point; the under mandible pale; nostrils in a depression, half the length of the bill, being a pervious slit on the fore part; tongue three-fourths of the length of the bill; plumage in general above brown, with several spots of the size of peas, on the lower part of the neck, and beginning of the back, but more numerous on the former; these are buff-coloured, and margined with black; over the eye sparingly beset with feathers, or rather down; from behind the eye a slender streak of white, passing down on each side of the neck; chin and throat white; the rest of the under parts dirty rufous white, inclining most to white on the breast; vent pale rufous brown; side feathers under the wings, marked with two or more obsolete spots on each side of the shaft; under wing coverts brown, spotted with white; tail cuneiform, stout, nearly six inches long, the outer feathers about three; the whole of a dark colour, with tawny yellow, stiff webs; thighs bare a little way above the joint; legs strong, four inches in length from the joint to the foot, the toes all disunited, but furnished on each side with a triple,

## PL.CLXIV.



c 2



FINFOOT. 11

scolloped membrane, in the manner of the Phalarope, or Coot; the colour orange; claws pretty long, and hooked, the middle one serrated on the inner edge; the wings reach to about one-third on the tail.—Inhabits Africa. The above description taken from a specimen in the collection of Mr. H. Brogden. I observe a second also in that of Mr. Bullock; and a third in the possession of Mr. Leadbeater; but the last is smaller, the colour and spots less defined, and most probably differs in sex, or may not have arrived at perfect matnrity.

## 2.—AMERICAN FINFOOT.

Plotus Surinamensis, Ind. Orn. ii. 896. Gm. Lin. i. 581.

Le Grebe-foulque, Buf. viii. 248. Pl. enl. 893. Tem. Man. Ed. ii. Anal. p. cvi. Podoa.

Oiseau de Soleil, Descr. Surin. ii. 192.

Le Macas à doigtier, Voy. d'Azara, iv. No. 446.

Surinam Tern, Brown, Ill. p. 90. pl. 39.

Surinam Darter, Gen. Syn. vi. 626.

SIZE of a Teal; length thirteen inches, Bill one inch and oneeighth long, pale, and sharp at the point; irides red; crown of the head black, and the feathers elongated into a small crest; the head small; the neck slender, and long in proportion to the body; cheeks bright bay; from the corners of each eye a line of white; sides, and hind part of the neck, longitudinally marked with lines of black and white; back, wings, and tail dusky brown; the last wedge-shaped, and tipped with white; the upper coverts very long, giving the appearance of two tails, one above the other; breast and belly white; legs short, pale dusky; toes four in number, three before and one behind; the forward ones furnished on each side with a lobated membrane, and crossed with several bars of black, four on the outer toe, three on the middle, and two on the inner; claws rather bent, and sharp; the hind toe free, but with a single plain membrane; the quills reach to within an inch of the length of the tail, which, towards the end, is crossed with a bar of dusky black.

12 FINFOO'T.

Inhabits Surinam, chiefly on the sides of rivers and creeks; feeds on small fish and insects, more particularly flies, and in catching them is so dexterous, as never to miss striking one with the bill; it is often domesticated by the inhabitants, and known to them by the name of Sun-Bird: said to be very active, with the head and body continually in motion: from its very frequently expanding the tail and wings at the same time, it has been thought to resemble the sun, and from thence has obtained the above name.

We may observe how different the conceptions of authors are, who have described this bird, which, to say the truth, does not entirely correspond with any Genus yet known. Dr. Forster ranks it with the Darters, from the connexion of the webs of all the four toes, which, in the complete bird, he says, is sufficiently conspicuous. In the specimens, however, which have come under our inspection, such connexion has not been to us at all clear: one circumstance, indeed, seems to shew the vicinity to the Darters, which is the suddenly darting of the bill on the object of its prey; yet it differs from them in not being bare on the sides of the head. Brown likens this bird to the Tern, to which it approaches by the bill. Buffon seems to come nearest to our ideas, by placing it between the Coot and Grebe, though it does not entirely correspond with either. have therefore ranked it with our African Species, forming therewith a distinct Genus -- leaving to futurity the propriety of so doing, and well knowing that Nature will not, in many instances, submit to the confinement of system, however useful such method may be, in assisting to arrange her works.

### GENUS XCIII.—COOT.

1 Common Coot	D Var.	3 Crested
A Var.	2 Greater	4 Mexican
B Var.	A Var.	5 Cinereous
C Var.	1	

BILL strong, thick, sloping to the point; the base of the upper mandible rising far up into the forehead; both mandibles of equal length.

Nostrils inclining to oval, narrow, short.

Body compressed; wings short. Tail short.

Toes long, furnished with broad, scolloped membranes.

#### 1.—COMMON COOT.

Fulica atra, Ind. Orn. ii. 777. Lin. i. 257. Fn. suec. No. 193. Gm. Lin. i. 702. Scop. i. No. 149. Brun. No. 190. Muller, No. 216. Kramer, 357. 1. Frisch, pl. 208. Georgi, p. 172. Hasselq. Voy. 200. 34. Sepp, t. p. 61. Bris. vi. 23. t. 2. f. 2. Id. 8vo. ii. 365. Raii, 116. A. 1. Will. 239. t. 59. Brown, Jam. 479. Schæf. t. 34. Klein, 150. 1. Id. Stem. 40. t. 40. f. 1. a. b. Id. Ov. 36. t. 12. f. 3. Borowsk. iii. 97. 2. Fn. Helv. Amer. Orn. ix. 61. pl. 73. 1. Tem. Man. 454. Id. Ed. 2d. 706. Lin. Trans. xiii. p. 197.

Fulica vulgaris, Gerin. v. t. 425.

Le Foulque, ou Morelle, Buf. viii. 211. pl. 18. Pl. enl. 197. Hist. Prov. 352. Voy. d'Azara, iv. No. 447.

Folaga, ò Polon, Zinnan. Uov. 108. t. 19. f. 96. Cet. Uc. Sard. 282.

Kleiner Bloessling, Gunth. Nest. u. Ey. t. 29.

Das russfarbige Wasserhubn, Naturf. xiii. 218.

Das gemeine Wasserhuhn, Bechst. Deuts. iii. 251. Id. Ed. 2d. iv. 511. Schmid, 136. t. 119.

Common Coot, Gen. Syn. v. 275. Id. Sup. 259. Id. Sup. ii. 328. Br. Zool. ii. No. 220. pl. 77. Id. fol. 132. pl. F. Id. 1812. ii. 127. pl. 22. f. 2. Arct. Zool. ii. No. 416. Will. Engl. 319. pl. 59. Alb. i. pl. 83. Bewick, ii. pl. 133. Lewin, v. pl. 195. Id. Eggs, pl. xxxvii. f. I. Walcot, ii. 167. Donov. pl. 106. Pult. Dors. p. 16. Graves, Orn. vol. ii. Orn. Dict. & Supp.

SIZE of a small Fowl; length eighteen inches; weight thirty ounces. Bill one inch and one-third, greenish white; on the roof

14 соот.

of the month several fringed appendages; the forehead bare as far as the crown, and covered with a white skin; the head, neck, and back, are black; the last inclining to ash-colour; breast, belly, and vent ash; outer edge of the wing white; just above the knee a circle, or garter of yellow; the colour of the legs, and bare parts yellowish green. Male and female nearly alike.

The Coot is pretty common throughout England, at all seasons; sometimes met with, many together, in winter, but in breeding time chiefly seen in pairs, about the borders of ponds, well covered with weeds, rushes, &c. and both swims and dives well. The nest is large, composed of weeds, well matted together, lined with grass, and the eggs six or seven in number;† these are two inches and a quarter long, of a pale brownish white, sprinkled all over with chocolate spots, some very minute, most at the larger end. The young take to the water very soon after hatching, but numbers fall a prey to the Buzzards, which frequent the marshes. The food small fish, and water insects, and sometimes the roots of the bulrush, with which it has been observed to feed its young; it will also eat grain: is frequently brought to market in the winter season.

The Coot is in great abundance in the Isle of Sheppey, and the inhabitants do not suffer the eggs to be destroyed, as the birds are an esteemed article of food; they are shot, or otherwise taken, from August, throughout the winter; are eaten by most people, and thought very good; are first skinned, and then dressed in various ways, like Pigeons. In the same place may be seen 400 or 500 in a flock; they are often salted, and supposed best in season in August and September: are also observed in vast numbers on large pieces of water, in various other parts of England. We find them recorded by anthors as inhabiting Greenland, Sweden. Norway, Russia, Siberia,

<sup>\*</sup> In the Leverian Museum was one, having in the middle of the bald front a small prominence, or kind of comb, of a dark red colour: this we believe was sent from Gibraltar, in which neighbourhood they abound all the winter.

<sup>†</sup> Others say fifteen or sixteen, and even as many as eighteen and twenty.

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Persia, and China, as well as several parts of India; also the Isle of Java: we believe very few places of the Old Continent, and its Isles, are without them; are not unfrequent in Jamaica, Carolina, and other parts of North America. The Indians, about Niagara, dress the skins, and use them for pouches; are called in Carolina, Flusterers: common in the ponds of Georgia, most so in the winter season; extend also to South America, being met with in small numbers in Paraguay.

A .- Fulica leucoryx, Mus. Carls. i. pl. 12 Gm. Lin. i. 703. Gen. Syn. Sup. 259.

This Variety has the eyelids pale; the whole of the wing white, but the shafts of the prime quills black; in other respects like the Common Species.

This was found dead in the park at Stockholm, in Sweden.

B .- Fulica Æthiops, Mus. Carls. fasc. i. pl. 13. Gm. Lin. i. 704. Gen. Syn. Sup. 259.

This differs from the Common One, in having the feathers of the breast and belly ferruginous, undulated with brown.

C .- White Coot, Br. Zool. ii. No. 220. Var. Gen. Syn. v. 277.

This Variety was wholly white, except a few feathers on the wings, and about the head, and was shot at Spalding, Lincolnshire.

D.—Length sixteen inches. Bill as in the Common, with the forehead bare but a very little way, scarcely half so much as usual; the head and neck black; the back very dark ash-colour; belly the same, but paler; outer web of the first quill white, and shorter by three quarters of an inch than the second; under tail coverts white; tail one inch and three quarters long.

Inhabits Georgia.—Mr. Abbot.

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### 2.—GREATER COOT.

Fulica aterrima, Ind. Orn. ii 778. Lin. i. 258. Gm. Lin. i. 703. Borowsk. iii. 98.
Fulica major, Bris. v. 28. t.2. f.2. Id. 8vo. ii. 366. Faun. Helvet. Raii, 117. 2.
Will. 239. t. 15. Klein, p. 151. Id. Stem. 40. t. 40. f. 2. Id. Ov. 36. t. 12. f.3?
Gerin, iv. t. 524.

Fulica fuliginosa, Scop. i. No. 150.

Grosser Bloessling met der Weissen Blaze, Gunth. Nest. u. Ey. t. 36.

Das swarze Wasserhuhn, Bechst. Deutsch. iii. 259.

La Fonlque à jarretières rouge, Voy. d'Azara, iv. No. 448.

Greater Coot, Gen. Syn. v. p. 277. Er. Zool. ii. No. 221. Id. 1812. ii. p. 129. Will. Engl. 320. Bewick, ii. p. 137. Walcot, ii. pi. 168.

THIS is larger than the Common Sort, with a similar plumage, but blacker; it is distinguished, too, by the bare part of the forehead being white, and the garter of a deep red.

This is found in Lancashire and Scotland, and recorded by authors as a distinct Species; said to be more plentiful on the Continent, and very common in Russia, and the western part of Siberia; also about Sologne, in France, where it is called Judelle, and allowed to be eaten on Maigre Days; the flesh much esteemed.

A.—Size uncertain. Bill flesh-colour; irides red; head, neck, and body bluish black; back, wings, and tail deep brown; a large square patch of white, near the edge, about the middle of the wing; legs pale olive green.

Inhabits India, and called Khuskull.—Sir J. Anstruther.

M. Azara, in his work above quoted, mentions this as frequenting the Rivers of Paraguay, having seen three or four pairs; that they swam with great ease, though perhaps less so than a Duck; and he thinks it to be distinct from the Common Coot.





## 3.—CRESTED COOT.--Pl. clxv.

Fulica cristata, Ind. Orn. ii. 779. Gm. Lin. i. 704. Grande Foulque à Crete de Madagascar, Buf viii. 222. Pl. enl. 797. Crested Coot, Gen. Syn. v. 278. 3. pl. 90.

LENGTH eighteen inches. Bill whitish, with the base red; the whole crown bare, and of a deep red, rising upwards into a bifid, detached membrane, like a crest, as in some of the Jacana Species; the whole plumage blue black; legs dusky, and formed as in the Common Sort.

Inhabits Madagascar, and probably China also, as such an one may be seen painted in Chinese drawings. The garter above the knee of three colours—red, green, and yellow; the name of the bird Tzing Kye.

#### 4.—MEXICAN COOT.

Fulica Mexicana, Ind. Orn. ii. 779. Bris. vi. 31. Id. 8vo. ii. 367. Gm. Lin. i. 704. Fulicæ Mexicanæ altera Species, Yohoalcoachillin, Raii, 117. Mexican Coot, Gen. Syn. v. 278.

SIZE of the Greater Coot. Bill red, with a yellow tip; forehead bare, and red; head, neck, breast, belly, thighs, under wing and tail coverts purple; back, rump, and wing coverts pale green, varied with blue and fulvous; quills pale green.—Inhabits Mexico.

## 5.—CINEREOUS COOT.

Fulica Americana, Ind. Orn. ii. 779. Gm. Lin. i. 704. Frankl. Narr. App. p. 690. Fulica Floridana, Great Blue, or Slate-coloured Coot of Florida, Bartr. Trav. 294. Cinereous Coot, Gen. Syn. v. 279.

SMALLER than the Common Coot. Bill pale green; bare space over the forehead smaller than in that Species, and chestnut;

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plumage above dusky ash-colour; beneath the same, but paler; chin dusky white; down the middle of the belly the same; legs blue black; membranes on each side of the toes much narrower than in any other of the Genus.

A specimen of this was in the Museum of the late Sir A. Lever; supposed to have come from North America. Mr. Abbot says, it is met with in some ponds in winter, but is not frequent. From the great similarity of the plumage in some of the above, it may be suspected that they are greatly allied, rather than distinct as to species.

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### GENUS XCIV.—GREBE.

1 Crested Grebe	A Var.	11 Rufous-breasted
2 Eared	6 Indian	12 Cayenne
A Var.	7 Little	13 Black-breasted
3 Horned	8 Black-chin	14 Pied-bill
4 Dusky	9 White-winged	15 Louisiane
5 Red-necked	10 New-Holland	

THE bill in this Genus is strong, and sharp-pointed.

Nostrils linear.

Tongue slightly cloven at the end.

Space between the bill and eyes, or lore, bare of feathers.

Body depressed; feathers thick set, compact, very smooth, and glossy.

Wings short. No tail.

Legs placed far behind, almost at the vent; much compressed, and doubly serrated at the back part.

Toes furnished on each side with a broad, plain, membrane, and the toes with nails not unlike those of the human species.

This Genus is placed by Linnæus, with the Guillemots, and Divers, under the general name of Colymbus, without even a division; but they differ materially from one another, more especially in the legs; in the Grebes they are not webbed. The Guillemots, though web-footed, have only three toes, all placed forwards; and the true Divers are web-footed, and have three toes before, and one behind.

### 1.—CRESTED GREBE.

#### IN COMPLETE PLUMAGE.

Podiceps cristatus, Ind. Orn. ii. 780. Lin. i. 222. Fn. suec. No. 151. Scop. i. No. 99. Brun. No. 135. Muller, No. 97, Frisch, t. 183. Sepp, t. p. 169. Bor. iii. 56. t. 43. Fn. Helv. Tem. Man. 462. Id. Ed. 2d. 717. Daud. i. p. 96. pl. 8. sceleton.

Colymbus major cristatus, et cornutus, *Raii*, 124. A. 2. *Will*. 257. t. 61. *Klein*, 149. 1. *Gerin*, v. t. 521.

Colymbus cornutus, Bris. vi. 45. t. 5. f. 1. Id. 8vo. ii. 370.

Ardea exotica aurita, Pet. Gaz. t. 40. f. 12.

Le Grebe cornu, Buf. viii. 235. pl. 19. Pl. enl. 400.

Smergo, Fisolo marino, Zinnan. Uov. 107, t. 19, f. 95.

Der Gehaubte Steissfuss, Schmid, 137. t. 120.

Der grosse Haubentaucher, Bechst. Deuts. ii. 783.

Le Macas cornu, Voy. d'Azara, iv. No. 443.

Greater crested, and Horned Ducker, Will. Engl. 340. § 5. pl. 61. f. 1. Plot's Staff. 229. pl. 22. Alb. i. pl. 81.

Crested Grebe, Gen. Syn. v. 281. Br. Zool. ii. 498. No. 223. Id. fol. 132. pl. K. Id. 1812. ii. 130. Arct. Zool. ii. 498. A. Bewick, ii. pl. p. 145. Lewin, v. pl. 106. Walcot, i. pl. 102. Donov. iii. pl. 68. Orn. Dict. Graves, Orn. V. iii.

#### IN THE SECOND YEAR'S PLUMAGE.

Colymbus cristatus, Bris. vi. 38. 2. t. 4. Id. Svo. ii. 368.

major cristatus, Klein, 149. 2.

Le Grebe huppé, Buf. viii. 233. Pl. enl. 944.

Grey, or Ash-coloured Loon, Will. Engl. 340. § 4. pl. 61. f. 4.

#### IN THE PLUMAGE OF THE FIRST YEAR.

Podiceps urinator, Lin. i. 223. Gm. Lin. i. 593. Scop, i. No. 102. Bor. iii. 61. 7. Fn. Helvet. Tem. Man. Ed. ii. 719.

Colymbus, Bris. vi. 34. t. 3. f. 1. Id. 8vo. ii. 368.

---- cristatus major, femina, Gerin. v. t. 522.

Le Grebe, Buf. viii. 227. Pl. enl. 941.

Der Erztaucher, Bechst. Deutsch. ii. 792.

Greater Loon, or Arsefoot, Will. Engl. 339. pl. 51. Edw. 360. f. 2.

Tippet Grebe, Gen. Syn. v. p. 283. Br. Zool. ii. No. 222. pl. 78. Id. fol. 133. Id. 1812. ii. 134. A. pl. 23, f. 2. Bewick, ii. pl. in p. 147.

THE above three sets of quotations are meant to discriminate the three different stages of the Crested Grebe, and of which have been made as many species, when in fact they are only one and the same. The complete, and full aged, bird is nearly the size of a Duck; length about two feet, and in breadth very little more; the weight from two to three pounds. Bill two inches and three quarters long, reddish flesh-colour, with a brown tip; lore and irides crimson; the head greatly enlarged with feathers, so as to make it appear unnatural; the feathers are much elongated on each side of the hindhead, appearing like ears, and from thence rounded like a ruff to the under jaw; colour black, except the middle, which is bright ferruginous; the neck behind, upper parts of the body, and wings brown; sides of the head, round the eyes, and under parts, from chin to vent, silvery white, and in many a mixture of pale ferruginous across the breast; on the wings an oblique white bar; the inner ridge of the wing is also white; legs dusky.

A bird in the second year has the feathers of the head greatly enlarged, dusky, or black, with a mixture of red, chiefly in streaks, the division into two beginning to appear, though incomplete; in other parts of the plumage similar to the fully adult, but the colours less brilliant. The young bird, of the first season, is somewhat less than when full grown, and wants both crest and ruff; the sides of the neck striped downwards from the head, with a narrow line of black and white; in other respects the colours and marks agree.

The female resembles most the male of the second year, weighing less than two pounds, and about twenty inches in length. Bill light flesh-colour; irides rufous brown; feathers about the head scarcely elongated; plumage above dusky, dashed with ash-colour; the lore brown; beneath it a stroke of small brown feathers, from mouth to eye; the cheeks white, with a few black spots near the sides of the

throat; the under parts fine satiny white; shoulders and lesser wing coverts white; eleven first quill feathers dusky, the four last of them tipped with white, the rest white; legs dusky without, inside pale flesh-colour, edges yellowish; nails bluish.

The above are, we believe, the principal differences arising from sex or age, but to describe every Variety that actually occurs, would be difficult, for they vary exceedingly. We have had this matter more fully ascertained, from the circumstance of a large flock of them, which appeared, some years since, on various parts of the shores of the Thames, from Gravesend to Greenwich, in the winter season, many of which came under my inspection; and among them were found the greatest Variety about the head, from being perfectly without a crest, to the most complete one, with all intermediate stages.

These birds are sufficiently common in some parts of England, breeding in the Meres of Shropshire, and Cheshire, and in the East Fen of Lincolnshire, where they are called Gaunts; and in some parts are known by the name of Cargoose. The female lays four white eggs, like those of the Pigeon; and makes a nest of a large size, formed of bogbean, stalks of water lily, pond weed, and water violet, floating independent among the reeds and flags. It is penetrated by the water, and the bird sits on, and hatches the eggs in that condition. The food chiefly consists of small fish, obtained by diving, and sometimes vegetables;\* feeds the young with small eels, and the old bird will sometimes carry them, when tired, on its back; rarely seen on land; is a quick diver, difficult to be shot, darting down on the least appearance of danger, and seldom flies farther than the end of the lake which it frequents. †

These birds are well known on various parts of the Continent of Europe; common in the winter time on the Lake of Geneva,

<sup>\*</sup> Dr. Heysham mentions one of the Tippet Grebe, having been shot near Carlisle, which had half-digested vegetables, and a great number of feathers, in its stomach.

<sup>†</sup> Br. Zool.

appearing in flocks of ten or twelve, and are killed chiefly on account of their beautiful skins; those of the breast, from their delicately white and glossy appearance, being greatly esteemed, and dressed with the feathers on, are made into muffs and tippets, and each valued at fourteen shillings; is said also to be common on the Lakes of Siberia, but not seen in Russia.

### 2.—EARED GREBE.

Podiceps auritus, Ind. Orn. ii. 781. Tem. Man. 469. Id. Ed. 2d. 726.

Colymbus auritus, Lin. i. 222. Fn. suec. No. 152. Scop. i. No. 106. Brun. No. 136, 137. Muller, p. 20. Bris. vi. p. 54. 6. Id. Svo. ii. 372. Borowsk. iii. 61. Fn. Helv. Gerin. v. t. 520.

Le petit Grebe huppé, Buf. viii. 235.

Der Ohrentaucher, Bechst. Deuts. ii. 796.

Eared Dobchick, Edw. pl. 96. f. 2.

Eared Grebe, Gen. Syn. v. 285. Br. Zool. ii. No. 224. pl. 79. Id. fol. 133. Id. 1812. ii. 135. pl. 24. f. 2. Arct. Zool. ii. 499. B. Boug. Voy. p. 61? Bewick, ii. p. 149. Lewin, v. pl. 107. Donov. ii. pl. 29. Orn. Dict. & Supp.

SIZE of a Teal; length twelve inches. Bill one inch, black, bending a little upwards at the point, the base reddish; lore and irides crimson; the head full of feathers, dusky black; the neck and under parts of the body the same; from behind each eye arises a tuft of orange-coloured feathers, growing broader, and almost meeting behind; breast and under parts silvery white; sides of the body ferruginous chestnut; legs black. The female is in all things like the male, but the head less full of feathers.

This species is not unfrequent in England, but, we believe, less numerous than the Greater; most common in the fens of Lincolnshire, where it breeds, but by no means the chief place of its residence, for a pair of them were found many years since, in Sandwich Haven, in the month of August; and Mr. Markwick received one, killed

near Battle, in Sussex, in May. Is found also in the northern parts of Europe, and in most is migratory; in Germany, seen the whole year through; met with also in the temperate and hotter parts of Siberia, and even in Iceland; and the breast, with the feathers attached, as well as that of the Greater crested Species, held in great estimation. M. Bechstein informs us, that the female lays, in May, three or four, and sometimes five, eggs, the size of those of a Dove, of a pale smutty yellow, spotted with dull brown; \* the nest made of water plants, among the reeds, and close to the surface of the water, as in the first described, and the time of sitting is three weeks: the young take to the water as soon as hatched, and are sometimes seen with part of the shell sticking upon their heads. The flesh of this, as well as others of the Genus, although it is sometimes eaten, is rank and unsavoury. We believe this bird to be the same, met with by Bougainville, in Falkland Islands, under the name of the Diver with Spectacles.†

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A.—Colymbus cristatus minor, Bris. vi. 42. t. 3. f. 2. Id. Svo. ii. 369. Ind. Orn. ii. p. 781. β.
Colymbus nigricans, Scop. i. No. 101.
Ash-coloured Loon, Raii, 124? Will. Engl. 340. pl. 61. f. 4.
Eared Grebe, Gen. Syn. v. 286. 4. Var. A.
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In this bird the head is not so full of feathers, but has two short tufts, one on each side of the hindhead; plumage above fine brown, beneath white, which passes back below the hindhead, where the brown advances forwards; the sides of the head, and fore part of the neck spotted with chestnut, and the sides with brown; on the wings a patch of white; legs olive brown.

This is probably a mere Variety of the other, if not in some progressive stage of perfection, as, like the Greater crested Species, it varies much at different periods of age.

<sup>\*</sup> The Orn. Dict. says, quite white.

### 3.—HORNED GREBE.

Podiceps cornutus, Ind. Orn. ii. 782. Tem. Man. 467. Id. Ed. ii. 722. Frankl. Nar. App. p. 693.

Podiceps Caspicus, Ind. Orn. ii. p. 784. Gm. Lin. i. 593. S. G. Gmel. It. iv. 137. N. Nord. Beytr. iv. p. 9.

Colymbus cornutus, Gm. Lin. i. 591. Bart. Trav. p. 293,

Colymbus cornutus minor, Bris. vi. 50. Id. Svo. ii. 371.

Colymbus, sive Podiceps minor, Raii, 190. 14. Sloan. Jam. 322. t. 271. f. 1. Klein, p. 150. 4?

Ardea exotica aurita, Petiv. Gaz. t. 43. f. 12.

Le petit Grebe cornu, Buf. viii. 237.

Grebe d'Esclavonie, Pl. enl. 404. 2.

Caspian Grebe, Gen. Syn. Sup. ii. 329.

Eared Grebe, or Horned Dobchick, Edw. pl. 145.

Sclavonian Grebe, Orn. Dict. & Supp. Gen. Syn. v. 288. 6. Br. Zool. 1812. ii. p. 141. Graves, v. iii.

Horned Grebe, Gen. Syn. v. 287. 6. pl. 91.

LARGER than the Dusky Grebe; length thirteen inches and a half; breadth twenty-two. The bill nearly one inch, dusky; base of the under mandible paler, inclining to pink, tip horn-colour; the lore crimson; irides the same, with a circle of white round the pupil; head enlarged with feathers, those on the top greenish black; the cheeks and throat the same, the feathers very long, forming a sort of ruff; from the base of the upper mandible originates a broad bar of dull orange yellow, passing through the eye to the hindhead, growing broader, and forming a tuft on each side, and capable of being erected like ears; the forehead dusky ferruginous; the back of the neck and upper part of the back dark brown, dashed with ferruginous: from thence to the rump dusky, faintly edged with cinereous; wing coverts, and first twelve quills brown; the thirteenth white on the inner web; the eleven next all white, except the last, which is brown on the outer web; chin black, a little mottled with white, the under part of the neck and upper breast bright ferruginous, running far

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behind and down under the wings; the rest beneath glossy white, like satin; the back part of the thighs ferruginous brown; legs dusky on the outside, pale within; toes pale down the middle, dusky at the edges.

The above was killed near Truro, the beginning of May, and proved a male; it seems to be no other than the Sclavonian Variety of the Horned Grebe, which is found in North America; it first appears there in May, about fresh waters, and lays from two to four white eggs, in June, among the aquatic plants; and said to cover them when absent from the nest; retires south in autumn; when it appears at New York, staying there till spring, and then returns to the north. For its vast quickness in diving, it is called the Water Witch; known at Hudson's Bay by the name Seekeep. There seems to be some Variety among individuals of this species, which has given rise to authors to mention them apart; but we believe on our further acquaintance with the subjects themselves, it will be found that they have one and the same origin. It may be observed, that the bill in the Eared Grebe is different from that of the Horned, or Sclavonian; for in the latter both mandibles meet in a conic point, and both equally sloping; but the former has the upper mandible straight, and the lower only slopes at the point, giving the bill a reflected appearance; besides, the plumage is very different; the situation of the ears, or horns, as well as other particulars, equally satisfactory.

### 4. – DUSKY GREBE.

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Red - necked Grobe!

Dusky Grebe, Gen. Syn. v. 286. Br. Zool. ii. No. 225. pl. 78. 1. Id. fol. 133. pl. K. 1. Id. 1812. ii. p. 136. pl. 23. f. 1. Arct. Zool. ii. No. 420. Bewick, ii. pl. p. 150. Lewin, v. pl. 98. Walcot, i. p. 106. Donov. ii. pl. 44. Orn. Dict.

SIZE of a small Teal; length eleven inches. Bill thirteen lines long, black, with the sides red; lore and irides red; the upper parts of the head, neck, and body, are dusky brown; ridge of the wing white; secondaries tipped with white; forehead, and all beneath, white; breast very glossy; at the throat the white passes backwards almost to the hindhead; and the brown comes forwards on each side to the middle of the neck; on the thighs a few black spots; legs flesh-colour, tinged with purple; in some the whole neck is ash-coloured, and others are spotted between the legs with black.—Inhabits the Fens of Lincolnshire, where it breeds, makes the same kind of floating nest as other Grebes, and lays four or five white eggs. It is occasionally offered for sale, and Mr. Edwards mentions his having had several out of the London markets, from whence we have likewise received a specimen. Is found in the winter in our inlets on the coast, particularly in Devonshire, where it is by no means uncommon; how it may belong to the Horned Grebe, we are not prepared to determine.

M. Temminck says, it is the young of that bird, in its first year's feathers.

# 5.—RED-NECKED GREBE.—PL. CLXIV.

Podiceps rubricollis, Ind. Orn. ii. 783. Tem. Man. 465. Id. Ed. 2d. 726. Frankl. Narr. App. p. 692.

Colymbus rubricollis, Gm. Lin. i. 592.

— subcristatus, Gm. Lin. i. 590. Fn. suec. No. 152.—alia. Brun. No. 138.
Jacq. Vog. 37. t. 18. Schr. d. Berl. Gesell. vii. s. 460. Besek. Kurl. s. 54.
No. 104.

Colymbus minor ex nigro et rubro refectus, Gerin. v. t. 519.

Urinator, It. Poseg. p. 25?

griseus, Schaf. el. Orn. t. 29. Fn. Helv.

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Le Grebe à Joues grises, Jougris, Buf. viii. 241. Pl. enl. 931.

Der Graukehlige Haubentaucher, Bechst. Deuts. ii. 790. t. 35.

Red-necked Grebe, Gen. Syn. v. 288. Id. Sup. 260. pl. 118. Br. Zool. 1812. ii. p. 239. Arct. Zool. ii. 499. C. Id. Sup. p. 69. Bewick, ii. pl. p. 152. Lewin, v. pl. 199. Walcot, i. pl. 103. Donov. i. pl. 6. Orn. Dict. & Supp.
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LENGTH eighteen inches, to the end of the toes twenty-four; weight seventeen ounces. Bill black, almost two inches long, the sides for three quarters of an inch, fine orange yellow; lore dusky; irides orange; the crown and sides of the head, above the eyes, nearly black, and the feathers a little elongated; neck behind, back, and wings, dark brown; six of the middle secondaries white, a little mottled with dusky at the tips; the two or three next outward more or less white near the ends, and inner webs; chin, sides under the eyes, and neck before, for more than an inch, pale ash-colour; the rest of the neck ferruginous chestnut, mottled on the breast with dusky; from thence to the vent white, with a gloss of satin, mottled on the sides with dusky, irregular spots; legs black. Male and female much alike. In the young bird the colours are less bright, and the ferruginous colour of the neck broken and indistinct.\*

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A.—Colymbus Parotis, Gm. Lin. i. 592. Mus. Carls. i. t. 9. Brun. 139. Ind. Orn. ii. 783. Gerin. v. t. 523?
Colymbus vulgaris, Scop. i. No. 102. Gen. Syn. v. 283.—Note†
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In this bird the whole top of the head, including the eye, is black, but smooth; sides under the eyes, jaws, and throat, white, marked with three or four irregular black streaks, pointing downwards; irides yellow; plumage in general brown above; sides of the neck and throat ferruginous; across the lower part of the neck a white band; breast and belly glossy white; on the wing a large white patch; sides and vent soot-coloured; legs dusky.

<sup>\*</sup> Colonel Montagu informed me, that five of these birds were shot on a lake near Kingsbridge, Devon, in 1808; and that one of them, although a male, had no red on the neck; hence it appears, that this characteristic mark does not appear till adult age.

This is probably only a young bird. We believe the Red-necked Species to be more common in England than is usually supposed, and that it certainly breeds with us. Dr. Lamb, of Newbury, mentioned his having seen one on a pond opposite Burges Burghfield, in Berkshire, in May: it is probably widely extended on the Continent; supposed to inhabit Denmark and Norway, as Mr. Pennant received one from Copenhagen; and it is found, though very rarely, towards the Caspian Sea. We find it not to be uncommon in Carinthia, and other parts of the German Dominions, having the same manners as the rest of the tribe, in respect to the nest and eggs; and that it lays four or five of the latter, which are of a smutty white; it feeds on small fish, and water insects, as well as water plants, and the flesh like that of others, oily and unsavoury. We have observed this bird in drawings done in India, so may of course suppose it to inhabit that part of the world.

### 6.—INDIAN GREBE.

SIZE uncertain. Bill thick and short, black, with a white tip; at the base, on each side, a white mark, occupying all the lower, and part of the upper mandible; irides yellow; head and neck black; at the back of the low jaw, and round the neck before, for half way, fine rufous; back dusky; breast and all beneath grey and white mixed; legs greenish black.

Inhabits India.—Sir John Anstruther's drawings. It bears some resemblance to the Red-necked, but appears to be a distinct species.

### 7.—LITTLE GREBE.

Podiceps minor, Ind. Orn. ii. 784. Raii, 125. A. 3. Will. 258. t. 61. Tem. Man. Ed. ii. 727.

Colymbus minor, Gm. Lin. i. 223.  $\gamma$ . Fn. suec. No. 152? Frisch, t. 184. Sepp, ii. t. 119. Gerin. v. t. 517. Klein, Stem. 39. t. 39. f. 1.

Colymbus fluviatilis, Bris. vi. 59. Id. Svo. ii. 374. Fn. Helv.

Yacapitzahoac, Raii, 177.

Der kleine Taucher, Bechst. Deuts. ii. 798.

Le Grebe de la riviere, ou le Castagneux, Buf. viii. 244. pl. 20. Pl. enl. 905.

Didapper, Dipper, or Dobchick, Will. Engl. 340. pl. 61.

Little Grebe, Gen. Syn. v. 289. Br. Zool. ii. No. 226. Id. fol. 134. pl. F. Id. 1812.
ii. p. 137. Bewick, ii. pl. in p. 154. Lewin, v. pl. 100. Id. xxxvii. 2.—the egg. Walcot, i. pl. 105. Donov. ii. pl. 56. Graves, Orn. v. i. Orn. Dict. & Supp.

LENGTH ten inches, breadth sixteen; weight seven ounces. Bill reddish brown, almost an inch long; irides reddish hazel; plumage on the upper parts of the head, neck, and body, reddish brown, very pale on the rump; sides of the head and fore part of the neck and chin yellowish grey; in old birds the cheeks are light ferruginous; breast and belly white, mottled with ash-colour and red; thighs and vent grey; legs dirty green. The male and female are much alike, and both vary according to age, as in other species.

In some adult birds the general colour is cinereous, beneath paler, mottled and waved with glossy white; on the wing a white patch; chin mottled dusky and white. One of this description was shot near Putney, and in the collection of Mr. Plasted, of Chelsea. In the same place is a younger specimen, brownish ash-colour above, beneath paler, glossed like satin; sides of the neck and the chin striped with dusky; chin white; bill dirty red, with a black tip; legs greenish black. Shot near Battersea.

This is the most common of all the Genus in this kingdom, few fresh waters being without it. It makes a large nest, in the water, composed of grass, and other water plants, and lays five or six cinereous white eggs, and the nest so placed is constantly wet; how far this is essential to the hatching of the young brood, does not seem manifest; it might be supposed, that the natural warmth of the bird, bringing on a fermentation in the vegetables, produces a hot bed fit for the purpose; but Colonel Montagu assures us, that he never could discover the least warmth in the nest. It lives on the same food as others of the Genus; is an admirable diver, and seems

to make way under the water at a very great rate, often arising at an inconceivable distance from the place it plunges in, and for the most part, considerably beyond the length of gunshot. By some it is said to be capable of staying under water for a quarter of an hour; but it may be supposed, that it must take breath during that space, as it is known to remain under water amongst the reeds, or other water plants, with only its bill above the surface.

Inhabits also various parts of the Continent of Europe, France, Italy, Germany, and Spain; is met with in the swampy parts of the Isthmus of Gibraltar, and a few of them take up their abode in the inundation in the winter.

The Little Grebe is common also at Hudson's Bay, in America, where it is called Dishishet Seekeep.

A.—Le Castagneux des Philippines, Buf. viii. 246. Pl. enl. 945. Ind. Orn. ii. 784. Gen. Syn. v. 290. 10. A. Lin. Trans. viii. p. 198.

This is rather larger than the last described, and differs from it in a few particulars. It is purplish brown above; the cheeks and sides of the neck incline to rufous; in other things it resembles the former, and appears to be merely a Variety.

Inhabits the Philippine Islands. I have also observed one similar in some drawings done in India; it is likewise found in Java, and called there Titihan.

### 8.—BLACK-CHIN GREBE.

Podiceps Hebridicus, Ind. Orn. ii. 785.

Colymbus Hebridicus, Gm. Lin. i. 594.

Colimbo minore, Gerin. v. t. 519.

Black-chin Grebe, Gen. Syn. v. 292. Br. Zool. ii. No. 227. pl. 79. Id. 1812. ii. 138. pl. 24. f. 1. Bewick, ii. p. 156. Lewin, v. pl. 201. Walcot, i. pl. 207. Orn. Dict. & Supp. Br. Misc. p. 19. pl. 70.

THIS is scarcely larger than the Little Grebe; chin black; fore part of the neck ferruginous; hind part mixed with dusky; belly cinereous and silver intermixed.

Inhabits Tiree, one of the Hebrides. One, corresponding with this description, was shot near Kingsbridge, Devon, and appeared to Colonel Montagu a further Variety of the Little Grebe.

According to the British Miscellany, a male and female with the nest and eggs were taken in a poud, on Chelsea Common, in June, 1805, and we are informed by Mr. Bullock, that they are not unfrequent about Brompton, near London; the egg of the Black-chin Grebe is white.

M. Temminck thinks it is the Little Grebe, in its complete adult state.

### 9.—WHITE-WINGED GREBE.

Podiceps Dominicus, Ind. Orn. ii. 785.

Colymbus Dominicus, Lin. i. 223. Gm. Lin. i. 593. Bris. vi. 64. t. 5. f. 2. Id. 8vo. ii. 376.

Le Castagneux de St. Domingue, Buf. viii. 248.

Le Plongeon, Descr. Surin. ii. 155.

Twopenny Chick, Hughes, Barb. 72.

White-winged Grebe, Gen. Syn. v. 291.

LENGTH from eight to nine inches. Bill pale, or dusky; head, neck, and upper parts of the body, chocolate brown; beneath brownish white; wings deeper brown; quills white for three-fourths of the length from the base, ends dusky; legs greenish. Individuals vary; some have a black bill, upper parts of the body dusky; cheeks, chin, and neck before, dusky grey; breast, belly, sides, and thighs, silvery grey, marked with small brown spots; quills greyish white, more or less marked with greyish brown on the outer webs and tips; legs brown.

The first described of these came from Berbice. I have seen also a specimen from the Island of Trinidad; another from the Island of St. Domingo. I have received it too, from Jamaica, of an uniform dusky lead-colour, except the middle of the belly, which had a large patch of white; the quills were also as above described; this probably

differs only in sex; it is called at the last named place, as well as at Barbadoes, the Twopenny Chick. We have seen others from Cayenne, with the belly wholly brown, and called there Soccové; it inhabits likewise Surinam and Guiana; also as far south as Paraguay, but very rarely. Mr. Fermin adds another, which he says is smaller, wholly covered with cottony white feathers; the bill yellow, and legs short: this, he says, is only seen in the savannas, near small ponds, and feeds on the lesser fish. Probably his may be a young bird, and not distinct as to species.

Inhabits also India, or at least one in appearance so similar as not to merit description. One mentioned by Sonnini,\* found in Egypt, varies somewhat; the first and last of the quills are blackish, the rest white: probably allied to the White-winged Species.

### 10.—NEW-HOLLAND GREBE.

LENGTH from the bill to the end of the toes, eighteen inches. Bill black; head and part of the neck dusky black; the rest of the parts above waved dusky and pale grey; beneath pale grey; the larger wing coverts and base half of the quills white, taking up a large portion of the wing; the outer ridge is also white; on each side of the neck a long streak of rufous, beginning just under the eye; legs black, formed as in others of the Genus.

Inhabits New-Holland, and there called Magaga, or Magager; is said to be rare.

#### 11.—RUFOUS-BREASTED GREBE.

LENGTH from the tip of the bill to the end of the vent sixteen inches. Bill one inch, black, with a white tip; from the nostrils on each side a brownish bar, passing over the eye, and growing

broader, meets under the nape; head, chin, throat, neck behind, back, and rump, black; fore part of the neck, breast, and sides, bright rufous brown; belly and vent silvery white; wing coverts in general brown; greater quills black; secondaries white, forming a bar, an inch broad, on the wing.

Found in the neighbourhood of Detroit, in North America.—General Davies.

### 12.—CAYENNE GREBE.

Podiceps Cayanus, Ind. Orn. ii. 78I. Colymbus Cayanensis, Gm. Lin. i. 593. Le grand Grebe, Buf. viii. 242. Pl. enl. 404. f. 1. Cayenne Grebe, Gen. Syn. v. 284.

LENGTH nineteen inches and a half. The bill dusky, beneath yellow at the base; the head, and upper parts of the neck and body dusky brown; fore parts, as far as the breast and sides, rufous, the last mixed with brown; breast and upper part of the belly white; the lower and vent brown; legs dusky.—Inhabits Cayenne.

## 13.--BLACK-BREASTED GREBE.

Podiceps Thomensis, Ind. Orn. ii. 784. Colymbus Thomensis, Gm. Lin. i. 592. Colymbus Insulæ S. Thomæ, Bris. vi. 58. Id. 8vo. ii. 374. Le Grebe Duc-laart, Buf. viii. 240. Black-breasted Grebe, Gen. Syn. v. 289.

SIZE of a small Fowl. Bill black, one inch long, tip pale; the irides white; head, and upper parts dull brown; between the bill and eye a white spot; the under parts white, except a large spot of black on the breast; belly and sides spotted with grey; wing coverts pale rufous; legs dusky.

Inhabits the Isle of St. Thomas, and is called Duc-laart.

### 14.—PIED-BILLED GREBE.

Podiceps Carolinensis, Ind. Orn. ii. 785.

Colymbus Podiceps, Lin. i. 223. Gm. Lin. i. 594.

Colymbus fluviatilis Carolinensis, Bris. vi. 63. Id. 8vo. ii. 375.

Colymbus fuscus, Klein, 150. 5. Bartr. Trav. p. 293.

Le Castagneux à bec cerclé, Buf. viii. 247.

Pied-bill Grebe, Gen. Syn. v. 292. Arct. Zool. ii. 418. pl. 22. Cates. Car. i. pl. 91.

LENGTH fourteen inches. Bill strong, a little bent, somewhat in the manner of Common Poultry; colour olive, with a dusky base, and crossed in the middle of both mandibles with a bar of black; nostrils very wide; irides white; the chin and throat glossy black, bounded with white; neck above, and back dusky; cheeks and fore part of the neck pale brown; the breast and belly silvery, the first mottled with ash-colour; the wings brown, ends of the second quills white; toes furnished with a broad membrane.

The female wants the black bar across the bill, and has the chin and throat of the same colour as the rest of the neck; it appears also to be smaller than the other sex, being only twelve inches long to the end of the rump, sixteen inches and a half to the end of the toes, and twenty inches broad.

Mr. Abbot, who gives me this account, observes, that it is common in the rivers and ponds about Savannah, in Georgia; makes the nest in the water, like other Grebes; the egg of a dusky white, with scarcely any perceivable markings of darker colour; called Didapper, or Water Witch. Found as far north as New York; arrives there late in autumn, and goes away in April; is called there the Henbeaked Wigeon. This is in the complete plumage, and the Louisiane probably a young bird.

### 15.—LOUISIANE GREBE.

Podiceps Ludovicianus, Ind. Orn. ii. 785. Colymbus Ludovicianus, Gm. Lin. i. 592. Le Grebe de la Louisiane, Buf. viii. 240. Pl. enl. 943. Le Macas à bec crochu, Voy. d'Azara, iv. No. 444. Louisiane Grebe, Gen. Syn v. 289. Arct. Zool. ii. 419.

BILL slightly bent at the point; plumage above deep brown; sides of the head and body, quite to the rump, rust-colour; about the middle of the wing, outwardly, a small patch of white; middle of the breast dusky white; from the base of the neck to the thighs marked with transverse black spots; legs dusky. In some the chin is mottled with black.

Inhabits Louisiana; also Paraguay. Is probably the last in incomplete plumage.

# ORDER IX. WEB-FOOTED.

#### \* WITH LONG LEGS.

### GENUS XCV.—AVOSET.

1 Scooping | 2 American | 3 Red-necked | 4 Oriental

BILL long, slender, very thin, and bending considerably upwards.

Nostrils narrow, and pervious.

Tongue short.

Feet palmated; the webs deeply semilunated between each toe; back toe very small, at a distance from the ground.

### 1.—SCOOPING AVOSET.

Recurvirostra Avocetta, Ind. Orn. ii 786. Lin. i. 256. Faun. suec. No. 191. Amæn. ac. iv. 591. It. Oeland. 89. Gm. Lin. i. 693. Scop. i. No. 129. Brun. No. 188. Muller, No. 214. Kram. 348. Georgi, 172. Sepp, t. p. 69. Bris. vi. 538. t. 57. f. 2. Id. 8vo. ii. 504. Raii, 117. A. 1. Will. 240. t. 60. Id. Engl. 321. Bor. iii. 85. t. 50. Fn. Helvet. Gerin. v. t. 495. Tem. Man. 379. Id. Ed. ii. p. 591.

Pico Corbo, Gabin. de Madrid, i. p. 19. lam. 45.

Plotus Recurviroster, Klein, 142. ii. p. 19.

Der gemeine Wassersabler, Bechst. Deutsch. iii. p. 223. Id, Ed. ii. iv. 450. t. 25. 2. Schmid, 131. t. 115.

L'Avocette, Buf. viii. 466. pl. 38. Pl. enl. 353. Voy. cn Barb. i. 280. Salern. Orn. 359. Cett. uc, Sard. 287.

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Scooping Avoset, Gen. Syn. v. 293. Id. Sup. 263. Br. Zool. ii. No. 228. pl. 80. Id. fol. 134. pl. C. Id. Ed. 1812. ii. 143. pl. 25. Arct. Zool. ii. 503. B. Albin, i. pl. 101. Bewick, ii. pl. p. 158. Lewin, vi. pl. 202. Id. pl. xxxviii. i. the egg. Walc. ii. pl. 165. Don. pl. 66. Pult. Dors. p. 16. Orn. Dict. Graves, Br. Orn.

SIZE of a Lapwing; length from eighteen to twenty inches to the end of the tail, but to that of the claws about three more; the breadth thirty; weight fourteen ounces and a half troy. Bill three inches and a half long, slender, very flat, and turns up towards the end, finishing in a sharp point; nostrils narrow, and pervious; the irides hazel; top of the head, including the eyes, black, passing some way down on the neck, and ending in a point; above and beneath the eye a spot of white; the rest of the head and neck, and all beneath white; back, greater part of the scapulars, outer part of the wing, lesser quills, and tail the same; inner scapulars, middle wing coverts, the outer webs, and ends of the greater quills, black, appearing as two black bars, three quarters of an inch broad; wider as they approach the rump; legs very long, pale blue, and the thighs naked for two inches; whole of the naked parts between six and seven inches. The male and female much alike.

The Avoset inhabits this kingdom at all seasons; is frequent in the winter on the sea shores; in Gloucestershire, at the Severn's Month; the eastern coasts of Suffolk and Norfolk, and sometimes on the shores of Sussex and those of Shropshire,\* as well as those of Kent:† in the breeding season found in vast numbers near Fossdike, in Lincolnshire, in the fens of Cambridgeshire and Suffolk, and other similar places; the female generally lays two eggs, among the weeds, on the edges of ponds or pools, about the size of those of the Pigeon, one inch and three quarters in length, cinereous grey, whimsically marked with deep, brownish, oblique black dashes, and some smaller ones intermixed; the food is said to be worms and insects,‡ collected from the mud; often seen to wade far into the water; they will also

<sup>\*</sup> Lin. Trans. † Mr. Boys twice met with them in October.

<sup>‡</sup> Chiefly the Cancer pulex and locusta—the sea-flea and locust; and in the stomach of one was found some small stones, and short hairs.—Dr. Lamb.



# PL CLXVII.



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occasionally swim, but always close to the shore; are very bold in defence of their young; and when disturbed in the breeding season, hover over the sportsman's head like the Lapwing; and fly with their necks and legs extended, having a sharp note like the word Twit, twice, or oftener repeated; hence have been called Yelpers; known known also in some counties by the names of Butter-flip, Scooper, Picarini, Crooked-Bill, and Cobler's-awl.

This bird is found also on various parts of the Continent: to the north, in Russia, Sweden,† and Denmark, but not in plenty; also in Siberia, but more frequent about the salt lakes of the Tartarian Desert, and about the Caspian sea.‡ Met with on the Coasts of Picardy, in France, in April and November, but rarely at Orleans. In breeding time they are in such plenty on the Coasts of Bas Poictou, that the peasants take the eggs by thousands in order to feast on them.§ They also inhabit both Italy and Spain, but in what numbers is uncertain. They likewise occur in drawings done in India, by the name of Hun Sowry. Dr. Buchanan mentions, that two of these were seen upon an Island in the River Hooghly, January 1806, they were shot and wounded, one of them lived a week, the other much longer; they were fed with the small fry of fish put into a pan of water, which they scooped up very readily with their bills.

# 2.—AMERICAN AVOSET.—PL. CLXVII.

Recurvirostra Americana, *Ind. Orn.* ii. 787. *Gm. Lin.* i. 693.

Avosetta, *Damp. Voy.* iii. pl. in p. 123. f. 3. *Tem. Man. Ed.* ii. 592.

American Avoset, *Gen. Syn.* v. 295. pl. 92. *Arct. Zool.* ii. 241. pl. 21. *Amer. Orn.* vii. 126. pl. 63. f. 2.

THIS is larger than the last, and somewhat longer, being in height as it stands, fourteen inches. The bill black; it irides reddish;

<sup>\*</sup> One shot, swimming with others, in Sunning-Eye Lake, in Berkshire; at another time four were seen swimming among the Ducks in the month of April.—Dr. Lamb.

<sup>†</sup> Chiefly in the Isle of Oeland. 

Arct. Zool. 

§ Salern.

<sup>||</sup> That in Amer. Orn. bends a trifle downwards at the ends, and finishes in an extremely fine point.

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forehead dusky white; the head, neck, and upper part of the breast, of a deep cream-colour, in some inclining to ferruginous, under the chin palest; lower part of the neck behind white; back black; the under parts from the breast white; the first and third order of wing coverts, with the outer part of the wing between, and the greater quills, black; the middle coverts and some of the secondaries white; some of the last tinged with ash-colour; the legs and thighs together measure about eight inches, the bare part above the knees two, colour dusky; in some pale blue; some have the whole of the back and rump white.

Inhabits North America, and was found by Dampier in Shark's Bay, on the Coast of New-Holland; it is there scarce, but occurs in drawings brought from thence; it has only been seen on some Lagoons between Port Jackson and Broken Bay; the native name Antiquatish. It varies in having more or less white; and in young birds, the white is mottled, or freckled with dusky.

The American Avoset is first seen on the coast of Cape May late in April, rears its young, and departs again to the south in October; is there called The Lawyer; it breeds in the shallow pools of New Jersey, associated with the Common Sort; the nest built among thick tufts of grass, composed of small twigs, dry grass, sea weed, &c. raised to the height of several inches; the eggs four, of a dull olive, with irregular blotches of black, and others of a fainter tint.

The female differs in being two inches shorter than the male.

### 3.—RED-NECKED AVOSET.

Recurvirostra rubricollis, Avocette à Cou marron, Tem. Man. Ed. ii. 592.

LENGTH fifteen inches and a half. Face, head, and upper part of the back rufous chestnut; lower part of the neck, back, scapulars, all the under parts, with the tail, pure white; on the scapulars a broad band of black, which extends on each side, the length of the back; the quills next the body black.—Inhabits the shores of the south of Asia, and is to be met with in various ornithological collections.

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# 4.—ORIENTAL AVOSET.

Recurvirostra orientalis, Avocette orientale, Tem. Man. Ed. ii. 593. Cuvier Regn. Anim. i. p. 464.

SIZE of the first Species. Bill black; plumage wholly pure white, except the wings and scapulars, which are black; and the tail ash-colour; legs yellow.

Native place unknown. The description taken from a specimen in the Jardin du Roi, at Paris.

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42 courier.

### GENUS XCVI.—COURIER.

THE bill, in this Genus, is short, straight, with the gape very wide. Legs long, thighs short.

Feet palmated, three toes before and one behind; the last short.

Corrira Italica, Ind. Orn. ii. 787. Gm. Lin. i. 653.
Corrira, Bris. vi. 542. Id. Svo. ii. 505. Johnst. Av. pl. 48. f. 3.
Trochilus, vel Corrira, Aldrov. iii. 288. t. p. 289. Raii, 128. 3. Will. 240. t. 60. Id. Engl. 321. pl. 60. Charlet. Ex. p. 102. ix. Id. Onom. 97.
Italian Courier, Gen. Syn. v. 298.

THIS is less than the Avoset, and the legs shorter in proportion. The bill shorter, straight, yellow, with a black tip; irides of two colours, first white, surrounded with chestnut; the head, and all the upper parts of the body, and wings rusty iron-colour; under parts white; the two middle tail feathers are white, tipped with black; the others black; toes webbed as in the Avoset.

This bird is said to inhabit Italy, and to run very fast, whence the name given to it. Aldrovandus is the only one who has seen the bird, and from him alone all succeeding authors have copied the description and figure. It swims occasionally, but generally wades five or six inches deep in the water. Some have supposed this bird to be no other than the Avoset, with a mutilated bill; a circumstance which I once saw, from both mandibles having been shot away within two inches of the gape, and might have passed for quite a different bird; yet the colours described by Aldrovandus by no means correspond with those of the Avoset. Charleton calls it the Finfooted Runner. Johnston gives much the same account as Aldrovandus, from whom he has no doubt taken the description; and Willughby's description and figure have originated from the same source.







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### GENUS XCVII.-FLAMINGO.

11

1 Red Flamingo

2 Chili Flamingo

BILL thick, large, bending in the middle, forming a sharp angle; the higher part of the upper mandible carinated; the lower compressed; the edges of the upper sharply denticulated; of the lower transversely sulcated.

Nostrils covered above with a thin plate, pervious, linearly longitudinal.

Tongue cartilaginous, and pointed at the end; in the middle muscular; base glandular; on the upper part aculeated.

Neck very long.

Legs and thighs of a vast length.

Feet webbed; the webs extending as far as the claws, but deeply semilunated. Back toe very small.

### 1.—RED FLAMINGO.—PL. CLXVIII.

Phænicopterus ruber, Ind. Orn. ii. 788. Lin. i. 230. Gm. Lin. i. 612. Scop. i. No. 214. Bris. vi. 532. t. 47. l. Id. 8vo. ii. 502. Raii, 117. 2. Id. 190. l. Will. 240. t. 60. Sloan. Jam. 321. 17. Brown, Jam. 480. Seb. Mus. i. 123. t. 67. f. l. Phil. Trans. xxix. t. 2. p. 523. Grew, Mus. p. 67. pl. 5.—the bill. Klein, 126. B. Borowsk. iii. 66. t. 44. Spalowsk. i. t. 26. Mus. Lev. t. 8. Gerin. v. t. 496. Bartr. Trav. 294. Gesn. Av. 623. pl. in 624. Amer. Orn. V. 8. p. 45. pl. 66. f. 4. Tem. Man. 378. Id. Ed. 2d. 587. Robert, Ic. pl. 8.

Le Flammant, Buf. viii. 475. pl. 39. Pl. enl. 63. Hist. Prov. i. 345. Voy. en Barb. i. 288. Voy. d'Azara, iv. No. 366. Schmid, 132. t. 116.

El Flamenco, Paxaro de Agua, Gabin. de Madrid, i. p. 45. lam. 20.

Red Flamingo, Gen. Syn. v. 299. pl. 22. Id. Sup. 263. Arct. Zool. ii. No. 422. Cat. Car. i. pl. 73, 74. Alb. ii. 77. Kolb. Cap. ii. 137. Russ. Alep. 69. Gent. Mag. xx. pl. 264. Sparrm. Voy. i. p. 30. Dillon, Trav. 374. Penn. Hind. ii. 159.

THIS singular bird is less than a Goose in the body, but the neck and legs are in the greatest disproportion; the length from bill

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to tail four feet two or three inches, and to the end of the claws more than six feet. Bill four inches and a quarter long, and in construction different from that of any other bird; the upper mandible thin and flat, and somewhat movable, the under thick; both of them bending downwards from the middle; the nostrils placed in a blackish membrane; from the base to the middle reddish yellow, the rest black; the base, and quite to the eye on each side, covered with a flesh-coloured cere, or skin; the neck slender, and of a great length; the tongue large, fleshy, filling the cavity of the bill, having twelve or more, hooked papillæ on each side, turning backwards, and cartilaginous at the tips; the plumage deep searlet, except the quills, which are black; from the base of the thighs to the claws thirty-two inches, but the part which is covered with feathers is only three; the bare part above the joint thirteen inches; and from thence to the claws sixteen; the colour of the bare parts is red; and the toes are furnished with a web, as in the Duck tribe, but deeply indented.

This bird does not gain the full plumage till the third year: in the first it is mostly greyish white, in the second the white is clearer, tinged with red, or rather rose-colour, and the wings and scapulars are red; but it is not till the third, that a general glowing scarlet manifests itself throughout; the bill and legs, too, keep pace with the plumage, obtaining colour by degrees, as the bird approaches to an adult state.

The Flamingo prefers a warm climate; it is seen in various parts of Europe, not often beyond 40 degrees north; known on the Coasts of Spain,\* Italy, and France, lying in the Mediterranean Sea; now and then being seen at Marseilles, and for some way up the Rhone: comes to Gibraltar annually in spring, from Barbary, generally about the beginning of May, and remains all the summer; sometimes as early as April, when from six to twelve or fourteen haunt the rivers which run into the Bay, and marshy grounds of the neighbourhood,

<sup>\*</sup> About Valencia, in the Lake Albufere. - Dillon's Trav. 374.

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and are sometimes seen swimming in the Bay, near the river. Are every where to be met with on the African Coast, and adjacent Isles, quite to the Cape of Good Hope;\* they breed in the Cape de Verd Islands, particularly in that of Sal;† in some seasons they frequent Aleppo,‡ and parts adjacent; also the Persian side of the Caspian Sea, and from thence, along the Western Coast, as far as the Wolga, though at uncertain times, and chiefly in considerable flocks, coming from the north-east, mostly in October and November; but on the wind changing, they totally disappear.§

The nest of the Flamingo is of a very curious construction, and singularly placed; it is made of mud, in shape of a hillock, with a cavity at the top; in this the female lays two white eggs, | the size of those of a Goose, but more elongated: the elevation of the nest is such, as to admit of the bird's sitting on it conveniently, or rather standing, as the legs are placed one on each side at full length. The young cannot fly till full grown, but run very fast: they are very shy, by no means suffering any one to approach near enough to shoot them, yet Dampier, with two or more in company, killed fourteen at once, which was effected by secreting themselves;\*\* and we learn from Catesby, that a person who can stand concealed, may shoot as many as he pleases, for they will not rise at the report of a gun, but the survivors will stand, as if astonished, and continue on the spot, till most of them are killed. They are common in the warmer situations of America, frequenting the same latitudes as in other parts of the globe. Are met with in Peru and Chili, as well as at

<sup>\*</sup> In Zee-Coow River.—Phil. Trans. Doctor Sparrman met with large flocks between Table and Simon's Bay, near Alphen, in April, seeking their food in pools and puddles that were drying up. These, he says, were of a snow white, and the wings of a flaming rosy hue.—Voy. i. p. 30. Once plentiful in the Isle of France.—Voy. to Mauritius, p. 66.

<sup>||</sup> Said to never lay more than three, and seldom fewer .- Phil. Trans.

They will sometimes lay four eggs, on a projecting part of a low rock, if sufficiently convenient to admit of the legs being placed one on each side.—Lin.

<sup>\*\*</sup> Davies talks of the gunner disguising himself in an ox's hide, and by this means getting within gun-shot.—Hist. Barb. p. 88.

46 FLAMINGO.

Cayenne,\* on the Coast of Brazil, and the various Islands of the West Indies. Sloane found them in Jamaica; but they more particularly frequent the Bahama Islands, and that of Cuba, and breed there. Their food chiefly consists of small fish,† or their eggs; also water insects, which they search after by plunging in the bill, and part of head; from time to time trampling with their feet to make the water muddy, and to raise their prey from the bottom. In feeding they are said to apply the upper part of the bill to the ground;‡ whilst feeding one of them stands sentinel, and when he sounds an alarm, the whole flock take wing. The Flamingo is said to sleep on one leg, the other being drawn up close to the body, with the head placed beneath the wing.

The flesh is by some much esteemed, and thought to equal that of the Partridge. The late Mr. White mentions the extreme softness of the flesh on the breast, which may be taken out by the fingers, and separated from the skin without a knife, and that the fat, as in the Stork, is red. Davies observes, that they are commonly fat, and accounted delicate; yet the inhabitants of Provence always throw away the flesh, as it has a fishy taste, and only use the feathers as ornaments to other birds, at particular entertainments; but the greatest dainty is the tongue, which was esteemed by the ancients as an exquisite morsel.

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* Called there Tococo. † Also small shell fish.—Gesner. ‡ Linnæus. Gesner. 

§ Hist. Barb. p. 88. || Dillon. Trav. p. 374. extr.
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Apicius, the celebrated Roman glutton, in his book de arte coquinaria, gives directions for dressing the Flamingo, but says nothing about the tongue; and whoever reads the receipt must allow, that whatever genuine taste the bird might have, the high rank nature of the seasoning would effectually cover it, even if it were more ill flavoured than some suppose it. See Apic. de Opsoniis, a Lister. p. 173.

<sup>¶</sup> See Plin. N. H. l. x. cap. 48. Martial says thus of it in one of his Epigrams—

<sup>&</sup>quot; Dat mihi Penna rubens nomen, sed Lingua gulosis " Nostra sapit : quid si garrula lingua foret?"—Lib. xiii. ep. 71.

I observe this bird in several drawings from India, and it certainly is there sufficiently common; its name in the Bengalese is Khonegil; it is also called Hanse, and Hanse Taulkau.

It has been observed to us, that the Flamingo of the Old Continent, and that of America, are distinct as to species; but if so, we have not hitherto received sufficient information, for distinguishing the one from the other. Mr. Temminck mentions a smaller sort as distinct, which inhabits India.\*

## 2.—CHILI FLAMINGO.

Phænicopterus Chilensis, Ind. Orn. ii. 789. Gm. Lin. i. 613. Molin. Chil. 214. Id. Fr. ed. 222. Chili Flamingo, Gen. Syn. Sup. 330.

THE height of this bird from the bill to the end of the claws is five feet, and the body itself one foot; the back and wings of a fiery red, the rest of the plumage of a beautiful white. The bill is five inches long; the head small, oblong, crowned with a sort of crest; the eyes small, but brilliant; the tail is short, and rounded; and the wings of a proper size; but in one particular the bird differs from the common sort; for the quills are of a pure white, which in the others are quite black. The young said to differ from the adult, in being of a grey colour.

This is probably one of the finest birds in Chili, and frequents only the fresh waters. The inhabitants value it much on account of the beautiful feathers, with which they adorn their helmets and spears; the wings are also converted into fans, and other purposes. The manners, as to incubation, &c. are the the same as in the more common sort.

<sup>\*</sup> Manuel, p. cii.

#### \*\* WITH SHORT LEGS.

## GENUS XCVIII.—ALBATROSS.

1 Wandering Albatross
A Var.
B Var.
2 Chocolate
A Var.
3 Yellow-nosed
4 Sooty

BILL strong, bending in the middle, and hooked at the end of the upper mandible; that of the lower abrupt; the lower part inclining downwards.

Nostrils opening forwards, and covered with a large, convex guard.

Tongue scarcely perceptible, only the rudiment of one.

Toes three in number, all placed forwards.

#### 1.—WANDERING ALBATROSS.

Diomedea exulans, Ind. Orn. ii. 789. Lin. i. 214. Gm. Lin. i. 566. Borowsk. iii. 27. t. 27. Gerin. v. t. 552. Lin. Trans. xiii. 489. Tem. Man. Ed. 2d. cx.

Plautus Albatrus, Klein, 140. t. 13. Bris. vi. 126. Id. 8vo. ii. 394. Buf. ix. 339. pl. 24. Pl. cnl. 237.

Tchaiki, Pall. Spic. fasc. v. p. 28. Hist. Kamtsch. 154.

Der Wandernde Schiffsvogel, Schmid, Vog. p. 144. t. 120.

Man of War Bird, Albin, iii. pl. 81.—the head. Grew's Mus. t. 6. f. 1.—the head.

Wandering Albatross, Gen. Syn. v. 304. Arct. Zool. ii. No. 423. Edw. pl. 88. Staunt. Chin. i. 222.

THIS is bigger than the Swan; and the length from three to four feet; the extent of wing at least ten feet; but many of our

\* Above ten feet,—Forst. Voy. i. 87. Ten feet two inches, called an enormous size,—Hawkesw. Voy. iii. 627. Eleven feet seven inches,—Parkins. Voy. 82. Eleven feet,—Cook's Journ. 77. Twelve feet, MS at Sir Joseph Banks's. One in the Leverian Museum expanded thirteen feet; and Ives even mentions one, shot off the Cape of Good Hope, measuring seventeen feet and a half from wing to wing. See Voy. p. 5.

voyagers mention them as greatly exceeding these dimensions: weight from twelve to twenty-eight pounds. Bill dirty yellow; crown of the head pale cinereous brown; the rest of the body in general white, crossed with blackish lines on the back and wings, and with spots in the same direction towards the rump; greater quills black; the tail dusky lead-colour, and rounded in shape; legs flesh-colour. The young birds are brown, more or less mixed with white; but do not acquire the complete plumage till mature age.

These birds are frequent in many parts without the Tropics, both to the north and south; not being confined to the latter, as has been by some imagined;\* indeed they are in great plenty about the Cape of Good Hope; and not only these, but other sorts also, as well as in every temperate southern latitude † as far towards the Pole as has been hitherto explored. Are seen in vast flocks in Kamtschatka, and adjacent Islands, about the end of June, and there called Great Gulls, but chiefly in the Bay of Penschinensi, the whole inner Sea of Kamtschatka, the Kurile Isles, and that of Bering; for on the east coasts of the first they are scarce, a single straggler only appearing now and then. Their chief motive for frequenting these places seems to be the plenty of food; and their arrival a sure presage of shoals of fish following. At their first coming they are very lean, but soon grow immensely fat, for they are very voracious birds, and will often swallow a salmon, of four or five pounds weight; but as they cannot take the whole of it into their stomach at once, part of the tail will often remain out of the mouth; and the natives, finding the bird in this situation, knock it down without difficulty. Before the middle of August they migrate elsewhere. They are also taken by means of a hook, baited with a fish, though it is not for their

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<sup>\*</sup> Buf. ix. 339. † Seldom below 30 degrees; never in the Torrid Zone.— Forst. Voy. i. 482.

<sup>‡</sup> Forster mentions their being caught with a line and hook, baited with a bit of sheep's skin.—Voy. i. 87. Cook's Voy. i. 84.

flesh that they are valued, it being hard and unsavoury,\* but on account of the intestines, particular parts of which they blow up like bladders, and use as floats to buoy up their nets in fishing: of the bones are formed many useful things.† The breeding places, if at all in the northern atmosphere, are not ascertained; but we are certain of their multiplying in the southern, as Patagonia, ‡ and Falkland Islands. § To the last they come about the end of September, or beginning of October, among other birds, in great abundance. The nests are made on the ground with earth, \( \Psi\) of a round shape, a foot in height, and indented at top; the egg is larger than that of a Goose, white, marked with dull spots at the large end, and is thought to be good food, the white never growing hard with boiling. While the female is sitting, the male is constantly on the wing, to supply her with food; and during this period they are so tame as to suffer themselves to be shoved from the nest, while the eggs are taken from them; but at other times, when caught, they will defend themselves stoutly with the bill; and not only in this case, but in general, the cry is harsh and disagreeable, not unlike the braying of an ass. The chief destruction of the eggs is from the Hawk,\*\* which darts on the nest, the moment the female leaves it, and flies away with the egg. The Albatross is also greatly persecuted while on the wing, by the Skua Gull, which attacks it on all sides, and particularly endeavours to get beneath, which is only prevented by the former

<sup>\*</sup> Yet they were eaten by our voyagers. As soon as caught they were skinned, and soaked in salt water till next morning, then parboiled, and the liquor being thrown away, stewed in fresh water till tender; and being served up with savoury sauce, they were much commended.—Hawkesw. Voy. i. 84.

<sup>†</sup> The New Zealand women wear pieces of the down in the holes of their ears, by way of ornament.—Forst. Voy. i. 841. Id. Obs. 310. Hawkesw. Voy. iii. 66.

<sup>‡</sup> Arct. Zool. § Clayton. || A part of New Zealand called Albatross Point, from this circumstance.—Parkins. Voy. 113.

With sedges in form of a haycock, three feet in height.—Arct. Zool.

<sup>\*\*</sup> Of two sorts.—Penrose. One of them the New Zealand Eagle, Vol. i. p. 160. pl. ix.

settling on the water;\* but indeed, the Albatross rarely flies at a great distance from the surface, except obliged so to do by high winds,† or other causes. As soon as the young are able to remove from the nest, the Penguins take possession, and hatch their young in turn. It is probable, that they pass from one part of the globe to another, according to the season; being occasionally met with, in intermediate places.‡ The food is supposed to be chiefly small marine animals, especially of the mollusca, or blubber class,§ also flying fish.

A.—The general colour of the plumage in this bird is brown, inclining to black above, with cinereous down, and whitish towards the head; a red bill, with a dusky tip.

B.—In this the upper mandible is white, or reddish, the under red, with the edges white; plumage white; top of the head and neck behind deep straw-colour; between the shoulders, the quills, and tail feathers, dusky brown.

These two Varieties are mentioned by Gmelin without any reference. A Variety from New-Holland was among the drawings of Mr. Francillon: in this the head, neck, and beneath, were white; back, wings, and tail, black; bill and legs, which are long, yellow.

<sup>\*</sup> Forst. Voy. i. 118. Hist. des Ois.

<sup>†</sup> Sometimes appear to soar above the clouds.—Amæn. Ac. v. 75.

<sup>‡</sup> Seen between six and seven hundred leagues from land, in the middle of the Southern Ocean.—Forst. Obs. 211. Met with in Sandwich Isles.—Ell. Narr. ii. 149. Also, in lat. 26. 31. north, on the 4th of April.—Id. p. 193. Off Japan and Jesso, October, 1771.—Cook's last Voy. iii. 391. Lat. 33. south, May 5.—Osb. Voy. i. 109.

<sup>§</sup> Forst. Voy. i. 118.

<sup>||</sup> Trigla volitans .- Amæn. ac. v. p. 75. Aret. Zool. No. 505.

# 2.—CHOCOLATE ALBATROSS.

Diomedea spadicea, Ind. Orn. ii. 790. Gm. Lin. i. 568. Lin. Trans. xii. 489. Chocolate Albatross, Gen. Syn. v. 308. Cook's Voy. ii. 116. 150.\* Forst. Voy. i. 258. Park, Voy. 83, 84?

THIS is larger than a Goose. Bill yellowish white; irides brown; fore part of the head, round the eye, chin, and throat, white; the general colour of the plumage fine deep chocolate; the neck and under parts palest; inner ridge of the wing, and under wing coverts, white; and the belly inclines much to white; tail short, rounded; and the wings equal it in length; legs bluish white; claws white. It varies in having more or less white about the head, and in a greater or less degree of purity; a specimen of this was seen in the South Seas, in lat. 37. the end of December.

A,-Albatros de la Chine, Pl. enl. 963.

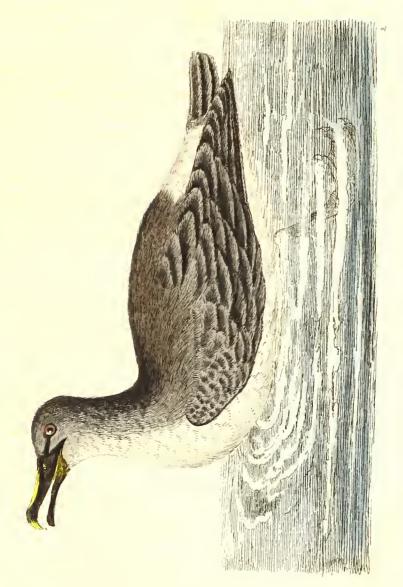
This bird is wholly greyish brown; bill and legs pale straw-colour.—Inhabits China, and is about two feet and a half in length.

# 3.—YELLOW-NOSED ALBATROSS.—PL. CLXIX.

Diomedea Chlororhynchos, Ind. Orn. ii. 790. Gm. Lin. i. 568. Lin. Trans. xii. 490. Yellow-nosed Albatross, Gen. Syn. v. 309. pl. xciv.

LENGTH three feet, breadth seven. The bill about four inches long, black, moderately stout, and hooked at the end, the upper ridge yellow the whole length, quite to the tip; the base of the

<sup>\*</sup> As few of the Voyagers have described the birds to which they have given names, we cannot always be clear in respect to the Species meant; and therefore not quite certain it was the one here described. Chocolate Albatrosses were mentioned by Forster; but not observed by him, except among the ice.—Voy. i. 258. Perhaps the Albatross with a white beak.—Park. Voy. 83, 84?



Hollow-nord : Matrefs



under mandible is also yellow; irides brown; the head grey; between the bill and eye an obscure black spot; just over the eye a dusky one; hind part of the neck dusky, the lower white; back, scapulars and wings, dusky blue black; rump and under parts of the body white; tail dusky; legs yellowish white; the fore part of them and the webs dusky. We believe that the plumage in this species varies as in the Gulls; for in a drawing of one, the whole head, neck, and under parts were pure white. This is met with in the southern atmosphere, from 30 to 60 degrees, all round the Pole.† One, taken off the Cape of Good Hope, furnished the above description.

Inhabits the South Seas without the Tropics, and like the Wandering Species, rarely flies above five or six feet above the surface of the water.

At least four Species of Albatrosses breed on the Islands of Tristan da Cunha. Among others the Yellow-nosed builds its solitary nest in some sheltered corner; selecting in particular the small drains that draw the water off the land into the ravines: the nest is of the height of ten or twelve inches, of a cylindrical form, with a small ditch round the base, and there is only one egg. ‡ All of this tribe nourish their young by disgorging the contents of the stomach; for as they feed on the blubber of dead whales, seals, &c. this would melt away if carried in the bill to any distance. During the time of incubation, no alarm is displayed on the approach of any man, as the birds suffer themselves to be kicked, or pulled off their nests, without the smallest resistance, and soon return again to their post. Captain Carmichael, who furnishes this description, observes, that when irritated, the feathers of the cheeks are separated, so as to display a beautiful stripe of naked orange skin, running from the corners of the mouth towards the back of the head.

<sup>\*</sup> Lin. Trans. xii. 489. † One caught in lat. 57. 30. south, in February.

<sup>\*</sup> They frequently merely chuse a dry spot, and making a slight concavity to prevent the egg from rolling away: the egg is white, very large, and peculiar in shape, being long in proportion, equally thick at both ends.

54 ALBATROSS.

# 4.—SOOTY ALBATROSS.

Diomedea fuliginosa, Ind. Orn. ii. 791. Gm. Lin. i. 568. Black Albatross, Lin. Trans. xii. 489. Albatross with a white eye-brow, Cook's Voy. i. p. 38? Black-billed Albatross, Parkins. Voy. p. 84? Sooty Albatross, Gen. Syn. v. 309. Forst. Voy. i. 91.

SIZE of a Goose; length nearly three feet. Bill black; irides pale yellow; at each angle of the eye a nictitating membrane; general colour of the plumage brown; the head and tail inclining to black or soot-colour; for a small space above, behind, and beneath the eye white, but not on the fore part; quills and tail dark brown, almost black, the shafts of the feathers of both white, the last pointed in shape; legs pale brownish lead-colour; claws black.

This is a general inhabitant throughout the Southern Ocean, within the Antarctic Circle; first met with in lat. 47. south;\* was called by our sailors the Quaker, from its brown plumage: is probably the same which Forster calls the Least of the Albatrosses,† met with off Kerguelen's Land, in the month of December.‡

This is also found to breed in the Islands of Tristan da Cunha; is gregarious, many of them building their nests close to each other; in the area of half an acre were reckoned upwards of a hundred. The nest is of mud, raised five or six inches, and slightly depressed at the top: when the young birds are more than half grown, they are covered with a whitish down: they stand on their respective hillocks like statues, till approached close, when they make a strange clattering with their beaks, and if touched, squirt a deluge of fœtid, oily fluid from the stomach.§

<sup>\*</sup> First met with about the time of first falling in with the ice. - Cook's Voy. i. 38.

<sup>†</sup> Voy. i. p. 91. ‡ Cook's Last Voy. i. 87. § Captain Carmichael.

## GENUS XCIX.—AUK.

- \* With a compressed Bill.
  - 1 Great Auk
  - 2 Tufted
  - 3 Puffin
    - A Var.
  - 4 Labrador

- 6 Black-billed7 Crested8 Dusky9 Perroquet

BILL smooth-edged, short, compressed, convex, frequently transversely furrowed.

Nostrils linear, parallel to the edge.

Tongue almost as long as the bill.

Toes three in number, placed forwards.

## \* WITH A COMPRESSED BILL.

## 1.—GREAT AUK.

Alca impennis, Ind. Orn. ii. 791. Lin. i. 210. 3. Fn. suec. No. 140. Gm. Lin. i. 550. Brun. No. 105. Muller, p. 17. Fn. groenl. No. 52. Borowsk, iii. 32. Gerin. iv. t. 497.

Alca major, Bris. vi. 85. 1. t. 7. Id. 8vo. ii. 382.

Pingouin brachiptere, Tem. Man. Ed. 2d. 939.

Penguin, Raii, 118. Will. 242. t. 65. Id. Engl. 322. t. 65. Edw. pl. 147. Nat. Misc. pl. 417.

Le grand Pingouin, Buf. ix. 393. pl. 29. Pl. enl. 367.

Great Auk, Gen. Syn. v. 311. Br. Zool. ii. No. 229. pl. 81. Id. fol. 136. Id. 1812. ii. 146. pl. 26. Arct. Zool. ii. No. 424. Edw. pl. 147. Bewick, ii. pl. p. 162. Lewin, vi. 21. pl. 222. Walcot, i. pl. 86. Orn. Dict. & App.

SIZE of a Goose; length three feet. Bill four inches and a quarter, covered in great part with short downy feathers, the colour

<sup>\*</sup> The last excepted, in which it is depressed.

black, crossed with several furrows. The plumage of the head, neck, and upper part of the body, the wings, and tail, black, the rest white; also a large oval spot of the same, occupying most of the space between the bill and eye; the second quills are tipped with white, forming an oblong stripe on the wings; which are so small as to be useless for flight, the longest quill feather being little more than four inches; legs black.

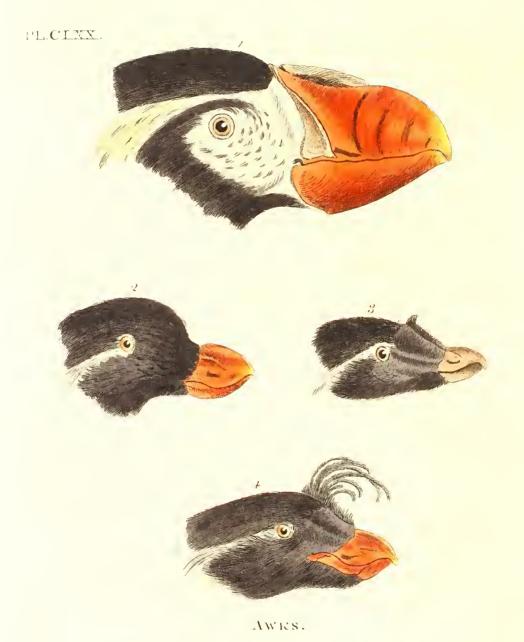
One of these, in the Museum of the late Mr. Tunstall, had only two or three furrows on the bill, and the oval white patch between the bill and eye spotted black and white: probably a young bird.

This, as far as we can learn, is by no means a common species; it appears on the Isle of St. Kilda the beginning of May, and retires in June, and probably breeds there; it lays one large egg, close to the sea mark, about six inches long, white, irregularly marked with purplish lines, and blotched at the larger end with black, or ferruginous spots; and it is said, that if the egg is taken away, the bird will not lay a second; is supposed to hatch late, as in August the young are only covered with grey down; it never ventures far out to sea, rarely beyond soundings. Sometimes frequents the Coast of Norway, the Ferroe Isles, Iceland, and Greenland; feeds much on the Lump fish, Father lasher, and others of that size, but the young birds will frequently eat Rose root,\* and other plants; the old ones are rarely seen on shore, though the young are often met with; it is a shy bird, and from the situation of the legs, being placed far behind, walks badly, but dives well, and is taken in the manner used for the Razor-bill and Puffin; the skin between the jaws is blown into a bladder, and in this state used, attached to the darts of the Greenlanders: † it inhabits also Newfoundland, ‡ and it is said, that the skin of the body is used by the Eskimaux Indians for garments.

This bird was found by Mr. Bullock, during his summer excursion in 1813, in Papa Vestray, one of the Orkney Islands; it was sufficiently familiar with the boatmen about those parts, but would not

<sup>\*</sup> Rhodiola rosea. - Lin. † Faun. Groenl. ‡ Arct. Zool. Br. Zool. | Arct. Zool.





1 Sufted. 2 Perroquel. \_3. Lusky \_ 1. Crosted.

admit of his coming, as a stranger, within gun shot, though in their company; but afterwards suffering the boatmen, by themselves, to approach so near, as to knock it down with an oar. This specimen was in good preservation in Mr. Bullock's Museum. The sexes of this species are called King and Queen of Anks; and by some Gair-Fowls.

# 2.—TUFTED AUK.—Pl. clxx. f. 1.

Alca cirrhata, Ind. Orn. ii. 791. Gm. Lin. i. 553. Pall. Spic. v. p. 7. t. 1. & 5. Borowsk. iii. t. 38.

Le Macareux de Kamtschatka, Buf. ix. 368. Pl. enl. 761.

Igilma, Hist. Kamtsch. 183.

Tufted Auk, Gen. Syn. v. 313. pl. 95. f. 1.—the head. Arct. Zool. ii. No. 432. Cook's Last Voy. ii. 411.

THIS exceeds the Common Puffin in size, and is nineteen inches in length. The bill nearly two inches long, crossed with three furrows; similar in colour and shape to that of the Common Puffin, and like that, compressed and furrowed on the sides; irides yellowish brown; the sides of the head and chin are white; over each eye arises a tuft of feathers, four inches, or more, in length, falling elegantly on each side of the neck, and in some specimens reaching almost to the back; these are white as far as they are attached to the head, but beyond it fine buff-yellow; the rest of the plumage is black, beneath paler, and inclining to ash-colour, the shafts of the quills white; tail very short, and consists of sixteen feathers; legs brownish orange; claws black.

The female is smaller,\* but scarcely differs in plumage from the male; the bill crossed with two furrows instead of three; and the tufts smaller.—This species inhabits Kamtschatka, and the neighbouring Islands.

<sup>\*</sup> Some of these, which we have seen, measured only fourteen inches and a half.

It was first met with a little to the south of Cape Hermogenes, and after that daily, sometimes in large flocks.\* Pallas remarks + that the Kamtschatkan girls imitate the tufts of these birds, by placing a similar strip of the white skin of the Glutton t behind each ear, hanging down behind, by way of ornament, and is a well received present from a lover to his mistress. The bills of these, as well as of the Common Puffin, were formerly held by the natives as charms, and worn by the priests as annalets; they are yet seen round their head dresses, but supposed at this time to be only by way of ornament: the skins are made use of for clothing, and sewed together for that purpose. The bird is called in Kamtschatka, Muechagatka; § and in Ochotka, Igilma, In manners it coincides with the last Species, and like it burrows under ground, lining the nest with feathers, and sea plants; lays a single egg, the end of May, or beginning of June, which is eaten, but the flesh of the bird is hard and insipid. It feeds on crabs, shrimps, and shell fish, which last it forces from the rocks with the bill.

#### 3.—PUFFIN AUK.

Alca arctica, Ind. Orn. ii. 792. Lin. i. 211. Fn. suec. No. 141. Gm. Lin. i. 549. Brun. No. 103. Muller, No. 140. Frisch, t. 192. Borowsk. iii. 31. Sibb. Scot. ii. 20. pl. 16. f. 1. Olear. Mus. t. 15. f. 5. Pall. Spic. v. p. 1. Fn. Groenl. 53. Fratercula, Bris. vi. 81. t. 6. f. 2. Id. 8vo. ii. 380. Gerin. t. 551. Mormon Fratercula, Macareux Moine, Tem. Man. 614. Id. Ed. 2d. 934. Alca deleta, Brun. No. 104.—a bird of the first year. Anas arctica, Raii, 120. A. 5. Will. 244. t. 65. Plantus arcticus, Klein, Av. 146. 3. Le Macareux, Buf. ix. 358. pl. 26. Pl. enl. 275. Papagaay Duiker, Sepp, Vog. 4. t. p. 359. Lunda, Seligm. Mus. ii. s. 11. t. 11. f. 21. Ipatka, Hist. Kamtsch. p. 153.

<sup>\*</sup> Cook's last Voy. ii. 411. † Spicil. Zoolog. ‡ Mustela Gulo.—Lin.
§ Mitchagatka—Alca monochroa sulcis tribus, circo duplici utrinque dependente—Alca
Arctica Cirrhata.—Phil. Trans. li. p. 482. Found in America, opposite Kamtschatka, as
also the Urili, and Kaiover, or Kaiour. 

| Hist. Kamts. p. 183. ¶ Arct. Zool.

Arktische Alk, Schmid, Vog. p. 162. t. 139. Bechst. Deuts. iv. 723.

Puffin, Gen. Syn. v. 314. Br. Zool. ii. No. 232. Id. fol. 135. pl. H. Id. 1812 ii.

152. Arct. Zool. ii. No. 427. Tour in Wales, ii. pl. 20. Will. Engl. p. 235. pl.
65. f. Hist. Groenl. ii. pl. 1. Albin, ii. pl. 78, 79. Edw. pl. 358. f. 1. Bewick,
ii. pl. p. 168. Lewin, vi. pl. 225. Id. pl. xlvii. f. 2.—the egg. Donov. i. pl. 8.

Walc. i. pl. 87. Pult. Dors. p. 17. Orn. Dict. & Supp. Graves, Orn. ii.

SIZE of a Teal; length twelve inches or more; weight twelve or thirteen ounces. The bill of a singular shape, one inch and a quarter long, much compressed, and near one inch and a half deep at the base, from whence both mandibles tend in an arched manner to the point, where it is a little curved; across the upper are four oblique furrows, on the under three; half of the bill, from the point, is red, the base half blue grey, and at the base a sort of elevated cere, full of minute holes; the nostrils are a long, and narrow slit on each side, near the edge of the upper mandible, and parallel to it; the irides grevish hazel; edges of the eyelids crimson; on the upper a callous, triangular protuberance, on the under an oblong one of the same texture; the top of the head, neck behind, and all the upper parts of the plumage are black, passing round the throat in a collar; the sides of the head, chin, and all beneath pure white; quills dusky; tail short, composed of sixteen feathers; legs placed very backward,\* orange: the claws back.

The male and female are much alike, but in some birds there is a great portion of a dusky mixture on the cheeks, and a patch of the same on each side of the under jaw. The Puffin is observed to vary exceedingly in the bill, owing to different periods of age; in the first year it is small, weak, without any furrow, and of a dusky colour; in the second larger, stronger, pale, with a faint appearance of a

<sup>\*</sup> Among the various authors who have figured this bird, some have represented it swimming, and others as resting not only on the feet, but on the back part of the shins also, propped up behind with the tail. We have never seen this bird in a living state, but the late Rev. Hugh Davies, of Beaumaris, assured me, that the bird, though sufficiently awkward in its gait as to walking, can do so, by means of the feet only, as in the Duck; though most certainly may be called an upright posture, in comparison with the last named.

farrow at the base; but as the bird advances in years the bill is more vivid, and increases in strength; it is therefore supposed not to be perfect, till the third year; especially, as not a single one has been observed at Priestholm, which had not the bill of full growth.\*

These birds frequent several parts of the Coasts of England, appearing about their breeding places the first week in April, but do not settle there immediately, as they go away, and return twice or thrice, before the first week in May, when they burrow; but many of them dislodge the rabbits from their holes, and save the trouble of forming one of their own; in the last case, they are so intent on what they are about, as to be caught by the hand; they are also taken by ferrets, in the manner of rabbits;† but where the soil is scanty on the rocks, they are content to deposit a single white egg, sometimes marked with a little cinereous, in a hole or crevice. It has been remarked, that the male performs the greater part of the task of forming burrows where necessary, and likewise assists in incubation, which has been proved by observation; the young are hatched the beginning of July. About the 11th of August they depart, but not completely; for the young ones, which have been late hatched, are deserted, and left a prey to the Peregrine Falcon, who watches at the mouth of the holes, till they, through hunger, are compelled to come out. Notwithstanding this appearance of neglect, no bird is more attentive in general, the female suffering herself to be taken, in defence of the young; biting, with savage fierceness, the hands, or any other part of the person who seizes it, as if actuated by despair: and if released, instead of flying away, will often hurry again into the burrows, to the young: about two years since, one was caught alive in the middle of the town of Newbury. The food chiefly consists of sprats, and the smaller kind of crabs, shrimps, and sea weeds; the flesh is excessively rank, yet the young ones are

<sup>\*</sup> See Tour in Wales, ii. p. 252. pl. 20, for figure of the bill in the different stages.

<sup>†</sup> Breed in vast numbers in Iceland.—Hooker's Tour, p. 36. ‡ Dr. Lamb.

A few of these birds frequent the rocks of Dover, and the neighbourhood; and great numbers about the Needle Rocks, adjoining the Isle of Wight; also at Beachy Head, and other parts, but no where in such plenty as at Priestholme Isle, where they are in flocks innumerable, and sometimes seen in winter, on the south coast of Devonshire; are common also in Ireland, on the Island Sherries, three leagues N.N.W. of Holyhead, and in the south stack, near the latter, breed in plenty. Inhabit also Iceland, and Greenland, breeding in the extreme parts, especially on the west of Disco, and the Island Orpiksank. Found in the Ferroe Isles, and called there Lunda. In the Farn Isles, Coulterneb, from the shape of the bill; also Tom-Noddy, and Skont: it is known also by various other names, as Guldenhead, Bottle-nose, and Helegug, in Wales; at Scarborough Mullet, and in Cornwall Pope.

We believe that in the warmer parts of the Continent of Europe they are less plentiful, but can be traced as far as Gibraltar, where they are seen throughout the winter: they first appear there in October, and depart in March; are very troublesome to the fishermen, taking their baits under water, on which element they seem to live constantly, rarely being observed on the wing. If kept tame, they will take no fish, except first thrown into the water, as in a tub, when they dive directly after them. Mr. White, who resided long on the spot, seems inclined to think, that the migration of this, and the Razor-bills may possibly be performed wholly through the water, as their diving, and making way in that element exceeds belief, except from those who have witnessed it. It appears also, that their summer retreat is not confined to the Arctic Regions, as they, in concert

<sup>\*</sup> They are potted at St. Kilda, and elsewhere, and sent to London, as rarities. The bones being taken out, the flesh is wrapped in the skin; they are eaten with vinegar, and are said to taste like baked herrings.

<sup>†</sup> Orn. Dict. ‡ "Which come in a surprising manner, in a flock, in the "compass of a night; and when their season comes, depart in the same manner."—Bibl. Topog. Brit. No. 10. p. 10. || Will. Orn.

with the Razor-bills, breed on many parts of the rocky coasts of Africa, between the Territories of Morocco, and those of Algiers, in the neighbourhood of Arzew; and that the eggs are there gathered by seamen, as a valuable article of fresh provisions.

Inhabits also America, being frequent in Carolina in winter, and has been met with in Sandwich Sound. The natives ornament the fore parts, and collar of their seal skin jackets, with the beaks of them; and those of Aoonalaschka wear gowns of their skins, along with those of other birds. On the Coast of Kamtschatka, and the Kurilschi Islands, they are common, even on the Penchinski Bay, almost as far as Ochotka. The natives of the two first wear the bills about their necks, fastened to straps; and according to the superstition of these people, their Shaman, or Priest, must put them on with a proper ceremony, in order to procure good fortune.\*

A.—Alca arctica, β. Ind. Orn. ii. 792. Gen. Syn. v. 317. A. Alca Indica, Gerin. v. t. 600.

Length sixteen inches. Bill nearly similar to the last; crown of the head, as far as the nape, ash-colour; sides of the head white; throat, neck, and all above, the wings, and tail black; breast and under parts white; legs orange.

In the female the bill is more slender; crown of the head brown black; sides of the head white, passing backwards almost to the nape; thighs ash-coloured; the rest as in the male.

This was met with at Bird Island, between Asia and America, and in the collection of Sir Joseph Banks.

# 4.—LABRADOR AUK.

Alca Labradora, Ind. Orn. v. 793. Gm. Lin. i. 550. Labrador Auk, Gen. Syn. v. 318. Arct. Zool. ii. No. 428.

SIZE of the Puffin. The bill one inch and a quarter long, much carinated at top, a little convex, but more narrow than in any of

<sup>\*</sup> Hist. Kamtsch.

the Genus; the upper mandible dusky red, the lower whitish, marked with a black spot, having an angle as in a Gull; the nostrils a slit near the edge, and covered with a dusky skin; the plumage on the upper parts is black, on the under white; sides of the head dusky white; throat dusky; wings and tail the same, the last very short; legs red.—A specimen of the above, supposed to have come from the Coast of Labrador, is in the British Museum.

# 5.—RAZOR-BILLED AUK.

Alca Torda, Ind. Orn. ii. p. 793. Lin. i. 219. Fn. suec. No. 139. Gm. Lin. i. 551. Scop. i. No. 94. Brun. No. 100. Muller, p. 16. Pall. Spic. v. p. 3. Bris. vi. 92. t. 8. f. 1. Id. Svo. ii. 383. Borowsk. iii. p. 33. Fn. Groenl. 78. No. 50.

Pingouin macroptere, Tem. Man. 616. Id. Ed. ii. 937.

Plautus Tonsor, Klein, 147. Id. Stem. 37. t. 38. f. 2.

Alca Hoieri, Raii, 119. A. 3. Will. 243. t. 64. 65.

Scheerschnabel, Shrift. de Berl. Nat. ix. 25.

Der Alk, Bechst. Deutsch. iii. 744. Id. Ed. ii iv. p. 711.

Le Pingoin, Buf. ix. 390, t. 27. Pl. enl. 1003.

Razor-bill, Auk, Murre, Gen. Syn. v. 319. Id. Sup. 264. Br. Zool. ii. No. 230. pl. 82. Id. fol. 136. Id. 1812. ii. p. 148. pl. 27. Edw. pl. 358. f. 2. Bewick, ii. pl. p. 164. Lewin, vi. pl. 224. Id. pl. xlvii. i. the egg. Donov. iii. pl. 64. Walc. i. pl. 84. Pult. Dors. p. 17. Orn. Dict. & Supp.

LENGTH eighteen inches; breadth twenty-seven; the weight twenty-seven ounces. Bill two inches long, black, and curved at the point, the feathers coming greatly forwards at the base, and crossed with four transverse grooves, one of which is white, forming an oblique band on both mandibles; inside of the mouth yellow; irides hazel; plumage, for the most part, black; from the base of the forehead, to the eyes, a narrow white line; the under parts of the body, from the breast, are white; the greater wing coverts tipped with white, forming a band on the wings; tail cuneiform, consisting of twelve pointed feathers; legs dusky black.

The Razor-bills first appear the beginning of February, but do not settle on their breeding places, with intent to lay, till the early

part of May,\* when they are met with on most of the high, craggy coasts of England, where our merciless shooters go to try the use of the gun, and too frequently leave many hundreds of these, and the Guillemots, after maining them, to die by slow degrees at the bottom of the rocks; for they are stupid birds, and suffer themselves to be shot at, one after another. They lay one egg, on the rugged sides of the bare rock, which adheres thereto, by means of the glutinous moisture, which hardens immediately on exposure to the air; and the part in contact is so small, as to make the egg appear as if resting on its own balance; this will account for the difficulty of restoring it again to its place, whenever it is once removed: † it is said, that in case the egg is taken away, the bird will lay again, and even a third time, should the second fail; the colour is dusky white, marked with many irregular, dusky, or blackish spots, and seems large in proportion to the size of the parent, equalling that of a Turkey, though somewhat longer in shape. The natives are fond of the eggs, and run the greatest hazard in procuring them, being lowered from above by ropes; two persons, each having a rope fied to their middle, the one takes fast hold, while the other lowers himself as convenience may serve; but the weight of the under one sometimes exceeding the uncertain hold of his companion, they both fall, and perish. ‡

The chief food of this bird is fish, particularly sprats; observed to dive frequently, and having caught several, to range them on each side of the bill, with the heads in the mouth, and the tails hanging out; and when the mouth can hold no more, the bird retires to the rocks, to swallow them at leisure, or carry them to its young.

<sup>\*</sup> Come every spring, with the Guillemots, to Saint Margaret's Cliffs, on the Kentish Coast, and leave that place in the course of the summer.—Mr. Boys.

<sup>†</sup> Harvey de Generat. Anim. Exerc. xi. See Arct. Zool. ii. 510. Note †. Col. Montagu is of opinion that the eggs are not fastened to the rock, as he has taken them up frequently, and laid them again in the same spot; and he has observed a violent gale of wind sometimes to sweep away whole ranks of them.—Orn. Dict.

<sup>&</sup>lt;sup>‡</sup> The eggs of this, and the Foolish Guillemot, are an article of trade in several Isles of the Coast of Scotland, and are used for refining sugars.—Orn. Dict.

These birds are found along the White Sea, and on the Arctic Asiatic Shores, and from thence to Kamtschatka, and the Gulph of Ochotka; is the only one which reaches the inland Baltic, being found there in the Carls Ozar Isles, near Gothland, and the Isle of Bondon, off Angermania.\*

It appears that this species, as well as the Puffin, extends as far as the Isle of Candia, and other parts of the Mediterranean; and is equally common in the Bay of Gibraltar, where it is curious to see their activity under water, when in pursuit of fish; for, as the water in the Bay is sometimes clear for a great depth from the surface, these birds may be often seen as it were flying after their prey, with the agility of a bird in the air, turning in every direction after the fish, with such wonderful dexterity, as seldom to miss their aim. It is known in England, by the name of Auk† and Razor-bill; in Scotland, and the Farn Isles is called the Scout; in Cornwall, the Murre and Marrot; in St. Kilda, the Falk and Bowkie. The Auk formerly mentioned as an article of diet, and in season in July;‡ but we believe, that such kind of food now would be relished by very few.

# 6.—BLACK-BILLED AUK.

Alca Pica, Ind. Orn. ii. 793. Lin. i. 210. Gm. Lin. i. 551. Fn. Groenl. No. 51.

Tem. Man. 617. Id. Ed. 2d. 937.

Alca unisulcata, Brun. No. 102. Muller, No. 138.

— minor, Bris. vi. 923. t. 8. f. 2. Id. 8vo. ii. 383.

Mergus Bellonii, Utamania, Raii, 119. Will. 243. t. 64. Id. Engl. 324.

Der Elster Alk, Bechst. Deuts. ii. 747. Naturf. xiii. 179?

De jonge Papegaay Duiker, Sepp, p. 406.—young.

Le petit Pingoin, Buf. ix. 396. Pl. enl. 1004.

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<sup>\*</sup> Hist. Kamts. 153. † From birds of the Auk Genus making their way on land with difficulty, the saying, that a man walks or performs other actions Aukwardly, is probably derived; and as their gait is wavering and unsteady, a northern proverb has arisen, viz.—" That such a man is as drunk as an Auk." ‡ See Archæol. xiii. p. 354. 368.

Black-billed Auk, Gen. Syn. v. 320. Br. Zool. ii. No. 231. Id. fol. 137. t. H. 1. Id. 1812. ii. 150. Arct. Zool. ii. No. 426. Bewick, ii. p. 169. Walcot, i. pl. 85. Orn. Dict. & Supp.

THIS is smaller than the former bird. The bill similar, but less curved, perfectly smooth, except a slight indentation at the base; though in some are three distinct furrows, and that nearest the base white; irides hazel; plumage in general black; the sides of the head and all beneath white; but the black of the neck comes forward on each side, and the white on the sides of the head extends backwards towards the hindhead; the lesser quills are tipped with white; the tail composed of twelve feathers as in the last species; legs brown black. Such is the description of one, formerly in my own collection, and nearly agreeing with that in the *Ornith*. *Dictionary*; but in the bird figured by Brisson, the forehead is white, and a dusky streak passes from the nostrils under the eye, and ends beyond it in a point, and in that too, the white on the sides of the head included the eyes.

The Black-billed Auk is found in Greenland, at all seasons, and appears to be more numerous than the Razor-bill, but breeds on the rocks in the same manner. Is exceedingly common in the Greenland Sea, and rarely seen on land, except in the breeding season; like the rest of the Genus it walks very ill, appearing with the body quite erect, but swims, and dives excellently well; it flies strongly and swiftly, but always near the surface of the water. The Greenlanders use this and the former, not only for food, but to make a warm clothing, with the skins sewed together; they often take them by throwing darts; and not unfrequently numbers of the natives in boats surround a large flock on the water, and drive them on shore, where others stand ready to attack them so suddenly, as to leave no time to escape; and many, by this means, may be taken by the hand.

It may be seen by the above, that in Greenland the two last birds are accounted distinct; and Colonel Montagu in his *Orn. Dict.* is of this opinion; yet it must be owned, that, guided by external appearance, the two would naturally appear to be one and the same,

at different periods of age; and if the change of the colour of the head in summer is allowed in both birds, as Fabricius indicates, and which we see too in the Little Auk, it is no wonder that the true state of things should have remained so long in obscurity.\* Said to feed on small fish, and in particular on shrimps.

The Puffin, Razor-billed, and Black-billed Auks, as also the Guillemot, are all seen about Gibraltar in October, and remain there all the winter, departing in March or April; but in England they are seen only in the summer months.

# 7.—CRESTED AUK.—Pl. clxx. f. 4.

Alca cristatella, Ind. Orn. ii. 794. Gm. Lin. i. 552. Pall. Spic. v. p. 18, t. 3, & 5. Black Stariki, Hist. Kamtsch. 156. Crested Auk, Gen. Syn. v. 323. pl. 95. f. 4. Arct. Zool. ii. No. 434.

SIZE of the Missel Thrush; length twelve inches. The bill shaped not unlike that of the Puffin, but the upper mandible more hooked at the tip, and the feathers of the chin produced half way on the under one: at the angle of the month a callous flap, the colour, as well as that of the bill crimson, the tip yellow; the head rather small; on the forehead an upright crest of long feathers, which curve forwards, as in the Crested Grakle.† The eyes are small; beneath them a line of white, and behind a streak, composed of four or five slender, white feathers; head and neck black; back the same, marked with ferruginous brown spots, changing into hoary on the rump; the under parts of a dusky brown; the wings reach to the base of the tail, which is black, and has fourteen feathers; the outmost but one ferruginous at the tip; the exterior marked with indistinct, white dots; legs livid; webs dusky.

<sup>\*</sup> Consult Faun. Groenl. and Pall. Spic. Fasc. v. p. 1—24. See Alca Balthica, Brun. No. 101. Pall. Spic. v. p. 4. M. Temminck supposes them one and the same, and that the Black-billed is not in full maturity of plumage. † See Vol. iii. p. 164.

Inhabits the Islands contiguous to Japan. One of these, in the collection of Sir Joseph Banks, came from Bird Island, between Asia and America. It sleeps at night in burrows on shore, and fissures of rocks, from whence it is often taken by the hand, with other birds of this stupid race.

# 8.—DUSKY AUK.—Pl. clxx. f. 3.

Alca tetracula, Ind. Orn. ii. 794. Gm. Lin. i. 552. Pall. Spic. v. 24. t. 4 & 5.

Dusky Auk, Gen. Syn. v. 324. pl. 95. f. 3. Arct. Zool. ii. No. 435. Ellis's Narr. ii. p. 252?

LENGTH eleven inches; breadth eighteen. The bill yellow brown, the ridge white, the upper mandible bent at the point; irides white, surrounded with black; feathers of the forehead somewhat long, downy, reflexed half one way, half the other; behind the eyes a white streak; the head and neck are black, marked with a few obscure, ferruginous spots on the nape; the upper parts of the body black; beneath cinereous, growing whitish near the vent; the wings reach to the base of the tail, which is composed of fourteen feathers, all of which, except the two middle ones, are ferruginous at the ends; the legs livid, webs black.

Met with in the Seas between Japan and Kamtschatka, and sometimes very far from land; in this case seen single, but on land are found in flocks; make the nest in burrows, among the rocks; are wonderfully active in the water, but no bird is more clumsy, or stupid on land; for it is with the greatest difficulty they get upright on their legs, and then cannot stand, except the rump be propped up on a stone, or other elevation; will now and then fly on board ships in the evening, and then are easily taken by the hand: the flesh is little valued, nor can the down be separated from the skin, so as to be useful; but the eggs are thought very good.

# 9.—PERROQUET AUK.—Pl. clxx. f. 2.

Alca Psittacula, Ind. Orn. ii. 794. Gm. Lin. i. 553. Pall. Spic. v. p. 13. t. 2 & 5. Stariki, Hist. Kamtsch. 155.

Perroquet Auk, Gen. Syn. v. 325. pl. 95. f. 2. Arct. Zool. ii. No. 433.

THIS is somewhat like the Little Auk, but more bulky in the body. The bill is of a deep red, greatly compressed on the sides, and convex, both above and beneath; above the nostrils a furrow, from the base to the middle; irides pale yellow;\* the visage, next the bill, much prolonged; whence the eyes, which are small, appear placed far back in the head; in the middle of the upper eyelid a white spot; at the back part of the eye, on each side, a slender tuft of white feathers, which hang loosely on the neck; the head, neck, and upper parts are black, inclining to hoary on the neck before, and the under parts, from the breast, white; thighs dusky; wings and tail even in length, the last short; legs dirty yellow, webs brown.

Inhabits Kamtschatka, with the last described; also the Islands towards Japan, and the west shores of America, most frequent in the last; is sometimes seen in flocks, but seldom far from land, except driven from thence by storms; harbours at night in the crevices of rocks: the egg almost the size of that of a Hen, dirty yellowish white, spotted with brown; the female deposits this upon the bare rock, or sand, about the middle of June, but makes no nest. They are stupid birds, as may be seen by the mode of catching them; one of the natives places himself under a loose garment of fur, of a particular make, with large open sleeves, among the rocks, in the evening; at which time the birds, returning to the shore at dusk, run under the skirts, and up the arm holes, for shelter during the night; the man, concealed beneath, kills them as fast as they enter, and by such means as many are taken in one evening as he can carry away.

<sup>\*</sup> So described in Billings's Voy. App. [56.] Met with at Oonalashka.

Their stupidity likewise leads them to fly on board a ship at such times, mistaking it for a roosting place, whereby navigators have been taught to avoid the danger of falling in, too near, with land, either in the evening, or on approaching storms. The eggs are esteemed.

## 10.—ANCIENT AUK.

Alca antiqua, Ind. Orn. ii. 795. Gm. Lin. i. 554. Ancient Auk, Gen. Syn. v. 326, Arct. Zool. ii. No. 240.

THIS is a trifle bigger than the following; length nearly eleven inches. Bill one inch and a quarter, the base white, but from the nostrils to the end black; the face is somewhat prolonged, and the feathers come very forward on the bill; the head, sides, and throat, are deep black; the upper parts of the body and wings dusky black; the under pure white; on the ears, just behind the eyes, spring several long, narrow, white feathers, which lie on each side of the neck, meeting at the lower part, and forming a crescent; these are somewhat curled at the origin, where they are most numerous, and may perhaps be erected at the will of the bird, as a ruff; the legs are placed quite in the vent, are one inch and a quarter long, and dusky; the tail short, rounded, and black.

Inhabits various parts, from the west of North America to Kamt-schatka, and the Kurile Islands.\*

#### 11.—LITTLE AUK.

Alca alle, Ind. Orn. ii 795. Lin. i. 211. Faun. suec. No. 142. Gm. Lin. i. 554. Brun. No. 106. Id. 107.—white. Fn. Groenl. No. 54. Act. Nidr. 261. t. 6. Martin. Spitsb. 61. t. M. C. Pall. Spic. v. p. 4.—Note f. Amer. Orn. ix. 94. pl. 74. 5. Lin. Trans. xii. p. 537.

Uria minor, Bris. vi. 73. 2. Id. 8vo. ii. 378. Gerin. v. t. 550.

<sup>\*</sup> Arct. Zool.

Uria alle, Tem. Man. d'Orn. 611. Id. Ed. 2d. 929. Parry's Voy. App. p. cex. Plautus columbarius, Klein, 146. 1.

Mergulus melanoleucos rostro acuto brevi, Raii, 125. A. 5. Will. 261. t. 59.—lower figure. Ross, Voy. App. p. 1.

Le petit Guillemot femelle, Pl. enl. 917.

Small black and white Diver, &c. Will. Engl. 343. §. iv. pl. 59. Edw. pl. 91. Greenland Dove, Albin, i. pl. 85.

Little Auk, Gen. Syn. v. 327. Br. Zool. ii. No. 233. pl. 82. Id. fol. 137. pl. H. 4.
f. 1. Id. 1812. ii. 158. pl. 27. f. 1. Arct. Zool. ii. No. 429. Bewick, ii. pl. p. 172. Lewin, vi. pl. 223. Walcot, i. pl. 88. Pult. Dors. p. 17. Orn. Dict. & Supp.

SIZE of a Blackbird; length nearly nine inches; breadth about thirteeen. Bill short, stout, somewhat rounded and black; general colour of the plumage black above, and white beneath; scapulars streaked with white; the second quills tipped with white, except the four nearest the body, forming a line on the wing; tail of four-teen feathers, of which the two middle exceed the others in length; legs yellowish brown; webs black.

In some the head and neck are wholly black, and a spot of white over the eye, but in other things resemble the former. Fabricius observes, that these differences do not arise from sex, for the male and female are much alike; but that they are only seen with the head and part of the neck black during the summer season, at which time both sexes appear in this dress, in the same manner as he mentions in respect to Razor-billed, and Black-billed Auks.

This inhabits the North of Europe, as far as Spitzbergen, but probably does not extend to Asia; is common in Greenland, found there in company with the Black-billed Species, feeding on the same food; lays two bluish white eggs, larger than those of a Pigeon; flies quick, and dives well; and while swimming it frequently dips the bill into the water; walks better on land than any of the Genus. Is very fat in the stormy season, from the waves dislodging numbers of crabs and small fish, on which it feeds; it is less sought after than any of the tribe, from its size; but as it is equally stupid, is taken by the same means. In Greenland it is called the Ice Bird, being the

harbinger of ice;\* in Shetland, called Rochie, or Ratch: seen by myriads in August, in lat. 75° 44. west, and long. 61° 20. west.†

It is now and then met with in England, but is far from common; I have received two specimens only, the one shot near Dover, and the other not far from Dartford, both of which were in the winter dress. Dr. Lamb also mentioned to me a third, shot in November, 1807, in the Mill Stream, at Newbury: is sometimes seen of a pure white.;

# 12.—MINUTE AUK.

SIZE not much exceeding that of a Bunting; length five inches and a half. Bill stout, small, rather compressed; general colour of the plumage brown; next the nostrils some hoary lines; the upper mandible covered half way with feathers; under parts of the body pale, and mixed with waved lines.—In Mr. Bullock's Museum.

#### \*\* WITH A DEPRESSED BILL.

# 13.—FLAT-BILLED AUK.

Alca pygmea, Ind. Orn. ii. 796. Gm. Lin. i. 555. Pygmy Auk, Arct. Zool. ii. No. 431. Flat-billed Auk, Gen. Syn. v. 328.

LENGTH seven inches. Bill three quarters of an inch long, and black; the top is ridged, but on the sides of the ridge is considerably

- \* Arct. Zool. Met with there in great abundance.—Phipps's Voy. p. 186.
- † Called Rotges.—Ross's Voy. p. 13. Used for food. A large Gull is here mentioned, which, when killed, disgorged one of these birds entire. So plentiful in Baffin's Bay, as fifteen to be killed at a shot, and used by the sailors for food.
  - ‡ Alca candida, Brun. No. 107. Muller, p. 17.

depressed, as in the Duck; nostrils parallel to the edge of the upper mandible; point of the bill slightly curved; the visage is somewhat prolonged, as in the Perroquet Auk; and the sides, between the bill and eye, furnished with a few, narrow, pale feathers; the plumage, on all the upper parts, sooty black; chin and throat pale; fore part of the neck, breast, and belly paler than above, inclining to ash-colour; the middle of the belly dirty white; legs dusky.

Inhabits Bird Island, between Asia and America, where it has been met with in considerable numbers; but we have not yet heard of its being found elsewhere.

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# GENUS C.—GUILLEMOT.

1 Foolish Guillemot	4 Black	E Var.
A Var.	A Var.	F Var.
B Var.	B Var.	5 White
2 Lesser	C Var.	A Var.
3 Brunnich's	D Var.	6 Marbled

BILL straight, slender, pointed, the upper mandible slightly bending towards the end, base covered with short feathers.

Nostrils linear, at the base of the bill.

Tongue slender, almost the length of the bill.

Legs furnished with three toes, all placed forwards.

# 1.—FOOLISH GUILLEMOT.

Uria Troile, Ind. Orn. ii. 796. Bris. vi. 1. t. 6. f. 1. Id. Svo. ii. 377. Tem. Man. 606. Id Ed. 2d. 922.

Colymbus Troile, Lin. i. 220. Fn. suec. No. 149. Gm. Lin. i. 585.

Lomwia Hoieri, Raii, 120. A. 4. Will. 244. t. 65. N. C. Petr. iv. 414. Klein, 148. S. Id. 168. 3. Brun. No. 108. Muller, No. 152. Scop. i. No. 103,

Uria Major, Gerin. v. t. 549.

Das Dumme Taucherhuhn, Beclist. Deuts. ii. 764. Id. Ed. 2d. iv. 574.

Der Dumme Lumme, Schmid, Vog. p. 161. t. 138.

Le Guillemot, Buf. ix. p. 350. Pl. enl. 903.

Lumme, Mart. Spitz. 57. t. M. f. A. Frisch, t. 185.

Foolish Guillemot, Gen. Syn. vi. 329. Id. Sup. 265. Br. Zool. ii. No. 234. Id. fol. 138. pl. H. 3. Id. 1812. ii. 160. Arct. Zool. ii. No. 436. Phipp's Voy. 187. Cook's last Voy. ii. 352. Will. Engl. 324. pl. 65. Alb. i. pl. 84. Edw. pl. 359.
1. Bewick, ii. pl. p. 175. Lewin, vi. pl. 50. Id. pl. xlv. 2.—the egg. Walcot, i. pl. 96. Donov. pl. 28. Pult. Dors. p. 17. Orn. Dict. & Supp. Graves. Br. Orn. ii.

THE length of this bird is seventeen inches, breadth twenty-seven; weight twenty-four ounces. The bill three inches, straight, pointed, and black; irides dusky; inside of the mouth yellow; base

of the bill above covered with short, downy feathers; from the eye to the hindhead they divide in a singular manner, giving the appearance of a line or channel; the head, neck, back, and wings, are mouse-colour; tips of the lesser quills white; under part of the body wholly white; sides under the wings marked with dusky lines; above the thighs the feathers are long, and curve downwards; legs dusky. Both sexes are alike in plumage.

The Guillemot is found on many parts of the English coasts during the summer, and in some particular spots in vast abundance, especially on rocky cliffs; first seen in May, and disappears the end of August. The Razor-bills, too, observe the same manners, and are found in the same places, though they do not interfere with each During the breeding season, our sportsmen attend these spots, that they may perfect themselves in the art of shooting flying, for which purpose no birds are more suitable, for they will see their companions killed one after another, without much alarm; as, after making a circuit, they alight in the same place, to be shot at in turn. These, as well as the Auks, and Puffins,\* are indiscriminately called Willocks; by the Welch, Guillem; in Northumberland and Durham, Guillemot, or Sea Hen; in Yorkshire, Scout; in Cornwall, Kiddaw; other names are mentioned which they go by, as, Marrot, Strany, Lungy, and Skuttock.† They lay a single egg, more than three inches in length, of a bluish white, or pale sea-green, and so irregularly spotted and streaked with black, that no two are alike. The places they most resort to in this kingdom are, the uninhabited Isle of Priestholm, near the Isle of Anglesea; a rock called Godreve, not far from St. Ives, in Cornwall; the Farn Isles, near the Coast of Northumberland, and the Cliffs about Scarborough, in Yorkshire. Are also found in most of the northern parts of Europe, as far as

<sup>\*</sup> Col. Montagu mentions one being shot near him, in January, 1805; it was a female, in the usual plumage, and weighed thirty ounces.—Ornith. Dict. Said to be found in the Orkney Islands throughout the year.—Br. Zool. † Orn. Dict.

Spitzbergen;\* the Coast of Lapmark; and along the White and Icy Seas, quite to Kamtschatka, where they are called Aru and Kara; the inhabitants kill them in numbers, for the sake of the flesh, though it certainly is tough and ill tasted; but more especially for the skins, of which, as well as of other Fowls, they make garments; the eggs, too, are accounted a delicacy.† These birds are not uncommon in various parts of Germany, France, and Italy, and though in general they depart in autumn, a few remain throughout the winter.‡

The Guillemots are found in the Bay of Gibraltar all the winter: as, in the faculty of diving, they are possessed of equal ability, it may be supposed that they migrate with the Auks, from the northern shores, when they depart from them at the end of the summer. Not only this, but the Black Duck, is known by the name of Macreuse, and both equally allowed by the Roman Catholics to be eaten in Lent. It is well known in Newfoundland, and some other parts of North America, but we do not find it very common there; has been met with at Nootka Sound.§

A .- Uria Suarbag, Brun. No. 110.

This has the cheeks and under parts white, with a black line behind the eyes; tips of the tail feathers white.

B .- Uria Alga, Brun. No. 112.

Like the last, but the tail feathers wholly black.

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* Phipp's Voy. p. 187. Common in Iceland,—Hooker's Tour, p. 72.
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<sup>†</sup> Hist. Kamts. 154. 

‡ Bechstein. Many pass the winter on the Coasts of Italy.

Arct. Zool. 

\$ Cook's last Voy. ii. 352.

# 2.—LESSER GUILLEMOT.

Uria minor, Ind. Orn. ii. 797. Gm. Lin. 585.
— Ringuia, Brun. p. 28. No. 111.
Lesser Guillemot, Gen. Syn. vi. 332. Br. Zool. ii. No. 235. pl. 83. Id. fol. 138. Id. 1812. ii. 162. pl. 28. f. l. Arct. Zool. Sup. p. 69. Bewick, ii. pl. p. 177. Walcot, ii. pl. 97. Orn. Dict. & Supp.

THIS is rather smaller than the last. The bill and irides the same; the top of the head, including the eyes, hind part of the neck, back, wings, and tail, black, behind the eye continued in a streak; sides of the head, beneath the eye, and all the under parts, white; greater wing coverts tipped with white; legs black. In some birds the black streak behind the eye is much broader.

The Lesser Guillemot is not near so common as the Foolish Species, and only frequents our coasts in winter; is more rare on those of Wales; but in the Firth of Forth in innumerable flocks, in pursuit of sprats, and there called Morrot, joining in company with the Black-billed Auks, on the Coasts of Devonshire.

Authors do not seem positive whether to rank this bird as distinct, or to esteem it as a Variety, or young bird of the Foolish Species; and we must confess, that it has hitherto appeared to us rather in the latter light; unless it were perhaps in the winter dress, for we are assured that they are not alike at all seasons; but the late Colonel Montagu seems confirmed in its being distinct in species, and in this view he also held the Black-billed Auk, which Fabricius says,\* undergoes a change according to the season, having the cheeks, and all the under parts, white, in the winter: as to ouselves, we are not prepared to give a determined opinion on the subject, from experience, and recommend to the readers a sensible dissertation by Col. Montagu, in the Supplement to his Ornithological Dictionary.

<sup>\*</sup> Faun. groenl. p. 7.

# 3.—BRUNNICH'S GUILLEMOT.

Uria Troille, Brun. No. 109. Lin. Trans. xii. p. 538.
— Francsii, Lin. Trans. xii. p. 588. (Dr. Leach) Tem. Man. Ed. 2d. 924. Ross's Voy. App. p. lii. Parry's App. p. ccix.

LENGTH seventeen inches; extent of wing two feet; weight two pounds six onnces. Inside of the throat yellow; irides dark; throat and neck sooty brown; head black; hind part of the head and neck, back and wings dark sooty brown, the wings being lightest, and the secondaries tipped with white; the feathers of the neck have a peculiar smoothness and softness; from the eye to the hindhead is a line, occasioned by a division of the feathers; belly and all beneath pure white, running up to a point in the neck; the feathers are very thick, and on being removed, a dark down appears between them and the skin; legs marbled brown and yellowish; claws black.

This is the description of Captain Sabine, who, as well as Dr. Leach, thinks it to be a Species distinct from the Foolish Guillemot. Brunnich observes, that it is like the last named in every particular, except in having a broader and shorter bill, and that even in dried specimens the edges of it are yellowish.

This bird was found in great abundance in Davis's Straits, and occasionally in Bashin's Bay. A specimen, killed on the 10th June, had the feathers of the throat mottled with white, whence it may be inferred, that it undergoes the same changes from season as the Foolish Species.

#### 4.—BLACK GUILLEMOT.

Uria Grylle, Ind. Orn. ii. 797. Brun. No. 113.

Colymbus Grylle, Lin. i. 220. Fn. suec. No. 148. Gm. Lin. i. 584. Muller, No. 151.

Act. Nidr. i. 258. t. 4. Frisch, t. 185. N. C. Petr. iv. 418. Mart. Spitz. 56.
t. L. f. B. Bewick, iii. 57. 2. Lin. Trans. xii. p. 540. Tem. Man. 609. Id.

Ed. 2d. 925. Parry's App. p. ccix.

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Columbus Groenlandicus, Klein, Av. 168. 2.
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Uria minor nigra, Columba Groenlandica, Bris. vi. 76. 3. Id. 8vo. ii. 379. Raii,
121. 6. Will. 245. Ray's Trav. 183. 192. N. Act. Stock. 1781. 3. No. 4- p. 224.
Das Schwarze Taucherhuhn, Bechst. Deuts. ii. 772.

Le petit Guillemot noir, Buf. ix. 354.

Kaiaver, or Kaier, Hist. Kamts. 157. Ph. Trans. li. p. 481.

Greenland Dove, Sea Turtle, Alb. ii. pl. 80. Will. Engl. 326. And. Gr. ii. pl. 1.

Black Guillemot, Gen. Syn. vi. 332. Br. Zool. ii. No. 236. Id. fol. 138. pl. H. 4.

Id. 1812. ii. p. 163. Arct. Zool. ii. No. 437. Bewick, ii. pl. p. 179. Lewin, vi. pl. 221. Id. xlvi.—the egg. Walcot, i. pl. 95. Pult. Dors. p. 17. Orn. Dict. & Supp. Edin. Ph. Journ. No. xiii. p. 101.

LENGTH fourteen inches, breadth twenty-two; weight twentyfour ounces. Bill one inch and a half long, straight, slender, black,
the inside of the mouth red; irides brown; general colour of the
plumage black, except a large portion of white on the wing coverts,
and the second quills tipped with white; legs scarlet, claws black.
This is the colour of the adult in the summer dress. The male and
female do not differ in plumage.

This species inhabits the Bass Island, in Scotland, and the Isle of St. Kilda, coming to the latter in March; makes the nest far under ground, or in a hole in the rock, the end of May, and lays generally two eggs, with blackish spots; breeds in numbers in Zetland, where the greater part remain throughout the winter: it frequents also the Farn Isles, off the Coast of Northumberland, mostly in pairs; they dive well, hence are called by some Diving Pigeons.\* A few breed annually on the Coasts of Wales, near Tenby,† and on the rocks of Llandidno, in Caernarvonshire:‡ common in the Bay of Dublin throughout the summer, and feeds on small fish; the eggs are eaten by the inhabitants, and the skins, with the feathers attached, used for warm garments, in the same manner as those of Auks; and the skin of the legs serves as a bait to their fishing lines. Is found also at Spitzbergen; § well known at Kamtschatka, where it multiplies among the high rocks in the sea, and whistles very loud; hence

<sup>\*</sup> Arct Zool. † Orn. Dict. ‡ Arct. Zool.

<sup>§</sup> Phipp's Voy .- There called Tyste, or Doveca.

called by the Cossacs, Ivoshik, or Post Boy: very numerous in all seasons at Hudson's Bay, called there Sesekesewuck; is found also about the North Cape of Lapland; the flesh is sometimes eaten, and said to be not unpleasant.

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A .- Ind. Orn. ii. 797. Gen. Syn. vi. 333. 1. A.
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Larger than the last. Bill black; plumage the same; several of the middle wing coverts tipped with white, forming a broad, oblong, spot across the wing; second quills also marked with white, meeting first in an acute angle; legs red.

Inhabits Aoonalashka.—Sir Joseph Banks.

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B.—Uria minor striata, Bris. vi. 78. Id. 8vo. ii. 379. Klein, 146. 1? Tem. Man. 610. Id. Ed. ii. p. 926.
Uria Balthica, Brun. No. 116?
Spotted Graphand Days. Com. Sup. vi. 222. B. Edw. pl. 50. Barrick ii. p. 181.
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Spotted Greenland Dove, Gen. Syn. vi. 333. B. Edw. pl. 50. Bewick, ii. p. 181. Ornith. Dict.

In this the upper parts are brownish black, transversely barred with a darker colour; sides of the head, and all beneath, from the chin, dusky white, barred with pale ash-colour; wing coverts white, part of them mixed with black; legs dirty flesh-colour.

Found at Greenland. This is the winter plumage of the mature bird.

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C.-Uria Balthica, Brun. No. 115. Gen. Syn. vi. 334. C.
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This has the head, neck, and breast white, very lightly spotted with black; back black, some of the feathers edged with white; the belly pure white; wings and tail black, with a white patch on the coverts.—Brought from Christiansoe, called there Sildeperris, and is a bird in the change of feathers on the approach of winter.

D.-Ind. Orn. ii. 798. E. Gen. Syn. vi. 334. D.

In this the upper parts of the body are dusky black; crown mottled with white; hind part of the neck inclining to ash-colour; greater wing coverts irregularly marked black and white; quills and tail black; the under parts of the bird white, with obscure dusky black lines, except the chin, which is pure white; legs pale brown; webs dusky.—Supposed to have come from Kamtschatka.—Sir J. Banks.

E.—Spotted Guillemot, Br. Zool. ii. pl. 83. f. 2. Id. 1812. ii. p. 162. pl. 28. f. 2. Gen. Syn. vi. 334. E.

In this the plumage is black and white in patches above; all beneath white. In Brunnich's bird the belly was also spotted white and black. This author supposes it to be a bird of the first year.

F.-Uria grylloides, Brun. No. 114. Act. Nidros. i. 268.

In this the belly is variegated white and black. M. Gunner thinks it to be a young bird of the first year; and Fabricius assures us, that the unfledged ones are wholly covered with a black down, and even the naked parts are black, except the tip of the bill, which alone is white. This is manifest from specimens in Mr. Bullock's Museum, where we may observe the young bird to be wholly black, after that much mixed with white, and in some approaching nearly to white; and finally black, with the white patch on the wing as first described.

M

# 5.—WHITE GUILLEMOT.

Uria lacteola, *Ind. Orn.* ii. 798. Colymbus lacteolus, *Gm. Lin.* i. 583. Cepphus lacteolus, *Pall. Spic.* v. p. 33. White Guillemot, *Gen. Syn.* vi. 335.

SIZE of the Black Guillemot. Bill and eyelids brownish flesh-colour; inside of the mouth white; irides brown; head and body as white as snow; back, wings, and base of the tail, pale grey, the rest of the last white, and somewhat pointed in shape; quills whitish, the shafts inclining to brown, the outer one longest; all the secondaries nearly equal in length; legs dusky flesh-colour, naked far above the knees; claws dusky.

Dr. Pallas mentions this bird as a nondescript, met with by him on the Coast of Holland; cast ashore, between the villages of Catwick and Scheveningen, in the winter, 1760.

A .- Colymbus novus, Naturf. xiii. 192. Gm. Lin. i. 584.

In this bird the upper parts are greyish white; breast and belly pure white; between the shoulders black; head and neck white; on the sides of the head a blackish spot; on the wing some mixture of blackish; second quills white at the tips; the bill is black, base beneath yellowish, and near the tip an obsolete tooth.

This bird is said to be of the size of the Teal, and met with on the River Rhine. It is probable, that both the last are Varieties of the Black Guillemot.





( ( Harbled Gullemot.

# 6.—MARBLED GUILLEMOT.—PL. CLXXI.

Uria marmorata, Ind. Orn. ii. 799. Marbled Guillemot, Gen. Syn. vi. 336. pl. 96. Arct. Zool. ii. No. 438. pl. 22.

THIS is larger than the Little Auk, and ten inches in length. The bill is black, somewhat compressed on the sides, slender, and one inch long; crown of the head dusky; upper part of the body transversely barred with tawny, chestnut, and blackish brown; tail short and black; wing coverts dusky, some of the larger edged with white; quills black; chin and throat dusky, blotched irregularly, or marbled with white; sides of the neck plain dusky; breast and belly barred, or marbled with dusky and white, changing to the last between the thighs, and on the vent; legs and toes pale orange; webs dusky; claws black. Male and female much alike.

Inhabits Prince William's Sound, on the west Coast of America; from whence the pair, formerly in the Leverian Museum, was brought. I also met with one in the possession of Sir Joseph Banks, brought from Kamtschatka, and another in the Museum of Mr. Bullock.

### GENUS CI.—DIVER.

1 Northern Diver 4 Red-throated 5 Speckled 6 Striped 2 Imber A Var. 3 Black-throated

BILL strong, straight, pointed; upper mandible the longest, edges of each bending inwards.

Nostrils linear.

Tongue long, and pointed, serrated on each side near the base. Legs compressed.

Toes four in number, the exterior the longest; the back one small, joined to the interior by a small membrane.

Tail short, consisting of twenty feathers.

### 1.—NORTHERN DIVER.

Colymbus glacialis, Ind. Orn. ii. 799. Lin. i. 221. Gm. Lin. i. 588. Muller, No. 155.
Frisch, t. 185. A. Fn. Groen. No. 62. Fn. Amer. No. 16. Ph. Tr. Ixii. 420.
22. Amer. Orn. ix. 84. pl. 74. 3. Shaw's Zool. pl. 1049. Tem. Man 597. Id.
Ed. 2d. p. 911.
Colymbus torquatus, Brun. No. 134.
Mergus major nævius, Bris. vi. 120. t. 11. f. 2.—adult. Id. 8vo. ii. 392.
marinus tessellatus, Robert. Ic. pl. 23.
Colymbus maximus caudatus, Raii, 125. A. 4. Will. 259. Klein, 141. 1.
stellatus, Sibb. Scot. ii. 20. t. 15. f. 1.
———— muticus, Great black and white Pied Diver, Bartr. Trav. 293.
Mergus major nævius, sive arcticus, Gerin. v. t. 507.
Der Imber, Bechst. Deutsch. iii. 780. Id. Ed. 2d. iv. 595.
Der Eistuucher, Schmid, Vog. p. 160. t. 137.
L'Imbrim, Buf. viii. 258. pl. 22. Pl. enl. 952. Ph. Trans. x. p. 460.*
Immer Goose of Zetland, Wern. Trans. iv. pt. i. p. 207.
Greatest Speckled Diver, or Loon, Albin, iii. pl. 93. Will. Engl. 341.

Northern Diver, Gen. Syn. vi. 337. Br. Zool. ii. 327. pl. 84. Id. fol. 139. pl. K. 2. Id. 1812. ii. 165. pl. 29. f. 2. Arct. Zool. ii. No. 439. Bew. ii. pl. p. 183. Lew. vi. pl. 226. Wale. pl. 90. Don. pl. 58. Pult. Dors. p. 17. Orn. Diet. & App. Frankl. Narr. App. p. 703. Graves, ii.

THIS Species is the largest of the Genus, sometimes weighing sixteen pounds, and three feet six inches in length, extent four feet eight.\* The bill four inches and a half long, and black; head and neck deep black, appearing like velvet; under the chin a patch of white, marked with several parallel lines of black; on each side of the neck a large portion of the same, elegantly marked with black lines, like the first, almost uniting at the back part; sides of the breast much the same, but the lines not so numerous; hind part of the neck, back, wing coverts, and scapulars, black, marked with round white spots, which grow larger as they are farther downwards; and on the scapulars, and part of the larger coverts, the spots are of a square form, placed in rows; quills and tail black; wings short, breast and belly white; legs black, and placed too far behind to be of use in walking.

The female is less, and the ring on the neck not so distinct. The young bird† does not soon gain the complete plumage, as it arrives to the full size without having it; hence we suspect, that the bird does not get to perfection till the second year, if not longer.

This Species inhabits several parts of the North of Europe, but is not very frequent on our shores, or ever to the southward, except in severe winters; for the most part seen on the open sea, where it is continually diving the for fish, which it does with great agility, and flies both high and well: is now and then seen on land, of which several instances may be mentioned; one taken alive among the

<sup>\*</sup> Col. Montagu thinks this weight and measure to be exaggerated, having never met with one weighing more than ten pounds, and an old male measured only two feet eight inches.

<sup>†</sup> Young birds are without any white spots. This rule seems to hold good in all the Genus.—Faun. Groenl.

<sup>#</sup> When pursued on the water, it escapes for the most part by diving.

heath, in Woolmer Forest, in Hampshire; this was two feet long, and forty-two inches in breadth, probably a young bird. Another sent to me from Teignmouth, in February; a third caught alive on the sands of Sandwich Bay; Dr. Heysham also mentioned another, taken alive near Keswick, in Cumberland, in July, 1781; and Mr. Willughby one, taken in the Island of Jersey: in addition to which, Colonel Montagu met with one near Penzance, in Cornwall, at some distance from the water, in the spring of 1797; this did not seem to have any defect, as it lived six weeks in a pond, being supplied with fish; but died, appearing to be starved from the want of a sufficient quantity.† Is found in the Ferroe Isles, ‡ also in Greenland, both in the open sea, and in fresh waters, frequenting the latter during the breeding season; § it lays two large brown eggs in June, and though it is not strictly migratory, changes places occasionally. Is sufficiently plentiful in Norway, and all along the Arctic Coasts, as far as the River Ob, in the Russian Dominions. The Barabinzians, a nation situated between that River and the Irtisch, tan the breasts of this and of other Water Fowl, and prepare the skins in such a manner, as to preserve the down; and sewing a number of them together, use them for pelisses, caps, &c.; these garments prove very warm, never imbibing moisture, and are more lasting than can be imagined. Is met with also among the Lakes of Hudson's Bay, where the Indians adorn their heads with circlets of the feathers; is known there by the name of Athinue-mogna: is rarely seen on the sea coasts, but chiefly among the lakes, and called Inland Loon.\*\* Captain Phipps met with it on the Coast of Spitzbergen.

<sup>\*</sup> Natur. Calend. p. 71. † A young bird of this Species was taken at Oxford, the middle of December, 1822.—Dr Williams. † Debes Ferr. Ins.

<sup>§</sup> Is generally a timorous bird; but having young, will defend them to the utmost, inflicting severe, and dangerous strokes with the bill.—Faun. Groenl.

<sup>|</sup> Russia, ii. 234. the downy side inwards. Id, iii. 21. ¶ Aret. Zool.

<sup>\*\*</sup> Mr. Hutchins. See Obser. on the Col. Immer, by Dr. Arthur, in the Wern. Trans. Vol. ii. pt. 1.

#### 2.-IMBER DIVER.

Colymbus Immer, Ind. Orn. ii. 800. Lin. i. 222. Gm. Lin. i. 588. Brun. No. 129. Muller, p. 29. Borowsk. iii. p. 60. Act. Nidr. i. 246. Fn. Helvet. Tem. Man. 598. Id. Ed. 2d. 912. Wern. Trans. ii. pt. 1. p. 232.

Mergus major, Bris. vi. 105. t. 10. f. 1. Id. Svo. ii. 389. Schæf. El. t. 48. Gerin. v. t. 505. 506.

Colymbus maximus Gesneri, Raii, 126. Will. 260. § HI. Klein, 150. 6.

Der Imber, Beclist. Deuts. ii. 780. young. Id. Ed. 2d. iv. p. 621?

Le grand Plongeon, Buf viii. 251.

Ember Goose, Sibb. Scot. 21. Wall. Ork. 16. Debes Ferr. 138. Pontop. Norw. ii. 80.
Imber Diver, Gen. Syn. vi. p. 340. Br. Zool. ii. No. 238. pl. 84. Id. 1812. ii. p. 167. pl. 29. f. 1. Will. Engl. p. 342. Arct. Zool. ii. 440. Bewick, ii. p. 185. Lewin, vi. pl. 227. Walc. pl. 99. Don. pl. 99. Pult. Dors. p. 17. Orn. Dict. & Supp.

THIS is generally less than the last, but varies exceedingly in size; the length mostly above two feet, but in some instances much beyond it. Irides brown; the bill is four inches and a half long, at least, and dusky brown; forehead and sides of the head and neck speckled with brown; the back and wings black brown, the feathers margined with paler brown: on the middle of the neck the brown comes very forward, and almost surrounds it; about this spotted black and white; except these markings, all beneath, from chin to vent, white, but mottled on the latter with brown, and between the thighs a band of black; quills and tail brown, feathers of the last edged with white; legs dusky. The female chiefly differs in being merely brown on the upper parts.

The Imber, by some called Cobble, as far as respects this kingdom, is scarce, only met with in severe seasons, and rarely in the southern parts; only one instance has occurred to me of its being shot on the Coasts of Kent; and I learn from Dr. Lamb that it was killed near Newbury, in January, 1795, on a piece of water, but was shot with great difficulty, as it dived so continually, as to preclude all true aim being taken. Is rarely seen to fly, but it certainly does so occasionally, though not to any distance.

SS DIVER.

Is found in the seas about the Orknies, and Ferroe Islands; also in Iceland, and most parts of Europe, likewise in Kamtschatka; but not in any part of Siberia, or Russia.

Inhabits Switzerland, particularly on the Lake Constance, where it is called Fluder; dives wonderfully well, rising at an amazing distance. Makes the nest among the reeds and flags, in the water, so that it is continually wet, in the manner of the Grebe; the eggs three in number, of a dark olive, spotted with black: has a loud shrill cry; not easily taken, either on the land or water, but has been caught under the water, by a hook, baited with a small fish.\*

A.—Der unbekannte Taucher, Bechst. Deuts. ii. 782? Lesser Imber, Bewick, ii. pl. p. 187. Orn. Dict. Supp.

Length two feet one inch, breadth three feet two inches; weight three pounds eight ounces. Bill black, and horn-colour, tinged with blue; nostrils very near the base; tongue pointed; irides brown; crown and back of the neck, mouse-colour; scapulars, back, rump, tail, and wings, black, edged with grey; quills black; tail very short, rounded; under side of the body silvery white, except a brown bar, crossing the vent; inner coverts of the wings white; legs black and grey, tinged with blue; webs flesh-colour. This was shot on Windermere Lake, in Westmoreland, in December, 1794; and is probably the Imber, in imperfect plumage.

M. Temminck is of opinion, that the Imber itself is merely an incomplete Northern Diver; which, it is said, does not get the complete dress till the third year; yet we think it not unlikely, that it may breed before it arrives at full maturity of plumage, as some birds are known to do, and hence may have arisen the supposition of being distinct species.

<sup>\*</sup> Sometimes taken twenty yards deep under water, viz. with a net or iron hook, baited with a fish; are commonly sold for two drachms and a half of silver, a piece.—Willughby.

# 3.—BLACK-THROATED DIVER.

Colymbus arcticus, Ind. Orn. ii. 800. Lin. i. 221. Fn. suec. No. 150. Gm. Lin. i. 587. It. Goth. 341. Brun. No. 133. Muller, No. 154. Besl. Mus. 31. t. 17. Raii, 125. 7. Will. 259. t. 62. Frisch, Sup. p. 185. A. Act. Nidr. i. 140. t. 2. f. 1. Jacq. Vog. 22. t. 7. Borowsk. iii. p. 59. 4. Fn. Helv. Bartr. Tr. p. 293. Amæn. ac. iv. 587. Tem. Man. 600. Id. Ed. 2d. 914.

Mergus gutture nigro, Bris. vi. 115. Id. Svo. ii. 391.

Grand Plongeon, Pl. enl. 914.—young bird.

Mergus arcticus, Klein, 141, 2. Id. Ov. 35. t. 21. f. 1.

Der Schwarzkehlige Taucher, Bechst. Deuts. iii 775. Id. Ed. 2d. 914.

Polarente, Naturf. xiii. 140.

Lumme, Buf. viii. 262. Worm. Mus. 304. t. Q. Q. Mus. Haff. i. t. 1. No. 2.

Wormius's Doucher, called Lumme, Will. Engl. 343. § 111. p. 62. 2.

Black-throated Diver, Gen. Syn. vi. 343. Br. Zool. ii. No. 241. pl. 85. f. 2. Id. 1812. ii. 170. pl. 30. f. 2. Arct. Zool. ii. No. 444. Edw. pl. 146. Bewick, ii. p. 195. Lewin, vi. pl. 229. Orn, Dict.

THIS is about two feet in length. The bill nearly three inches, slender, and black; hind part of the head and neck ash-colour; sides of the last white, spotted with black; on the fore part of the neck a large black patch, five inches long, changing to purple and green, in different lights; back and upper parts black; scapulars marked with square spots of white; wing coverts the same, but with round spots; breast and belly white; quills dusky; tail short, black; legs black, with a tinge of red on the inside.

This bird is now and then found in England, in hard winters, but is not common; is more plentiful in Austria, and other parts of Germany; more frequent in Norway, Sweden, and Denmark; and in the inland Lakes of Siberia; especially those of the Arctic Regions; also in Iceland, Greenland, and the Ferroe Isles; said to make a great noise against rain; hence the Norwegians think it impious to destroy this species; but the Swedes, less superstitious, dress the skins, which like all of the Genus, are exceedingly tough, so as to be used for gun-cases, and facings for winter caps; is seen about the Caspian Sea, in March.

It is found also in America. Mr. Edwards received it from Hudson's Bay, where it is called Moqua. The egg, according to Klein, is white, marked with four or five dusky specks. Mr. Ekmarck\* observes, that it is every where known in the northern Lakes of Sweden; leaving them in autumn for the neighbouring Provinces of Germany, but scarcely going farther.

### 4.—RED-THROATED DIVER.

Colymbus septentrionalis, Ind. Orn. ii. 801. Lin. i. 220. Borowsk. iii. p. 58. 3. Fn. groenl. No. 61. Lin. Trans. xii. p. 542. Frankl. Narr. App. p. 703.

Colymbus Lumme, Brun. p. 39. No. 132. Muller, No. 153.

Mergus gutture rubro, Bris. vi. 111. t. 11. f. 1. Id. 8vo. ii. 390. Klein, 142. 3. Tem. Man. 603. Id. Ed. 2d. p. 917. Parr. App. p. ccix.

Rothhalsiger Taucher, Sch. d. Berl. Nat. vii. 459. Besek. Kurl. 53. No. 53. No. 100. Beckst. Deuts. iv. 609.

Plongeon à gorge rouge, Buf. viii. 264. Pl. enl. 308.

Red-throated Diver, Gen. Syn. v. 344. Br. Zool. ii. No. 240. pl. 85. 1. Id fol. 140. Id. Ed. 1812. ii. 169. pl. 30. f. 1. Arct. Zool. ii. No. 443. Edw. pl. 97. Bew. ii. pl. p. 193. Lewin, vi. pl. 230. Walc. i. pl. 100. Don. pl. 78. Pult. Dors. p. 17. Orn. Dict. & Supp.

LENGTH two feet five inches; weight three pounds. Bill three inches long, black, and slender; the head and chin cinereous, dotted with brown; the rest of the head, sides of the neck, and throat ash-colour; hind part of the neck longitudinally streaked with dusky and white; the throat and part of the neck fine chestnut red; from thence the under parts are white; upper parts of the body, wings, and tail dusky, the two first marked with a few white spots; the tail plain; thighs streaked dusky and white; legs dusky, tinged with red in some lights.

This, like the former, is not met with southward, except in severe winters; breeds in the northern parts of Scotland, on the borders of

<sup>\*</sup> Amæn. ac.

the lakes: found in Russia, Siberia, and Kamtschatka,\* but does not haunt the inland lakes; common in Iceland and Greenland, breeds in the last in June,† laying two ash-coloured eggs, the size of those of the Hen, but more elongated, marked with scattered black spots; observed to breed in separate pairs, no two nests being found at a moderate distance of each other, or in the same lake; the nest made on the shore, of moss and grass, near the water; it swims and dives well, and flies admirably, when it is very noisy, especially in cloudy weather; more often met with on fresh waters than those of the sea; feeds on small fish, crabs, and sea insects; and the skin is put to the same uses as that of the Black-throated Species.

Inhabits America; found at Hudson's Bay in the summer, appearing as soon as the rivers are open; lays there in June, and lines the nest with down from the breast; the young fly before the end of August; depart in September. They are called by the natives Assee-moqua. They prey much on the fish entangled in the nets; but are often thereby caught themselves.;

#### 5.—SPECKLED DIVER.

Colymbus stellatus, Ind. Orn. ii. 800. Gm. Lin. i. 587. Brun. No. 130. Muller, No. 159.

Colymbus cristatus stellatus, Naturf. xxi. 9.

Mergus minor, Bris. vi. 108. t. 10. f. 2. Id. Svo. ii. 389. Fn. Helv.

Plotus claudicans, Scop. i. No. 93. Klein, Stem. t. 37. f. 2. a. b.

Colymbus caudatus stellatus, N. C. Petr. iv. p. 424. Will. t. 62.

Der gesprenkelte Tancher, Bechst. Deuts. ii. 778.

Le petit Plongeon, Buf. viii. 254. pl. 21. Pl. enl. 992.

- \* Hist. Kamtsch. translated by Dr. Greive, p. 161. The spot on the fore part of the neck is here called clay-colour.
- † Said to breed also on the more unfrequented lakes of Zetland.—Orn. Dict. Supp. Mr. Bullock found a nest with two eggs, in the Isle of Hoy.
- ‡ Fourteen have been taken out of a single net at one tide.—Mr. Hutchins. Other species are also taken in the same manner.

Speckled Diver, or Loon, Gcn. Syn. vi. 341. Br. Zool. ii. No. 239. Id. fol. 139.
pl. K.\* Id. 1812. ii. 168. Albin, i. pl. 82. Arct. Zool. ii. No. 441. Bewick, ii. pl. p. 189. Lew. vi. pl. 228. Walc. i. pl. 101. Pult. Dors. p. 17. Orn. Dict.

SMALLER than the last. The bill three inches long, and tends a trifle upwards, pale horn-colour, upper ridge dusky; irides fine red brown; the head dusky, dotted with grey; neck behind plain dusky; sides under the eye, the chin, and throat, white; fore part of the neck pale ash; back dusky, with oval spots of white; sides of the breast and body the same, but the spots smaller, those on the rump and tail minute; breast and under parts white; quills dusky; tail of twenty feathers; legs brown; webs and claws pale.

This bird varies in size; one brought to me in Kent, weighed three pounds six ounces, and every way large in proportion; irides fine red brown; across the vent, between the legs, a bar of black; the tail consists of twenty feathers, dark ash-colour, tipped with white; each feather, from the lower part of the neck behind, quite to the rump, marked near the end, with two white dots, placed obliquely; the rump itself plain.

This bird is pretty frequent in England; common on the River Thames, and called by the fishermen, Sprat-Loon; and in the lower part of Kent, Cobble, and Sprat-Barrow; being often seen in vast numbers among the shoals of that fish, diving after them, and frequently approaching very near to the boats, while fishing; is not seen here in the warmer months, as it retires then towards the north to breed; said to lay generally two dusky brown eggs, in the grass, about the size of those of the Goose, and marked with some spots of black; it breeds, among others, between Loch Lomond and Caithness, makes a great noise before storms, and called Fur-bhuachaille.\*

It is common about the Baltic and White Seas, but not observed in other parts of Russia, yet is a native of Kamtschatka. They are frequent about fish ponds, in France; and we have twice had them brought to us, shot at some distance from any large river; once in January, and another time in February.

<sup>\*</sup> Tour in Scotland, p. 107.

Inhabits North America; seen at New York in the winter, departing northward in the spring to breed. The circumstance of the Puffin being able to make its way under water, with a rapidity not easily to be imagined, has been already mentioned; and we are informed by Col. Montagn, that the same thing occurs in respect to the Speckled Diver, which he had an opportunity of noticing; and proved, that by walking and running in a straight line by the side of a canal, the bird proceeded by swimming on the surface, at the rate of four miles and a half in an hour, and under the surface between six and seven.\*

#### 6.—STRIPED DIVER.

Colymbus striatus, Ind. Orn. ii. 802. Gm. Lin. i. 586. Striped Diver, Gen. Syn. vi. 345. Arct. Zool. ii. No. 442.

WEIGHT from two to three pounds. Bill three inches long, black; head and neck light grey, striped longitudinally with narrow black lines; back and scapulars plain dusky; primaries, tail, and legs the same; cheeks, and all beneath the body, dusky white.

Inhabits the inland lakes of Hudson's Bay, about 100 miles south of York Fort; lays two eggs in June; flies high, and during flight makes a great noise, which is thought to portend rain; is detested by the natives, who think this cry to be supernatural;† called at Hudson's Bay, Mathe moqua.‡

M. Temminck, in his Manuel, considers the Speckled Diver to be a bird of the first, and the Striped One of the second year, and both incompletely plumaged individuals of the Red-throated Species. Mr. Edmondston is disposed to consider the Black-throated and Red-throated Divers as one and the same, and that the Speckled One is the young of the latter: hence he would infer, that the whole of the above described constitute only two Species—the Colymbus

<sup>\*</sup> Orn. Dict. Supp.

Glacialis, and Septentrionalis: be it so or not, we have thought right to detail the descriptions of authors, to point out to the reader the variety of dresses in which these birds appear in their progress to perfection.

#### 7.—NEWCASTLE DIVER.

Second Speckled Diver, Bewick, ii. pl. p. 191.

THE length of this bird is two feet four inches; weight full three pounds;† extent of wing three feet four inches. The bill to the gape more than three inches, colour purplish white; irides brown; head and neck behind, hoary, dark ash-colour; but on a nearer view the feathers of the crown and brow are dark in the middle, edged with light grey; from the nape larger, and the grey edges less defined; cheeks and throat white; freckled with numerous, brownish, ash-coloured spots, but on the fore part of the neck inclining more to brown; upper parts of the body black brown; greater coverts and quills marked with oblong, oval, white spots; under parts of the body white; tail brown.—A pair of these were shot on the Tyne, at Newcastle, in January.

#### 8.—BOREAL DIVER.

Colymbus borealis, Ind. Orn. ii. 801. Brun. No. 131.

THE general colour of this bird is dusky above, marked with numerous white spots; the under parts white; fore part of the neck sparingly marked with rufous.

This was killed near Copenhagen, but is probably not a distinct species; and is most likely, as well as the last described, belonging to the Red-throated Species.

<sup>\*</sup> Wern, Trans. V. iv. pt. 1. p. 212.

<sup>†</sup> One of them weighed only two pounds and a half.

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### 9.—CHINESE DIVER.—PL. CLXXII.

Colymbus Sinensis, Ind. Orn. ii. 802. Gm. Lin. i. 586. Chinese Diver, Gen. Syn. vi. 345. pl. 97.

SIZE uncertain. Bill dusky; irides ash-colour; upper parts of the head, neck, body, wings, and tail dusky greenish brown; the middle of the feathers much darker; fore part of the neck the same, but paler; chin pale rufous; the breast and under parts pale rufous white, marked with dusky rufous spots; quills and tail plain brown, the last short; legs ash-colour.

Supposed to inhabit China, as I saw it among some other well painted drawings at Sir J. Banks's; it was in the attitude of fishing, with a brass ring round the neck like the annexed figure.

From the various and uncertain accounts of authors, we are not clear how many birds the Chinese use for catching fish: the custom, however, of doing so, is manifest, from the relations of many travellers: when used for this purpose it has a ring fastened round the neck, to prevent its swallowing, and to this a slender, long string is fastened; and, thus accourted, is taken by its master into his fishing boat, from the edge of which it is taught to plunge after the fish, as they swim by; and as the ring prevents their passing further downwards, they are taken from the mouth of the bird as fast as they are caught; in this manner, sometimes, a great many are procured in a few hours: when the keeper of the bird has taken a sufficient quantity for himself, the ring is removed, and the poor slave suffered to satisfy its own hunger.\*

We do not assert that this bird is the one most commonly used for the above purpose, but have thought proper to figure it, as a species, if not new, at least as not generally known; and probably, from the circumstance of its situation in the drawing, may prove one of the birds employed on this occasion.

<sup>\*</sup> See an account of this method of fishing in Du Halde's History of China. Osbeck's Voy. ii. p. 35. Salmon. Mod. Hist, i. p. 18. Will. Orn. p. 329. and many other authors. For a further account, see Article Corvorant.

### GENUS CH.—SKIMMER.

Black Skimmer

- 11

A Var.

THE bill in this Genus is greatly compressed, the lower mandible much longer than the upper, and truncated at the end.

Nostrils linear, near the edge, pervious.

Feet with four toes, palmated, slender, the hind toe very small. Tail forked.

### BLACK SKIMMER. -PL. CLXXIII.

Rhynchops nigra, Ind. Orn. ii. 802. Lin. i. 228. Gm. Lin. i. 611. Borowsk. iii. 26. t. 36. Bartr. Tr. 293. Nat. Misc. pl. 325.

Rygchopsalia, Bris. vi. 223. t. 21, 2. Id. Svo. ii. 421. Gerin. v. t. 548.

Avis Maderaspatana major Novaculæ facie, Raii, 194, 5. t. 1. f. 5.

- Carolinensis rostro cultriformi, Pctiv. Gaz. t. 76. f. 2.—the bill. Edw. pl. 281.

Plotus rostro conico inæquali, Klein, Av. 142. 2.

Le Bec en Ciseaux, Buf. viii. 454. pl. 36. Pl. enl. 357.

Coupeur d'Eau, Descr. Surin. ii. 291. Voy. d'Azara, iv. No. 408.

Bec de hache, ou Pied ronge, Hist. Louis. ii. 117.

Der Schecrenschnabel, Schmid, Vog. p. 138. t. 121.

Cutwater, Catesb. Car. i. pl. 90.

Black Skimmer, Gen. Syn. vi. 347. pl. in frontisp. Arct. Zool. ii. No. 445. View of Hindoost. ii. p. 42. Amer. Orn. vii. 85. pl. 60. f. 4.

SIZE of the Black Guillemot; length eighteen inches, breadth three feet. The bill is of a singular structure, the upper mandible being above an inch shorter than the under, which is four inches and a half long; both are greatly compressed on the sides, and both sharp on the edges, but the upper is bifid beneath, so as to admit of the under one entering the shallow groove, like a razor shutting into its handle; the base of the bill is red, the rest black, and on the sides are several furrows; the forehead, chiu, and all the under parts are white; the rest of the head, and upper parts of the body and wings dusky black; across the latter a bar of white; the tail forked,

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two middle feathers black; the next on each side the same, margined outwardly with white; the four outer white, dashed with dusky down the shafts, but least so on the outmost feathers; legs weak, red, claws crooked, black; the greater quills exceed the secondaries by eight inches at least; and the wings, when at rest, are longer than the tail by three inches.

Both sexes are nearly alike; but some birds are brown instead of black, and the white less pure. These are probably young.

This singular bird inhabits America, from New York to Guiana, Cayenne, and Surinam; and extends to Paraguay, Buenos Ayres, and Brazil. The Guaranis call it Hati-guazu, from its having a forked tail, like Hatis or Tern; the Spaniards Rayador, Breaker, or Cutter, from its dividing or cutting the water with the bill; known in Guiana by the name of Taya-Taya; and at New York, Skippog; and by some the Razor-bill. It flies generally close to the surface of the water, with the under mandible in the water, and the gape wide open, so that on meeting with any prey the mouth is immediately closed; the food supposed to be small fish principally, and it is rarely seen otherwise than on the wing, though in stormy weather it is said to seek the shores: mostly found single, or in pairs, except in breeding time; it can swim well, but walks ungracefully.

They breed along the shores of Cape May, in New Jersey, and form themselves, early in June, into small societies, 15 or 20 pairs, frequently breeding within a few yards of each other; the nest a mere hollow in the sand; the female lays three eggs, nearly oval, of a clear white, with large, round, brownish black spots, and others like pale Indian ink; half a bushel, or more, has sometimes been collected from one sand bar, within the compass of half an acre. They have somewhat of a fishy taste, but are eaten by many people; the voice is harsh and screaming, resembling that of a Tern, but

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<sup>\*</sup> The report of these birds frequenting the oyster beds, and feeding on them, is said to be without foundation.

stronger. After the young are able to leave the country, the Skimmers take their departure.

It is not uncommon in the East Indies, both on the Malabar Coast, and that of Coromandel; called at Madras, Coddal Cauka, or Summoodra Cauky: we learn this from various Indian drawings. It is also found on the African Coast; a specimen, in the collection of Mr. H. Brogden, having been brought from Senegal; but I observe in this, that the bill is wholly orange, except towards the end, which is horn-coloured.

A.—Rhynchops fulva, *Ind. Orn.* ii. 803. *Lin.* i. 229. *Gm. Lin.* i. 611. *Bor.* iii. 262. Rygchopsalia fulva, *Bris.* vi. 227. A. *Id.* 8vo. ii. 422. *Gen. Syn.* vi. 348. A.

This differs from the other, in having those parts of a fulvous colour which in that are black brown; otherwise it entirely agrees.

Inhabits Guiana, and is probably a mere Variety.

### GENUS CHI.—TERN.

29 Minute 14 Egyptian 1 Caspian Tern 30 Black 15 Mustachoe A Var. 16 Simple 31 Kamtscatchan B Var. 17 Marsh 32 Black-headed C Var. 33 Cinereous 18 Gull-billed 2 Crested A Var. 34 Surinam 3 Sooty 35 Chinese 4 New-Holland 19 Roseate 20 Common 36 Javan 5 Tehary 21 Arctic 37 Black-naped 6 Brown-bellied 22 Wreathed 38 Hoary 7 Noddy A Var. 39 Southern 8 Philippine 9 Sandwich 23 Crimson-billed 40 White-winged A Var. 24 Black-eyed 41 Cayenne 42 Dove-coloured 25 Waved B Var. 26 Sumatran 43 Georgian 10 African 11 White-browed 27 Grey 44 Brown 12 Striated 28 Panayan 45 Dusky A Var. 46 Short-tailed 13 White

BIRDS of this Genus have a straight, slender, and pointed bill.

Tongue slender, sharp.

Wings long. Tail forked.

Feet webbed, weak, back toe small.

# 1.—CASPIAN TERN.

Sterna Caspia, Ind. Orn. ii. 803. Gm. Lin. i. 603. N. C. Petr. xiv. 582. t. 22. Act. Holm. 1782. iii. 221. Fn. suec. Retz. p. 126.

Sterna Tschegrava, N. C. Petr. xiv. 500. t. 13. 2. Sonn. Buf. xxiv. p. 117.

Sterna maggiore, Gerin. v. 540.

Larus atricilla, N. C. Petr. xv. 478. t. 22. f. 2.

Caspische Meerschwalbe, Bechst. Deuts. ii. 825. Id. Ed. 2d. iv. 675.

Caspian Tern, Gen. Syn. vi. p. 350. Arct. Zool. ii. 526. B. Id. Sup. p. 70. Phil. Voy. 160. pl. p. 77.

LENGTH twenty-two inches; breadth three feet or more. Bill crimson; irides dusky; forehead, crown, hindhead, and round the

eyes deep black, here and there dotted with white; on the lower eyelid a small whitish crescent; the hind part of the neck and all the upper parts of the body are hoary; fore part and sides of the neck, all beneath the body, the rump, and tail pure white, the last forked; the first six quills deep ash-colour, the margins and tips blackish; the others like the back; legs black. Pallas's bird had the bastard wing marked with sagittal black spots; legs reddish brown.—This is very frequent in the Caspian Sea, and neighbouring parts, about the mouth of the Jaick; wandering at times up the great River Ob, even towards the Frozen Ocean; frequents also the rivers, fishing much in the same manner as the Black-headed Gull; sometimes seen suspended in the air, and then all at once darting into the water after a fish; at others skimming the surface, like a Swallow. Mixes with the Gulls on the rocks; lays two pretty large eggs, spotted with brown; the note like a person laughing. The Russians call it Tschegrava.

A .- Gen. Syn. vi. 351. Var. A. Ind. Orn. ii. 804, 1. B.

This is a trifle smaller. Bill stout, three inches and a half long, and deep red; top of the head and sides, taking in the eyes, black, spotted with white; the rest of the head, neck, and under parts, white; back hoary; quills pale grey, with white shafts; on the scapulars a few dusky spots; tail short, forked, crossed with a few dusky bars, near the end; the wings exceed it in length by three inches; legs black.—Inhabits Bombay, and called Talla; is found also in New-Holland.

A .- Sterna Caspica Var. Mus. Carls. fasc. iii. No. 62. Ind. Orn. ii 804.

In this the bill is crimson; the plumage chiefly differs in having the crown of the head plain black; back and wing coverts inclining to lead-colour, hoary, or silvery white; the quills reach much beyond the end of the tail.

Found frequently on the sea shores of Sodermanland; called by the Swedes, Skränmase. In the Carlsonian Museum is a Variety, with a white bill; crown of the head mixed black and white; the region of the ears black; the back and wings are cinereous; tips of the prime quills black. This probably is a young bird, but whether of the Caspian or Cayenne Species does not seem quite clear.

C.—Bill orange; crown black; the plumage much as in the last described; the outer tail feather reaches three inches, or more, beyond the adjoining one, but the others are moderately forked; the outmostas far as it exceeds the other pure white; legs red.

This is found in India, about Lucknow. In the drawings of Lord Mountnorris is a further Variety, with the crown mottled white and ash-colour, and a dusky mark about the ear.

#### 2.—CRESTED TERN.

Caspian Tern, Phill. Voy. 160. pl. p. 177. Gen. Syn. vi. 351. 1. Var. B.

LENGTH nineteen or twenty inches. Bill three, stout, pale yellow; nostrils pervious; the crown of the head black, the feathers longish, forming a kind of pensile crest at the nape; the rest of the head, neck, and under parts of the body white; back and wings pale cinereous grey; quills grey, with the ends dusky; inner webs, half way from the base, white; tail grey, forked, the end half of the feathers white; the shafts of the quills and tail white, the last shortest by an inch; legs black. The supposed female has the crown somewhat mottled with grey, and the wings darker coloured.

Inhabits China: we have seen one, greatly resembling, from the Friendly Isles, in the South Seas; it is also found at Hapaee, one of the Sandwich Islands; it appears to be not unfrequent in New-Holland, and there called Gerra-gerra. Is probably allied to the Caspian Tern.

#### 3.—SOOTY TERN.—PL. CLXXIV.

Sterna fuliginosa, Ind. Orn. ii. 804. Gm. Lin. i. 605.

Hirondelle de Mer à grand envergure, Buf. viii. 345. Am. Orn. viii. 145. pl. 72. f. 7.

Egg Bird, Forst. Voy. i. 115. Cook's Voy. i. 66. 275.

Noddy, Damp. Voy. iii. pt. i. p. 142. pl. p. 123. f. 5. Hawkesw. Voy. iii. 652.

Sooty Tern, Gen. Syn. vi. 352. Arct. Zool. ii. No. 447.

SIZE of the Noddy; length sixteen inches. Bill two inches and a half, black; the forehead white, passing on each side to the upper part of the eye, and ending in a point; through the eye a streak of black, passing to the hindhead; the crown, neck behind, and all the upper parts, wings, and tail black; the under, from the chin, white, passing a little backward at the lower part of the neck; the under wing coverts and inner ridge of the wing white; quills dark greyish black; tail forked; outer web of the exterior feather white, except just at the tip; the shafts of both quills and tail are white beneath; legs black. Both sexes are nearly alike.

This species has been met with in various parts, by our voyagers. In the Island of Ascension are seen in prodigious numbers, so as to darken the air. Dampier observed them near the Coast of New-Holland, and in great plenty off the Roca Islands, near Tortuga,\* where he has found the nests; and between New South Wales and New Guinea one of them settled on the rigging of a ship:† it also sometimes strays farther south, having been seen in latitude 48.38.‡ Most sailors agree, that this, and others of the Noddy Tribe, seldom go above 70 or 80 leagues from land; but Captain Cook says, this is not always to be relied on. The specimen in my collection came from Christmas Island, where it is gregarious; it lays a single egg on the bare ground, in the month of December, making no nest.

It is also found in North America: Sir Ashton Lever received it from New York, from whence General Davies also had a specimen. I have likewise seen a third from Cayenne.

<sup>\*</sup> Damp. Voy. iii. pt. 1. p. 143. Vol. i. p. 53. † Hawkesw. Voy. iii. 652.

<sup>#</sup> Forst. Voy. i. 113. Cook's Voy. i. p. 66.





### 4.—NEW-HOLLAND TERN.

LENGTH fourteen or fifteen inches. Bill one inch and a half, black, curved at the tip; irides blue; tongue longish, and pointed; top of the head and behind the neck brown; back the same, but darker, and mottled; forehead and all beneath white; quills brown, reaching much beyond the end of the tail; legs brown, bare greatly above the knee.—Inhabits New-Holland. Mr. Lambert.

### 5.—TEHARY TERN.

SIZE uncertain.\* Bill stout and black; irides dusky; head, neck, and under parts, white; from the middle of the crown to the nape black; back, wings, and tail, pale cinereous blue, the last moderately forked, the wings exceed it by about two inches; legs deep, dull red, the webs between the toes reach about half way.

Inhabits India, in some parts called Kohurry, or Gohurry.

In General Hardwicke's drawings is one, probably differing in sex. The bill black; forehead white, the rest of the crown tinged with blue; with dusky streaks before, and dusky black behind the eye; communicating with the nape and neck adjoining, which are of the same colour; under parts from the chin white; wings and tail fine pale grey; the second quills marked with brown at the ends and middle; back greyish ash-colour, marked with large spots of dusky, pointed at the back part; tail moderately forked; the quills exceed it by three inches; legs dusky red; the toes webbed only one-third from the base.

Inhabits India, known by the name of Peteysee Tehary.

#### 6.—BROWN-BELLIED TERN.

LENGTH nearly twelve inches. Bill two inches, fine orange, near the base red; crown, even with the eye, black; back and wings

<sup>\*</sup> In the Drawing, nine inches.

brownish, or bluish lead-colour; quills dusky; forehead, jaws, chin, and throat, white; from thence to the vent fine chocolate brown; thighs the same, but the lower half to near the joint is white; rump dusky; upper tail coverts chocolate, and end in a point, reaching to three-fourths of the length of the tail, which is white, and forked; the quills somewhat exceed it in length; legs red.

Inhabits India, called in the Province of Oude, Bugheeah. From the drawings of Lord Monntnorris, and General Hardwicke. Said to be found at Cawnpore, in May and June. In one drawing the under parts are dusky black, not chocolate brown; the black on the crown spotted with white; and the quills exceed the length of the tail by more than one inch.

The female has the crown purplish brown, with a darker mixture, and the markings in general are much the same; but the belly is not black, and the upper parts of the body, wings, and tail, are pale ash-colour.

# 7.-NODDY TERN.

Sterna stolida, Ind. Orn. ii. 805. Lin. i. 227. Aman. ac. iv. 420. Gm. Lin. i. 605. Borowsk iii. 51. t. 42. Bartr. Tr. 293. Spalowsk. iii. t. 25.

Passer stultus, Raii, 154. Will. 297. Id. Engl. 385.

Gavia fusca, Bris. vi. 199. 15. t. 18. f. 2. Id. 8vo. ii. 414. Klein, 139. 15.

Le Fou, Hist. de la Louis. ii. 119.

La Mouette brune, Pl. enl. 997.

Noddy, Gen. Syn. vi. 354. Arct. Zool. ii. No. 446. Buf. viii. 461. pl. 37. Sloan. Jam. i. p. 31. pl. 6. f. 2. Brown, Jam. 481. Cat. Car. i. pl. 88. Damp. iii. pt. 1, pl. p. 123. f. 6.

LENGTH fifteen inches; weight four ounces. Bill two inches, slender, and black; the whole plumage sooty brown, except the top of the head, which is white, changing at the hind part to ash-colour; quills and tail darker than the rest; legs black.

This bird is seen very frequently at sea; but chiefly within the Tropics, and frequently flies on board the ships, so as to be easily taken; but, though seemingly thus stupid, will often bite severely

with the bill, and scratch with the claws, so as to make it unsafe to be held by an unguarded hand. When flying about in flocks they are very noisy, but particularly in breeding time: they lay the eggs in vast numbers on certain small rocky Isles, near St. Helena, and the eggs are thought good; some voyagers affirm, that the sight of this bird at sea, as well as of other Terus, shews the vicinity of land; but this does not always prove the case. From their stupidity, they are called by the sailors, Noddies. At Otaheite, known by the name of Oiyo. They breed also in the Bahama Islands, laying the eggs on the bare rocks; and on the Roca Islands, and various parts of the Coasts of Brazil, and Cayenne, they likewise breed in abundance; and at that season are seen in great flights, near the surface of the water, continually dropping on the small fish, which are driven to the top, to shun the persecution of the greater. Have a variety of notes, and the whole air resounds with their noise: when the time of incubation is past, they disperse over the ocean.

# 8.—PHILIPPINE TERN.

Sterna Philippina, Ind. Orn. ii. 805. Le petit Fouquet des Philippines, Son. Voy. 125. pl. 85. Philippine Tern, Gen. Syn. Sup. 267.

THIS is double the size of the Common Tern. The bill bent, black, and pointed at the end; the upper part of the head even with the eye, white; at the base of the bill a narrow stripe of black, which surrounds the eye, and finishes in a point; neck, breast, and belly, vinaceous grey; above the same, but deeper; quills, tail, and legs, black.—Inhabits the Philippine Islands; is often found at a great distance from land.

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### 9.—SANDWICH TERN.

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Sterna Boysii, Ind. Orn. ii. 806.

— Cantiaca, Gm. Lin. i. 606. Lin. Trans. xiii. 329.

— media, rostro, pedibus, et occipite nigro, Gerin. v. t. 545.

— Cantiaca, Hirondelle de Mer, Caugek, Tem. Man. 479. Id. Ed. 2d. 735.

— Petto bianca dicta, Gerin. v. t. 546.

Greater Sea Swallow, Albin, ii. pl. 88.

Sandwich Tern, Gen. Syn. vi. p. 356. Id. Sup. p. 266. Boy's Sandwich, ii. pl. p. 851.

Lewin, vi. pl. 203. Id. xxxviii. f. 2. the egg. Bewick, ii. pl. p. 204. Walcot, i. pl. 120. Donov. t. 120. Br. Zool. 1812. ii. p. 200. Orn. Dict. & Supp.
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LENGTH eighteen inches; extent of wing thirty-three inches; weight thirteen ounces. Bill two inches long, black, with the tip yellowish horn-colour; tongue half the length of the bill; irides hazel; forehead, crown, hindhead, and sides above the eye, black; the feathers of the nape elongated; the rest of the head, neck, under parts of the body, and tail white; back and wings hoary lead-colour; the first five quills hoary black; the inner webs deeply margined with white; the sixth like the others, but much paler; the rest of the quills like the back; tail forked; the exterior feathers six inches and a quarter long, striped with cinereous on the outer web; the wings reach rather beyond it; legs and claws black; under part of the feet red; the fore part of the neck and breast, in some, delicately and faintly blushed with red.

In those approaching to the adult state, the top of the head is dotted with white. In young birds, of immature feather, the upper parts are much clouded with brown, and the whole top of the head greatly mixed with white; but this is not peculiar, as the young of some other Terns, with black heads, are so marked.

This species is pretty common on the Coasts of Kent during the summer months, appearing first about Romney, the middle of April, and departing the beginning of September; it has a shorter scream

than the Common Tern, though more like it than the note of any other: are said to lay among the rocks in June, and to hatch the eggs before the middle of July, as I have received birds, supposed to be the young of this species, from Mr. Boys, the end of August. About the same time a young specimen, with very nearly the same markings, was killed by Dr. Leith, on the banks of the Thames, near Greenwich. Mr. Pennant mentions one having been shot near Shrewsbury; and we have been informed, that it is not uncommon on the Coast of Suffolk\* in summer, and there associates with the Common Tern. Mr. Bewick says, it frequents the Coast of Northumberland, a pair having been shot on the Fern Islands. An egg sent to me by Mr. Lewin, was larger than that of the Common Tern, olive brown, with purplish blotches. A bird very similar, with the bill and legs dusky red, is found at Sumatra, and called Samarlaut.

A.—Sterna nubilosa, Mus. Carls. tab. 63. Ind. Orn. ii. 806.

Bill black, slender, elongated; forehead, and all beneath, from chin to vent, white; the crown and hindhead varied with black and whitish; nape partly black, partly pale brown; the back, and wing coverts dusky; prime quills black, beneath brown; the shafts black above, and white beneath; the outer one sooty brown, inner margin whitish, but the shaft white above and beneath; tail forked, dusky, beneath brown; the four middle feathers equal in length; legs black.

Inhabits Finland: this has every appearance of a young bird, probably may be the Sandwich Tern; but no size is mentioned, or any further guide, to enable us to judge more about it.

B.—Die Stubbersche Meerschwalbe, Beckst. Deuts. ii. 828.

Smaller than the Caspian Tern. Top of the head black; forehead and a streak over the eye white; back and wing coverts ash grey; under parts of the body white.

M. Bechstein, who describes this says, it inhabits the Island Stubber, and breeds there, laying three white eggs in the sand, with brown and black spots, of the size of a pea.

#### 10.—AFRICAN, TERN.

Sterna Africana, Ind. Orn. ii. 805. Gm. Lin. i. 605. Tem. Man. Ed. 2d. p. 737. African Tern, Gen. Syn. vi. 354.

SIZE of the Sandwich Tern; length sixteen inches. Bill black; plumage in general white; top of the head mottled with black; wings pale bluish white, inclining to lead-colour, and spotted with brown; quills pale blue grey, margined with white, except the ends of the outer ones; the wings exceed the tail in length, the latter forked, the end dusky, mottled with black; legs black.

Inhabits Africa.—Described from a specimen in the British Museum; it seems to have many markings in common with the Sandwich Species: is probably a young bird.

#### 11.—WHITE-BROWED TERN.

Le Hatis à Sourcil blanc, Voy. d'Azara, iv. No. 415.

LLNGTH eight inches. Over the eye a broad band of white, and a second of black and white beneath, surrounding the eye; sides of the head, and all the under parts, white; top of the head marbled black and white; hindhead black; body above, and wings blue grey, but the outer quills are blackish.—Met with in Paraguay, the latter end of April.

Another is mentioned, varying somewhat in plumage, under the name of Hatis tacheté, and supposed to be a young bird.

## 12.—STRIATED TERN.

Sterna striata, Ind. Orn. ii. 807. Gm. Lin. i. 609. Tem. Man. Ed. ii. 737. Striated Tern, Gen. Syn. vi. 351. 10. pl. 91.

SIZE uncertain, supposed about twelve inches. Bill black; irides lead-colour; crown and sides of the head below the eyes white, mottled with black; the back part of the head and nape black; neck behind, back, and scapulars, white, transversely waved with black; many of the feathers being tipped with that colour; wing coverts bluish white, some of the lesser mottled with black; quills the same, with the outer margins black; tail white, shorter than the wings, some of the feathers edged, and others tipped with black; legs lead-colour.

Inhabits the Sea Shores of New Zealand, found there by Dr. J. R. Forster. From the drawings of Sir Joseph Banks: is probably a young bird, not in complete plumage.

## 13.—WHITE TERN.

Sterna alba, Ind. Orn. ii. 808. Gm. Lin. i. 607. Mus. Carls. fasc. i. t. 11.
 Sterna candida, Gm. Lin. i. 607.
 White Tern, Gen. Syn. vi. 363. Id. Sup. 266. Portl. Voy. pl. p. 312.

LENGTH thirteen inches, breadth thirty. Bill slender, black; eyelids the same; plumage white, but the shafts of the scapulars, quills and tail, except the three outer feathers, are black: the last forked, and shorter than the wings, by an inch; legs brown, webs orange; claws black. Some have a mixture of brown on the head.

Inhabits Christmas Island, and other parts of the South Seas; seen also off the Island of St. Helena.

## 14.—EGYPTIAN TERN.

Sterna Nilotica, Ind. Orn. ii. 806. Gm. Lin. i. 606. Hasselq. It. 273. Id. Voy. 202. 41. Egyptian Tern, Gen. Syn. vi. 356.

SIZE of a Pigeon. Bill black; the head and upper part of the neck ash-colour, marked with small blackish spots; round the eye black, dotted with white; back, wings, and tail, ash-colour; outer quills the same, but darker; all the under parts white; legs flesh-colour; claws black.

Inhabits Egypt; found in flocks in January, especially about Cairo; it feeds on insects, small fish, &c.; seen frequently, among other birds, on the mud, left by the overflowing of the River Nile: the Arabs call it Abumere.

### 15.—MUSTACHOE TERN.

Sterna leucopareia, Hirondelle de Mer Moustache, Tem. Man. Ed. 2d. 746.

LENGTH eleven inches. Bill and legs deep red; irides black; top of the head and nape, the neck, and all the under parts white; behind the eyes a spot of black; the back, wings, quills, and tail cinereous grey. Male and female much alike.

The young have a mixture of brown on the crown, and about the eyes and ears dusky ash; upper parts mixed with brown and Isabella; bill brown, with the base reddish; legs flesh-colour.

Inhabits Germany, in the southern parts of Hungary; found also on the Coasts of Istria and Dalmatia, and has once been killed on the Coast of Picardy; said to frequent the marshes, and to feed on aquatic worms, but not on fish.

# 16.—SIMPLE TERN.

Sterna simplex, Ind. Orn. ii. 805. Gm. Lin. i. 606. Simple Tern, Gen. Syn. vi. 358.

LENGTH fifteen inches. Bill almost three inches long, stout, and reddish; crown of the head nearly white; upper parts of the neck and back pale lead-colour; the under white; behind each eye a spot of black; the lesser wing coverts, scapulars, and tail like the back; the middle of the greater coverts white, and the margins of some of the latter brown; quills black; tail slightly forked, and the wings exceed it much in length; legs red.

Inhabits Cayenne; it seems to have many markings with the last described, but is a larger bird.

## 17.—MARSH TERN.

Sterna aranea, Amer. Orn. viii. 143. pl. 72. f. 6.

LENGTH fourteen inches; breadth twenty-four. Bill thick, much rounded above, and glossy black; crown, and neck behind black; all beneath pure white, and a line of white between the nostrils and the eye; body above, wings, and tail hoary white; the last forked, and the wings exceed it in length by two inches; legs black. Male and female much alike. The young differ as in others of the Genus; the tips and edges of the prime quills blackish, with white shafts; legs dull orange, mottled with brown or dusky.

Inhabits America, breeding in the salt marshes; lays three or four eggs on the dry grass, greenish olive, spotted with brown. Is common on the shores of Cape May, particularly in the salt marshes, darting down after a kind of black spider, which is in plenty in such places; this spider, it is said, can travel under water as well as above, and during the summer at least, the stomach of the bird is wholly

crammed with them. The bill is shorter than in the Common Tern, and thicker; the tail shorter, and much less forked; and as these birds are not found to associate with others, may be considered as a new Species. This resembles the Gull-billed so much, as to lead us to suppose it is allied; M. Temminck considers it to be the same.

## 18. - GULL-BILLED TERN.

Sterna Anglica, Gull-billed Tern, Orn. Dict. Sup. ii. pl. in ditto. Hirondelle-de-Mer Hansel, Tem. Man. Ed. 2d. 744.

SIZE of the Sandwich Species. Bill half an inch long, thick, strong, and angulated on the under mandible, like the bill of a Gull, and black; upper part of the head, including the eyes, black, but extends farther down the back of the head, and part of the neck, than in the Sandwich Tern, with two or three white feathers mixed on the crown; general plumage on the upper part of the body cinereous; the quills are hoary, the first five, for an inch or more, black; tail much the same, the outer feather on each side white; legs two inches long, rufous black; toes longer than in the Sandwich Species, especially the middle one; claws straight.

This has been in general confounded with the Sandwich Tern, and at first sight, may be taken for that bird. Colonel Montagu, however, who has had opportunity of comparing several specimens, assures us, that the two are perfectly distinct. One was formerly sent to me for the young of the Sandwich Tern; and others have been met with in Sussex, and particularly about Rye: ours, we believe, was killed near Sandwich, in Kent.

A .— Sterna affinis, Lin. Trans. xiii. p. 129.

This is white; the back and wing coverts greyish lead-colour; quils hoary, within brownish.—Inhabits Java.

### 19.--ROSEATE TERN.

Sterna Dougallii, Roseate Tern, Orn. Dict. Supp. pl. in ditto. Tem. Man. Ed. 2d. p. 738.

LENGTH fifteen inches. Bill one inch and five-eighths, slightly curved, and black, the base bright orange; inside of the mouth orange; irides black; tongue half the length of the bill, pale red, and bifurcated; forehead brown; hind part and sides of the head, taking in the eyes, except a small portion of the lower part, jet black; the feathers of the hindhead thinly diffused, and flowing over the white, down the back of the neck; sides of the head under the eyes, sides of the neck, and all beneath, white; but the fore parts of the neck, breast, and belly, to beyond the vent, are tinged with a most delicate rosy blush colour; back, scapulars, and wing coverts, pale cinereous grey; quills narrow, the first has the exterior web black, with a hoary tinge; the others hoary on that part, and part of the inner web; next the shaft of the first three or four, hoary black, paler by degrees in the succeeding feathers; all deeply margined with white, quite to the tip, shafts white; tail greatly forked, the outer feather seven inches long, the middle ones scarcely three, and all of them white; legs of the brightest orange; claws black, and hooked; the wings shorter than the tail by about two inches. Both sexes are much alike.

Inhabits Scotland: several of them shot in the West Highlands; first discriminated by Dr. M'Dougall, of Glasgow, and one of them added by that gentleman, to Colonel Montagu's collection. We are informed, that the places of resort of this species are two, small rocky Islands, in the Firth of Clyde, called Cumbrey Islands, in Milford Bay. We recommend the perusal of Col. M.'s account of this new species, in the Supp. to his Orn. Dict. Said also to be met with in Norway, and probably on the shores of the Baltic Sea; and M. de Lamotte is said to have found a pair on the Coast of Picardy, in France, in company with the Greater Tern.

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#### 20.—COMMON TERN.

Sterna Hirundo, Ind. Orn. ii. 807. Lin. i. 227. Fn. suec. No. 158. Gm. Lin. i. 606. Hasselq. It. 272. Scop. i. No. 111. Brun. No. 151, 152. Muller, p. 21. Fn. groenl. No. 69. Fn. arag. p. 76. Kram. 345. Frisch, t. 219. Borowsk. iii. 52. Fn. Helv. Sepp, t. 105.—male and female. Lin. Trans. xii. p. 542. Bris. vi. 203. 1. t. 19. f. 1. Id. 8vo. ii. p. 415.

Sterna Hirundo, Hirondelle de Mer, Pierre Garin, Tem. Man. 481. Id. Ed. 2d. 740. Hirundo marina, Raii, 131. A. 1. Will. 268. t. 68.

Larus albicans, Klein, 138. 10. Id. Stem. 32. t. 36. f. 3. a—c. Mars. Dan. v. t. 42. Die gemeine Meerschwalbe, Beschst. Deuts. ii. 828. Naturf. xii. 143. Schmid, 139. t. 122.

La grande Hirondelle de Mer, Buf. viii. 331. pl. 27. Pl. enl. 987.

Le Hatis à tête noire, Voy. d'Azara, iv. No. 413.

Sea Swallow, Will. Engl. 352. pl. 68.

Silver Bird, Staunt. Chin. i. 224.

Greater Tern,\* Gen. Syn. vi. 361. Br. Zool. ii. No. 254. pl. 90. Id. fol. 144. pl. L.\*

Id. 1812. ii. 196. pl. 35. Bewick, ii. pl. p. 199. Lewin, vi. pl. 204. Id. xxxix.—the egg. Walcot, i. pl. 119. Donov. i. pl. 23. Pult. Dors. p. 18. Orn. Dict. & Supp. Amer. Orn. vii. 76. pl. 60. f. 1.

LENGTH fourteen inches, breadth thirty; weight four ounces and a quarter. Bill slender, crimson, two inches and a half long, and pointed at the end, which is black; top of the head, taking in the eyes and nape, black, tapering to a point at the back part of the neck; between the nostrils and eye, sides under it, the neck, and all the under parts, pure white; back and wings pale ash-colour; quills grey; two or three of the outer ones dark, shafts white; tail greatly forked, white, except the outer web of the exterior feather, which is black; legs crimson; claws black.

The Greater Tern frequents our sea coasts, and banks of lakes and rivers, throughout the summer, but more common near the sea; found also in various other parts of Europe and Asia; seen about the Caspian Sea, in April; in summer met with as far north as

<sup>\*</sup> It is known by various other names, as Kirmew, Picket, Tarney, Pitcarne; Tarrock, Rittock, Spurre, and Scraye.—Orn. Dict.

Greenland, and Spitsbergen; approaches the south as winter advances, and is plentiful at that season in various parts of Andalusia, in Spain: observed with the Auks and Guillemots, in Gibraltar Bay, also the Lesser and Black Species, and supposed to proceed still farther south to the Coasts of Africa. In this kingdom is no where in greater abundance than on the Sussex and Kentish Coasts; lays three or four eggs in June, of a dull olive-colour, spotted irregularly with dusky black, except at the smaller end, which is plain; they are about the size of those of the Pigeon, placed among the grass, on the shore, without the preparation of a nest: \* the young are hatched in July, quit the nest soon after, and are able to fly in about six weeks. It is frequently seen to pursue the Lesser Gulls till they disgorge their prey, which it dexterously catches before it reaches the water; hence called on the south Coast of Devonshire, the Gull-Teazer; and is probably the one called by the sailors, the Mackarel Bird. The Greater Tern is said to have been once seen in Paraguay, unless it may be the following Variety; but the colour of the legs is not mentioned.

A .- Sterna Hirundo var. Phil. Trans. lxii. 421. Ind. Orn. ii. 808. β.

The feet in this Variety are black; the tail shorter, and much less forked than in the former, the outmost tail feather likewise wants the black, in other respects the same.

Inhabits Hudson's Bay, and supposed by Dr. Forster to be the kind called there the Egg-breaker, but on what account, he is silent. It is also called Black-head. The native name is Kenouch ene on keask.† Comes into New England in May, and goes away in

<sup>\*</sup> Captain Parry, in his 2d Voy. p. 283, says Tern Island was occupied by innumerable Terns; the eggs deposited on the bare ground; they are much coveted by the Eskimaux; and the birds, after due preparation, were made into pies, and thought very good.

<sup>†</sup> In Iceland called the Cree, or Kriia. The eggs boiled hard, are served up as a dainty, and eaten with cream.—Hooker's Iceland, pp. 56. 66.

autumn, and is called there Mackarel Gull; observed to lay the eggs in small hollows on the shore, sometimes lined with a few leaves; often found in great numbers on the islets, in the middle of the rivers, and is thought to be good eating. Is a bold bird, and like the rest of the Genus, not fearing mankind. In the time of incubation will attack any one; frequently darting down, so as to touch a person's hat, without his having given offence.

I remarked a bird, apparently of this species, in the drawings of Sir J. Anstruther, from India, which differs in having the whole of the tail feathers grey, like the quills. Said to be common on the Banks of the Ganges. Also a similar one in some drawings from New-Holland.

### 21.-ARCTIC TERN.

Sterna arctica, Tem. Man. Ed. 2d. 742. Franklin's Narr. App. p. 694. Parry's App. p. ccii.

LENGTH thirteen inches and a half. Bill fine red; the irides brown; the crown and nape deep black; beneath the eye a streak of white; the rest of the upper parts of the plumage much as in the Common Species, but of a deeper ash-colour; the throat, and neck before darker than the back; a small part of the belly and under tail coverts white; tail greatly forked, as in the Common One, but a trifle longer; legs fine red; the middle claw much longer than the others, and curved laterally outwards.

This is found within the Arctic Circle; common in the Orknies, and on the Coasts of Scotland and England; likewise on the Baltic shores: is easy to be confounded with the Common Tern, but does not appear so far southward as that bird.

I received one of these, shot in August, near Sandwich. In this the crown was mottled with white, and some of the feathers, at the back of the neck, tipped with brown; the tail white, with the outer

edges of the feathers pale lead-coloured grey; the outer web of the exterior, and edge of the adjoining black; legs flesh-colour, with the claw of the middle toe longer than the rest, and curved laterally outwards. This is probably an immature bird.

# 22.—WREATHED TERN.

Sterna vittata, Ind. Orn. ii. 807. Gm. Lin. i. 609. Wreathed Tern, Gen. Syn. vi. 359.

LENGTH fifteen inches. Bill slender, near two inches long, and blood red; crown of the head, including the eye, and as far as the nape black, bounded by a line of white all round; the rest of the plumage very pale ash-colour, in some parts nearly white; chin palest; rump, vent, and tail pure white, the exterior feather inclining to ash-colour; legs orange. One, supposed to be a younger bird, had a shorter bill; the tail ash-colour, with white shafts; and the general colour of the plumage every where darker.

Inhabits Christmas Island, in the Southern Ocean.—In the collection of Sir Joseph Banks.

A.—Among the drawings of Sir John Anstruther is one greatly similar, but the tail very pale ash-colour, and the outmost feather, as far as it exceeds the others, quite white; the bill yellow; and the legs crimson.—Inhabits India, and named Tetrarie.

### 23.—CRIMSON-BILLED TERN.

SIZE uncertain. Bill long in proportion, and crimson; irides the same; the general colour of the plumage dusky lead-colour, approaching to black; beneath pale ash; from the gape a white streak passes under the eye, and ends in a long fringe of feathers, which curve on each side of the neck, and there lie loose; second

quills and part of the prime ones tipped with white, forming, when the wing is closed, a narrow bar; the tail very much forked, and is greatly exceeded by the wings in length; legs crimson.

From the drawings of Mr. Dent, the country not mentioned: we have also seen a similar one in other drawings, done in India, but in this the crown was black.

## 24.—BLACK-EYED TERN.

LENGTH above nine inches. Bill one inch and a quarter, deep red, or crimson; forehead, sides, and all beneath white; the crown black, spotted with white; back of the head and nape black, curving behind the eye, which is placed in the posterior part of an oval patch of black, giving the appearance of the eye having a black spot before it; plumage on the upper parts, and the wings pale cinereous grey; quills white, with dusky ends, the greater black; tail even at the end, and exceeded in length by the quills, by full one inch and a half; legs the colour of the bill.—Inhabits India.—Sir J. Anstruther.

#### 25.—WAVED TERN.

LENGTH twelve inches. Bill stout, dull yellow, tip dusky; irides brown, surrounded with dusky before and beneath, and continuing behind for one inch; plumage above pale cinereous grey, or dove-colour; the crown marked with short dusky streaks, the feathers of the back and wings margined at the ends with pale buff, bounded within with dusky, like waves; greater quills and tail darker; inside of the quills white; tail forked, the outer feather exceeding the middle one by one inch and a quarter; the quills do not reach quite to the end of the tail; legs stout, of a moderate length, dusky orange; claws black.——Inhabits India. From the drawings of General Hardwicke. Probably allied to the Black-eyed Species.

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## 26.—SUMATRAN TERN.

Sterna Sumatrana, Lin. Trans. xii. 329.

THIS is a small Species. Plumage mostly white, tinged on the back, head, and wing coverts, with light reddish brown, and mixed with a few dark spots; a blackish crescent extends from eye to eye, round the back of the head; wing coverts lead grey, the first nearly black; under parts snowy white; tail like the back, rather short; that and the wings equal in length.—Inhabits Sumatra.

## 27.—GREY TERN.

LENGTH fifteen inches. Bill black, length from the gape one inch and a half; nostrils pervious; eyelids and round the eye dusky; top of the head, sides, and nape, nearly white, dashed with small dusky specks, longer and more conspicuous at the nape; neck behind, back, and wing coverts, very pale, or cinereous white; beneath from chin to vent pure white; tail forked, long, the interior feathers shorter by one inch; above it is like the back, beneath white; quills pale silvery grey, with white shafts; the second quills like the back, with a dusky white spot on each of them, near the tip; and they exceed the tail in length by two inches; legs slender, and black.

Inhabits Georgia, received from Mr. Abbot, it is known there by the name of Grey Gull.

# 28-PANAYAN TERN.

Sterna Panaya, Ind. Orn. ii 808. Gm. Lin. i. 607. Lin. Trans. xiii. p. 329. L'Hirondelle de Mer de Panay, Son. Voy. 125. pl. 84. Buf. viii. 344. Panayan Tern, Gen. Syn. vii. 363.

SIZE of the Common Species. Bill and legs black; top of the head spotted with black; hind part of the neck greyish black; wings

the colour of nmber, greyish beneath; fore part of the neck, breast, and belly, white; tail as the wings.

Inhabits the Isle of Panay; and much resembles the Common Tern, except in the darkness of the upper parts of the plumage.

A.—In the Island of Sumatra is one nearly alike, blackish brown above, white beneath; a white stripe from the base of the bill to the eyes; crown black, mixed with white; hindhead, back of the neck, and wings, black; tail the colour of the body; wings about the same length as the tail; bill and legs dusky red.

# 29.—MINUTE TERN.

Sterna minuta, Ind. Orn. ii. 809. Lin. i. 228. Gm. Lin. i. 608. 4. Borowsk. iii. p. 55. Tem. Man. 487. Id. Ed. 2d. 753.

Sterna metopoleucos, Ind. Orn. ii. 809. Gm. Lin. i. 608. N. C. Petr. xv. 475. t. 22. Lin. Trans. xiii. p. 198.

Sterna minor, Bris. vi. 206. t. 19. f. 2. Id. Svo. ii. 416. Klein, 138. 11. Gerin. v. t. 541.

Sterna argentea, Maxim. Tr. i. p. 67.

Sterna bicolor, Scop. i. No. 110.

Larus Piscator, Aldr. Raii, 131. A. 2. Will. 269. §. 11. t. 68.

Die kleine Meerschwalbe, Bechst. Deuts. ii. 837. Naturf. xii. 144.

La petite Hirondelle de Mer, Buf. viii. 337. Pl. enl. 996.

Lesser Sea Swallow, Will. Engl. 353. pl. 68.

Hooded Tern, Gen. Syn. vi. 365.

Lesser Tern, Gcu. Syn. vi. 364. Br. Zool. ii. 255. pl. 90. Id. fol. 144. pl. L. 2.
Id. 1812. ii. 198. pl. 35. Flor. Scot. i. 196. Arct. Zool. ii. No. 449. Bcwick, ii. pl. p. 241. Lewin, vi. pl. 205. Id. xxxix. f. 2. Walc. i. pl. 121. Donov. pl. 96. Pult. Dors. p. 18. Orn. Dict. & Supp. Amer. Orn. vii. 80. pl. 60. f. 2.

LENGTH eight inches and half, breadth nineteen and a half; weight about two ounces. Bill yellow, tipped with black; irides dusky; forehead to the crown white; the rest of the head and nape black; through the eye, from the bill, a streak of the same; except this, the side of the head, the neck, all beneath, and tail, are pure

white; back and wings pale grey; quills the same, but deeper, and much longer than the tail; legs yellow; claws black. Male and female alike.

This has much the same manners and haunts as the Common Tern, but less numerous. It breeds on many of our shores, lays two or three eggs, about one inch and a half in length, dashed all over with dusky, inclining to red, and weighing each from two drachms, forty grains, to three drachms, generally placed in a hollow on the beach, without any nest.\*

On the Continent it is found in the southern parts of Russia, about the Black and Caspian Seas; and in Siberia, about the River Irtisch; feeds principally on small fish, and in former times used to be caught by tying a fish to a light piece of wood, and letting it float on the water, surrounded with birdlime; the bird on taking the prey, was entangled, and easily secured. We find this bird on the shores of France, Italy, Germany, and Spain; and is sometimes also in the latter, the greater part of the winter. It is seen about New York in the summer, and is said to change place in America according to the season, as it does in Europe.

One similar, in General Hardwicke's drawings, differs in having the bill shorter, and dull yellow; the tail but little forked; the legs brownish orange, more dusky about the joint.—Met with at Cawnpore; is found also at Java, and called there Toyang.

#### 30.—BLACK TERN.

Sterna fissipes, Ind. Orn. ii. 810. Lin. i. 228. Gm. Lin. i. 610. Brun. No. 153. Schaf. el. t. 63. Fn. Helv.

Larus merulinus, Scop. i. No. 108?

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Sterna nigra, Bris. vi. 211. Id. 8vo. ii. 417. Sepp, Vog. t. p. 131. Tem. Man. Ed.
2d. p. 749. Frankl. Narr. App. p. 694.

Sterna cinerea atricapilla, Gerin. v. t. 543.

Larus niger Gesneri, Raii, 131. A. 3. Will. 269. § 111. Klein, Av. 138.

o o

<sup>\*</sup> One of the names given to it is Richel-Bird .- Orn. Dict.

Larus niger fidipes alis longioribus Aldr. Raii, 131.4. Will. 270. §. V. t. 68. Robert, Ic. pl. 6.

Larns minor fidipes nostras, Raii, 132. A. 6. Will. 269. § IV.

Die schwarze Meerschwalbe, Bechst. Deuts. ii. 833. Naturf. xii. 144.

Hirondelle de Mer noir, ou L'Epouventail, Buf. viii. 341. Pl. enl. 333.

Black Tern, Gen. Syn. vi. 366. Id. Sup. 267. Br. Zool. ii. No. 256. Id. fol. 145.
pl. L.\* 1. f. I. Id. 1812. ii. 199. Arct. Zool. ii. No. 450. Bewick, ii. p. 203.
Lewin, vi. pl. 206. pl. xl. f. 1.—the egg. Walcot, i. pl. 121. Donov. pl. 96.
Pult. Dors. p. 18. Orn. Dict. & Supp.

THIS is larger than the Minute Species; length ten inches; the breadth twenty-four; and weighs two ounces and a half. Bill black; head, neck, and body sooty black; back, wings, and tail deep ash-colour, the last but little forked; vent and under tail coverts white; the outer feathers of the tail edged with white; legs dusky red: the male has a spot of white under the chin.

This is found far more inland than the other British Species, often in several of our fens, and now and then about reedy places, and neglected fish ponds; common about the fenny parts of Lincolnshire and Cambridgeshire; is called about Cambridge the Car-Swallow. First appears about Romney Marsh, in Kent, the end of April, a few days after the other Terns, and does not associate with them. breeding in the sedgy places, among the reeds, &c.: it lays three or four eggs, of a light olive brown, blotched and spotted with brown, or black, of the size of those of the Magpie. Is not uncommon on the Continent, and found pretty far north; very numerous in Siberia, and about the salt lakes of the deserts of Tartary: in Europe, as far as Iceland to the north, changing its abode as winter approaches, at which time it is seen, with others of the Genus, about the Bay of Gibraltar, remaining there through the cold season; the food consists not only of fish, but insects, as the remains of both have been found in their stomachs. Is supposed to inhabit Hudson's Bay, and other parts of America, and is probably the same which was seen in vast flocks, beyond lat. 41. north, long. 47. W. by Mr. Kalm, somewhat south of the Banks of Newfoundland.\*

<sup>\*</sup> Kalm says, it is rather darker than the common Sea Swallow; the flocks consisted of some hundreds, and sometimes settled on the ship.—Trav. i. p. 23.

#### 31.-KAMTSCHATKAN TERN.

Sterna nævia, Lin. i. 228. Gm. Lin. i. 609. Bris. vi. 216. t. 20. f. 2. Id. Svo. ii.
418. Borowsk. iii. 54. 4. Fn. Helv. Tem. Man. Ed. 2d. 751.

Rallus Lariformis, Scop. i. No. 156. Klein, 103. 3.

Die gefleckte Meerschwalbe, Bechst. Deuts. ii. 831. Id. Ed. 2d. iv. 688.

La Guifette, Buf. viii. 339. Pl. enl. 924.

Cloven-footed Gull, Albin, ii. pl. 82. Id. pl. 90.—Lesser Sea Swallow.

Kaintschatkan Tern, Arct. Zool. ii. 525. A. Gen. Syn. vi. 358. 9. A. Bewick, ii. 207. Br. Zool. 1812. ii. 201.

LENGTH eleven inches and a half. Bill dusky; back of the head and nape black, the feathers edged with brown; behind the eye a crescent of black; the rest of the head, neck, and under parts, white; back and wings bluish brown, edges of the feathers paler; outer part of the wing blue grey; tail very little forked, and the wings exceed it in length; legs dusky brown.

This inhabits Kamtschatka, and is now and then met with in this kingdom: is probably allied to the Black Species.

#### 32.—BLACK-HEADED TERN.

Sterna nigra, Ind. Orn. ii. 810. Lin. i. 227. Fn. suec. No. 159. Muller, 171. Georgi, 171. Borowsk. iii. p. 52. 2.

Sterna obscura, Gm. Lin. i. 608. Ind. Orn. ii. 810. Tem. Man. d'Orn. 484.

atricapilla, Bris. vi. 214. Id. Svo. ii. 418.

----- fusca, Raii, 131. t. 15?

Die graue Meerschwalbe, Bechst. Deutsch. ii. 836.

Brown Tern, Bewick, ii. 208. Gen. Syn. vi. 368.

Lesser Sea Swallow, Albin, ii. pl. 89. Gen. Syn. vi. 367. 22. A.

THIS is a trifle bigger than the last; length nine inches and a half. Bill black; head, neck, and breast the same; round the eyes a few grey feathers; back, rump, scapulars, and upper wing coverts ash-colour; lower part of the breast, the belly, thighs, under wing coverts, and vent white; quills deep coloured at the end; tail as the

quills, but the exterior feather on each side white on the outer web, margined with ash; shape of the tail a little forked; legs dull red; claws black.—Said to inhabit various parts of Europe.

It is most likely a Variety of the last, as we have observed more or less white between the legs of some specimens. Colonel Montagu supposes this to be the Black Species, in immature plumage,\* and that the black on the under parts does not appear till after the first moult; also that both sexes are black beneath in the breeding season.

## 33.—CINEREOUS TERN.

Sterna cinerea, Ind. Orn. ii. 808. Gm. Lin. i. 607. Bris. vi. 210. Id. 8vo. ii. 417. Gerin. v. t. 542.

Larus niger fidipes alter, alis brevioribus, Raii, 131. Will. 270. § vi.

The other Cloven-footed Gull of Aldrovandus, with shorter wings, Will. Engl. 354. Cinereous Tern, Gen. Syn. vi. 363.

SIZE of a Blackbird; length thirteen inches. Bill black; head and throat the same, in some the forehead and chin mottled with white; the upper part of the plumage, and beneath from the breast, ash-colour; but the under tail coverts and ridge of the wing are white; legs reddish; claws black.

Inhabits Italy, and parts adjacent, where these birds are called Rondini marini: probably a further Variety of the Black Tern.

### 34.—SURINAM TERN.

Sterna Surinamensis, Ind. Orn. ii. 804. Gm. Lin. i. 604. Greater Tern, Hist. Surin. ii. 187, Surinam Tern, Gen. Syn. vi. 352.

SIZE uncertain. Bill, head, neck, and breast, black; back, wings, and tail, ash-colour; belly and thighs dirty white; legs and feet red; claws black.

<sup>\*</sup> Orn. Dict.

Inhabits Surinam; often met with 200 leagues from land. Feeds on fish, and pursues the lesser birds, till they disgorge what they have swallowed. We have seen one of these in a collection from Cayenne, in which the vent was rufous. This seems to agree in point of colours and distribution of them, with the Black-headed Tern.

#### 35.—CHINESE TERN.

Sterna Sinensis, Ind. Orn. ii. 809. Gm. Lin. i. 608. Chinese Tern, Gen. Syn. vi. 365.

LENGTH eight inches. Bill black, one inch and a quarter long, and moderately stout; nostrils pervious; head, neck, rump, and under parts, white; across the top of the head dusky black, including the eye on each side, and passing downwards in a point, at the nape of the neck; back cinereous; some of the feathers edged with pale tawny; wing coverts fine pale ash-colour, dashed down the middle of the shaft with dusky; quills fine cinereous grey; tail short, very little forked, paler than the quills; legs slender, orange; claws hooked, and black.

Inhabits China; has somewhat the appearance of the Lesser Tern, but the tail is much less forked, and the distribution of colours do not agree.

## 36.—JAVAN TERN,

Sterna Javanica, Lin. Trans. xiii. p. 198.—Horsfield.

LENGTH eleven inches. Colour glaucous; throat, cheeks, neck behind, wings, and tail beneath, white; head above black; quills brownish grey, marked within with a whitish patch; bill and legs yellow.—Inhabits Java.

#### 37.—BLACK-NAPED TERN.

Sterna media, Lin. Trans. xiii. p. 199.

LENGTH fifteen inches. Bill long; forehead, neck behind, and under parts of the body, white; crown varied with black and white; nape black; wings, back, and rump, glaucous; quills brown, powdered with grey.

Inhabits Java, by the name of Toyang-kacher.

### 38.—HOARY TERN.

Sterna grisea, Lin. Trans. xiii. p. 199.

LENGTH nine inches. Bill black; above grey; forehead, a collar round the neck, and the under part of the body, white; outer quill dusky.

Inhabits Java, and called Puter-lahut.

# 39.—SOUTHERN TERN.

Sterna Australis, Ind. Orn. ii. 809. Gm. Lin. i. 608. Southern Tern, Gen. Syn. vi. 365.

LENGTH seven inches and a half. Bill one and a half, black; forehead dirty buff; back, wings, and tail, dirty pale ash-colour; under parts grey; quills white; tail forked; legs pretty long, dusky black; webs orange.

Inhabits Christmas Island. Some specimens are full nine inches in length.

#### 40.—WHITE-WINGED TERN.

Sterna leucoptera, Tem. Man. d'Orn. p. 483. Id. Ed. 2d. p. 747. Sterna nera, Gerin. v. pl. 544.

LENGTH nine inches and a quarter. Bill and legs coral red; irides black; the head, neck, upper part of the back, breast, under wing coverts, and belly deep black; the lower part of the back, and scapulars ash-colour; lesser and middle wing coverts, rump, and tail white; the greater wing coverts and second quills bluish ash; inner webs of the two first quills striped longitudinally with a white band; tail very little forked. Young birds have the white on the wing less pure; the tail cinereous; tip of the bill dusky, and the black of the plumage inclining to ash; forehead light ash; and the feathers of the upper parts of the body more or less tipped with whitish ash.

Inhabits the shores of the Mediterranean Sea, the marshes and rivers beyond the Alps; also the lakes of Lucarno, from Lugano to Como; sometimes seen at Geneva, but not met with in Holland.

#### 41.—CAYENNE TERN.

Sterna Cayana, Ind. Orn. ii. 804. Gm. Lin. i. 604. Le grand Hirondelle de Mer, Buf. viii. 346. Pl. enl. 988. Le Hatis à derrière de la tête noire, Voy. d'Azara, iv. No. 412. Cayenne Tern, Gen. Syn. vi. 352.

LENGTH about sixteen inches. Bill more than two, and pale orange; hind part of the neck black, mottled with dusky white; the rest of the plumage above blue grey, the feathers edged with rufous; beneath the body white; tail the same; quills dusky, exceeding the tail in length, which is much forked; legs reddish brown.

Inhabits Cayenne.

## 42.—DOVE-COLOURED TERN.

LENGTH full uine inches. Bill one inch, slender, black; the forehead, to the middle of the crown, before the eye, and all beneath, from the chin, white, passing round the neck, below the nape, in a slender ring; from the middle of the crown, and the nape dusky black, mottled with a paler colour; upper parts of the body, wings, and tail dove-colour, or fine bluish ash, the feathers mostly fringed with brown; lesser wing coverts within darker than the rest; quills and tail blue grey; under wing coverts nearly white; sides of the breast dark ash; of the body beneath and wings like the back; the quills pale grey, with white shafts, and exceed the tail by one inch and a half; the latter three inches long, moderately forked, the two middle feathers being only half an inch shorter than the middle ones; legs dusky brown, or reddish.

Inhabits Georgia, in America, and said to be rare. One of these, in the collection of General Davies, had the top of the head brown; behind the eyes, or rather over the ears, an oblong blackish patch; nape mottled brown and black: in other respects it answered to the last description.

### 43.—GEORGIAN TERN.

LENGTH ten inches; breadth twenty-three. The feathers project much forwards on the base of the bill, and from thence the bare part is one inch more; the head and neck dusky black; forehead, to the middle of the crown, and the sides of the gape, to the eye, much mottled with white; the rest of the plumage bluish ash; thighs and vent white; the wings, when closed, reach one inch and a half beyond the tail; the shaft of the first quill feather white, of the others very pale; the legs red. The female has a greater mixture of white about the head and neck.

Inhabits Georgia; sometimes comes in small flocks to the ponds in Burke Country: takes its prey on the wing, like the Swallow, and frequently, in flying, dips the bill into the water.—Mr. Abbot. This seems allied to the last described.

#### 44.—BROWN TERN.

Sterna spadicea, Ind. Orn. ii. 807. Gm. Lin. i. 610. Brown Tern, Gen. Syn. vi. 359.

A TRIFLE less than the Noddy; length fifteen inches, breadth thirty-four. Bill two inches long, black; the plumage in general reddish brown, paler beneath: between the legs and the vent white; head, neck, and under parts plain; the feathers of the back, and wing coverts fringed at the ends with reddish white; scapulars and second quills tipped with white; under wing coverts and ridge of the wing white; quills and tail dusky, the last forked, the shafts of both white beneath; legs pale reddish brown, the claws black. In some specimens the feathers of the neck and breast are margined with dusky.—Inhabits Cayenne.

# 45.—DUSKY TERN.

Sterna fuscata, Ind. Orn. ii. 807. Lin. i. 228. Gm. Lin. i. 610.
Sterna fusca, Bris. vi. 220. 7. t. 21. f. 1. Id. 8vo. ii. 420.
Dusky Tern, Gen. Syn. vi. 360.

SIZE of the Black Tern; length eleven inches. Bill one inch and a half, greyish brown, with a black tip; the head, throat, and neck behind dusky brown; back, rump, scapulars, and upper tail coverts the same, but the feathers are margined with rufous; fore part of the neck and all beneath brown; the lesser and middle wing coverts above dusky brown, the greater dusky; under wing coverts

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cinereous white; the quills dusky, the shafts white beneath, the two nearest the body tipped with rufous; tail as the quills, the two middle feathers rufous at the tips; the shape somewhat forked, and the wings do not quite reach to the end of it; legs dull red, claws black.

Inhabits the Island of St. Domingo, and seems allied to the last, though much inferior in size.

## 46.—SHORT-TAILED TERN.

Sterna plumbea, Short-tailed Tern, Amer. Orn. vii. 83. pl. 60. f. 3.

LENGTH eight inches and a half; extent twenty-three. The bill, crown, auriculars, spot before the eye, and hindhead are black; forehead, eyelids, sides of the neck, passing quite round below the hindhead, and the whole lower parts pure white; back and shoulders dark ash, the feathers broadly tipped with brown; wings and tail dark lead-colour, the former longest by one inch and a half; the tail slightly forked; legs tawny.

Inhabits America, found about the Schuylkill, and other places, towards the end of summer; oftener on the mill ponds and fresh water marshes, than in the Bays: is considered a different bird from the Minute Tern, and never associates with that species; it also has an extent of wing wider by three inches than the other, and makes its appearance when the Minute is gone off; the stomach, on examination, was found to contain grasshoppers, crickets, spiders, &c. but no fish. It is doubted, whether it can be the same with the Little Gull, or Brown Tern of Willighby, for the figure in the plate has the bill shaped like that of the Tern, and by no means that of a Gull, being much longer, and more slender in proportion to the size of the bird.

# GENUS CIV.—GULL.

* Nostrils distinct,	9 Italian	Tarrock, Young
1 Great Gull	10 Crimson-billed	A Var.
2 Black-headed	11 Black-backed	21 Pulo Condore
A Red-legged	12 Iceland	* * Nostrils covered with
B Brown-headed	13 Glaucous	
C Brown	14 Herring	a Cere.
3 Laughing	I5 Silvery	22 Skua
4 Georgian	A Var.	23 Pomarine
5 Masked	16 Common	24 Arctic
6 Little	17 Ivory	25 Black-toed
A Brown Tern	18 Hudsonian	26 Keeask
7 Forked-tailed	19 Black-tailed	27 Pacific
8 Adriatic	20 Kittiwake	A Var.

BILL strong, straight, bending at the point; on the under part of the lower mandible an angular prominence.

Nostrils oblong, pervious, in the middle of the bill, in some covered with a cere.

Tongue a little cloven.

Legs small, naked above the knees; back toe small.

Between the Gulls and Terns there seems to be much affinity; and by some authors, they have been considered as one family; but they are perfectly distinguishable, and easily separated into two genera. The Gulls are in general stouter in proportion than the Terns; the bills much stronger; and in some crooked at the end, in a degree equal to many birds of prey; while that of the Tern is for the most part straight and slender; the legs are likewise much weaker than in the Gull, and the tail forked at the end—a circumstance rarely observed in the last Genus. Great variety, however, is found in respect to plumage in both, arising from the different stages of life, and has occasioned authors to consider many birds a

<sup>\*</sup> Great latitude should be given in respect to the young of the Tern; as in some species the tail, during that stage of life, is nearly even at the end.

species, which, from later observations, have proved to be only the effect of age or sex: much, therefore, remains to be ascertained on this head, as such uncertainties are only to be removed by slow degrees, and reiterated observation.

## 1.—GREAT GULL.

Larus icthyætus, Ind. Orn. ii. 811. Gm. Lin. i. 599. Pall. reise, ii. 713. p. 27. Act. Holm. iv. 119. 7.

Die grosse Lachmoeue, Gm. reise, i. 152. t. 30, 31.

Mauve, Tem. Man. Ed. 2d. Anal. p. cviii.

Great Gull, Gen. Syn. vi. 370, 1.

SIZE of the Bernacle Goose, and sometimes larger; weight between two and three pounds; bill dusky yellow at the base, towards the end crimson; tip yellow, near it crossed with a dusky brown spot; inside of the mouth red; irides brown; the head and half the neck black; eyelids white; back and rump pale grey; second quills darker; greater quills white; the first five tipped with black; tail even at the end, and white; legs reddish brown.

Inhabits the borders of the Caspian Sea, appears similar to the Black-headed Gull, but is clearly different, being so many degrees larger; lays the eggs on the bare sand, without the preparation of a nest, in shape oblong, marked with numerous brown spots, and some paler ones intermixed. In flying this bird has a hoarse cry, somewhat like that of a Raven.

# 2.—BLACK-HEADED GULL.

Larus ridibundus, Ind. Orn. ii. 811. Lin. i. 225. Gm. Lin. i. 601. Act. Holm. iv. 120. 9. Gm. reise, iv. 140? Schæf. el. Orn. t. 44. Sepp, t. p. 153. male & fem. Am. Orn. ix. 89. pl. 74. 4. Tem. Man. 304. Id. Ed. 2d. 783. Gavia ridibunda phænicopos, Bris. vi. 197. Id. 8vo. ii. 413.

Larus albus crythrocephalus, Klein, 138. 8. Id. Stem. 32. t. 36. f. 2. a—c. Larus atricilloides, Ind. Orn. ii. 813. Gm. Lin. i. 601. Falck. It. iii. 355. t. 24.

Larus cinereus, Raii, 128. A. 5. Will. 164. pl. 66. Scop. i. No. 105. Gcrin. v. t. 527. Id. 526. younger bird.

Die Schwarzkopfige Lachmeve, Bechst. Deuts. ii. 819. Id. Ed. 2d. iv. p. 635.

La Mouette rieuse, Buf. viii. 433. Pl. enl. 970.

Brown-headed Gull, Albin, ii. pl. 86.

Black-beaded Gull, Gen. Syn. vi. 380. Id. Sup. 268. Br. Zool. ii. No. 252. Id. fol. 143. pl. L. 5. Id. 1812. ii. p. 189. Arct. Zool. ii. No. 455. Flor. Scot. i. pl. 5. f. 1. Will. Engl. 347. pl. 66. Bewick, ii. pl. p. 222. Lewin, vi. pl. 212. pl. lxiii. f. 1. the egg. Walcot, i. pl. 115. Plot, Stuff. 231. Lin. Trans. vii. 284. Orn. Dict. & Supp.

LENGTH fifteen inches; breadth three feet; weight ten onnces. Bill rather slender, blood red; eyelids the same; irides hazel; head and throat brown black; on each eyelid a small white spot; back and wings ash-colour; the neck, all the under parts, and tail white; the first ten quills white, margined, and more or less tipped with black; the others ash, with white ends; legs like the bill, and the claws black.

A.—Larus cinerarius, Ind. Orn. ii. 812. β. Lin. i. 224. Gm. Lin. i. 597. Fn. Helv. Larus canus, Scop. i. No. 104.

Gavia cinerea minor, Bris. vi. 178, 9, t. 17, f. 1, Id. Svo. ii. 409.

Die aschgraue Meve, Bechst. Deutsch. ii. 812. Naturf. xii. 143.

Kleine Zee-meeuw, Sepp, Vog. iii. t. p. 281.

Larus cinereus rostro et pedibus rubris, Gerin. v. t. 526. Id. 528. Var.

Larus albus major, Raii, 129. 9. Will. 264.

La petite Mouette cendrée, Buf. viii. 430.

Le petit Goiland, Pl. eul. 969.

Dingla, Forsk, Faun. Arab. p. 8. 17.

La Mouette blanche, Voy. d'Azara, iv. No. 411?

Greater White Gull of Belon, Will. Engl. 348. Br. Zool. ii. No. 252. A: Id. 1812. ii. p. 191.

Red-legged Gull, Gen. Syn. vi. 381. Orn. Dict. & Supp.

In this the fore part of the head is white; space round the eyes dusky; from the corner of each eye a broad dusky bar, surrounding the hindhead; behind that another, from ear to ear; ends and outer edges of the three first quills black; the ends and interior of the

two next black, but the shafts and middle part white; the tips of the two following white, beneath a black bar; the rest, as well as the secondaries, ash-colour; in other things it resembles the first described. In this state the feathers of the head are externally white, with here and there a dusky shade, but on raising them they appear to be white only at the ends, the rest being dusky or blackish. Both this and the foregoing appear to be complete in their plumage, and the former in the winter dress.

B.—Larus maculatus, Mars. Dan.v. p. 94, t. 45. Klein, 138, 14. Gen. Syn. vi. 382. A.
 Larus erythropus, Gm. Lin. i. p. 597. Ind. Orn. ii. 812. Tem. Man. d'Orn. 506. Id. Ed. 2d. 783.

Red-legged Gull, Arct. Zool. ii. 533. E. Br. Zool. Ed. 1812. 192.

Gavia grisea minor, Buf. vi. p. 173. Id. 8vo. ii. p. 408.

Brown-headed Gull, Gen. Syn. vi. 383. Orn. Dict.

Length fourteen inches. Bill red; eyelids scarlet; the head and throat monse-colour, spotted with white; neck and belly white; the back and scapulars ash; wing coverts dusky brown, edged with dusky white; the exterior sides, and part of the interior of the four first quills black; tail white, the ten middle feathers tipped with black, near an inch broad; the outer one plain; legs red.

One of these was killed on the banks of the Esk, at Netherby, the seat of Sir J. Graham. Mr. Pennant's bird was shot in Anglesea.

C.—Sterna obscura, Ind. Orn. ii. 810.
Brown Tern, Gen. Syn. vi. 368.
Brown Gull, Gen. Syn. Sup. ii. 331. Br. Zool. 1812. ii. p. 193. Orn. Dict. & Supp.

Length fifteen inches. The bill yellow as far as the hook of the upper, and to the gibbous part of the lower mandible, from thence black; hindhead and nape dusky; at the anterior angle of the orbit a black spot, another of the same behind the ear; forehead, throat, neck before, belly, vent, and rump white; the back, scapulars, and

upper range of wing coverts, next the body, grey; the middle series brown, edged and tipped with white; the lower grey, with white tips; bastard wing black and white; the quills deeply tipped with black, fringed with white; middle of the feathers and shafts white; outer webs banded with black, inner webs dusky, but deeper; secondaries dusky, tipped with grey; the two outer tail feathers white; the rest white, with a bar\* of dusky; legs dusky; claws black.

I received this from the late Mr. Boys, of Sandwich; supposed to be the young of the Black-headed; as in this, as well as the Redlegged, the feathers of the head and parts of the neck, which in the complete bird are black, are only so for three parts of the length, the tips being white; and it is further conjectured, that birds with the black heads are only in that state during the breeding season, for it is certain, that such are not seen at any other time.

According to Col. Montagu, in the first plumage the feathers are more or less mottled with brown and white, which, in a short time after leaving the nest, are displaced by those which are wholly white underneath, the head becomes white, with an obscure spot behind the ear; but the back, scapulars, and wing coverts continue mottled longer. In this state it comes nearest to the description of the Brown Gull, our Var. C, or last described. After this it obtains the plumage of the Brown-headed, or Var. B, and when more complete that of the Red-legged, or Var. A, and finally becomes the full plumed bird, called the Black-headed Gull: other markings will also be found in individuals in the intermediate states, which of course, might give rise to further descriptions; it is, however, necessary to say, that the bill and legs only become red gradually, both being dark-coloured in proportion as the bird is younger; the tail, too, has the black bar at the end till the bird arrives at the state of the Red-legged; after which it becomes, and continues, of a pure white.

<sup>\*</sup> One, shot at Romsey, the last week in December, differed in having only the outer tail feather wholly white; the rest white, with the ends, for three quarters of an inch, black.

The Black-cap, Pewit, or Puit, Gulls, as by some called, breed on the shores of some of our rivers, but full as often in the inland fens of Lincolnshire, Cambridgeshire, and other parts of England; likewise in Northumberland, and Scotland; they make the nest on the ground, with rushes, dry grass, and such like, and lay three greenish brown eggs, marked with red brown blotches; after the breeding season disperse again to the sea coasts. Mr. Ray\* gives this account of them-" We diverted out of our way to see the Puits, "which we judged to be a sort of Lari, in a Meer, at Norbury, "belonging to Col. Skrimshaw. They build altogether in an Islet, "in the middle of a Pool; each hen layeth three or four eggs, of a "dirty blue or sea-green, spotted with black; at the driving every "year, they take commonly above 100 dozen young, which they " sell at five shillings the dozen. The colour of the Puit is near "that of a Sea Mew, i.e. white and somewhat flecked, only the " head is perfectly black; about the bigness of a Teal or a Widgeon. "They come to this Meer the beginning of March, and are all gone "by the latter end of July, or before. They usually drive them " about the 6th or 8th of June, sooner or later. They have some-" times divided, and part removed to another Meer not far off, but "this is not often." Dr. Plot, in his History of Staffordshire, † gives a similar account; and adds, that the young birds are accounted good eating, and are kept alive, and fattened on offal. They were driven into nets, and three drivings generally made in one season; and anciently, as many were taken, as the profit amounted to fifty or sixty pounds.

The young birds about the Thames are called Red-legs, and are thought to be good eating, but the old ones, called Black-caps, are less esteemed, being rank, like other old birds.—Found in Russia, and throughout Siberia, as far as Kamtschatka, but not farther north. Are in such numbers at Aleppo in winter, and so tame, that the women divert themselves on the terraces of the houses by throwing

up pieces of bread, which these birds catch in the air; not uncommon on the Caspian Sea; also found in America, coming into New England in May, and departing in August.

## 3.—LAUGHING GULL.

Larus atricilla, Ind. Orn. ii. 813. Lin. i. 225. Gm. Lin. i. 600. Fn. Helv. N. C. Petr. xv. 478. t. 22. f. 2.—young bird. Act. Holm. iv. 120. 8. Tem. Man. Ed. ii. p. 780. Frankl. Narr. App. p. 695.

Gavia ridibunda, Bris. vi. 192. B. t. 18. f. 1. Id. Svo. ii. 413.

Larus albus, Scop. i. No. 106.

----- major cinereus Baltneri, Raii, 129. 8. Will. 263. t. 67.

Baltner's Great Sea Mew, Will. Engl. 346. pl. 67.

Grande Mouette blanche of Belon, Bewick, ii. pl. p. 228.

Laughing Gull, Gen. Syn. vi. 383. Cat. Car. i. pl. 89. Br. Zool. 1812. ii. 193. Arct. Zool. ii. No. 454. Amer. Orn. ix. pl. 74. f. 4. Orn. Dict. & Supp.

THIS is rather bigger than the Black-headed Gull; length eighteen inches, breadth three feet; weight eight ounces. It appears to have much the same markings in respect to plumage, but the bill is stronger, and the head larger in proportion; the tail too, is shorter; the colour of the bill is red, but the legs are reddish black; or, according to some, very deep red. That described by Brisson, as the female, having a cinereous head, and the forehead and throat spotted with white, as well as the one in the Petersburgh Transactions, of a less size, and the head spotted black and white, are no doubt young birds, or described at a season when the black head was not conspicuous.—This species seems to be most plentiful in Russia, on the River Don, particularly about Tschercask; the note resembles a coarse laugh, whence the name of the bird. We have had our suspicions of this bird being in England, as our late friend, Mr. Boys, once mentioned having met with a Gull with black legs, but we were unconscious of its being a British Species. I had also a

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\* Russ. Alep.

+ Arct. Zool.

YOL, X.

skin of one given to me, which was thought to have been killed in England; but Colonel Montagn has determined this matter, by assuring us, that he saw five of them together, feeding in a pool, upon the Shingly Flats, near Winchelsea, in August, 1774: two only were black on the head, the others mottled all over with brown; one of them was shot, the others were too shy to be procured. This Gentleman also saw two others, near Hastings, in Sussex; and observes, that this species may be easily known from the Blackheaded, even on the wing, the flight being different; the bird appears much larger, and the tail shorter in proportion.\* It is likewise met with in more places than one on the Continent of America, and very numerous in the Bahama Islands; and also found at Cayenne.—A Gull with a black head and dusky yellow irides, frequents Hudson's Bay, coming in May; makes the nest on the on the pine trees, lays four lead-colour eggs, and departs south in September; feeds on fish and worms, and is called by the natives Akeese-keeask.t

We suspect also that it inhabits India, as we have seen one corresponding in drawings from thence, but this had only the fore part of the head, including the eye, and the chin and throat, dusky black.

# 4.—GEORGIAN GULL.

LENGTH eighteen inches, breadth thirteen. Bill long, blackish, point red; irides yellow brown; head for the most part, neck, and all beneath, white; from the crown to the nape, and to the eye, dusky white, mottled with pale cinereous-brown; on the ears a patch of the latter; back and wings pale bluish ash; rump and tail white; the three first quills black, the second and third tipped with white; the first wholly black, and shorter by an inch; the fourth and fifth dove-colour; the first of these black for one inch and a half; and

the last for one inch from the end, with white tips; the rest dove-colour, tipped white; the ends of all the secondaries are also white, but not seen unless the wing is expanded; under wing coverts white; the quills reach one inch beyond the tail; legs two inches, and black, with a tinge of pink-colour.

Inhabits Savanna, in Georgia, and parts thereabouts. A specimen sent from thence by Mr. Abbot, by the name of Cinereous Gull. He observes, that the bird was new to him.

We have placed this as distinct, not without suspicion of its being allied to the Laughing Gull, but be this as it may, the tail being wholly white, seems to prove it an adult bird, and probably in its change from summer to winter plumage.

A second of these sent to Mr. Francillon, and shot in October, at which time the former was killed, was only sixteen inches long. Bill dusky, reddish towards the base; forehead to the crown white; crown, nape, and hind part of the neck, mottled brownish ash; back dove-colour; wings pale mottled ash; the first quill longest, and black; the first five plain, the others white at the tips; the secondaries sooty, deeply margined at the end, with white; rump and tail for three-fourths of the length white; the end for one inch and a half black; the quills exceeding the end of it by an inch and a half.

## 5.—MASKED GULL.

Larus capistratus, Mouette à masque brun, Tem. Man. Ed. 2d. 785.

LENGTH thirteen inches. Bill smaller, and more slender than in the Black-headed, but the plumage in general not far different; the outer quills with white shafts; the whole front of the head light brown, giving the idea of a mask; the legs are shorter than in the Black-headed, and reddish brown.

In the summer the mask is dirty grey brown; top of the head, cheeks, opening of the ears, and throat, light brown; nape and fore

part of the neck white, and the brown on the throat much deeper than on the head; legs reddish. M. Temminck says, this bird has not hitherto been discriminated from the Black-headed Gulls; but it differs in being smaller; by its bill and legs being both more slender; the toes shorter; and the under wing coverts light ash-colour, instead of dusky.

Inhabits chiefly the Arctic Circle; common in the Orknies, in Scotland, and on some of the Coasts of England. One, exactly the same, has also been met with both in Baffin's Bay, and Davis's Straits.

### 6.—LITTLE GULL.

Larus minutus, Ind. Orn. ii. 813. Gm. Lin. i. 595. Pall. reise, iii. 702. 35. N. Act. Stockh. 1783.
 No 1. p. 120. Tem. Man. 509. Id. Ed. 2d. 787. Franklin's Narr. App. p. 696.

Larus atricilloides, Ind. Orn. ii. 813. Gm. Lin. i. 601. Falck. It. iii. 355. t. 24. Little Gull, Gen. Syn. vi. 391. 17. Orn. Dict.

SIZE of the Missel Thrush. Bill reddish brown; irides bluish; the head and beginning of the neck black; the rest of the neck and body white; back and wings grey, but the quills are white at the ends; tail even, white; legs red.

Inhabits the southern parts of Russia and Siberia; found about the shores of the Caspian Sea, and the rivers falling into it, migrating in summer up the Wolga, in order to breed, but is a rare species.

A.—Little Gull, Orn. Dict. App. pl. in ditto. Sterna fusca, Raii, 131. A. 15. Will. 268. Brown Tern, Ein Kessler, Will. Engl. 352.

This is the Brown Tern of Baltner, as quoted by Ray and Willinghby, and concerning which we have hitherto been under much uncertainty; but through the kindness of the late Earl of Dartmonth, in whose possession Leonard Baltner's drawings were, we have been

tavoured with an inspection of them. The one in question, there figured, has the appearance and bill of a Gull, with a brownish lead-coloured plumage, mottled about the head, and sides under the eyes; the quills and tail of even lengths. It is described as being the size of an Ouzel, with long wings, short legs, generally black; the guts white, close together as a snail, three-quarters of an ell long; that it comes in May (on the Rhine), and stays to July; sometimes many fly together. On the 20th of April, 1650, four of them were killed, which were all hens, and had eggs as big as a radish seed, all of the same size; they breed in July.

This, we have no doubt, is a female, or immature bird of the Little Gull, which we may suppose to gain the black about the head by degrees, in the same manner as the Black-headed Species.

The Little Gull has been lately found to inhabit our kingdom, for which knowledge we are indebted to Mr. Plasted, of Chelsea, who obliged me with a sight of a specimen, preserved in his collection, and which was shot on the Thames, not far from his house. It answers to Baltner's short description, but will be better understood by the following account.

The length is about ten inches. Bill three-quarters of an inch or more; inside of the mouth orange; forehead and crown white; back of the head and part of the neck contiguous, dark cinereous, with a hoary tinge; behind the eye a white streak; on the ears a black spot; between the bill and eye white, but forwards the orbit is black; from whence to the black spot on the ear is a mixture of dark cinereous and white; body above cinereous grey; upper tail coverts mostly white; beneath from the chin white, but the grey of the back tends a little downwards on each side of the breast; tail somewhat concave at the end, the feathers white, the tips for about an inch black, but the outer one wholly white, except a small dusky spot within at the end, the tips ending in dirty white; the wings mixed black, white, and cinereous; greater quills white within, the outer webs, shafts, and part of the inner webs close to the shafts, the

tips, and part of the inner margins black; on the three outer a small white speck at the tip; the others to the seventh marked also at the end, but the white occupies more space; legs dusky yellow; the wings exceed the tail in length one inch and a half.

The above will perhaps be sufficiently descriptive, but as Colonel Montagu has in his work been more explicit in his account of the bird, we will refer the reader thereto.

## 7.—FORKED-TAILED GULL.

Larus Sabini, Forked-tailed Gull, Lin. Trans. xii. p. 520. pl. 29. & 551. Parry's App. p. cev.

Xeme Sabini, Ross, Voy. App. p. lvi. pl. in ditto.

THIS species is in length from twelve and a half to fourteen inches, and has about thirty-three inches in extent of wing; weight from six and a half to seven and a half ounces. The bill one inch, black, with the end yellow; inside of the mouth vermilion; irides dark, surrounded by a naked circle of vermilion, and a small white speck beneath the eye, scarcely perceptible; head and upper part of the neck dark ash lead-colour; the remainder of the neck, the breast, and belly, pure white; a narrow black collar surrounds the neck at the meeting of the ash-colour and white; back, scapulars, and wing coverts ash, very much lighter than the head, but darker than the corresponding parts in the Laughing Gull; the shafts of the first prime quills black; outer webs the same; the edges of their upper webs white to within one inch and a half of the tips, the white sometimes continued to the point; the tips of the first and second quills in some white, in others black; those of the third, fourth, and fifth white, giving, when the wing is closed, a spotted appearance; the sixth prime quill has a white shaft, with the web more or less black, but principally white, with sometimes a black spot near the end; the other primaries, secondaries, and tertials, white; the under part of the wings wholly white; feathers of the tail white, twelve in number,

the outer ones five inches long; the others gradually shortening, so that the whole becomes forked by a diminution of nearly one inch; the wings reach, when closed, an inch or more beyond the longest feathers of the tail; legs, feet, and claws, black; the thighs feathered to within three-eighths of an inch of the joint.

Such is the description of a Gull, which appears to be a new species, for the account of which we are indebted to Captain Sabine, who accompanied the late Expedition in search of a North-West Passage. The description was taken in the breeding season; and in complete plumage; but it is probable, that in its immature and winter state, it resembles other Black-headed Gulls, in being divested of the dark plumage of the head.\*

These birds were met with in considerable numbers in the month of July, on a group of three low rocky islands on the west coast of Greenland, twenty miles distant from the main land, associated with the Common Tern, breeding there, and the nests of both intermingled. This species lays two eggs on the bare ground, one inch and a half in length, of a regular shape, not much pointed, colour olive, greatly blotched with brown: the manners and habits of this bird are but little known, not having been seen in any other instance during the voyage through Davis's Straits and Baffin's Bay; nor did they seem at all to be known to the Esquimaux, who served as an interpreter in the Expedition: they were observed to fly with impetuosity towards persons approaching their nests and young, and seemed to get their food on the sea beach, feeding on the marine insects which are cast on shore. Mr. Sabine describes a Gull with similar plumage, but differing in having an even tail, and wanting the dark collar round the neck: this was brought from Hudson's Bay.

M. Temminck mentions having seen the Forked-tailed Gull in the Museum at Vienna.

<sup>\*</sup> In Capt. Parry's Second Voyage, p. 449. a Gull is mentioned with a black ring round the neck, with a beautiful tint of delicate rose-colour on the breast; no further description is given, but that the legs were red.

# 8.—ADRIATIC GULL.

Larus melanocephalus, Tem. Man. Ed. 2d. 777.

LENGTH fifteen inches and a quarter. Bill strong, rather short, and the colour of vermilion; irides, and round the eyes, brown; the head, neck, upper parts, tail, and the quills, from the middle to the ends, white; back, wings, second quills, and base of the greater, light bluish ash; legs light orange.

The young have the plumage mixed with deep brown; and the white of the head and outer edge of all the quills deep black, but the inner webs and ends white; at the end of the tail a black band.

In the summer plumage, the head and upper part of the neck deep black; fore part of the neck and belly rose-colour, which disappears soon after the death of the bird.

Inhabits the Coasts of the Adriatic Sea; very common on those of Dalmatia, in the marshes. Communicated by M. Natterer.

# 9.--ITALIAN GULL.

LENGTH eighteen inches. Bill one inch and a half, deep blood-red; head fine deep black; back, wings, and rump, pale silvery grey; greater quills white; the outer web of the exterior black for four inches in the middle of the quill; the rest white; neck, breast, belly, and tail, pure white; the wings exceed the tail in length by two inches; legs deep red, the colour of the bill.

Inhabits Italy: this seems to bear much affinity to the Crimson-billed or next Species, but the wings are wholly without the black, except part of the outer web of the exterior one. In the Museum of Mr. Bullock.

## 10.—CRIMSON-BILLED GULL.

LENGTH seventeen or eighteen inches. Bill from gape to point two inches, colour crimson; irides yellow-hazel; eyelids dotted with crimson; head, neck, and under parts of the body, white; back and wings pale silvery grey; outer border of the wings white; some of the greater quills chiefly white; but two or three of the outer for the greater part black; all of them are white near the ends, for an inch or more, and some of the tips are black: these are so long as to reach an inch beyond the end of the tail, which is white; legs crimson; webs and toes the same, but the former rather darker; claws black; legs bare above the knee for three quarters of an inch.

Inhabits New-Holland; not unfrequent at New South Wales, most so in April. Native name Tanna-rang. Described from the collection of Mr. Francillon.

## 11.—BLACK-BACKED GULL.

Larus marinus, Ind. Orn. ii. 813. Lin. i. 225. Fn. suec. No. 155. Gm. Lin. i. 598.

Act. Holm. iv. 101. Faun. groenl. No. 66. Brun. No. 145. Muller, No. 163.

Bor. Nat. iii. 48. 4. Lin. Trans. xii. p. 543. Tem. Man. 492. Id. Ed. 2d. 760.

Great White Gull, Bartr. Trav. 293.

Larus niger, Bris. vi. 158. Id. Svo. ii. 403.

----- maximus ex albo et nigro varius, Raii, 127. A. 1. Will. 261. Klein, 136. 1.

Die Mantel meve, Beckst. Deuts. ii. 815. Id. Ed. 2d. iv. 763. Schmid, t. 123.

Le Goeland noir manteau, Buf. viii. 405. t. 31. Pl. enl. 990.

La grande Mouette, Voy. d'Azara, iv. No. 409.

Great black and white Gull, Will. Engl. 344. pl. 67. Albin, iii. pl. 94.

Black-backed Gull, Gen. Syn. vi. 371. Br. Zool. ii. No. 242. Id. fol. 140. pl. L. Id. 1812. ii. p. 172. Flor. Scot. i. pl. 5. f. 2. Arct. Zool. ii. No. 451. Bewick. ii. pl. p. 212. Lewin, vi. pl. 208. Id. xli.—egg. Pult. Dors. p. 18. Walcot, pl. 112. Lin. Trans. viii. 267. Id. xii. 543. Orn. Dict. & Supp.

THE length of this Gull is twenty-nine inches, breadth five feet nine inches; weight near five pounds. The bill strong, and thick, vol. x.

almost four inches long, pale yellow, the lower mandible marked with a red spot, having a black one in the middle; edges of the eyelids orange; irides yellow; the head, neck, all beneath, the lower part of the back and the tail, white; the upper part of the back and the wings black; quills tipped with white; legs pale flesh-colour.

This bird inhabits various parts of England, but we believe is less numerous than many of the other species; it generally keeps in small flocks of eight or ten, sometimes in pairs, but never herding with the other Gulls. Said to breed on the Steep Holmes, and on Lundy Islands, in the British Channel; and is there called a Cobb. The young, for the first two or three years, are mottled all over with brown and white; the bill light horn-colour, tip black; quills dusky; tail mottled, near the end a dusky bar, tip white; irides and orbits dusky. These, from associating with the former, and their weight and size being but little inferior, may naturally be supposed to be young birds, and will accord with the synonyms following.

#### YOUNG BIRD.

Larus nævius, Gm. Lin. i. 598. Ind. Orn. ii. 814. Tem. Man. d'Orn. 492. Id. Ed. 2d. 762.

Larus maculis Muscas referentibus variegatus, Gerin. v. t. 534.

Bunte Sturmmeue, Shr. d. Berl. Nat. viii. 92.

Die geflechte Meve, Bechst. Deuts. ii. 814.

Le Goéland varié, Grisard, Buf. viii. 413. pl. 33. Pl. enl. 266.

Wagel Gull, Gen. Syn. vi. 375. Br. Zool. ii. No. 247. A. pl. 28. Id. 1812. ii. p. 182. pl. 33. f. 2. Arct. Zool. ii. No. 453. Id. Sup. p. 70. Will. Engl. 349. pl. 66. Bewick, ii. pl. p. 216. Lewin, vi. No. 208. pl. xlii.—the egg. Walcot, i. pl. 111. Pult. Dors. p. 18. Orn. Dict. Lin. Trans. V. xii. 547.

THIS is about two feet in length, and in breadth five; weight nearly three pounds. Bill black, from two to three inches long; irides dusky; plumage in general mixed brown, ash-colour, and

white; the middle of each feather brown, beneath much the same, but paler; quills black; the lower part of the tail mottled black and white, near the end a bar of black, beyond this the end is white; legs dirty flesh-colour; in some white. There is very little doubt of this being the immature Black-backed Gull;\* an opinion has been entertained of its being the female of that bird, and accounts given of the incubation, and egg considered as such,† but how far to reconcile this we know not, otherwise than by supposing it possible to breed before it acquires maturity, which it probably does not gain till the third year, and we have seen birds in the intermediate state, in which the general colour was more uniform, with a considerable tinge of deep lead-colour on the scapulars and wing coverts; and such were most likely in the second season of plumage.

The Black-backed Species, or one pretty nearly corresponding, also found in New South Wales.

Mr. Hooker informs us, that these birds breed by thousands, on two fine black, insulated rocks,‡ in the middle of the immense Lake of Thingevalle, in Iceland, under the name of Svart Bakr. Once seen by our late voyagers high up in Baffin's Bay.

### 12.—ICELAND GULL.

Iceland Gull, Wern. Trans. iv. pt. 1. p. 176.

IN Mr. Bullock's Museum was a Gull about the same size as that called the Wagel, yet differing in many particulars. The bill is longer, yellow, but without the red patch; general colour of the plumage dirty white, irregularly marked with brown spots; the under parts of the body darker than the upper; quills wholly white; tail even, marked with brown and white irregularly; quills and tail equal in length; legs bare one inch above the knee, and yellow.

<sup>\*</sup> Faun. groenl. † Lewin. ‡ Called Sandsey and Nesey. The lake said to be fifteen miles long, and from five to twelve wide.—Tour in Iceland. p. S1.

Said to have come from Shetland, but it differs in many things from the Wagel; for the colours, though not much unlike, are differently blended; and again, this bird is darker beneath, but in the Wagel the under parts are paler; the bill, too, in this species is longer, and wholly yellow, which is in the Wagel dark-coloured, if not black.

Mr. Edmondston, in the Wern. Trans. describes the adult in length two feet five inches, breadth five feet two inches, and weight five pounds: the back and upper part of the wings pale blue; irides pale yellow; head and neck streaked with grey, the rest of the plumage and prime quills white; feet and legs like those of the Herring Gull, but larger. Some specimens vary, in having scarcely any grey on the head and neck, and supposed to be the most perfect birds.—The above inhabits Iceland and Shetland; in the latter about Balta Sound; seen sometimes by more than 100 in a flock; but more frequent in the Island of Unst. The place of breeding unknown. Is called in Iceland Scorie: the plumage very dense, so as to render it difficult to be penetrated, unless with large shot: is said to have a great partiality for carrion.

#### 13.—GLAUCOUS GULL.

Larus glaucus, Ind. Orn. ii. 814. Gm. Lin. i. 600. Brun. No. 148. Muller, No. 169. Fn. groenl. No. 64. Act. Holm. iv. p. 97. 1. Lin. Trans. xii. p. 543. Ross's Voy. Ap. p. liv. Tem. Man. 495. Id. Ed. 2d. 758. Parr. App. p. cciii.
Larus cinereus, Bris. vi. p. 160. 2. Id. 8vo. ii. 404. Gerin. v. pl. 533.

Goeland à manteau gris, Buf. viii. 406. pl. 32. Pl. eul. 253.\*

Le Bourgmeister Buf. viii. 418.

Burgmeister, Mart. Spitsb. p. 60. t. L. F. D. Naum. Vog. t. 35.

Groote Zee-Meeuw, Sepp, Vog. t. p. 195.

Weisschwingige Meve, Bechst. Deuts. Ed. ii. Vo. iv. 662.

Glaucous Gull, Gen. Syn. vi. 374. Aret. Zool. ii. 532. B. Id. Sup. p 70.

<sup>\*</sup> The engraver seems to have omitted the back toe, though it is sufficiently expressed in Buffon's figure.

Herring Gull, Gen. Syn. vi. 372. Br. Zool. ii. No. 246. pl. 88. Id. fol. 141. Id. 1812. ii. p. 181. pl. 33. Will. Engl. 345. Bewick, ii. pl. p. 214. Lewin, vi. p. 7. Walcot, i. pl. 113. Orn. Dict. δ Supp.

LENGTH twenty-six inches. Bill yellow, with a patch of red on the under mandible; irides yellow; head, neck, and all beneath white; the ends of the greater quills are also white, the outmost has a black spot within the white at the end; back and wings hoary grey; legs pale fulvous. Male and female much alike.

Inhabits Norway, Lapmark, Greenland, and Spitzbergen, and called by the Dutch, Burgmeister, being master of all other Sea Fowls. Is every where on the sea coast and bays of Greenland, at all seasons; lays three pale eggs on the crags of the rocks, among the grass in May, about the size of those of a Duck, marked with numerous brown spots. Its food various—chiefly the young and smaller fish; will prey also on dead whales: often destroys the young of the Razor-bills, and will sometimes eat the berries of the black-berried heath\* in defect of other food; is for the most part seen on the wing, making a noise like that of a Raven, or as some think, a Turkey.

The young birds of the first year are pale fulvous, marked with dusky spots, which gradually disappear, till the plumage becomes perfect; in this state the bill has no yellow spot, nor is it yellow. Whilst young the flesh is esteemed in Denmark, and thought to yield very little in flavour to that of a young Fowl. This bird is often caught with a hook, baited with a small fish, as the Father Lasher, or such like, on a pointed stick, tied in the middle and baited with a lump of lard, or other fat; and now and then struck with darts, whilst sleeping on the water.

I have received this bird from Hudson's Bay, twenty-three inches in length, and four feet in breadth. In this specimen six of the prime quills were black at the ends, near the tip of the outer a large spot of white, on the second a smaller one of the same on the inner

web, near the tip, and the tip itself white; the four following white only at the tips; the second quills white at the ends; legs brownish red. It is as numerous in the Polar Sea as in Baffin's Bay, and Davis's Strait.

Dr. J. R. Forster mentioned to me, that he met with this species both at Terre del Fuego, and New Zealand.

#### 14.—HERRING GULL.

Larus fuscus, Ind. Orn. ii. 815. Lin. i. 225. Fn. suec. No. 154. Gm. Lin. i. 599.
Scop. i. No. 107. Brun. No. 142. Id. 143. Var. 104. young. Mull. No. 164.
Georgi, p. 171. Frisch, t. 218. Borowsk. iii. p. 49. Act. Holm. iv. 105. Fn. Helvet. Sepp, iii. t. 101. Lin. Trans. viii. p. 267. Id. xii. p. 547. Tem. Man. 497. Id. Ed. 2d. 767.

Larus varius, Brun. No. 150. young bird.

---- griseus, Bris. vi. 162. Id. Svo. ii. 405. Klein, Av. 137. 2.

Gavia grisea, Bris. vi. 171. 6. young. Id. 8vo. ii. 407.

Larus cinereus maximus, Raii, 127. A. 2. Will. 262. Sloan, Jam. 322. Gerin. v. t. 533.

Gabiano Zafferano mezza more, Gerin. v. 532.

Die Heeringsmeve, Beschst. Deuts. ii. 818. Id. Ed. 2d. iv. 658.

Goeland à manteau gris et blanc, Buf. viii. 421. in the third year's feathers.

Herring Gull, Arct. Zool. ii. No. 402. Br. Zool. ii. No. 246. pl. 88. Id. fol. 141.Id. 1812. ii, 181. pl. 33. Orn. Dict. & Supp.

LENGTH twenty inches; weight thirty ounces. Bill yellow, with an orange spot on the under mandible; irides straw-colour; the edges of the eyelids red; the head and neck are white, with a pale dusky dash down the middle of each feather; front, throat, breast, and belly, the lower part of the back, and tail white; upper part of the back, the scapulars, and wings in general black, or deep ash; the quills black, towards the end of the two exterior an oval spot of white, the end black; the others white to the end; the secondaries and scapulars tipped with white; legs yellowish: the plumage in both sexes much the same.

Young birds are at first ash-coloured, spotted, or mottled with brown and dirty white; but do not arrive at full maturity until the third season, and even then in some specimens the wing coverts are still mottled with brown, with a mottled bar on the tail feathers: and it may be observed, that in the two first years the young of the Black-backed are so much alike, as not to be ascertained, till the mature feathers begin to appear on the back.

The Herring Gull is common in this kingdom, and frequents the same places with the following species; scrapes together some dead grass for a nest, and lays three eggs, pale dirty white, marked with pale ferruginous streaks, and blotched with black, oval in shape, and two inches and three quarters in length. This species was found to breed on an Island off St. David's, and the nests innumerable; and as there was a mixture of the immature birds, we may be inclined to believe, that they breed before their plumage appears in the complete state. They are also in numbers about a mile south of Troup Head, and on the south Ronaldsha, Pentland, Skerrie, and Copinsha, and other places similar.

### 15.—SILVERY GULL.

Larus argentatus, Ind. Orn. ii. 814. Gm. Lin. i. 600. Brun. No. 149. Faun. groenl.
 p. 101. (Obs.) Lin. Trans. viii. 267. Tem. Man. 494. Id. Ed. 2d. 764. Frankl. Narr. App. p. 695.

Goeland à manteau gris et blanc, Buf. viii. 421.—three year's bird.

Grande Mouette cendrée, Buf. viii. 428. Pl. enl. 977.

Lesser black-backed Gull, Orn. Dict. & Supp.

Silvery Gull, Gen. Syn. vi. 375. Arct. Zool. ii. p. 533. C. Id. Sup. p. 70.

THIS is about twenty-two inches in length, and weights about thirty-six ounces. Bill yellow, with an orange spot on the under mandible; irides pale yellow; the head, neck, tail, and all beneath, white; back, scapulars, and wings, dusky black; prime quills dusky, towards the end black; the point of the first white, with the end black; the second the same, with only a white spot within the black;

the others very slightly tipped with white; two or three of the scapulars are also tipped with white. According to Brunnich, the head and neck are marked in lines of ash-colour, but this is only seen in incomplete birds. The female is smaller, and the young birds at first are blotched, and spotted with brown, as in the Wagel.

Inhabits Norway and Greenland; in plenty at Lesser Cumbray, in the Firth of Clyde; no other Gulls, not even the mottled ones of their own species, on the Island.\* Breeds in abundance on Ramsay Island, in Pembrokeshire, and frequently with the Herring Gull, but less plentiful than the Black-backed, with which it never associates.† The eggs like those of the Herring Gull, but larger; the young of both much alike: it is by far less numerous than the Herring Gull, but much more plentiful than the Great Black-backed.

A .- Larus argentatus, Silvery Gull, Lin. Trans. V. xii. p. 546. Parry's App. x. p. cciv.

A bird under this title is mentioned by Capt. Sabine, which he describes by comparison with the Herring Gull. In general character of plumage they are not unlike, but without any black in the primary quills; the shade of ash-colour on the back, scapulars, and coverts, varies in different specimens. The males about twenty-four inches long, the females rather less; extent of wing four feet and a half; the wings longer in proportion than those of the Herring Species.

These were abundant in Davis's Straits, and Baffin's Bay, supposed to be specifically the same with the Herring Gull, but from the effect of climate the black markings of the prime quills changed to white. Mr. Pennant observes, that the Herring Gull inhabits Greenland throughout the year; but Mr. Sabine rather thinks that it is not so, as not a single one has been seen there with the black prime quill feathers; and that it is most probable to be the one he here describes. These were seen near Bear Island, with their young, the end of August.‡

<sup>\*</sup> Lin. Trans. † Orn. Dict: ‡ Parry's second Voy. p. 61. 84.

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#### GULL.

## 16.—COMMON GULL.

Larus canus, Ind. Orn. ii. p. 815. Lin. i. 224. Fn. suec. No. 153. Gm. Lin. i. 596.
Sepp, pl. 56. Brun. No. 141. Muller, No. 162. Georgi, p. 170. Fn. arag. p. 75.
Borowsk. iii. p. 47. 3. Act. Holm. iv. p. 109. Fn. Helv. Tem. Man. 501. Id. Ed. 2d. p. 774.

Larus cinereus rostri extremitate et pedibus croceis, Gerin. v. t. 530.

Larus canescens, Hasselq. It. 272. 39. Id. Voy. 202.

Gavia cinerea, Bris. vi. 175. t. 16. f. 1? Id. 8vo. ii. 408.

Gavia cinerea major, Bris. vi. p. 182. t. 16. f. 2. Id. 8vo. ii. p. 410.

Larus rostro nigro, Klein, Av. 137. 5. Id. Ov. 35. t. 20. f. 5.

Larus cinereus minor, Raii, 127. A.3. Will. 262. t. 76.

La grande Mouette cendrée, Buf. viii. 428. Pl. enl. 977.

Gabbiano minore di color cinerizio, Zinnan. Uov. 115. t. 22. f. 104.

Kleine graue Mewe, Naturf. xii. 143.

Die gemeine Meve, Bechst. Dents. ii. 808. Id. Ed. 2d. iv. p. 645.

La Mouette cendrée, Voy. d'Azara, iv. No. 410.

White web-footed Gull, Albin, ii. pl. 84.

Common Gull, Gen. Syn. vi. p. 378. Br. Zool. ii. No. 249. pl. 89. f. 2. Id. fol. 142. Id. 1812. ii. p. 184. pl. 34. f. 2. Arct. Zool. ii. No. 458. Id. Sup. p. 70. Will. Engl. 345. pl. 76. Bewick, ii. pl. p. 218. Lewin, vi. pl. 215. Id. xliv. f. 1. the egg. Donov. ii. pl. 46. Walcot, i. pl. 110. Pult. Dors. p. 18. Graves, Vol. I. Orn. Dict. & Supp.

LENGTH eighteen inches, breadth three feet; weight sixteen ounces. Bill yellow; irides hazel; eyelids brown; head, neck, under parts, and tail white; back and wings pale blue grey; the outer edge of the first four quills, and ends of the first five black; but the fourth and fifth have a white spot at the tips; the rest, except the three nearest the body, have the ends white; legs dull greeenish white; in some spotted with yellowish.

The young of this, as of all of the Gull Tribe, are more or less mottled with brown, which they lose by degrees, as they approach to maturity.

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A.—Larus hybernus, Gm. Lin. i. 596. Tem. Man. 500. Id. Ed. 2d. p. 773.Gavia hyberna, Bris. vi. 189. Id. 8vo. ii. 411.

Larus fuscus, sen hybernus, Raii, 130. A. 14. Will. 266. t. 66. Klein, 138. 9.

Larus ex cinereo, albo, fusco, et nigric. infectus et maculatus, Gerin. v. t. 531.

Larus nostratibus vulgo Guairo, Gerin. v. t. 535 ?

Larus maculatus, Brun. No. 146. 147.

Guacu-gnacn, Raii, 130. 12. Will. 268. Id. Engl. 352.

Mouette d'Hyver, Buf. viii. 437.

Winter Mew, Coddy Moddy, Gen. Syn. vi. p. 384. Br. Zool. ii. No. 248. pl. 86. 1.
Id. fol. p. 142. pl. L. 2. Id. 1812. ii. 185. pl. 34. f. 1. Will. Engl. 350. pl. 66.
Alb. ii. pl. 87. Bewick, ii. p. 221. Donov. pl. 77. Walcot, i. pl. 114.. Lewin, vi. pl. 210.

Size of the last. Bill two inches long, horn-colour, tip black, and bent at the end; irides hazel; top of the head, hind part, and sides of the neck white, marked with oblong dusky spots; back ash-colour; scapulars and wing coverts the same, marked with dusky brown; forehead, all the under parts, and rump, white; the first quill black, the six following more or less black at the ends; the others tipped with white; tail white, with a bar of black near the end; legs dirty bluish white.

This is, without doubt, only an immature bird of the Common Gull, probably in the plumage of the second year; and they vary too, in respect to size and weight, in their different stages of growth.

This species seems to be the most common of all the Genus, being found in vast numbers on our shores and rivers, contiguous to the sea; sometimes approaching far inland; seen to follow the plough for the sake of picking up worms, and in particular are fond of the larvæ of the chafer beetle.\* Is seen in flocks of hundreds, on the shores of the Thames, and other rivers, in the winter and spring at low water, picking up various worms and small fish left by the tide; has been also met with sometimes at sea, 200 miles from land. It breeds

<sup>\*</sup> Scarabæus Melòlontha.—Lin.

like others, on the rocks and cliffs, and lays two, or at most three, dull, olive-brown eggs, about the size of those of a Hen, marked with irregular, dusky red blotches. The nests generally made of sea weed, and placed near together, about fourteen feet from the sea beach. On the Continent it is a general inhabitant; seen as far north as Iceland, and the Russian Lakes; also in the neighbourhood of the Caspian Sea, and various shores of the Mediterranean, as well as in Greece, but no where more plentiful than on the shores of Andalusia, and about the Bay of Gibraltar, except in the breeding season, when they retire to the more rocky, and less frequented shores of Spain and Barbary. All the winter they attend the fishermen in prodigious flocks, but will suffer no other persons to come near them, either on land or water; and it requires much patience and dexterity to get an opportunity of shooting them. very similar is found in India, but with yellow bill and legs. called there Gongcheel; is also found in America, being frequent on the coast of Newfoundland.

Much has been said about the gelatinous substance called Star Shot, or Star Jelly, which is the half-digested remains of worms, frogs, &c. first swallowed by Gulls or Herons, and the indigestible parts brought up again; for on examination, the limbs of frogs have sometimes been found attached, and this lump of matter being further enlarged, and swelled by rain and moisture, when found in the marshes and low lands, puts on the appearance of a jelly, and in this state has been mistaken for the Tremella Nostoc, but the difference between the two may be detected by the scientific botanist.\*

<sup>\*</sup> See Br. Zool. Art. Winter Gull. Morton's Northampt. p. 353. Gent. Mag. 1793. p. 135. Bee, Vol. ii. p. 132. Also Wither. Bot. Ed. iii. Vol. iv. p. 80. Sowerby's Botany, pl. 461.

### 17.-IVORY GULL.

Larus eburneus, Ind. Orn. ii. p. 816. Gm. Lin. i. 596. Phipp's Voy. p. 187. Lin. Trans. xii. 548. Tem. Man. 498. Id. Ed. 2d. 769. Ross's Voy. App. liv. Parr. App. p. cciv.

Larus niveus, Act. Holm. iv. p. 100. 2. Mart. Spitz. t. L. f. A.

Larus candidns, Fn. groenl. No. 67. Muller, p. 8.

Rathsher, i. c. Senator, Raii, 126. 1. Mart. Spitz. p. 77. Adel. 359. 415. t. 13. f.4. Salern. Orn. 382.

La Mouette blanche, Buf. viii. 422. Pl. enl. 994.

Ivory Gull, Gen. Syn. vi. 377. Arct. Zool. ii. No. 457.

LENGTH sixteen inches; breadth thirty-seven. Bill two inches long, lead-coloured, with a pale tip; orbits saffron; the irides dark brown; plumage wholly white; the wings very long, exceeding the tail, and even the legs, when at length; the legs lead-colour, claws black. In young birds the bill is black; the plumage marked with oblong black spots, especially on the back and wings.

This species seems to prefer the most northern situations, inhabiting both Coasts of Greenland, and met with far out at sea, very seldom approaching the land, except in breeding time; but is then sufficiently tame, so as to be shot without difficulty; whereas at sea it is very shy. Frequent in the Frozen Sea, between Asia and America, and off Cape Denbigh, a little to the south of Behring's Straights; met with by our late voyagers at Aoonalaschka, and has a rough and loud kind of scream; further than the above, the manners are not known; is seen at Spitsbergen, and the most northern coasts; abundant in Baffin's Bay, in company with the Fulmar.

## 18.—HUDSONIAN GULL.

LENGTH twenty-seven inches and a half, breadth five feet. Bill and legs flesh-colour; irides straw; the plumage wholly of a

beautiful white, except a few of the tail coverts, which are barred with dusky. The young are blackish, and the old ones do not become perfectly white under three years.

Inhabits Hudson's Bay; is scarce along the coasts, but more plentiful in the Islands, and inland lakes, where it makes a slight nest on the ground, of dry grass, and lays four white eggs. This was described to me by the late Mr. Hutchins, under the name of Ivory Gull, but I suspect it to be a distinct species, as it so very much exceeds that in size.

## 19.—BLACK-TAILED GULL.

SIZE of the Common Gull. Bill yellow; irides brown; eyelids yellow; head deep black; general colour of the plumage pale silvery ash; belly and vent white; wing coverts pale cinereous blue, inclining to brown at the bend; quills and tail wholly black; legs yellow.

Inhabits India. From the drawings of Sir J. Anstruther.

# 20.—KITTIWAKE GULL.

OLD BIRD.

Larus tridactylus, Ind. Orn. ii. 817. Tem. Man. 503. Id. Ed. 2d. 774.

Larus Rissa, Lin. i. 224. Gm. Lin. i. 594. Brun. No. 140. Muller, No. 160. Isl. reise, 356. t. 23. Fn. groenl. No. 63. Lin. Trans. xii. p. 549. Ross. Voy. Ap. p. liii. Frankl. Narr. App. p. 695.

Kutiegef, Adel. 361. t. 14. f. 6. Gm. reise, ii. 191?

Gavia cinerea, Bris. vi. p. 175. t. 16. f. 1? Id. 8vo. ii. 408.

Larus albus minor, Bartr. Trav. 293.

Islandische Meve, Bechst. Deutsch. ii. 804. Id. Ed. 2d. iv. 628.

Le Goiland cendré, Pl. enl. 253. Bris. vi. t. 14? Id. 8vo. ii. 404.

Kittiwake, Gen. Syn. vi. 393. Br. Zool. ii. No. 250. pl. 89. Id. 1812. ii. 186. pl. 34.
f. 1. Sibb. Scot. 20. Arct. Zool. ii. No. 456. Tour in Scotland, 1769. (4to. ed.)
p. 145. Phipps's Voy. 187. Bewick, ii. pl. p. 229. Lewin, vi. 13. pl. 214. Id. xliii. 2.—the egg. Lin. Trans. viii. 267. Walcot, i. pl. 108. Pult. Dors. p. 18. Orn. Dict. & Supp.

LENGTH eighteen inches; weight seven or eight ounces. Bill yellowish, length two inches; irides dusky; inside of the mouth and

tongue orange; head, neck, belly, rump, and tail, pure white; back and wings dove-colour, or light grey; the outer edge of the first quill feather, and the tips of the four or five next black; legs dusky, with a knob instead of a back toe. Some have a dusky spot behind the ear, shewing that the bird is not in the most perfect state of completion.

#### YOUNG BIRD.

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Larus tridactylus, Ind. Orn. ii. 817. 11. 3. Lin. i. 224. 2. Fn. suec. No. 157. Gm.
    Lin. i. 595. Muller, No. 161. Isl. reise, 572. t. 24, 25. Faun. groenl. p. 98.
    No. 63. Faun. Helv. Borowsk. iii. 47. 2.
Larus nævius, Lin. i. 225, 5.
Gavia cinerea nævia, Bris. vi. 185. 11. t. 17. 2. Id. Svo. ii. 410.
Larus vulgo Terragnola, et Goletra dictus, Gerin, v. t, 529.
---- cinereus Bellonii, Raii, 128. A. 4. Will. 263. t. 68.
----- albo cinereus torque cinereo, Aldr. iii. t. p. 77. Will. 266. t. 66.
Kuutge-Gef, Klein, Av. 148, 9-169. 4.
Die Winter Meve, Bechst. Deuts. ii. 805. Naturf. xii. 142.
La Mouette cendrée tachetée, Buf. viii. 424.. Pl. enl. 387.
Tarrock, Gen. Syn. vi. 392. Id. Sup. 268. Br. Zool. ii. No. 251. Id. fol. 142, pl.
    L. 3. Id. 1812. ii. p. 187. Arct. Zool. ii. 533. D. Id. Sup. p. 70. Fl. Scot. i.
    p. 41. 193. Will. Engl. 346. pl. 68. Bewick, ii. 231. Lewin, vi. p. 12. pl. 213.
    Walcot, i. pl. 109. Orn. Dict.
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Length fourteen inches; weight seven or eight ounces. Bill black; head, neck, and under parts, white; near each ear, and under the throat, a black spot; at the hind part of the neck a crescent of black; back and scapulars bluish grey; wing coverts dusky, edged with grey, some of the larger wholly so; the exterior sides and ends of the first four quills black; tips of the two next black; all the rest white; the ten middle tail feathers white, tipped with black; the two outmost wholly white; legs dusky ash-colour: instead of a back toe, there is only a protuberance. This is the plnmage of the second season, when these birds are found at their breeding places with the Kittiwake. During the first they are mottled like other young Gulls, and are not complete in feather till the third year.

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A.—This is larger than the Tarrock, and differs but little in general markings; on the ear a spot of black; at the lower part of the neck behind the feathers marked with a dusky black bar just at the tip; from the bend of the wing to the tip of the second quills an oblique bar of black; tail white, all but the outer feathers tipped for one inch with black.

Inhabits Kamtschatka, and seems to be a Variety of the Tarrock, but of a larger size. In a second, from the same place, the markings were much less distinct, with the addition of some clouds of black below the nape. Both these were in the possession of Sir J. Banks.

The Kittiwake, in all its stages, inhabits various parts of England, though, perhaps, less generally than many other Species: is called, about Flamborough Head, the Petrel, and is found in the cliffs thereabouts; also in the Bass Isle, the vast rocks near the Castle of Slains, in the county of Aberdeen; Priestholme Isle, on the Isle of Glass; Troup Head; in the vicinity of Montrose, and other places; but rarely appearing in the more southern parts; yet I have received specimens shot near Faversham, in Kent, and others killed near Teignmouth, Devon, in November, 1785.

Is found also in Greenland, Spitzbergen, Iceland, and the north of Europe, the Arctic Coast of Asia, and Kamtschatka; by the Icelanders it is called Ritsa. We are able to trace this bird as far south as Gibraltar, where it is seen in the Bay with others of the Genus; is likewise met with at Newfoundland: the eggs are two in number, greenish white, marked with black and brown spots, and deposited in a sort of nest in June, composed of dry confervæ; in Greenland it feeds chiefly on a small fish of the salmon genus,\* sand eels,† and other small fishes: the noise these birds make, while hovering over their nests, when in great numbers, is intolerable, and they are equally restless at sea. The skins are used for garments by

<sup>\*</sup> Salmo arcticus.—Lin.

the Greenlanders, and their flesh and eggs both eaten; the young are also brought to the markets of Edinburgh with the Gannet, and sold as articles of food.

Multitudes annually arrive in Shetland for the purpose of breeding: in the Island of Foula, they are so congregated in a kind of natural arch, on the north-west side, as completely to whiten the face of the rock, and where the fowler, if so disposed, may kill them by bushels.\*

B.—A bird is mentioned by Mr. L. Edmonston, which, although differing very little in plumage from the Kittiwake, may possibly prove distinct. In this the upper part of the neck and head are pale blue; on each ear a darker spot; the plumage otherwise like the Kittiwake.—Small flocks of this are observed in Zetland towards the end of autumn, generally frequenting exposed bays: in form they seem more elegant, erect, and elongated; the mode of flight different, not unlike that of the Lapwing. This Variety is only to be found for about a month, and though at first numerous, it soon almost entirely disappears, yet some of the Kittiwakes still remain. Supposed to breed in Greenland.

### 21.—PULO-CONDOR GULL.

Larus Pulo-Condor, Ind. Orn. Sup. p. lxviii. Mus. Carls. fasc. iv. t. 83. Pulo-Condor Gull, Gen. Syn. Sup. ii. 332.

SIZE uncertain. Bill black; the forehead ash-colour; crown the same, with a mixture of white; plumage on the upper parts rusty ash-colour and brown mixed; beneath white; hindhead, nape, and shoulders, black; legs yellow, claws black. In the coloured print of the bird, the legs are without a hind toe, but the circumstance is not mentioned in the description.

Inhabits the Island of Pulo-Condor, in the East Indian Sea.

<sup>\*</sup> Wern. Mem. iv. pt. 2. 249 .- Captain Vetch.

#### \* NOSTRILS COVERED WITH A CERE.

#### 22.—SKUA GULL.

Larus Catarractes, Ind. Orn. ii. 818. Lin. i. 226. Gm. Lin. i. 603. Borowsk. iii. p. 50. Lestris Catarractes, Tem. Man. 511. Id. Ed. 2d. 792.

Larus fuscus, Bris. vi. 165. Id. Svo. ii. 405. Klein, Av. 137. 7.

Catharacta Skua, Brun. No. 125. Muller, No. 167. Fn. suec. Retz. No. 123.

Catarractes et Catarracta, Raii, 128. A. 6. Id. 129. 7. Will. 265. Id. Engl. 348, 349. pl. 67. Sibb. Scot. p. 2. l. iii. p. 20. pl. 14. 2.

Le Goéland brun, Buf. viii. 408.

Gabbiano, Cuccale, Zinnan. Uov. 114. pl. 21. f. 102.

Port Egmont Hen, *Hawkesw. Voy.* ii. 283. Cook's Voy. i. 44. 272. Forst. Voy. i. 109. 118. &c.

Sea Crow, Kolb. Cap. ii. 141?

Brown Gull, Albin, ii. pl. 85.

Skua Gull, Gen. Syn. vi. 385. Id. Sup. ii. 332. Br. Zool. ii. No. 243. Id. fol. 140.
pl. L. 6. Id. 1812. ii. p. 174. Arct. Zool. ii. No. 460. A. Bewick, ii. pl. p. 233.
Lewin, vi. pl. 211. Id. xlii. No. 2.—the egg. Walcot, i. pl. 117. Orn. Dict. & Supp.

SIZE of a Raven; length two feet, breadth four and a half; weight three pounds. Bill nearly two inches long, and black, much curved at the end, and covered, for three parts of its length, with a kind of black cere, at the end of which the nostrils are placed, which are pervious; the plumage on the upper parts of the head, neck, back, and wings, is deep brown, margins of the feathers ferruginous brown; but the head and neck incline to ash-colour, especially the forehead and chin; the breast, belly, thighs, and vent, pale dusky ferruginous; legs black, rough, and warty; claws, especially the inner, very hooked, the hind toe very short, but the claw crooked and sharp. The young bird is ash-coloured.\*\*

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<sup>\*</sup> Mr. Bullock observed to me, that the bills of all the young of this Genus are peculiarly hard, and therefore adapted to make their way more easily through the shell of the egg.

This is a very voracious and fierce species, and inhabits, in preference, the northern parts of this kingdom, though it occasionally visits the south, having been shot near Greenwich, in Kent, and likewise at Sandwich, in the year 1800; is no where more frequent than in the Schetland Isles, and those of Ferroe; common also in Norway, and as far as Iceland. On the rocky Island Foula\* is much esteemed, as it is said to defend the flocks from the Eagle, which it beats and pursues with great fury: the natives denying that it ever injures or even attacks poultry. It preys on the lesser Gulls, and other birds, in the manner of a Hawk, attacking the first on the wing, in order to make them disgorge the fish they may have taken; in the manner of the Bald Eagle.† During incubation is courageous to an alarming degree, in defence of its young; as it will then attack several persons in company without fear, should they approach the haunts. ‡ Has been seen in many high latitudes of the southern atmosphere; met with in Falkland Isles, particularly about Port Egmont, and there called Port Egmont Hen. In this place, and at Terra del Fuego, observed to make the nest among the dry grass;§ said to lay three or four olive-brown eggs, and marked with dusky clouded spots. After breeding time they disperse over the ocean, and for the most part separate into pairs. | Met with in Kerguelen's Land, and off the Cape of Good Hope, and other parts. In all places noticed for its ferocity: is frequently seen to attack the largest Albatross, beating it with great violence while on the wing, at which time this giant finds no other resource, than in settling on the water, when the Skua flies away. This may probably be the Sea Crow of Kolben; \*\* said to be in plenty at the Cape, and the flesh delicate, and much valued; but the manners of the Skua seem to differ; it

<sup>\*</sup> Said to breed there on the Snuke, at the height of 1300 feet, and no where else on the Island of Foula,—Wern. Mem. iv. pt. 2d. 246.

<sup>¶</sup> See Hawkesw. Voy. ii. 283. Cook's Voy. i. p. 44, 272. Forst. Voy. i. 109. 118. ii. 493. Cook's last Voy. i. 88. and elsewhere.

\*\* Kolb. Cap. ii. 241.

is in estimation on account of the feathers, which are very soft, and much valued for stuffing of beds and cushions; and if not this bird, at least may be one of the Genus, as the feathers of all the tribe are said to be used indiscriminately for that purpose at the Cape, in preference to those of the Goose; many thousands being killed there every year.\* The inhabitants of St. Kilda are accustomed to torturea large kind of Gull, called Fuilag; probably the one known there by the name of Bonxy. They discover the greatest rage at seeing, or hearing of this cruel enemy, and exert their whole address to take it, when they pluck out its eyes, sew the wings together, and send it adrift. At other times they extract the meat out of the egg, on a supposition that the bird may sit till it pines away; and to eat the egg would be accounted flagitious, and worthy of a monster only, † The Skuas abound in the Island of Tristan da Cunha, attracted thereto by the various species of Petrels, which they attack as they come out of their holes in the evening, and leave nothing but the bones and feathers, to attest the havock made among them. t

#### 23.—POMARINE GULL.

Lestris pomarinus, Tem. Man. d'Orn. 514. Id. Ed. ii. 796. Parry's App. p. cevi. Stercorarius striatus, Bris. vi. 152. t. 13. f. 2. Id. 8vo. ii. 401.

LENGTH eighteen or nineteen inches. Bill two inches, bluish; irides yellow; all the upper parts of the bird plain brown bay; the under the same, but paler; tail white at the base, otherwise dusky brown; shafts of the quills white; shins lead-colour; base of the toes whitish, the rest black, hind claw white; wings and tail even. Both sexes alike in plumage. The young bird has the feathers varied with pale brown; a black space before the eye; scapulars and wing coverts deep brown, with a rufous bar at the ends; belly and upper and under tail coverts banded rufous and dusky.

<sup>\*</sup> Kolb. Cap. † Buchanan's Trav. ‡ Li

Inhabits the parts about the Arctic Circle, migrating southward occasionally, being found on the sea coasts of Holland and France, at such times. This has so many things in common with the Blacktoed Gull as to be ranked with it, but it is a much larger bird, and We are assured that it is a distinct species.

## 24.—ARCTIC GULL.—PL. CLXXV.

Larus parasiticus, Ind. Orn. ii. 819. Lin. i. 226. Fn. suec. No. 156. Ph. Tr. lxii.
p. 421. Gm. Lin. i. 601. Fn. Amer. p. 16. Mull. No. 166. Bor. iii. 45. t. 41.
Lestris parasiticus, Lin. Trans. xii. 551. Tem. Man. 512. Id. Ed. 2d. 797. Frankl.
Narr. App. 697. Parry's App. p. cevi.

Catharacta parasitica, Brun. No. 127. Fn. groenl. No. 68.

---- Coprotheres, Brun. No. 128.—female.

Stercorarius longicaudus, avis arctica dictus, Gerin. v. t. 539. Bris. vi. 155. 3.—male. Id. 8vo. ii. 402.

Stercorarius, Bris. vi. 150.-female. Id. Svo. ii. 401. Ross, Voy. Ap. p. lvi.

Sterna rectricibus maximis nigris, It. Wgoth. 182. Act. Holm. 1753. 291.

Strundt-jager, i.e. Κοπροθήρης, Raii, 127. Adel. 364. t. 34. f. 5. Mart. Spitz. S7.

Der Strunt-jager, Bechst. Deutsch. ii. 821. Id. Ed. 2d. iv. 375.

L'Abbe à longue Queue, Buf. viii. 445. Pl. enl. 762.\*

Arctic Birds, Edw. pl. 148, 149.—male and female.

Arctic Gull, Gen. Syn. vi. 389, 16. pl. 99. Br. Zool. ii. No. 245. pl. 87.—male & fem. Id. 1812. ii. 179. pl. 32. Arct. Zool. ii. No. 459. Bewick, ii. p. 239. Lewin, vi. pl. 207. Id. pl. xl. f. 2.—the egg. Walcot, i. pl. 116. Lin. Trans. viii. 267. Orn. Dict. & Supp.

LENGTH twenty-one inches. Bill one inch and a half long, pretty much hooked, and dusky; nostrils in a kind of cere; the top of the head is black; the sides of it, forehead, neck, and all beneath, white; across the breast pale dusky; upper parts of the body, wings, and tail, black, base of the quills white on the inner webs; the two middle tail feathers are nearly four inches longer than the rest; legs scaly, not very stout, and black. We have observed one, which had the chin and hind part of the neck mottled dusky and white; at the lower part of the neck the dusky colour advanced

<sup>\*</sup> In this plate the tail seems to be one-third of the length of the bird.

PL.CLXXV.



O (Trotic Gull !!

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forwards on each side; all the upper parts dusky brown; breast and under parts white, crossed with irregular, transverse dusky streaks; the two middle tail feathers very little longer than the rest; this was probably a young bird. The female is said by authors to be brown, palest beneath; the middle tail feathers only two inches longer than the others.\*\*

This is a northern species; is very common in the Hebrides, and breeds among the heath; comes in May, and retires in August; when disturbed flies about like the Lapwing, but soon alights. Breeds in numbers on the Isle of Foula, where the young birds are called Scories. Is found in the Orknies, and on the coasts of Yorkshire, where it is called the Feaser; is likewise named Scull, Badock, Scoutinallan, or Dirten-allan. It makes an artless nest of grass and moss, and lays two eggs in June, which are ash-coloured, marked with black spots, and the size of those of a hen; does not often swim, and generally flies in a slow manner, except it be in pursuit of other birds; which it often attacks, in order to make them disgorge the fish, or other food, which this common plunderer greedily catches up; and not the dung of the bird as some authors have asserted, and on that account given it the name of Strunt-jager: for the most part it dives with difficulty, and is not easy to be taken, except when sleeping on the water; when it is secured by throwing darts at it. Met with on the northern coasts of Sweden, Denmark, and Russia, as far as Kamtschatka.

Edwards received both his birds from Hudson's Bay, where he informs us, that it is called the Man of War: the natives know it by the name of Utay-keeash.

<sup>\*</sup> This reputed female is probably a young bird; for Fabricius says, that the male and female are alike, and that he is certain of it, having brought them up. The Coprotheres of the Faun. Groent. is supposed to be the female in Iceland and Norway; but Fabricius calls it the young. We have only seen the two first described, which were in the Leverian Museum. Mr. Simmonds assures us, that there is no external mark of distinction between the sexes. See Lin. Trans. viii. p. 367.

† Orn. Dict. Supp.

In the Transactions of the Wernerian Society, Dr. Arthur Edmondston thinks there may probably be two kinds of Arctic Gull, which appear in the Shetland Isles; the more common, with the breast and belly mouse-colour; and the other with the breast and belly pure white: each sort keeps together, but the white is the larger and heavier bird, though less bold than the other; the Doctor supposes them to be different species.

## 25.—BLACK-TOED GULL.

Larus crepidatus, Ind. Orn. ii. 819. Gm. Lin. i. 602. Hawkesw. Voy. i. p. 15. Lin. Trans. xii. 551. (Lestris parasiticus, immature.)

Lestris crepidatus, Tem. Man. 515. Id. Ed. 2d. 799.

Catarracta Cepphus, Brun. p. 36. No. 126. t, in ditto. Muller, p. 21. Phil. Trans. lii. p. 135. Raii, 129. 11. Will. 267. Id. Engl. 351. pl. 67.

L'Abbe, on Stercoraire, Buf. viii. 441. pl. 31. Pl. enl. 991.

Mouette à Pieds noirs, Buf. viii. 439. 3°.

Black-toed Gull, Gen. Syn. vi. 387. Id. Sup. 268. Br. Zool. ii. No. 244. pl. 86. Id. 1812. ii. 178. pl. 3I. f. 2. Arct. Zool. ii. No. 460. Lewin, vi. pl. 216. Bewick, ii. pl. p. 236. Orn. Dict. & Supp.

THIS bird is fifteen inches long, thirty-nine broad, and weighs eleven ounces. The bill is one inch and a half long, not unlike that of the Arctic Species, but more slender, and less hooked; head and neck dirty white, sides of the last marked with dusky; breast and belly white, crossed with numerous dusky and yellowish lines; sides and vent barred transversely black and white; back, scapulars, wing coverts, and tail, black, edged with white, or pale rust-colour; shafts and tips of the quills white, the exterior web, and upper half of the interior, black, but the lower part of the latter white; the tail black, tipped with white; the two middle feathers near an inch longer than the others, the shafts white; the exterior webs of the outmost spotted with rust; the legs bluish lead-colour; lower part of the toes and webs black.

A bird of this kind was taken near Oxford, and another met with between the Islands of Teneriffe and Bonavista.\*

In the Leverian Museum was one of this Species, but much smaller than the above. General colour brown; the head and neck crossed with numerous, transverse, darker lines; the breast and belly mottled with dusky white; sides barred with the same; base of the tail white; the rest of the length dusky black, shape rounded; the two middle feathers not particularly longer than the others; the legs, half the toes, and webs yellowish brown, the end half black.

One of these birds was sent to me by Mr. Jackson, shot at Field Place, near Horsham, in Sussex, the beginning of September. It differed from the first described in a few particulars; the whole plumage darker coloured, and mixed with ferruginous; the quills marked at the tips with the same; breast mottled with white; shape of the tail a trifle rounded at the end, and the wings, when closed, reaching an inch beyond the tip of it:† the feathers of the tail, to about one-third from the base, are white within; the rest of the length, and the outer webs wholly black; under parts of the body, from the breast, dull pale ferruginous, barred with dusky; under tail coverts ferruginous, crossed with three or four bars of black; about the breast mottled with white; quills white at the base; legs blue; webs and claws black, but the webs are white for one-third from the base.

We have already supposed this to be the same which Buffon describes as the Stercoraire, and quotes the Act. Holm. for it, as given by M. Ghister,‡ and that it lays the eggs on the rocks; that the male is darker in colour, and a trifle bigger than the female, and the cry

<sup>\*</sup> The dung of this bird is red, supposed to be owing to its feeding on the Helix janthina Lin. the inhabitant of which furnished the purpura of the antient Greeks. Said to be found on the Coasts of Somersetshire, and those of South Wales.—Phil. Trans. Vol. xv. p. 1278.

<sup>†</sup> The tail in this bird had only ten feathers, and we may probably think that the bird had lost two, as others have twelve.

<sup>#</sup> Tom. xi. p. 51.

being like the words Lab lab, has probably given rise to one of the names by which it is known: it principally feeds on herrings, and the place where the shoals of these fish are, to be known by the birds being in great numbers hovering over the spot. Buffon mentions two of them being forced on the Coast of Picardy, in a storm, in the month of November, 1779.

There seems also a further uncertainty in respect to the above bird, for we cannot well reconcile the one having the two middle tail feathers one inch longer than the rest, when in the other the tail is merely rounded at the end, and if we do not comprehend the matter amiss, can only arise from difference of sex, unless on future investigation the whole may turn out no more than that the Black-toed, and its varieties, are only in the progressive stages towards perfection of the Arctic Gull.

# 26.—KEEASK GULL.

Larus Keeask, Ind. Orn. ii. 818. Keeask, Arct. Zool. ii. App. p. 71. Gen. Syn. vi. p. 389.

LENGTH twenty-three inches, breadth four feet; weight two pounds and a half. Bill black; three inches long; head, neck, breast, and belly, uniform brown; prime quills black; wing coverts and scapulars brown, marked with white; tail black, speckled, and tipped with white.

Inhabits Hudson's Bay, comes there in April, makes a slight nest of grass, and lays two pale, ferruginous eggs, spotted with black: as the winter comes on, it retreats to open water, and is there known by the name of Keeask. It seems nearly to approach to the Skua; and Mr. Hutchins, who furnished the above account observes, that half the toes and webs are black.

## 27.—PACIFIC GULL.

Larus pacificus, *Ind. Orn. Sup.* p. lxviii. Pacific Gull, *Gen. Syn. Sup.* ii. 332.

SIZE uncertain. Bill dirty orange, swelling near the point, where it is crossed with dusky or black; general colour of the plumage deep brown, but the under parts, the rump, and tips of the lesser wing coverts very pale brown, approaching to white; tail rather short, rounded at the end; legs dusky, with the segments of the shins paler than the rest.

Inhabits New-Holland. The base of the bill seems enlarged, but whether furnished with a cere as in the last, is uncertain. It is known by the name of Troo-gad-dill.

A.—Length twenty-four inches. Bill from gape to point nearly three inches, colour dusky, crossed with black near the point; irides yellow; head dusky white, with a few brownish markings; neck and breast yellowish buff-colour; belly, thighs, and vent, white; back brown; tail short: quills dark, exceeding the tail in length by more than an inch; legs long, brown, with paler segments; thighs bare for one inch anda half at least.

Inhabits New-Holland: probably the Pacific Gull; though the drawing not shewing the rump, the colour of that part could not be ascertained: called the Large Grey Gull.

## GENUS CV.—PETREL.

10 Fulmar	22 American		
A Var.	23 Stormy		
11 Shearwater	A Var.		
12 Cinereous	24 Long-legged		
13 Manks	55 Leach's		
14 White-faced	26 Diving		
15 Black-toed	** Spurious, with the Nos- trils distinct.		
16 White-breasted			
17 Snowy			
18 Brown-banded	27 Broad-billed		
19 Sooty	28 Blue		
20 Fork-tail	29 Pacific		
21 Frigate	30 Dusky		
	11 Shearwater 12 Cinereous 13 Manks 14 White-faced 15 Black-toed 16 White-breasted 17 Snowy 18 Brown-banded 19 Sooty 20 Fork-tail		

In this Genus the bill is straight, but bent at the end.

Nostrils for the most part contained in one Tube, but in a few they are distinct and separate.

Legs naked above the knees; toes palmated—three placed forwards, with a spur behind instead of a back toe.\*

\* TRUE-WITH THE NOSTRILS CONTAINED IN A TUBE.

# 1.-GIANT PETREL.-PL. CLXXVI.

Precellaria gigantea, Ind. Orn. ii. 820. Gm. Lin. i. 563. Quebrantahuessos, Boug. Voy. 63. Forst. Voy. ii. 516. Buf. ix. 319. Osprey Petrel, Forst. Osb. 202. Monton, Pernet. Voy. i. 15. t. 8. f. 3.—the bill. Glupisha, Hist. Kamtsch. 156.

<sup>\*</sup> One only excepted, No. 26, in which the spur is wanting.



Giant Petrol.



Ossifraga, or Break-bones, Ulloa Voy. Svo. ii. 214.

Mother Cary's Goose, Cook's Voy. ii. 205.

Giant Petrel, Gen. Syn. vi. 396. pl. 100. Arct. Zool. ii. Sup. p. 71. Cook's last Voy. ii. 258. & 299.

THIS is the largest of the Petrel Genus, in length forty inches, and expands seven feet. The bill is four inches and a half long, remarkably stout, and dusky yellow; the upper mandible very hooked at the end; the tube on the top reaches nearly half way from the base; at the gape a naked, wrinkled, yellow skin; the crown of the head is dusky; the sides, fore part of the neck, breast, and belly, white; neck behind, and upper parts of the body, pale brown, mottled with dusky white; scapnlars, wing coverts, quills, and tail, dusky brown; the last six inches long, and the feathers darker in the middle; the legs greyish yellow; webs dusky; the spur behind stout, and pointed, but short; claws black.

We have seen one of these birds in which the general plumage was yellow brown, inclining to chocolate, somewhat paler beneath.

Found at Staaten-land, Terra del Fuego, the Isle of Desolation, and other places in the high sonthern latitudes; often seen sailing, with expanded wings, close to the surface of the water, without appearing to move them; like others of the Genus, said to be most active, and in the greatest numbers, either in storms, or at the approach of them; hence their appearance is unwelcome to the mariners. Like the Albatross, they also visit the northern hemisphere; being seen in lat. 44. 10. N. in March;\* off the coasts of Nootka Sound in April;† and again further north on the American Coast in May, in pairs; from which we may not unaptly conclude, that they breed in the north; though as yet no one has mentioned the circumstance.

If it be only in the south, they must migrate in the same manner as the Albatross, which is not improbable, as they are found frequently together, and it must be confessed, that they are met with in the largest

<sup>\*</sup> Cook's last Voy. ii. 258. † Id. 299. ‡ Id. 352.

numbers in the southern regions.\* Capt. Cook says, that they were so common in Christmas Island, Kerguelen's Land,† in December, and so tame, that the sailors knocked them down with sticks, on the beach; they are carnivorous, feeding on the dead carcasses of seals, or birds, though their chief food is undoubtedly fish: are called by the sailors Albatrosses, but by the more discerning are well known by the name of Mother Cary's Geese, and thought to be very good food.‡ These birds are said to spurt out an oily matter from the tubes of the bill, but we apprehend that it can only happen after their feeding on whales, seals, or other such food.§ It may be observed, that the fullness of plumage is more conspicuous in birds of this Genus than in others, nature having suited them to the climate wherein they are to live.

## 2.—BRAZILIAN PETREL.

Procellaria Brasiliana, *Ind. Orn.* ii. 821. *Gm. Lin.* i. 564. Puffinus Brasiliensis, *Bris.* vi. 138. *Id.* 8vo. ii. 397. Le Puffin du Bresil, *Buf.* ix. 337. IV. Majague, *Raii*, 133. 5. *Will.* 252. t. 62. Brasilian Maiaguè of Piso, *Will. Engl.* 334. III. pl. 62. f. 4. Brasilian Petrel, *Gen. Syn.* vi. 398. 2.

SIZE of a Goose. Bill hooked; head round and thick; neck long; the whole bird dusky, or blackish, except the fore part of the neck, which is yellow.

- \* If we do not mistake, this is one of the sorts called Glupisha, mentioned as so frequent in all the Islands between Kamtschatka and America, that they are covered with them—Hist. Kamtsch. 156. † Cook's last Voy. i. 87. ‡ Id. ii. 205.
- § Birds, supposed to be Albatrosses, were found on more than one part of New-Holland, and so plentiful in one as to give the name of Albatross Island: the colour of the birds more white than black, and in extent of wing from seven to nine feet; the nests not more than one foot and a half apart, and made of muddy earth and grass, in diameter about five or six inches, in height about four inches, with a concavity of nearly that depth; the egg nearly the size of that of a Goose, and dingy white; and it is remarked, that even the young in the nest, on being disturbed, spouted plentiful mouthfuls of a hot, inodorous oil upon the intruders; from this latter circumstance we rather suspect these birds to be the Giant Petrel.

Inhabits Brazil, about the mouths of rivers; but builds the nest and lays the eggs on shore; is a swift bird, swimming and diving well; its flesh is good meat, especially if young. We rank this as a Petrel, on some uncertainty, for we have ourselves never met with the bird.

# 3.—GREAT BLACK PETREL.

Procellaria equinoctialis, Ind. Orn. ii. 821. Lin. i. 213. Gm. Lin. i. 564.

Puffinus Capitis bonæ Spei, Bris. vi. 137. Id. 8vo. ii. 397.

Plautus Albatross spurius major, Klein, Av. 148. 14.

Avis Diomedea, Redi, Opusc. 1626. Amst.

Le Petrel-Puffin brun, Buf. ix. 326.

Shearwater, Brown, Jam. 482.

Great Black Petrel, Gen. Syn. vi. 398. Id. Sup. ii. 333. Edw. pl. 89. Staunt. Chin. i. 223.

SIZE of a Raven; length twenty-three inches. Bill three, and the tubes half an inch; colour yellowish, with the sutures black; body in general blackish brown; legs, toes, and webs brown; claws black. It varies in having the upper ridge of the bill black, and a large spot of white on the chin.\*

Inhabits the Cape of Good Hope, and the neighbouring parts; also New Zealand.†

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A.—Kuril Petrel, Gen. Syn. vi. 399. 3. A. Arct. Zool, ii. 256. A. Pall. Spic. v. p. 28.
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This is larger by almost half than the other, has a strong yellow bill; the whole plumage rusty black; legs the same, dashed with red.—Inhabits the Kurile Islands, and Kamtschatka.

<sup>\*</sup> In lat. 35. 15. S. long. 7. 45. W. Cook's last Voy. i. 36, but in this the bill and legs are black. † Forst. Voy. i. 113. 487.

#### 4.—GREY PETREL.

Procellaria grisea, Ind. Orn. ii. 821. Gm. Lin. i. 564. Grey Petrel, Gen. Syn. vi. 399. Cook's Voy. i. 258.

LENGTH fourteen or fifteen inches. Bill two inches, brown; the general plumage black or sooty; under wing coverts white, with black shafts; the quills exceed the tail in length: fore part of the legs greenish blue. It varies in having the chin and throat whitish.

Inhabits the Southern Hemisphere, from 35 to 50 degrees: seems allied to the last.

## 5.—GLACIAL PETREL.

Procellaria gelida, Ind. Orn. ii. 822. Gm. Lin. i. 564. Glacial Petrel, Gen. Syn. vi. 399.

LENGTH nineteen inches. Bill one inch and three quarters, yellow; the tube over the nostrils, top of the upper mandible, the end of the lower, and edges of both, black; top of the head, taking in the eyes, the neck behind to the shoulders, pale, bluish ash-colour; the rest of the parts above dusky black; chin, fore part of the neck and breast, white; from thence to the vent pale ash; wings and tail even; legs and webs blue; claws black; sole of the foot white.—Inhabits the Antarctic Circle, chiefly among the ice.

### 7.—FULIGINOUS PETREL.

Procellaria alba, Ind. Orn. ii. 822. 6. β.
Norfolk-Island Petrel, Phill. Voy. pl. p. 161.
Fuliginous Petrel, White's Journ. pl. p. 252. Gen. Syn. Sup. 2d. 334.

LENGTH sixteen inches. Bill one inch and a half long, black, and very much hooked at the end; the head as far as the eyes, and

the chin mottled brown and white in waves; the rest of the bird above, and tail sooty brown; beneath deep ash-colour, within next the base, nearly white; the wings, when closed, exceed the tail by nearly one inch; this is rounded, and consists of sixteen feathers; legs pale yellow, outer toe black the whole length; the web the same, except just at the base; inner toe and web black for three quarters of an inch; claws and spur behind black.

We have observed some slight Varieties, but the general colour of the plumage sooty black, beneath cinereous; between the bill and eyes all round, or face, mixed white and brown; quills much longer than the tail; legs yellowish; toes and webs, half way on the fore part, black. That figured in Mr. White's work has the bill yellow, and is white on each side of the under mandible, passing backwards in an irregular streak; with this difference, I am at a loss to determine whether this bird really belongs to the Black Petrel, or to the last described, but probably to the latter, as the black part of the toes corresponds with it; and further, we could almost suppose, that the three last form in reality but one species, differing in age or sex; till, however, this can be ascertained, it is better to keep them as distinct species.

The Black Petrel, so called, inhabits the sea, in the neighbourhood of Port Jackson, in New South Wales, having the same manners with its congeners. No one is a greater enemy to the Albatross than this bird, whenever it is seen on the wing; but quits it as soon as it takes to the water; sensible, no doubt, that an encounter on this element would end to its disadvantage. It is, however, a still greater scourge to the Broad-billed Species, for although multitudes of these are destroyed by it, the heart and liver seem to be the only parts coveted, as the rest of the bird is left untouched; hundreds of them, thus eviscerated, have been found lying on the ground in this situation.\*

<sup>\*</sup> Embassy to China, i. 223.

Found in Norfolk Island, in great plenty, and burrows in the sand like a rabbit. On Mount Pitt, the highest land in the Island, the ground was as full of holes as a warren, and an immense number of aquatic birds burrowed, and made their nests in them.\* These, during the day, were at sea, but as night approached, they returned in vast flocks. The settlers lighted small fires every night on this mount, about which the birds dropped as fast as the people could pick them up, and kill them; for the wings of sea birds are generally so long, as to prevent their rising, till they can ascend some small eminence; hence the difficulty in the Abatross to detach itself from the surface of the water, which it can never do without the greatest exertion. But, when it is fortunate enough to gain a small rock or shelf, it has only to throw itself therefrom, and take wing immediately. This we believe is the species called in Norfolk Island, Mutton Bird; probably from the flesh having somewhat of the flavour of that meat. Among the drawings brought to England by Mr. White, was the figure of one, having the breast greatly enlarged, and covered with loose brown down, instead of feathers, and said to be a young bird, in the second or middle state of plumage.

A bird similar to this in respect to feathers, had all the front before the eyes mixed with white; bill and legs black.

## 7.—DOUBTFUL PETREL.

Le Martin-pêcheur de Mer aux Ailes longues, Voy. d'Azara, iv. No. 422.

TOTAL length thirty inches, breadth sixty-seven and a half. Bill bluish white, thirty-eight lines long, hollowed at the base, from which it is straight for three-fourths of the length, then bent and hooked; from the opening of the nostrils to the place of curvature a

<sup>\*</sup> Hunter's History of Port Jackson.

channel; gape wide; tongue short; irides black; top and sides of the head and neck, shoulders and small scapulars, brown; the greater scapulars, back, rump, tail, greater wing coverts, and quills black, glossed with purple; the rest of the coverts light brown, with yellowish margins; throat and neck before whitish; sides of the neck brown; on the top of the neck a deep brown band, taking rise from the setting on of one wing to the other; greater part of the breast, stomach, and nearly the whole of the belly, white; the rest of the under parts quite black; the uape almost bare of feathers; the tail is much forked, and consists of twelve feathers, the outer one six inches longer than the two middle; toes joined by a membrane, but not quite to the end of them, being only so as to leave great hollows between the toes, which are black.

A great number of these birds were seen flying generally at a middling height, and sometimes even out of sight, near the Isle of Ascension, appearing in pairs.—This bird cannot be a Kingsfisher; nor is it more likely to be a Pratincole, as the annotator on Azara seems to think. In our opinion, it probably belongs to the Petrel Genus.

#### 8.—ANTARCTIC PETREL.

Procellaria antarctica, Ind. Orn. ii. 822. Gm. Lin. i. 565.

Le Petrel antarctique, ou Damier brun, Buf. ix. 311.

Brown and White Petrel, Boug. Voy. i. p. 42?

Antarctic Petrel, Gen. Syn. vi. 400. Forst. Voy. i. 108. Cook's Voy. i. 257.

LENGTH sixteen inches. Bill one inch and a half, brown, with a black tip; irides brownish hazel; plumage in general above deep brown, beneath bluish white; the second quills are white, with dark brown tips; the greater dark brown, with the inner webs of some next the body white; rump and tail white; tips of all the tail feathers black for nearly an inch; legs dusky lead-colour.

This is found every where within the Antarctic Circle; in small flights, lat. 61. 36. S.

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#### 9.—PINTADO PETREL.

Procellaria Capensis, Ind. Orn. ii. 822. Lin. i. 213. Am. Ac. iv. p. 240. Gm. Lin. i. 565. Osb. It. p. 76. Id. Voy. 109. Borowsk. iii. p. 37.

Petrella Pintada, Pintado Bird, Bartr. Trav. 293.

Procellaria nævia, Bris. vi. 146. Id. 8vo. ii. 400. Klein, 148. 14.

Le Petrel tacheté, ou le Damier, Buf. ix. 304. pl. 21. Pl. enl. 964. Pernet. Voy. ii. p. 72. Forst. Voy. i. 489.

Pardela, Ulloa's Voy. 304.

White and Black Spotted Petrel, Edw. pl. 90. Hawkesw. Voy. i. 556.

Pintado Petrel, Gen. Syn. vi. 401. Damp. Voy. iii. pl. p. 96. f. 1.

LENGTH fourteen inches. Bill one inch and a half long, and black; the head, hind part of the neck, quills, and tail, black; sides of the head mottled black and white; all the under parts whitish, irregularly marked with spots of black; legs black. Is apt to vary much in plumage.

The Pintado Petrel is, we believe, confined to the Southern Hemisphere, being rarely seen much to the north of 30 deg.; most frequent about the Cape of Good Hope,\* and adjacent parts, and called by our sailors the Cape Pigeon. They fly many together; seldom high, but almost sweeping the surface of the water,† and sometimes appear in such immense numbers, that 700 have been taken in one night;‡ are often caught with a tarred string, or a piece of lard, at the end of a fishing rod.§ Dampier observes, that he met with them in greatest plenty from about 200 leagues from the coast of New-Holland. Later voyagers trace them to New Zealand, Falkland Isles, and many other parts; and probably all round the South Pole. One of their breeding places is Kerguelen's Land. The egg of the size of a Pullet's, and laid in December. When caught they make a noise, not unlike a Parrot, at the same time spurting out oil from

<sup>\*</sup> Dampier and others. Said by sailors to be a sure presage of a near approach to that promontory.

† Dampier.

† At Maso Fuero—Hawkes, Voy. i. 556.

§ O.b. Voy. i. 109.

§ Forst. Voy. i. 489.

¶ Cook's last Voy. i. 86.

the nostrils into the face of the person who holds them. The food is fish, but more frequently the dead carcases of whales, &c. about which they are often seen in vast numbers.\*\*

A .- Pintado Petrel Var. Gen. Syn. vi. 402. Ind. Orn. ii. 823. β.

Size of the former; and differs in having the white parts buffcolour; tail white, tipped with black; and the base of the quills white; legs brown; webs black; with the two inner toes orange in the middle.

This was met with in the Isle of Desolation.—Sir Joseph Banks.

### 10.—FULMAR PETREL.

Procellaria glacialis, Ind. Orn. ii. 823. Lin. i. 213. Faun. suec. No. 144. Id. Retz. No. 102. Gm. Lin. i. 562. Brun. No. 118. Muller, No. 144. Fn. groenl. No. 55. Borowsk. iii. 36. Lin. Trans. xii. p. 553. Tem. Man. d'Orn. 518. Id. Ed. 2d. p. 803. Parry's App. p. cevi.

Procellaria cinerea, Bris. vi. t. 12. f. 2. Id. Svo. ii. 399. Act. Nidr. i. 182. t. 1.

Puffinus, sive Procellaria æquinoctialis, Gerin. v. t. 536.

Wagellus Cornubiensium, Mallemuche, Raii, 130. A. 13.

Haff'hert, seu Equus marinus, Will. 306. Id. Engl. p. 395.

Fulmar, ou Petrel-Puffin gris blanc, Buf. ix. 325. p. 22. pl. 59.

Fulmar Petrel, Gen. Syn. vi. 403. pl. 91. Br. Zool. ii. No. 257. Id. fol. 145. pl. M. 2. Id. Ed. 1812. ii. p. 203. pl. 36. Arct. Zool. ii. No. 461. Flor. Scot. i. No. 197. Martin's St. Kilda, 30. iv. pl. 82. Martin's Spits. pl. v. f. C. Phipps's Voy. p. 186. Bewick, ii. pl. in p. 243. Lewin, vii. pl. 217. Id. xliv. f. 2.—the egg. Walcot, ii. pl. 68. Pult. Dors. p. 21. Orn. Dict. & Supp.

LENGTH nearly eighteen inches; weight twenty-two ounces. Bill two inches long, pale grey, with a yellowish tip; the back and wing coverts ash-colour; quills dusky, and somewhat longer than the tail; the rest of the plumage white; legs greyish yellow: in some the tail is pale ash, the outer feather only white.

<sup>\*</sup> Ives mentions, that when caught, and brought on board a ship, they cannot rise for flight from the deck, but will most readily do so out of a tub of water. See Voy. p. 5.

This species is found in the northern parts of Great Britain; is in the greatest plenty in the Isle of St. Kilda, where it appears in November, and remains the whole year, except September and October. It lays one large, white, and very brittle egg, and the young is hatched the middle of June; very common in Greenland,\* and parts adjacent, frequently seen in vast numbers, passing in the manner of the Passenger Pigeon of America; and of great use to the inhabitants for food, the flesh being eaten boiled or dried, although it is very stinking and offensive; the fat is eaten crude, or burned in lamps instead of oil; and the small pouch of the under jaw is formed into a bladder, to buoy up their lesser kind of darts, by means of which the natives often kill the bird itself, while sitting at rest on the surface of the water; for it is heedless, and will suffer any one to approach near; hence is called Mallemucke, or Foolish Fly, by the Dutch.†

The food of this species for the most part is fish; but they eagerly seize every thing that can be converted into food, and every filth from the ships, which they frequently follow; though the sailors are not pleased with their company, having a notion, that they forbode tempests, or at least very stormy weather. Are often seen by thousands on the carcase of a dead whale, and pick out the fat, which soon becoming liquid in the stomach, enables the old birds to eject it into the months of their young, for their sustenance, while in the nest; and on occasions are known to throw it out with violence, both from the mouth and nostrils, into the faces of those who attempt to seize them; and is one, if not almost the only, defence that they make against an enemy.

We find these birds common between Kamtschatka and America, where they are blended with others, under the common name of Chupisha, and are so stupid, as frequently to fly into the boats of the

<sup>\*</sup> Breed on the craggy shore on the west of Disco, and other places remote from the Continent in great numbers.—Faun. groenl. Phipps's Voy. 186.

<sup>†</sup> At Newfoundland called John Down, by the Fishermen. See Orn. Dict. Supp.

natives while fishing. It is asserted, that they are so fat, that no more is required than to squeeze the skins, through which the fat runs like oil, and is used for the same purposes. Numbers are caught on the fourth and fifth Kurilski Islands, which the inhabitants dry in the sun, and use for food. This species is also in sufficient plenty in the Antarctic Regions from the Cape of Good Hope, to as far south as has been explored; and indeed in greater or smaller numbers, from 34 to 70 degrees S. latitude, all round the Pole.\*

A.-Gen. Syn. vi. 405. Var. A. Ind. Orn. ii. 823. β.

Size of the last. Bill black; head, neck, body, and tail, white; between the wings pale ash-colour; the whole of the latter dusky black; legs dusky.—Inhabits the Antarctic Ocean, met with pretty far south.

B.—In the British Museum is one, nearly twenty inches in length; with a dark streak through the eye; tail dusky, pointed at the end; legs pale, almost white.

#### 11.—SHEARWATER PETREL.

Procellaria Puffinus, Ind. Orn. ii. 824. Lin. i. 213. Gm. Lin. i. 566. Brun. No. 119.
Muller, p. 18. Fn. groenl, No. 56. Bris. vi. 131. Id. 8vo. ii. 395. Klein, 139.
Br. Jam. 482. Borowsk. iii. 37. Tem. Man. Ed. 2d. 806. Parry's App. ccs.
Le Puffin, Buf. ix. 321. Pl. enl. 962.

Shearwater Petrel, Gen. Syn. vi. 406. Id. Sup. 269. Br. Zool. ii. No. 258. Id. 1812. ii. 206. Fl. Scot. i. No. 198. Bewick, ii. pl. p. 246. Lewin, ii. pl. 218. xlv. 1. the egg. Walc. i. pl. 90. Orn. Dict. & Supp.

LENGTH sixteen inches. Bill one inch and three quarters, yellow, with a black tip; plumage above ash-colour, the feathers with paler margins, chiefly on the back; the scapulars, wings, and

<sup>\*</sup> Forst. Voy. i. p. 52. Id. ii. 534. Cook's Voy. i. p. 252.

tail, dusky ash, plain; quills black; middle of the neck and breast, and all beneath, white; legs weak, whitish, compressed on the sides, and dusky behind. Both sexes are nearly alike; but the young are much darker in plumage.

This is found in the north of England, particularly in the Calf of Man, and in the Orknies.\* They resort to the first in February, take a short possession of the rabbit burrows, and then disappear till April, when they return; lay one white egg, blunt at each end: the young are fit to take the beginning of August, when great numbers are killed by the person who farms the Isle; these are salted and barrelled, and after being boiled, eaten with potatoes; during the day keep at sea, fishing, and towards the evening return to their young, which they feed in the same manner as the Fulmar: and generally quit the Isle by the end of August, or beginning of In the Orknies they make the nest in holes in the September. ground, near the shelves of the rocks, and headlands: are called there the Lyre, and much valued, as well for the feathers, as for their use as food, as in the Calf of Man; the old ones, too, are taken in March, but are then poor, and not so well tasted as the young. They appear there first in February: are very numerous in Denmark, Iceland, and Greenland, and no doubt in other parts far north; so plentiful in some years, that the whole surface of the sea seems covered with them. It is called at Ferro, Skrabe, or Leeren; and in Norway, Skraap. The flight of this bird is almost close to the surface of the water, in an undulating manner; and it arises from the water with great difficulty; in the efforts the head preponderates for some distance, the bill cutting the water as if it were for a time, and hence probably it has obtained the name of the Shearwater.

<sup>\*</sup> Multitudes of the Lyre (Shearwater) breed in the cliffs about the lochs of Hemprig and Waster.—Tour in Scotland, 1769, 4to. p. 199.

#### 12.—CINEREOUS PETREL.

Procellaria cinerea, Ind. Orn. ii, 824. Gm. Lin. i. 563. Tem. Man. Ed. 2d. 805. Forst. Ic., t. 92.

Cinereous Petrel, Gen. Syn. vi. 405. Id. Sup. ii. 335.

LENGTH twenty inches. Bill yellowish, with black sutures; irides ash-colour; all the upper parts of the plumage dusky ash; crown and forehead palest; beneath, from chin to vent, white; tail rounded in shape, and black; beneath pale ash; legs bluish, webs pale yellow; toes and claws pale.

Inhabits the parts within the Antartic Circle; many seen in the latitude of 48 degrees; food various. Bills of the cuttle fish have been found in the stomach.

We have seen a Variety with a pale blue bill, and the breast and belly deep dusky black.

Another, common about Port Jackson, in New-Holland, and the parts adjacent, wholly dusky black; but the sides of the head, the neck, and all beneath, ash-colour; bill and legs dull yellow.

In one specimen we observed the whole of the under parts, from breast to vent, occupied by an ash-coloured down, projecting greatly more than the feathers which would probably afterwards supply its place, shewing that birds in this state are in imperfect plumage.

It is said that six species of the Petrel Genus are found in the island of Tristan da Cunha, viz. the Giant, the Cinereous, and the Broad-billed, with three others, smaller, which are night birds; never appearing on the wing till after sun-set, and may be caught in any number, by kindling a fire; when, attracted by the light, they approach, and flutter round it, like so many moths round a candle, till at length the greater number of them, dazzled by the glare, plunge into the flames and perish.†

<sup>\*</sup>M. Temminck considers this the same bird as the Shearwater, and that it is seen on the coast of Spain and Provence, and probably Italy, but not in the Adriatic.

<sup>†</sup> Lin. Trans. V. xii. p. 497.

#### 13.—MANKS PETREL.

Procellaria Anglorum, *Tem. Man. Ed.* 2d. 806. *Will.* 252. *Raii*, 134. A. 4. Puffinus, *Bris.* vi. 131. *Id.* 8vo. ii. p. 396. *Brun.* No. 119. Puffinus minor, *Gerin.* v. t. 537? Manks Puffin, *Edw.* t. 359. *Will. Engl.* p. 333. Shearwater, *Br. Zool. fol.* 146. t. M. *Arct. Zool.* ii. No. 462.

LENGTH thirteen inches. Bill dusky brown; crown, nape, and all the upper parts of the plumage, wings, and tail, with the edges of the under coverts and thighs, black; beneath wholly white, the black and white mixing on the sides of the neck; legs brown, webs yellowish.

Inhabits the Isle of Man, Saint Kilda, the Orknies, and all the northern coasts of England; also Ireland; frequent in Norway and Denmark. Has been met with on the coasts of France, and Holland, but the instances are rare. Said to breed in the holes of rocks, or old rabbit burrows, and to lay a single white egg, about the size of that of a Duck.

I have for some time been aware of the probability of the birds called Shearwaters forming at least two distinct species, arising from my having received two birds of this kind from Mr. Walcot, in the year 1792; one of which was more than sixteen inches in length, and thirty-three in breadth, and weighing seventeen ounces; the bill black, with reddish brown sides; nostrils swelling, but not distinct, arising out of an eminence, but not bony; plumage above dusky black; beneath more or less dirty white, clouded with ash-colour; tail of twelve feathers, dusky black. The other only twelve inches long, twenty-six broad, and weighed ten ounces and a half; as to plumage it chiefly differed, in the under parts being wholly white; tail as in the other, but the outer feather (on one side only) was wholly white.

M. Temminck considers this as totally distinct from the Common Shearwater, and I most readily join him in that opinion. These, as well as other Puffins, serve the inhabitants for food.

# 14.—WHITE-FACED PETREL.

Puffinus cinereus, Bris. vi. 134. t. 12. f. 1. Id. 8vo. ii. 396. Ind. Orn. 824. 11. β. Le Petrel cendré, Buf. ix. 302. pl. 20. Brown Shearwater, Kalm. Trav. i. p. 23? Shearwater Petrel, Gen. Syn. Sup. ii. 407. 11. Var. A.

SIZE of the Shearwater. Bill one inch and three quarters long. black; hind part of the head cinereous white; the rest of the upper parts of an elegant ash-colour; fore part of the head, and under part of the body, pure white; bastard wing spotted with black; quills outwardly black; tail white; legs grey brown.

Inhabits the northern regions, and is probably the Brown Shearwater, with a white ring round the neck, which Kalm saw every where from our channel to the American coast. He says, it has a peculiar slow way of flying, and may be plainly seen to feed on fish,\* and though this bird is thought by many to be peculiar to the Northern Seas, we are assured it abounds no where more perhaps than about Cape St. Vincent, which is the most southern point of Portugal, and forms the entrance of the Straits mouth; and like the Petrel, it also visits the Bay of Gibraltar, and has been found dead on the strand; probably from meeting with the same fate with the Auks, by swallowing the fishermen's baits.

# 15.—BLACK-TOED PETREL.

Procellaria melanopus, Ind. Orn. ii. 824. Gm. Lin. i. 562. Black-toed Petrel, Gen. Syn. vi. 408. 12. Arct. Zool. Sup. p. 73.

LENGTH thirteen inches. Bill one inch and a half; all round the base, the chin, and throat pale, silvery grey, marked with minute

> \* Kalm. Trav. i. p. 23. + White. Вв

dusky specks; breast and belly hoary ash-colour; top of the head, and all the upper parts of the plumage, wings, and tail dusky black, inclining to hoary on the back; tail rounded at the end; wings and tail even; legs very pale; webs for one-third the same, the rest to the end black; joints of the toes black.

Said to inhabit North America.—Leverian Museum. One of these, supposed to be an adult bird, had the forehead, sides under the eyes, and all beneath from chin to vent white, but the under tail coverts were dusky.

### 16.—WHITE-BREASTED PETREL.

Procellaria alba, Ind. Orn. ii. 822. Gm. Lin. i. 565. White-breasted Petrel, Gen. Syn. vi. 400.

LENGTH sixteen inches. Bill one inch and a half, very hooked at the tip, and black on the top; before the nostrils much indented, and the tube containing them very prominent; head, neck, and upper parts of the body dusky brown, nearly black; on the throat a whitish patch; breast, belly, and vent, white; under tail coverts cinereous and white mixed; tail rounded at the end, and the wings somewhat exceed it in length; legs black brown, fore part of the toes half way black, the outside of the exterior the same the whole of its length; webs black; the spur behind blunt.

Inhabits Turtle and Christmas Isles in the South Seas.—From the drawings of Sir Joseph Banks. This and the last seem to be allied.

# 17.—SNOWY PETREL.

Procellaria nivea, Ind. Orn. ii. 825. Gm. Lin. i. 562. Le Petrel blanc, ou Petrel de neige, Buf. ix. 314. Snowy Petrel, Gen. Syn. vi. 408. Forst. Voy. i. p. 96. Cook's Voy. i. p. 33.

LENGTH twelve inches. Bill one inch and a quarter long, black, inclining to blue at the base; the tube containing the nostrils

comes pretty forward on the upper mandible, which is much curved at the end; the whole plumage pure white, the shafts of the feathers black; the wings exceed the tail in length; legs dark sea-green, or blue, with pale webs; claws long, and crooked.

Inhabits the colder parts of the southern regions, off the Island of Georgia, Terra del Fuego, and other parts; but no where in such plenty as in the neighbourhood of ice, or within a few leagues of it, and proved to be the forerunner of falling in with the same: on the icy masses also, these birds are often in considerable flocks.

#### 18.—BROWN-BANDED PETREL.

Procellaria desolata, Ind. Orn. ii. 825. Gm. Lin. i. 562. Brown-banded Petrel, Gen. Syn. vi. 409.

LENGTH eleven inches. Bill one inch, black, tip yellowish; plumage on the upper parts of the body greenish ash-colour, deepest on the crown; sides of the head, including the eyes, and all the under parts of the body, white; ridge of the wing almost black; quills and tail dusky; the last rounded at the end, and tipped with dark brown; when the wing is extended, there appears a dark band from tip to tip, quite across the body; legs brown, webs yellow, claws black.

Inhabits the Isle of Desolation.—Sir Joseph Banks.

#### 18.—SOOTY PETREL.

Procellaria fuliginosa, Ind. Orn. ii. 825. Gm. Lin. i. 562. Sooty Petrel, Gen. Syn. vi. 409.

LENGTH eleven inches. Bill black, one inch long, and hooked at the tip; irides pale ash-colour; head and neck sooty black; body above the same, but inclining to brown, not unlike the colour of the Swift; beneath paler; rump brown; the ridge of the wing mixed with ash; the tail somewhat forked at the end, but each

feather is square at the tip; the colour of them and the quills deep black; and the latter exceed the tail a trifle in length; legs slender, one inch long, and black.

Inhabits Otaheite.—Sir Joseph Banks. One, in a drawing in possession of this gentleman, had each web of the toes marked with a yellow spot. Observed too, in various parts of New-Holland, and Van Diemen's Land; but no where in greater plenty than in Bass's Straits; as about three Hummock Island, a stream of these birds was seen early in the morning, passing the vessel on the way to the windward; probably composed of some millions; and supposed to have taken flight from some other Island not explored; it is said also, that in Preservation Island, the crew of the Sydney Cove ship subsisted for the most part on these birds, for more than a year; yet at the end of that time, the returning flights in the evening were as numerous as they had been observed to be on their first arrival.

#### 20.—FORK-TAILED PETREL.

Procellaria furcata, Ind. Orn. ii. 825. Gm. Lin. i. 561. Fork-tailed Petrel, Gen. Syn. vi. 410. Arct. Zool. ii. No. 463.

LENGTH ten inches. Bill three quarters of an inch long, and black; the upper mandible very hooked at the end, and the tube of the nostrils reaching some way on the top of it; general colour of the plumage dark silvery grey, paler beneath; chin very pale grey; vent white; on the forehead and crown a mixture of brown; the inner ridge of the wing dusky black; quills blackish grey; the secondaries paler grey on the edges; tail coverts pretty long; the tail itself the colour of the quills, and forked in shape; the onterfeather white on the outer web; the wings, when closed, equal the tail in length; legs black.

Found among the ice, between Asia and America.

<sup>\*</sup> See Collin. Bot. Bay. Vol. ii. pp. 151, 172.

# 21.—FRIGATE PETREL.

Procellaria marina, Ind. Orn. ii. 826. Frigate Petrel, Gen. Syn. vi. 410.

LENGTH eight inches and a half. Bill one inch, slender, and not greatly hooked; top of the head and neck behind, as far as the shoulders, bluish ash-colour; back and wing coverts brown; rump hoary blue; sides of the head above the eye, and all the under parts, white; under the eye a trace of bluish ash; back and wing coverts brown; the tail, when spread, seems hollowed out in the middle, but scarcely what may be called forked; legs black, on the middle of each web a yellowish mark.

Such is the description of a bird among the drawings of Sir Jos. Banks. Said to have been met with in lat. 37. south. In a second drawing I observe the rump to be very pale, nearly approaching to white.

# 22.—AMERICAN PETREL.

Procellaria Fregata, Ind. Orn. ii. 826. Lin. i. 212. Gm. Lin. i. 561. Hirundo Americana, Rochef. It. 134. t. 135.

THIS is a trifle smaller than the Stormy Petrel; the plumage dusky black above, beneath to the breast the same, but paler; belly, vent, and rump, white; legs black.—Met with at sea. Allied to the last.

# 23.—STORMY PETREL.

Procellaria pelagica, Ind. Orn. ii. 826. Lin. i. 212. Fn. suec. No. 143. Am. Ac. iv. 587. Act. Stock. 1745. 93. Gm. Lin. i. 561. Scop. i. No. 95. Brun. No. 117. Muller, No. 143. Anders. Isl. ii. p. 54. pl. l. Bris. vi. 140. t. 13. f. 1. Id. 8vo. ii. 398. Bor. iii. 35. t. 39. Gerin. v. t. 538. Tem. Man. d'Orn. 319. Id. Ed. 2d. p. 810.

Der Sturmvogel, Bechst. Deuts. ii. 176. Schmid, Vog. p. 142. t. 124.

Storm-zwalluw, Sepp. Vog. t. p. 245.

Stormfinch, Will. 306. Id. Engl. 395.

Stormy Petrel, Gen. Syn. Sup. 269. Br. Zool. ii. No. 259, pl. 91. Id. fol. 146 pl. L. 5. Id. 1812. ii. 208. pl. 36. Fl. Scot. i. No. 199. Cat. Car. App. pl. 14. Edw. pl. 90. upper fig. Bor. Corn. 247. pl. 29. Alb. iii. pl. 92. Damp. Voy. iii. p. 97. Hasselq. Voy. p. 174. Staunt. Chin. i. 224. Bew. ii. pl. p. 249. Lew. vi. pl. 219. Walc. i. pl. 91. Pult. Dors. p. 19. Orn. Dict. & Suppl. Am. Orn. vii. 90. pl. 60. f. 6.

SIZE of a Swallow; length six inches, breadth thirteen; weight at least an ounce. Bill black; general colour of the plumage black, paler beneath, where it inclines to soot-colour; the ends of the second quills, the rump, and vent, white; the four outer tail feathers white at the base on the inner webs; the wings, when closed, half an inch longer than the tail; legs long and black. Young birds both of this and other Petrels, have a singular appearance, from the immense long and floating down, which occupies the whole under parts from the chin, and supplies the parts with complete warmth, till the true feathers appear.

This bird is sufficiently common, though rarely met with but at sea, except during the time of its breeding, and seems to be dispersed all over the Atlantic Ocean; flocks of them are for the most part seen about ships in full sail, but particularly in stormy weather, in the wake of the vessels, to which they seem to resort for shelter, from the violence of the waves; however, the sight of them at any time is not pleasant to the sailors, as they suppose them to forebode bad weather; when following the ships they are silent during the day, but very clamorous in the night, and are called by the sailors Mother Cary's Chickens, and Witches. Are said by some to be excellent divers, appearing to stay under water half an hour without rising to the surface: \*\* they fly wonderfully swift, and like Swallows, they skim the surface of the water; at other times appear to run on

<sup>\*</sup> The circumstance of their diving is doubted in the Ornithological Dictionary, for as they are feathered like a Gull, added to their form and levity, they should thereby be not capable of immersion.

the top of it.\* Their chief food supposed to be small fishes, but they will pick up, or at least examine, every scrap which falls from the ships;† are pretty common in the north, being found in Kamtschatka;‡ but do not extend to the Arctic Circle, though met with at all distances from land, from Great Britain to the Coast of North America; common on the Coasts of Brazil; and are said to breed in great numbers on the shores of the Bahama and Bermuda Islands; are not unfrequent in the southern regions. Forster§ saw them in lat. 25 deg. Dampier || in 31 deg. and Osbeck ¶ in 34 deg. south. In the Ferroe Isles the inhabitants draw a wick through the body, from the mouth to the vent, which, when lighted, serves them for some time, burning like a lamp, being fed by the vast quantity of oil contained in the body of it, as well as in other birds of this Genus.\*\*

It is true that these birds are seen every where throughout the northern and Atlantic Oceans; but they also inhabit the Mediterranean Seas, being not unfrequent in the neighbourhood of Minorca, and no strangers in the Bay of Gibraltar. Petrels are seen pretty often along the western coasts of Europe and Africa. The open sea seems to be their favourite residence, though sometimes are in the Bay, and one was picked up on the strand, within half a mile of the Town of Gibraltar the end of March; but we are by no meanse certain of their breeding any where on those shores. It is probable, that they do so in the holes of the rocks like many of the Genus, as Mr. Pennant observed them in August off the Isle of Skie, lurking among the loose stones, and betraying themselves by their twittering noise; †† they breed also about Gordon Castle, in Scotland, and

<sup>\*</sup> Damp. Voy. iii. p. 97. † "Feast along with other sea birds; when we threw "the guts of pigs overboard, they generally were the first and last on such occasions."—Osb. Voy. i. p. 115.

<sup>‡</sup> Hist. Kamtsch. 155. Those found here said to be larger than have been observed elsewhere.—Arct. Zool.

<sup>§</sup> Voy. i. 50. 110. || Voy. iii. p. 97. | ¶ Voy. i. 113. | \*\* Brun. Orn. p. 29.

<sup>††</sup> Br. Zool. This is mentioned as an article of food, in June, by the name of Petterell. See MS on the order and Government of a Nobleman's House.—Archæol. xiii. 352.

were observed in a small uninhabited Island in Orkney, by Mr. Scarth, in passing over a tract of peat moss, in the month of August; being first led to the enquiry, by hearing a sound somewhat resembling that of a spinning wheel, commonly emitted by these birds when hatching. The nest was found in a small hole in the ground, of very simple construction, being little more than a few fragments of shells, laid on the bare turf; the eggs, two in number, round, and white, and large in proportion; on its first seizure the bird squirted out of her mouth an oily substance, of a very rancid smell. During four days confinement of the bird in a cage, she would eat nothing, but having observed that she drew the the feathers of the breast through the bill frequently, Mr. S. was induced to smear her breast with oil; he afterwards placed a saucer of oil in the cage, and he found that she regularly extracted the oil, by dipping her breast in the vessel, and then sucking the feathers as before. In this way he kept the bird for three months. It sometimes made the same purring noise which first attracted notice, and sometimes whistled very shrilly.\* In the Orknies it is known by the name of Alimonty.

This bird visits the Isle of Thanet early in the winter; sometimes in the month of October. Mr. Boys mentioned having one sent to him from thence in January 1782, and another shot at Margate, in Kent, in a storm of wind, among a flock of Hoopoes, in the January following. One in the Leverian Museum was killed at Walthamstow, in Essex. We have also heard of one being shot at Oxford; and Colonel Montagu mentions having seen one, taken near Marazion, in Cornwall;† and in the middle of October 1786, one was seen on the banks of the Thames, near Northfleet, when a boy threw a stone at it, but it appeared only to have been stunned, for it was brought to me, seemingly unhurt; I endeavoured to keep it alive in a large

<sup>\*</sup> Lin. Trans. xiii. 618. † Breeds on the rocky coast of the north of Cornwall; lays one egg, the size of that of the Blackbird, white, with an obscure zone of purplish brown, formed by minute specks at the larger end.—Orn. Dict. Sup. Breeds in all the Isles of Zetland.—Id.

cage, but it would not take any food, and died the 3d day after I received it: it frequently dipped the bill into a cup of water, placed in the cage; it seemed to walk in a tripping manner, and with some difficulty, and would frequently sit down, resting the body on the whole length of the legs: from the above instances, it should seem that they are more often on land than is generally suspected.

A .- Stormy Petrel, Gen. Syn. vi. 413, 18. A. Salern. Orn. 383. Ind. Orn. ii. 826.

Salerne mentions one of the same size, but differing in colour. Bill black; back the same, waved with bluish purple; head, crop, and sides of the body, nearly blue, reflecting black and violet in different lights; hind part of the neck changeable green and purple; the upper parts of the wings and rump spotted with white; the rest of the body black; legs short, and black.—This is said to be found in the sea, about Italy, and always in flocks: has never been seen on land.

The reader cannot fail to observe the great likeness which some of the last described bear to each other. It may, therefore, be suspected that the species have been unnecessarily multiplied; and that probably we may long remain in the dark concerning them, as the manners are so little known. There can be no doubt of several changes of plumage taking place at different periods of life, but as no one has yet ventured to point them out, we must wait longer for a complete elucidation.

# 24.--LONG-LEGGED PETREL.

Petrel échasse, Tem. Man. Ed. 2d. 812. Petrel, ou L'Oiseau de tempête, Buf. ix. p. 327 t. 23. Pl. enl. 993. Stormy Petrel, Gen. Syn. vi. 411.

THIS, in every respect as to colour of plumage, is like the Common Stormy Petrel, but larger, the legs considerably longer, and the wings, when closed, reach full an inch beyond the tail.

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Inhabits the Southern Ocean, as well as the Pacific; and M. Temminck esteems it as a distinct species.

#### 25.—LEACH'S PETREL.

Procellaria Leachii, Tem. Man. Ed. 2d. 812.

LENGTH seven inches and a quarter. Bill and legs black; head and body dull black; sides of the belly and upper tail coverts white, with brown shafts; wing coverts dusky brown; quills and tail black; the tail forked as in the Martin Swallow.

A bird of this description was met with, not long since, in the Orknies. One of them was killed by Mr. Bullock, in the Isle of St. Kilda; another on the Coast of Picardy, in the cabinet of M. Baillon, at Abbeville.

This species is said to be not uncommon in the Isle of St. Kilda; that it is rarely seen in the day, but appears after dusk; at which time it is supposed to feed. It lays a single white egg, in the hole of a rock, or other cavity, in the same manner as the common sort.

### 26.—DIVING PETREL.

Procellaria Urinatrix, Ind. Orn. ii. 827. Gm. Lin. i. 560. Haladroma, Pélécanoide, Tem. Man. Ed. 2d. Anal. p. cix. Diving Petrel, Gen. Syn. vi. 413. Forst. Voy. i. 189. 483. 503.

SIZE of the Little Auk, and of a stout make, not unlike that bird; length eight inches and a quarter. Bill nearly one inch long, stout and black, the middle of the under mandible white on the sides; nostrils partly inclosed in a tube; irides dusky blue; plumage on the upper parts of the body black brown; beneath white, except the chin, which is black; the skin of that part, and of the throat, loose, serving as a ponch, as in the Frigate Pelican; the wings rather shorter than the tail; legs bluish green; webs black; spur at the back part wanting.

These were met with in Queen Charlotte's Sound, and other parts adjacent to New Zealand, in vast flocks; fluttering on the surface of the water, or sitting upon it, and dive well; arising often at considerable distances, with amazing agility. They croak like frogs, and sometimes make a noise like the cackling of a Hen; known by the name of Tee-tee. This alone, according to M. Temminck, forms a Genus as above mentioned; probably discriminated from the others in having the skin of the under mandible dilatable, as in the Pelican Tribe, and seen in no other species; independent of the want of a spur on the leg.

#### \*\* SPURIOUS-WITH THE NOSTRILS DISTINCT.

# 27.-BROAD-BILLED PEDREL.

Procellaria Forsteri, Ind. Orn. ii. 827.

Procellaria vittata, Gm. Lin. i. 560.

Pachyptila, Prion, Tem. Man. Ed. 2d. Anal. p. cix.

Le Petrel bleu, Buf. ix. 316.

Vittated Petrel, Forst. Voy. i. 153. Id. Obs. p. 199.

Blue Petrel, Cook's Voy. i. p. 29.

Broad-billed Petrel, Gen. Syn. vi. 414.

LENGTH twelve inches. Bill blue grey, one inch and a quarter long, and almost an inch broad at the base, both mandibles bending at the point, the edges finely serrated; each nostril ending in a distinct, very short, tube; tongue very large, fleshy, and fills up the whole of the bill, conforming to the shape of it; plumage bluish ash on the upper parts, and some of the feathers are brown in the middle; sides of the head and under parts of the body white; beneath the eye a dusky black streak; quills and ends of the six middle tail feathers dusky, almost black: when the wings are expanded, a dark, oblique band appears from the bend of the wing on each side, passing to the lower part of the back; legs black.

The female has the same plumage; but the bill, though exceeding that of any other Petrel, is scarcely more than half the breadth of that of the male.—These birds were seen all over the southern hemisphere, from 28 deg. upwards; met with in Dusky Bay, and other parts of New Zealand. On the NW. of Anchor Isle found in immense numbers, among other species; some on the wing, and others in woods, in holes in the ground, close to each other; or under roots of trees, or erevices of rocks; make a noise like the croaking of frogs, and fly much by night, so as to be taken for bats. were not seen in the day time, but at three o'clock in the morning were very active, diving throughout the day, at sea, in quest of food. \*- Dr. Forster observes, that these birds are exceedingly well furnished with cloathing, equal to the Penguin; for "their plumage " was amazingly abundant, and increased their bulk in a great pro-" portion; and two feathers, instead of one, proceeded out of every " root, lying one within another, and formed a very warm covering. †

# 28.—BLUE PETREL.

Procellaria cærulea, Ind. Orn. ii. 827. Gm. Lin. i. 560. Another blue Peteril, Cook's Voy. i. 32. Blue Petrel, Gen. Syn. vi. 415. Forst. Voy. i. p. 91.

LENGTH twelve inches. Bill one inch and a quarter, blue, with a black tip, middle of the bend yellow; upper parts of the plumage blue grey, but paler than in the last; beneath white; under the eye a patch of dusky; on the breast a dusky band; the greater quills are somewhat darker than the rest; and the inner webs of some of them nearly white; the tail like the back, with a dusky band near the end; but the outer feather is white; the next white within, the rest tipped with white; across the body and wings when expanded, a dark band, as in the last species; the wings, when closed, somewhat longer than the tail; legs blue, webs pale.

<sup>\*</sup> Forst. Voy. i. p. 103. Obs. p. 199. Cook's last Voy. i. p. 86. + Forst. Voy. i. p. 103.

These inhabit the Southern Ocan, from 47 to 58 deg. of latitude. and fly in flocks. Capt. Cook supposed them to be the females of the Broad-billed, but the bill has no degree of breadth to justify it; and the colours of the plumage, on comparison, immediately detect the difference.

#### 29.—PACIFIC PETREL.

Procellaria pacifica, Ind. Orn. ii. 827. Gm. Lin. i. 560. Pacific Petrel, Gen. Syn. vi. 416.

LENGTH twenty-two inches, breadth forty. Bill two inches long, lead-coloured, and much hooked at the tip; in the place of the tube the nostrils only appear, they are situated obliquely, of an oval shape, a little elevated, and placed one inch and a quarter from the base; plumage on all the upper parts black, on the under dusky; legs pale on the insteps, marked with some black spots, and a few others on the toes and webs.

Inhabits Euopoa, and other Islands of the Pacific Ocean. Said to fly in flocks innumerable; disappear all at once, dipping under water all together, and then rising as suddenly.

#### 30.—DUSKY PETREL.

Procellaria obscura, Ind. Orn. ii. 828. Gm. Lin. i. 559. Tem. Man. Ed. 2d. p. 808. Gerin. v. pl. 538.

Dusky Petrel, Gen. Syn. vi. 416. Arct. Zool. ii. Sup. p. 73.

LENGTH thirteen inches. Bill one inch and a half, colour black, with horn-coloured sides, point hooked; in the usual place only two small holes, serving for nostrils; the upper parts of the body dusky black, the under white; on the sides of the neck brown and white mixed; the edges of the middle wing coverts are whitish;

the legs placed quite in the vent, black, but the inside pale the whole length, and the two inner toes yellowish; the webs orange; claws black.

Inhabits Christmas Island. One of these, two inches shorter, in the Leverian Museum, was said to have come from King George's Sound, on the American Coast. M. Temminck assures us, that this species has been met with in the Mediterranean, though very rarely; it inhabits also the Archipelago throughout; and very common on the Coasts of Africa, and the Cape of Good Hope; but never seen in the Northern Seas.

# GENUS CVI.-MERGANSER.

1 Goosander	B Var.	A Var.
2 Imperial	4 Hooded	7 Fork-tailed
3 Red-breasted	5 Brown	8 Blue
A Var.	6 Smey	

BILL slender, cylindrical, somewhat depressed at the base, dentated, or sawed on the sides; at the end a crooked nail.

Nostrils small, oval, in the middle of the bill.

Feet furnished with four toes, palmated, three forwards, and one behind; the outer one before longer than that of the middle.

#### 1.—GOOSANDER MERGANSER.

MALE.

Mergus Merganser, Ind. Orn. ii. 828. Lin. i. 208. Faun. suec. No. 135. Gm. Lin. i. 544. Besch. Berl. Nat. ii. 551. Id. iii. 457. N. Act. Stock. 1785. iv. 287. No. 5. Brun. No. 92. Mull. No. 133. Kram. 343. 1. Sepp., iv. t. p. 325. Georgi, 169. Gm. reise, ii. 188. t. 20. Bor. iii. 21. t. 33. Fn. groenl. No. 49. Bris. vi. 231. t. 22. Id. 8vo. ii. 423. Raii, 134. A. 1. Will. 253. t. 64. Faun. Helvet. Schæf. el. t. 47. Gerin. v. t. 508. Nat. Misc. pl. 445. Amer. Orn. viii. 68. pl. 68. 1.—male and female. Tem. Man. 577. Id. Ed. 2d. 882.

Serrator, Klein, 140. Besch. Berl. Nat. i. 170.

Der Gansen Sager, Schmid, 154. t. 132.

Mergus Æthiops, Scop. i. No. 90.

Seerach mit schwartzem Kopfe, Frisch, t. 190.

Tauchergans, Bes. Berl. Nat. iv. 594, t. 18, f. 3, Schr. Berl. Nat. vii. 119, Bechst. Deutsch, ii. 724, Id. Ed. 2d. iv. 781.

Le Harle, Buf. viii. 267. pl. 23. Pl. enl. 951. Rob. Ic. pl. 18.

Goosander Merganser, Gen. Syn. vi. 418. Id. Sup. ii. 336. Br. Zool. ii. No. 260. pl. 92. f. 1. Id. fol. 147. t. N.\* N. Id. 1812. ii. 311. pl. 37. Arct. Zool. ii. No. 465. Id. Sup. 73. Fl. Scot, i. p. 42. Will. Engl. 335. pl. 64. Bewick, ii. pl. p. 254. Lewin, vi. pl. 231. Lin. Trans. iv. 122. Id. viii. 268. Walcot, i. pl. 79. Donov. iii. pl. 49. Pult. Dors. p. 19. Orn. Diet. & Supp.

THE weight of this species is about four pounds, length twentyeight inches, breadth forty. The bill is red, three inches long, narrow, toothed on the edges of both mandibles, the tip of the upper much bent, and of the under a little swelling; irides red; the head is full of feathers on the top, and back part; colour of that and half the neck, fine glossy greenish black; the rest of the neck and under parts of the body white, in some of a delicate yellowish rose-colour; sides over the thighs transversely undulated with dusky lines; upper part of the back black; scapulars nearest the body the same, the others white; lower part of the back, rump, and tail, brownish ash-colour, the feathers edged with dusky white towards the rump; lesser wing coverts white, the others ash, but in the middle white; the twelve first quills are black, some of the inner ones ash on the inner webs; the secondaries mostly white, and five or six of them fringed with greenish black on the outer margins; the tail consists of eighteen or twenty ash-coloured feathers, with dusky shafts; legs orange; the trachea, or windpipe, is enlarged in two places, nearly at equal distances between the glottis and labyrinth, which is a large bony box, from which the bronchiæ pass into the lungs.

# DUN DIVER MERGANSER.

FEMALE.

Mergus Castor, Ind. Orn. ii. 829. Lin. i. 209. Gm. Lin. i. 545. β. Fn. Helvet. Tem. Man. 577. Id. Ed. 2d. p. 883.

Mergus Merganser, fem. Fn. suec. p. 48. Bris. vi. 231. Id. Svo. ii. 428.

- Gulo, Scop. Ann. ii. No. 88.

---- cinereo-albus capite castaneo, Kramer, 343. 2.

- cirratus longiroster, Raii, 134. A. 2. Will. 253. t. 64.—the head.

Merganser einereus, Bris. vi. 254. 7. t. 25. Id. 8vo. ii. 428.

-------longirostræ fem. Gerin. v. t. 509.

Anas rubricapilla, Brun. No. 93.

Der Bibertaucher, Bechst. Deuts. ii. S. 731. Naturf. xv. 158.

Seerach mit rothem Kopfe, Frisch, t. 191.

Le Harle femelle, Buf. viii. 236. Pl. enl. 953.

Der Hanbentaucher, Schr. d. Berl. Nat. iii. 374. t. 7. f. 5,-the trachea.

Dun Diver, Sparling-Fowl, Gen. Syn. vi. 420, 421. A. Id. Sup. 270. Br. Zool. ii. No 260. pl. 92. f. 2. Id. 1812. ii. 212. pl. 37. Arct. Zool. ii. No. 465. Albin, ii. pl. 87. Will. Engl. 333. pl. 64. Bewick, ii. pl. p. 257. Lew. vi. pl. 232. Don. iii. pl. 65. Wale. i. pl. 80. Pult. Dors. p. 19. Orn. Dict. & Supp. Nat. Misc. pl. 445.

THE Dun Diver is less than the Goosander; length twenty-seven inches, breadth thirty-five; weighing three pounds and a half. The

bill is much as in the other, but duller in colour; nail at the tip blackish; the upper part of the head and neck ferruginous, paler before; the feathers of the crown and nape much longer than in the Goosander; chin and throat white; back, wing coverts, tail, and sides of the body, ash-colour; lower part of the neck before, breast, and middle of the belly, white; greater quills black; scapulars darker than the back; the ends of six of the second quills white for two inches; but the last of these has the inner web, and remaining parts of the others, pale ash-colour; the tail consists of twenty ashcoloured feathers; legs orange, but paler than in the Goosander. In this bird the trachea has no enlargement throughout its length. This is mostly found at the same season, as the Goosander; but appears to be far more common. In respect to the Mergus Castor, supposed by Linnæus and Brisson to be a distinct species, it seems not to differ much from the Dun Diver; it is less in size, the length about twenty-two inches, breadth twenty-seven; weight seventeen ounces. The bill two inches and a quarter; in colour of plumage much the same with that bird, but the neck has a greater mixture of ash-colour, with a pale streak between the nostrils and eye; the rest as in the Dun Diver; such an one was in my own collection, killed on the Coast of Suffolk; and was probably a bird of the first year; and the Mergus rubricapillus a young male; but it appears that the different varieties of plumage in this species may be accounted for, as it requires three years before it arrives at complete feather: and we learn, that the young of both sexes at first put on the appearance of females. That the complete Dun Diver is the female of the Goosander, will therefore be admitted; but as both sexes have the same plumage for at least two years, to identify the male, recourse must be had to the anatomical structure of the windpipe; when, in whatever state of plumage the subject may be, should there be found two enlargements of that organ, there is no doubt of it proving a male; on the contrary, in the female there is no enlargement throughout the whole of its length. As an additional proof of this,

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from two birds in the plumage of the Dun Diver having been sent to me in January 1789, shot in Dartford Marshes, Kent; in one of them the ovary was clustered with eggs, and the trachea of equal size from beginning to end; the other with a double enlargement, as in the complete Goosander, with the other internal marks of the sex complete. The first of these was probably a perfect female, and weighed more than two pounds and three quarters; the length twenty-seven inches; breadth twenty-three. The other weighed only fourteen ounces; and the length twenty-three inches; an incomplete male. The complete male Goosander is sometimes seen with a yellowish rose-coloured breast; perhaps a mark of extreme completion, and only seen in the breeding season.

The Goosander seems to prefer the more northern situations; not being seen southward except in severe seasons; it continues the whole year in the Orknies, and has been shot in the Hebrides;\* is not uncommon on the Continent of Europe, and Asia, but chiefly in the north; found also in Iceland, and Greenland, and breeds there. It makes a slovenly kind of nest, either in a hollow tree, or under a bush, and sometimes among the rocks; lays twelve or fourteen whitish eggs, and the young are hatched in a month. It is also said to breed upon the Islands of the Shannon, near Killaloe, in Ireland. It is frequent in America, found about New York, in winter, from whence it retires in April, probably to Hudson's Bay;† and, if the same which is called Fisherman's Duck, is also found in Carolina.‡

# 2.—IMPERIAL MERGANSER.

Mergus imperialis, Ind. Orn. ii. 829. Gm. Lin. i. 547. Cet. uc. Sard. 326. Imperial Merganser, Gen. Syn. Sup. ii. 337.

SIZE and shape of a Goose. Bill rufous white; tongue ciliated; the head not crested; general colour of the plumage varied with

<sup>\*</sup> Br. Zool. Arct. Zool. † Arct. Zool.

<sup>†</sup> Lawson's Carol. p. 150.

black, brown, and grey, no speculum on the wings; prime quills black; legs rufous white.—Inhabits Sardinia. The above is all we can collect concerning the bird.

### 3.—RED-BREASTED MERGANSER.

Mergus Serrator, Ind. Orn. ii. 829. Lin. i. 208. Fn. suec. No. 136. Gm. Lin. i. 546. It. Got. 166. 271. It. Oel. 271. Bor. iii. p. 22. 2. Mull. No. 134. Georgi, 169. Faun. groenl. No. 48. Fn. Helv. Sepp, iii. t. 124, 125. Gerin. v. t. 500. Tem. Man. 579. Id. Ed. 2d. 884.

Merganser longiroster cristatus, Gerin. v. t. 509.

----- cristatus, Bris. vi. 237. t. 23. Id. 8vo. ii. 424.

Mergus cristatus, Brun. No. 94, 95. Bechst. Deuts. ii. 737. 2. Id. Ed. 2d. iv. 795. Serrator cirrhatus, Klein, 140. 2. Id. Stem. 33. t. 37. 1. a—c. Robert. Ic. pl. 23.

Mergus pectore rufo, Bartr. Trav. 293. Besch. Berl. Nat. i. 170. Id. ii. 551.

albellus, Scop. i. No. 89.

--- cirrhatus fuscus, Raii, 135. A. 4. Will. 255. t. 64. Id. Engl. 336. t. 64.

Der Meerracken, Bechst. Deuts. ii. 732. t. 24. Id. Var. 736. Id. Ed. 2d. iv. 795.

Der Haubentancher, Schr. d. Berl. Nat. iii. 374. t. 7. f. 5.

Der Langschnabel, Naturf. xii. 139.

Le Harle huppé, Buf. viii. 273. Pl. enl. 207.

Red-breasted Merganser, Gen. Syn. vi. 423. Id. Sup. 271. Id. Sup. ii. 337. Br. Zool. ii. No. 261. pl. 93. Id. fol. 147. Id. 1812. ii. p. 214. pl. 38. Arct. Zool. ii. No. 466. Edw. pl. 95. Albin, ii. pl. 101. Bew. ii. pl. p. 261. Lewin, vi. pl. 233. Lin. Trans. iv. 121. pl. xvi. f. 1, 2. Id. viii. 268. Walc. pl. 81. Don. pl. 38. Pult. Dors. p. 18. Am. Orn. viii. 81. pl. 69. f. 2. Orn. Dict. & Supp. Frankl. Nar. Ap. p. 702.

LENGTH one foot nine inches, breadth two feet seven inches; weight two pounds. Bill nearly three inches long, the upper mandible dusky, the lower red; head and part of the neck black, glossed with green, the feathers of the first elongated, forming a long crest; the rest of the neck and under parts of the body white; upper part of the back glossy black; the lower and rump transversely striated brown and pale grey; on each side of the breast five or six broad white feathers, margined all round with black, and when the wing is closed, rest on the bend of it; part of the scapulars black, others white; wing coverts also part black part white, but the

greater number white; bastard wing black; quills dusky; tail consisting of twenty feathers, \* brown, bordered with greyish white; the shape rounded, ending in a point in the middle; legs orange; claws black. The female differs in being smaller, and having only the rudiment of a crest; the head and upper part of the neck adjoining, dull ferruginous; chin white; fore part of the neck and the breast ferruginous, mottled with black and white; neck behind, back, rump, and scapulars, cinereous; lower part of the breast and belly white; on each side of the breast the same black and white feathers as in the male; scapulars and wing coverts much the same as in that sex, but have less white, and more dusky in them; legs orange, but paler than in the male.

Individuals of both sexes differ from each other in plumage; some of the males have twice the proportion of white in the neck, as in others, and the white on the wings more pure. The females too, differ in being more or less bright in colour.

We do not find that the sexes of this bird have been mistaken by authors, but still the inquisitive naturalist will observe the same internal difference to exist, as in the great species. The male has a single enlargement of the trachea about the middle of its length, in the manner of the Golden Eye, and nearly in the same place, but differs in being bony instead of cartilaginous; and the bony plaits, most curiously furrowed, or channelled transversely; besides this, the lower part ends in a large, and remarkably bony cavity, of an irregular heart-shape, with two openings on one side, and one on the other; all of which are covered with fine membranes, in the same manner as in the Scaup, Gadwal, and Tufted Ducks; from the bottom of this triangular bony box the two bronchiæ arise, and from thence lose themselves in the lungs.

In the female the trachea continues nearly the same the whole of its length.

<sup>\*</sup> Sometimes sixteen, and sometimes eighteen feathers, Pallas, Besch. d. Berl. N. ii. s. 554.





PL.CLXXVII.





The young birds of the first winter are generally brown; the head with a crest, of a rufous colour, but neither white, nor edged with black, as in the adult male.

The one figured in the Pl. enlum. supposed to be the female, is only a bird more advanced in plumage, probably in the second year; it has the head and neck dark ash-colour, mottled with dusky black; the crest short, and rust-coloured; chin and throat whitish; back, wings, and tail, dusky, with a white line across the wings; breast and belly white. The male of this bird, as in all others of the Genus with which we are acquainted, is furnished with a bony enlargement at the bottom of the trachea before the two branches divaricate to pass into the lungs, but in shape it is not exactly like any yet described; it is oval, at its greatest length one inch and a quarter, wholly bony, without any opening, and stands obliquely. The trachea itself is about seven inches long from the entrance to the divarication; it passes downwards, of nearly the same diameter for three-fifths of its length, when it increases for more than two inches, the greatest diameter full five-eighths of an inch; it contracts again to three-fourths of an inch before it enlarges into the bony cist, but not to the same size as the tube above. It may be observed too, that the enlargement in the trachea does not change into the texture of bone, as in the Red-breasted; but remains cartilaginous throughout the whole of its length.\*

This elegant species inhabits North America; appears at Hudson's Bay the end of May, and builds close to the lake. The nest composed of grass, lined with feathers from the breast; the female lays from four to six white eggs; the young at first are yellow; are fit to fly in July, and in autumn all depart southward. They first appear at New York, and other parts, as low as Virginia and Carolina, in November; frequent fresh waters, remaining through the winter, and return northward in March: called at Hudson's Bay,

<sup>\*</sup> I am indebted to Mr Abbot, of Savannah, in Georgia, for the above; as also for an exact drawing of the trachea.

Omiska sheep; in Georgia, Shag Pole, Cotton Head, or Hairy Head; comes there in the winter, and frequents ponds and lakes, in pairs, and small companies; is a great diver.

#### 5.—BROWN MERGANSER.

Mergus fuscus, Ind. Orn. ii. 832. Brown Merganser, Gen. Syn. Sup. ii. 339. Arct. Zool. ii. Sup. 74.

LENGTH seventeen inches and a half; weight twenty-three ounces. Head dark brown; from the orbits a whitish brown streak, extending backwards, and ending in a large pendent crest; the upper part of it brown, the lower black; greater and lesser coverts, scapulars, and tail, black; secondaries the same, but each web broadly mottled with white; belly white; vent tawny; beyond the junction of the thighs with the body, a few black feathers, marked with red; legs dusky yellow.

Inhabits Hudson's Bay, arriving there in May, as soon as the rivers are open; makes the nest about the lakes with grass, lined with feathers from the breast; retires when the rivers become frozen. This seems to correspond somewhat with the Hooded Merganser, in one of its stages towards perfection. It is now and then eaten, but said to have a strong and rancid flavour. I find it among the drawings of Mr. Abbot, of Savannah, as distinct. It is said to frequent the ponds there in the winter; and that both sexes are alike.

#### 6.—SMEW MERGANSER.

Mergus albellus, Ind. Orn. ii. 831. Lin. i. 209. Fn. suec. No. 137. Bris. vi. 245. t. 24. f. l. Id. 8vo. ii. 425. Klein, 135. 30. Brun. No. 97. Frisch, t. 172. Kram. 244. Johnst. Av. t. 47. Fn. Helv. Dec. russ. ii. 145. Besch. d. Berl. Nat. iv. 496. t. 18. f. 7. Nov. Act. Stock. 1780. iii. p. 224. Naturf. xxv. s. 11. Besek. Voy. Kurl. s. 53. Schr. Berl. Ges. vii. 457. Borowsk. iii. s. 22. 3. Am. Orn. viii. 126. pl. 71. 4. Tem. Man. d'Orn. 581. Id. Ed. 2d. p. 888.

Smew, Gen. Syn. vi. 428. Id. Sup. 271. Id. Sup. ii. 338. Br. Zool. ii. No. 262.
Id. fol. 148. pl. N. 1. Id. 1812. ii. p. 216. Bewick, ii. pl. p. 264. Lewin, vi. pl. 234. Alb. i. pl. 89. Walc. i. p. 82. Pult. Dors. p. 19. Orn. Dict. & Supp.

Mergus minutus, Lin. i. 209. 6. Gm. Lin. i. 548. Fn. suec. No. 138.

Merganser stellatus, Bris. vi. 252. Id. 8vo. ii. 428. Brun. No. 98. Klein, 135. 29.

Tem. Man. 582. Id. Ed. 2d. 888.

Merganser cinereus capite rufescente breviroster, Gerin. v. t. 511.

Le Harle etoilé, Buf. viii. 278.

Weesel-Coot, Albin, i. pl. SS.

Red-headed Smew, Br. Zool. ii. No. 263. Id. fol. 148. pl. N. 2.

Mergus minutus, Fn. suec. No. 138. Kramer, 344.

Tinus, Hasselq. It. 269. Id. Voy. 201.

glacialis, Brun. No. 99. Raii, 135. A. 3. Will. 254.

Pannuonicus, Scop. i. No. 92. Bechst. Deuts. ii. 743.

Merganser cristatus minor fæm. Bris. vi. 243. t. 24. f. 2. Id. 8vo. ii. 426.

De kleine Zaagbek, Sepp, iv. t. p. 293.

Der kleine Tauchente, Bechst. Deuts. ii. 742. 1.

Pfeilschwanz, Naturf. xii. 139.

La Piette femelle, Pl. enl. 450.

Lough-Diver, Will. Engl. 338. Br. Zool. ii. 560. Id. fol. 144. Add. Arct. Zool. ii. 540. A. Id. Sup. 74.

Minute Merganser, Gen. Syn. vi. 429.

LENGTH sixteen or seventeen inches; breadth two feet; weight thirty-four ounces. Bill nearly two inches long, and black; general colour of the plumage white; the head crested at the back part; beneath the crest black; on each side of the head an oval black spot, beginning at the bill, and taking in the eye; on the lower part of the neck, on each side, two curved black streaks, pointing forwards:

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inner scapulars, back, coverts on the side of the wing, and greater quills, black; tail cinereous, consisting of sixteen feathers; legs bluish grey.

The second set of synonyms, supposed to be of the female, refer to a bird sixteen inches long, twenty-three broad, and weighing fifteen ounces. Bill lead-colour; head ferruginous, and slightly crested; cheeks, chin, and throat, white; between the bill and eyes the same oval black spot as in the other bird: back dusky ash-colour; wings as before described: belly white; legs pale ash-colour.

The Minute Merganser, meant by the last division of synonyms, is rather smaller than the other two; length fourteen inches and a half, breadth twenty-three. Bill black; top of the head and sides, including the eyes and hind part of the neck, dusky ferruginous, deeper on the head, the feathers of which are somewhat elongated; chin, throat, fore part of the neck, and sides of it for half the length, white; lower part of the neck and breast mottled dusky and white; wings much as in the Smew, dusky black, with a patch of white on the coverts, and two bars of the same below; legs dusky.

It seems now certain, that both sexes, while young, are more or less brown, with a reddish, or chestnut head; the under parts white; and as some of these have the oval spot between the eye, and others without, it may not be unreasonable to suppose, that the former may, when complete, be the males, and the others the females: in such case reducing several birds described by authors as distinct, into one and the same species; that at first all are without the distinguishing, oval black spot, which may break forth more or less distinct in the second year, with some change also of plumage, and on the third, the plumage may arrive at its mature state. I have been led to this supposition, by finding the trachea of a Minute Merganser, which proved to be a male, exactly of the same conformation with that of the adult Smew, with this difference only—that the parts were less ossified. The trachea when complete, may be described thus:—near the upper part it is very small in diameter, but enlarges as it descends

as far as the middle, from whence to the bottom it continues of nearly equal dimensions; the texture consists of completely bony rings, with scarcely any cartilage intervening; at the bottom is a bony cavity as in other Mergansers, but smaller in proportion, and differing in shape, the greater expanse being from side to side; whereas in the others it is almost upwards and downwards; on one side is a round hole, covered by a drum-like membrane, and on the opposite, an oval, smooth, hollow bone, uniting with it; from the bottom arise the two bronchiæ.\*\*

The Smew is seen in England only in the winter; at which season, it is sometimes met with in the southern parts, but only in severe seasons; in France, about Picardy, it is called La Piette. to this appellation, we have heard it called in Kent the Magpie Diver. On the Continent we find it as far southward as Carniola; t is common in Iceland, at which place, and other Arctic Regions, it passes the summer, and where it probably breeds with the other Mergansers, as it has been observed to migrate in company with those birds, several kinds of Ducks, &c. in their course up the Wolga, in February. 1 It inhabits also America, having been sent from New York, \ where it is migratory, as in Europe. Birds of this Genus are occasionally met with in the London markets, but are seldom so well flavoured as those of the Duck kind; and we have there seen in particular the Smew, in its several varieties of plumage, but rarely the adult bird. The Smew feeds chiefly on shrimps, and we have found both these and also the fish called Miller's Thumb, | in the stomach; but in one met with in Ireland, the end of August 1786, the stomach was distended with shrimps, to the utmost it was capable.

<sup>\*</sup> Lin. Trans. V. iv. pl. xvi. f. 3, 4. There is no enlargement of the trachea in the female.

<sup>†</sup> Hasselquist says, as far south as lat. 37. having found it in the Island of Tenos, or Tino, in the Archipelago: probably he gave his bird the name of Mergus tinus from this circumstance.

<sup>‡</sup> Dec. russ. ii. 145.

<sup>||</sup> Cottus Gobio, Lin.

A .- Mergus Asiaticus, Gm. Lin. i. 548. Gmel. It. ii. 188. t. 20.

Length fourteen inches and a half. The bill formed as in the Smew, and red; the head not crested in either sex, the feathers being quite smooth; upper part and sides of the head dull ferruginous; throat and breast clouded with white on an obscure ground; belly white; back black; on the wings a white space, with a black speculum, bounded with white before and behind; prime quills black; tail ash-colour; legs dull red.

Inhabits Astrachan. Gmelin observes, that the trachea of the male is exactly like that of the Smew, from which it no doubt differs only in age, or sex.

#### 7.—FORK-TAILED MERGANSER.

Mergus furcifer, Ind. Orn. ii. 832. 8. Gm. Lin. i. 548. Schr. d. Berl. Nat. vii. 458. 32.

Fork-tailed Merganser, Gen. Syn. Sup. ii. 339.

The bill in this bird is black at the tip and base, and reddish in the middle; irides pale brown; forehead and back light brown; from the ears, down the sides of the neck, to the breast a black stripe, shaded for half the length with chestnut; hindhead and neck white; breast, back, and rump, shaded with black, the feathers appearing scaly; belly and vent white; tail black, forked as in the Swallow; the outer feathers white; wing coverts shaded not unlike the back; lesser quills black, part of them white, making a long spot of that colour between the back and wings.

Inhabits Courland.

### 8.—BLUE MERGANSER.

Mergus cæruleus, Ind. Orn. ii. 833.

Anas discors, Ind. Orn. ii. 854. 55. B.

White-faced Duck, Gen. Syn. vi. 504. 50. A.

Blue Merganser, Gen. Syn. Sup. ii. p. 340. Arct. Zool. ii. Sup. p. 74.

THIS bird is fourteen inches in length, and weighs fourteen ounces. The bill black, long, and slender; irides blue; forehead and crown shining black, the feathers long; about the ears some dirty white feathers; throat and belly white; breast and vent blue; the hind part of the neck inclining to brown; primaries, scapulars, bastard wing, and lesser coverts, dark blue; greater coverts blue, marked with a white spot; secondaries white on the outside, blue on the inner; tail black, short, and rounded; legs blue.

Arrives at Hudson's Bay in June; makes the nest on the stump of a tree, near the side of a pond, and lays ten small white eggs, in a cavity formed by scraping away the rotten wood; hatches in July, and immediately conveys its young in her bill to the water; retires in October; feeds on grass at the bottoms of ponds, and is frequently seen flying over the surfaces. The natives call it Waw pew ne way se pis, or Pied Duck.

I have been favoured with the description of a similar one by General Davies, which he met with in Canada, under the name of Betsee, differing in a few, but not essential particulars, probably arising from sex.

30 White-fronted

31 Bean

32 Bering

# GENUS CVII.—DUCK.

1	Whistling Swan	33	Gulaund	6
2	Lesser	-	Bernacle	6
3	Mute	35	Brent	-
4	Black-necked		A Rat or Road	6
5	Black	36	Torrid	6
6	Black and White Goose	37	Scopoline	
7	Loggerhead	38	Eider	6
8	Hybrid	39	King	6
9	Coscoroba	40	Muscovy	7
10	Antarctic	41	Nilotic	7
11	Bustard	42	Merian	7
12	Variegated	43	Abha Duck	7
13	Painted	44	Solitary	7
14	Magellanic	45	Lobated	
	A Var.	46	Royal	
15	Blue-winged	47	Georgian	7
	A Var.	48	Black	7
16	Snow		A Var.	7
17	Great	49	Scoter	7
18	Chinese	50	Cinereous	7
	A Spontaneous	51	Velvet	8
	B Oriental		A Var.	8
	C White	52	Harlequin	8
19	Canada	53	Brown	1 8
20	Błack-backed	54	Spotted-billed	8
21	Spur-winged	55	Damietta	8
22	Barred-headed	56	Mallard	
23	Hindustan		A Tame	1
24	Egyptian		B Greater	
	A Cape		C Grey	8
25	Grey-headed		D Greater-spotted	
26	Mountain		E Hook-billed	1 8
	Red-breasted	57	Mixed	1 8
28	Ruddy	58	Curve-billed	
29	Grey Lag	59	Semipalmated	
	A Tame	60	Cream-coloured	

61 Red-billed Whistling62 Black-billed ditto

63 Piping

1	64	Fluting
	65	Scaup
ŀ		A Var.
	66	White-faced
	67	Shieldrake
		A Var.
	68	New-Holland ditt
1	69	Ash-headed
	70	Crimson-billed
	71	Ilathera
-		Mareca
	73	Striped
	74	Shoveler
		A Var.
		B Var.
	75	Red-breasted
	76	New-Holland Jamaica
	77	Jamaica
		Ural
		Spanish
		White-masked
	81	Dominican
	82	Pied
	83	Rubicund Gadwal Falcated
	84	Gadwal
	85	
		A Var.
	86	Javan
		A Var.
	87	Wigeon
		A Var.
		Black-tailed
	89	Cape
	$\parallel 90$	Supercilions
		Canvas-backed
	92	American Wigeon
		Bimaculated .
		Membranaceous
	95	Soft-billed

96	Pochard	{ C Var.	127 Chestnut-winged
	A Var.	110 Raft	128 Grey-shouldered
97	Rufous-necked	111 Lapmark	129 Bilibi
98	Mexican P.	112 African	130 American
99	Chestnut-crowned	113 Nyroca	131 St. Domingo
100	Varied-billed	114 New Zealand	132 Spinous-tailed
101	Jacquin's	115 Crested	133 Siley
	Pintail	116 Hawksbury	134 Madagascar
103	Long-tailed	II7 Dusky-bay	135 Coromandel
	A Ferroe	118 Red-crested	136 Girra
104	Western	119 Iceland	137 Manilla
105	Pink-headed	120 Dusky	138 Baikal
106	Spirit	121 Summer	139 Hina
	Golden-eye	122 Chinese	140 Sparrman's
	A Morillon	123 Summer Teal	141 Gmelin's
108	Fulvous	124 Garganey	142 Kekushka
109	Tufted	125 Common Teal	143 Arabic
	A Var.	A Var.	144 Alexandrine
	B Var.	126 Sirsæir	145 Gattair

THE bill in the Duck Genus is strong, broad, depressed, and commonly furnished at the end with an additional piece, termed a nail; the edges of the mandibles marked with sharp lamellæ, imitating teeth.

Nostrils small, and oval.

Tongue broad, sometimes irregular in shape and fringed near the base.

Toes, three before and one behind, with webs between, the middle toe longest.

## 1.—WHISTLING SWAN.

Anas Cygnus, Ind. Orn. ii. 833. Lin. i. 194. Fn. suec. No. 107. Gm. Lin. i. p. 501. Scop. i. No. 66. Brun. No. 44. Muller, No. 106. Kram. 338. Georgi, 165. Borowsk. iii. 14. Fn. Helv. Gerin. v. t. 554. Bartr. Trav. 292. Bes. d. Berl. Nut. iii. s. 460. Tem. Man. 522. Id. Ed. 2d. 829. Parr. App. p. ccvii.

Cygnus ferus, Bris. vi. 292. t. 28. Id. 8vo. ii. 439. Raii, 136. A. 2. Will. 272. t. 69. Klein, 128. Id. Stem. 31. f. 33.

Der Sing Schwan, Bechst. Deuts. ii. 581. Id. Ed. 2d. iv. 330. Naturf. xii. 131. Cisne, Gabin. de Madrid, ii. p. 65. lam. 66.

Cygne sauvage, Buf. ix. p. 3. Hist. Prov. i. 340.

Wild, or Whistling Swan, Gen. Syn. vi. 433. Id. Sup. 272. Id. Sup. ii. 341. Br. Zool. ii. No. 264. Id. fol. 149. pl. Add. Id. Ed. 1812. ii. 218. Arct. Zool. ii. No. 469. Id. Sup. p. 75. Fl. Scot. i. No. 204, Will. Engl. 356. pl. 69.—head. Edw. pl. 150. Phil. Trans. lvi. t. x. 215. f. 1, 2. Lin. Trans. iv. 105. pl. xii. f. 1, 2. Bewick, ii. p. 272. Lewin, vii. pl. 236. Id. xlviii.—the egg. Parry's 2d Voy. p. 240. pl. of the nest. Walcot, i. pl. 55. Pult. Dors. p. 19. Orn. Dict. & Supp. Wood's Zoogr. i. p. 530. Cooke's Whistling Swan, Monogr. two plates.

THE Whistling or Wild Swan, formerly called Elk or Hooper, is less than the Tame or Mute Species, and about five feet in length; breadth seven; and weights from fifteen to twenty pounds. The bill between four and five inches long; from the base to the middle yellowish white, and from thence to the end black; irides pale yellow, in some dusky; round the eyes a small, bare space; eyelids yellowish; plumage wholly white; at the end of the bastard wing a horny spur, about half an inch long, somewhat curved, scarcely discernible, till the feathers are removed; legs black. The female does not externally differ.

The Wild Swan inhabits the northern regions, rarely appearing in England, except in severe winters, when flocks of five or six are now and then seen: said, however, to come into Lingey, one of the Western Isles, in October, departing in March; and that a few continue in Mainland, one of the Orknies, and breed there. This species has also been seen on the eastern side of the Chesil Bank, I believe in August;† but the greater part retire northward as the spring advances, and are found in summer in Iceland,‡ Lapland, the Deserts of Tartary and Siberia, as far as Kamtschatka, as well as

<sup>\*</sup> In some birds the head has a yellowish tinge.

<sup>†</sup> Dr. Maton. See Western Tour, i. p. 68.

<sup>‡</sup> The people of Iceland find, that the number increases towards winter, hence suppose them to come from parts still farther north; and in spring more than 100 are often seen in a flock, which are thought to have come from the south. This is said of migrators, for the greater part of the young brood stay the whole year, frequenting the lakes in summer, and in the winter remove to the sea shore.—Van. Troil. Icel. 143.

about the Caspian and Euxine Seas; seen in Greece, and at times, even as low as Egypt, but observed on this side of the Equator only between the Tropic and Arctic Circles, to the last of which it scarcely ever arrives. In the neighbourhood of Tzaritzin, and the lower Wolga, a great number of Swans appear about the 20th of February, particularly upon the Sarpa, and towards the lower grounds of the Achtuba;\* they are of two kinds, but that which distinguishes itself by its very sharp scream, and has the lower part of the bill yellow, is the most numerons;† among the Kalmucs, the Lama Dardsha had for his title, Erdeni Lama Baatur Khan Taïdshi, signifying Noble Father of Souls, brave Prince of Swans.‡

Are well known in America, especially on the borders of the upper lakes, as they breed in the lagoons, and marshy inlets, and migrate to the southern provinces with their young, in incredible numbers, about the beginning of October; § are not uncommon at Hudson's Bay, and there called Wapa-seu. They come there, accompanied by the Geese, about the end of May, but not in great numbers; though sometimes as many as nine in a flock, yet the lakes to the southward are said to abound with them; are eaten by the natives, and much esteemed. They lay four white eggs, and the young are hatched in July; | have been seen also in King George's Sound, ¶ and from thence to Carolina, \*\* and Louisiana, migrating in the New, as on the Old Continent. The Indians wear the skins, with the down attached, sewed together, by way of covering: the larger feathers are made into diadems for their chiefs, and the smaller are woven on threads, with which they cover garments, but worn only by women of the highest rank. ††

- \* Breeds in Prussia, about Pillau.—Naturf. xii. s. 131.
- † Meaning, no doubt, the Wild Swan.—Russia, 8vo. 1783. iv. p. 283.
- ‡ Russ. iv. 205. § General Davies.

|| Mr. Hutchins. A nest was met with in Winter Island, built of peat moss, five feet ten inches long, nearly five feet wide, and two feet deep; the hole of entrance eighteen inches.—Capt. Parry.

¶ Cook's last Voy. i. 235.

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<sup>\*\*</sup> Said to be of two sorts; the larger called the Trumpeter, the smaller the Hooper.— Lawson, p. 146. Arct. Zool. †† Hist. Louis. ii. p. 113.

In August they lose their feathers, and not being able to fly, the natives of Iceland and Kamtschatka hunt them with dogs, which catch them by the neck, and easily secure their prey. In the last named place they are also killed with clubs: the eggs are accounted good food; and the flesh is much esteemed by the inhabitants, especially that of young birds; insomuch that in summer or winter no entertainment is made without one.\*

The general use of the feathers is well known, and the skins of the body worn for garments; besides which, those of the legs, taken off whole, are made into purses, appearing not unlike shagreen. The Venetians and Neapolitans turn the feathers of this and the Mute Species to another account, by dying those of the belly, for the purpose of making artificial flowers.

However this and the Mute Species may be alike in plumage, they differ within most essentially, in respect to the structure of the trachea or windpipe. In most birds, as well as in the Mute Swan, the keel-shaped process of the breast bone is thin, and sharp, but in the Whistling one it is very broad and hollow. The windpipe in the female, first enters this cavity for about three inches, when it makes a turn back, and returns at the place it first entered, after which it passes into the chest. In the male, however, it continues the whole length of the keel, down to the sternum.† This circumstance has been noticed by many authors, but as words are scarcely sufficient to convey a just idea without engravings, the reader may be referred to the Philos. Trans. where Dr. Parsons has given a good representation, or the Lin. Trans. above referred to.: It is perhaps from this structure that the bird is enabled to produce so strong a voice; whereas in the Mute, or Tame Species, the windpipe enters at once into the lungs, and the utmost noise the bird can make is a mere hiss. I find this Species mentioned under the name of Elk, among the

<sup>\*</sup> This was not the case when Capt. Cook visited that place. See Last Voy. iii. p. 347.

<sup>†</sup> In the female the trachea is about six inches shorter than in the male.

<sup>‡</sup> See also the Sceleton of this bird with the trachea in situ, in Blasii Anat. 4to. 1681. pl. 42.

general table of provisions fit for a nobleman's house,\* but as it is not said to be peculiar to any season, no doubt it must be only at very uncertain times, that it could be procured.

Colonel Montagu says, that a Hooper Swan, which he bred up from very young, turned out to be a female, and that having put it to a small white China Gander, they seem to be much attached, but doubts when any connexion will take place. He adds, that "it is "a most domestic, sweet-tempered creature; follows me about the "field; eats out of my hand, and expresses great pleasure on my "approach, by its plaintive notes, and curious gesticulations; nod-"ding the head, and raising the wings something like the Mute "Species; and is a most elegant bird."

A female, full-grown bird, shot near Bridgewater, in 1805, got the better of the wound, and became perfectly tame, mixing with the other birds, in the poultry yard.

## 2.—LESSER SWAN.

THIS is not so large as the Hooping Swan, nearer that of the China Goose, but much more slender, and longer in the neck. The bill black, flat as in the Swan, with a black knob at the base, as in the Mute Swan, but not a projection on the forehead like the China Goose; in fact, it imitates the Wild Swan in miniature. The legs are also black, and broader than those of the Goose; the plumage perfectly white.

This was bought out of a collection, called the Bath Museum, and is evidently a Swan; but whether distinct as a species, or some chance, or mixed breed, cannot be determined.

A specimen of the above in the collection of the Rev. Mr. Vaughan, at Aveton Giffard, Devon.

#### 3.—MUTE SWAN.

Anas Olor, Ind. Orn. ii. 834. Gm. Lin. i. 501, Tem. Man. 524. Id. Ed. 2d. 830. Cygnus maximus, Gerin. 553.

Anas Cygnus (mansuetus) Lin. i. 191. Fn. suec. No. 107. β. Brun. No. 44. Kram. 338. 2. B. Frisch, t. 152. Bris. vi. 288. Id. 8vo. ii. 438. Raii, 136. A. 1. Will. 271. t. 69. Klein, 128. 1.

Der stumme Schwan, Bechst. Deutsch. ii. 559. Id. Ed. 2d. iv. 815. Schmid, p. 145. t. 126.

Le Cygne, Buf. ix. p. 3. pl. 1. Pl. enl. 913. Cet. Uc. Sard. 316.

Tame, or Mute Swan, Gen. Syn. vi. 436. Id. Sup. ii. 342. Br. Zool. ii. No. 265. pl. 60. Id. fol. 149. pl. Add. Id. Ed. 1812. ii. 221. pl. in frontisp. Will. Engl. 355. pl. 69. Arct. Zool. ii. No. 470. Fl. Scot. i. No. 205. Bewick, ii. pl. in. p. 277. Cheseld. Ost. Ch. 5.—Sceleton. Lin. Trans. iv. 106. pl. xii. f. 3.—the breast bone.

THIS is bigger than the Whistling Swan; is more than five feet in length, about eight feet in breadth; and weighs from twenty to thirty pounds, when in good condition. The bill is four inches long, red, with the tip and sides black; at the base, on the forehead, a callous black knob; the whole plumage is pure white: the young birds are blackish; in the second year ash-coloured; but in the third, and ever after white; the legs are dusky; but sometimes vary more or less to red.\*

This species is found wild in Russia and Siberia, most plentiful in the latter; arrives later from the south, and does not spread so far north.† Those about the provinces of Ghilan and Masenderan, on the south of the Caspian Sea, grow to a vast size, and are esteemed great delicacies. The Mahometans hold them in high estimation.‡

The female scarcely differs from the male, except in the black knob on the forehead being smaller. Whether it is often met with here in a wild state is not said, but probably it is now and then the case, as our late friend Mr. Boys, in December 1785, shot two at large, the one weighing twenty-one and the other twenty-five pounds.

<sup>\*</sup> They are said to be red like vermilion.—Bechst. Dr. Plott mentions this Variety, found on the Trent, near Rugeley, Ph. Tr. xvi. p. 210. † Arct. Zool. ‡ 1b. 16.

I do not learn that the former species has ever been domesticated, but the latter is very common in every gentleman's grounds, where water forms a part, being kept as an ornament; generally begin to lay the first egg in February, and continue to do so every other day, to about seven or eight; these are placed on a bed of grass near the water, and the female commonly sits six weeks; the eggs are white. The young ones, called Cygnets, were formerly much esteemed, and at this day are fattened about Christmas, at Norwich; they formerly were thought worth a guinea each,\* now much more, as the mere fattening costs from ten shillings to a guinea: it takes two months to fit them for the table, and in this time each will consume two coombs of oats; added to this, the birds are sometimes sulky, and will not eat, unless a companion be allowed: only one or two persons undertake the business, and the birds by this treatment will weigh twenty-four pounds. The taste of the flesh in this state is compared to that of a pigeon.† They are seen on the River Thames in vast plenty, and are esteemed as Royal property, it being accounted felony to steal the eggs; by this means the increase is secured, and they prove a delightful ornament to the whole length of that river, from the part where the traffic of the metropolis ceases, quite to its source: and so tenacious were our ancestors in respect to this, that in the reign of Edw. IV. "no one that possessed a freehold of less than

<sup>\*</sup> The price of a Swan in the reign of King Edward III. was set at four shillings; for according to a proclamation in that reign, no poulterer shall sell one of the best Swans for more than four shillings—best Porcelle for eight-pence—best Ewe for six-pence—best Capon for six-pence—best Hen four-pence—Pullet two-pence half-penny—Powcyn two-pence—best Conynge or Peel for four-pence—Teel two-pence—River Mallard five-pence—best Mallard of the Fyns three-pence—Snipe one-penny—four Allowes one-penny—Wood-cock three-pence—Partridge five-pence—Plover three-pence—Pheasant one shilling and four-pence—Curlis ten-pence—thirteen Thrushes six-pence—twelve Eggs one-penny—twelve small Birds one-penny.—Strut. View. V. iii. p. 113.

<sup>†</sup> In season from November to March.—Archæol. xiii. p.

<sup>‡</sup> If lawfully marked, Edw. IV. taking the eggs, or spoiling them in the nest, three months imprisonment, or twenty shillings, for every egg to the poor.—I Jac. See other Statutes in Burn's Justice, Vol. ii.

These birds sometimes live together in society, with perfect complacency. Two female Swans have, for three or four years each, had a brood together, bringing up eleven young: they sat by turns, without quarrelling; and this is not the only instance which has come under our observation. We see on the River Trent, and many other waters, often great numbers, but the most noble Swannery is, we believe, very near Abbotsbury, in Dorsetshire; about a quarter of a mile to the west of which, in the open part of the Fleet, are to be seen six or seven hundred, and formerly more than double that number. The Royalty belonged anciently to the Abbot, since to the Family of Strangeways, and now to the Earl of Hichester.†

The Swan is very pugnacious, and I have known full grown boys of fifteen or sixteen, injured by the attack of one, and it must be a powerful man who is able to withstand an encounter with an enraged male; even a horse has been lamed by one of these furious birds, when feeding too near the edge of the water, near which a Swan was sitting. At Pewsy, in Buckinghamshire, whilst a Swan was on the nest, she observed a fox swimming towards her from the opposite shore, when she darted into the water, and having kept the fox at bay for considerable time with her wings, at last succeeded in drowning him, in the sight of several spectators.

<sup>\*</sup> But to make it felony the Swan must be marked by nicks, made with a red hot iron on the bill, and varying in number, direction, and shape, according to the family they belonged to—e. g. three vertical nicks for the King's Highness; and in one of the libraries of Oxford is an old MS shewing the Swan nicks of 304 families, of England. See Gent. Mag. Aug. 1808. 669. A Copy of the Ordinances respecting Swans on the River Witham, in the County of Lincolnshire, may be seen in Archæol. xvi. p. 153, with three plates of Swan nicks. It is observed by the Rev. Mr. Weston, that the name of the Swan with two Necks, a well-known sign in London, might have originally meant, the Swan with two Nicks; and that the Swan hopping, so called, when the Swan companies annually made progress up the Thames; might have meant formerly Swan-upping.—Arch. xvi. 163.

<sup>†</sup> Multitudes of the Tame Swan, seen by Dr. Maton, within two miles of Abbotsbury, West. Tour. i. p. 68. At present much reduced, there not being more than 6 or 700, formerly as many thousands.—Orn. Dict. Sup.

This bird feeds on both fish and herbage, and is long lived, not unfrequently arriving at 100 years; no wonder therefore, that the flesh of the old ones is hard, and ill tasted, but that of the young birds is much esteemed, though more valued by the ancients than at present. Nothing can exceed the beauty and elegance with which the Swan rows in the water, throwing itself, before the spectators, into the proudest attitudes, as if desirous of being viewed; and will swim faster than a man can walk; but has a most inelegant and awkward gait on land. The use of the feathers, and particularly the down of both kinds, is well known, as well as the quills; the feathers, too, compose muffs, and other ornaments.

Although both species are externally alike as to plumage, within they differ much in regard to the trachea; as in the tame one, it enters the lungs in a straight line without curvature, and the keel of the breast bone being narrow as in the Common Goose; but in the Whistling Swan the keel is enlarged into a deep cavity to receive the curved part as mentioned above.

## 4.—BLACK-NECKED SWAN.

Anas nigricollis, Ind. Orn. ii. 834. Gm. Lin. i. p. 502.

— melanocephala, Gm. Lin. i. p. 502.

--- melancorypha, Cygne Chilien, Molin. Chil. Fr. ed. p. 213.

Cygne à tête noire, Voy. d'Azara, iv. No. 425.

Black-necked Swan, Gen. Syn. vi. 438. Id. Sup. ii. 344. Boug. Voy. p. 59. Pern. Voy. ii. p. 26. ch. 9.

SIZE of the European Swan. Bill red; head and half the neck black, the rest glossy white; legs flesh-coloured.—Inhabits Falkland Isles, Rio del Plata, and Chili. The female, according to Molina, has commonly six young, which it never leaves alone in the nest, but carries them on its back every time it goes out in search of food.—M. d'Azara says, it is not found in Paraguay, but is very common about the River Plata, and the Swamps of Buenos Ayres, where it is to be met with the whole year; lives in flocks, and

numbers of the skins are often sent into Spain. The bill is blood red half way from the base, the rest dusky black; nostrils oval, and not covered with a membrane; eyelids white, reaching in a narrow band to the hindhead; rest of the head and half the neck black, &c.

A bird is mentioned in *Hawkesworth's Collection of Voyages*, said to be black and white, much larger than a Pelican, and resembling that bird: probably it may be the one here described.

#### 5.—BLACK SWAN.

Anas atrata, Ind. Orn. ii. 834.

— plutonia, Nat. Mis. pl. 108.

Black Swan of Van Diemen, D'Entrecast. Voy. 8vo. i. 140. pl. ix.

Shawian, or Black Swan, Penn. Outlin. iv. 130.

Black Swan, Gen. Syn. Sup. 343. Phil. Voy. p. 96. White's Journ. 137.

THIS is somewhat less than the European Species, but with the same elegant shape; extent of wing four feet eight inches. The bill is large and red, growing paler towards the end; on the base of the upper mandible a bifid protuberance; the under red on the sides, and whitish beneath; irides red; general colour of the plumage a fine shining black, as remarkable, as the pure white colour of our Swan; but the greater part of the second quills, and all the prime ones are white, also two or more white feathers on the coverts; belly and thighs ash-colour; legs flesh-coloured brown.

The female differs no otherwise, than in having only the rudiment of the protuberance at the base of the bill: both sexes have a very fine down under the feathers of a grey colour, and very thick.

Inhabits various parts of New-Holland, where it has been long noticed. I find it first mentioned in a letter from Mr. Witsen to Dr. M. Lister, about the year 1698, which says, here is returned a ship which by our East India Company was sent to the South Land called Hollandia Nova; and adds, that Black Swans, Parrots, and many Sea-Cows, were found there.\* In 1726 two of them were

<sup>\*</sup> Phil. Trans. V. xx. p. 36.

brought alive to Batavia, as confirmed by Valentyn, several being found in New-Holland, near Dirk Hartog's Bay. Since that time our circumnavigators, from Capt. Cook to the present day, have found them every where in those parts, eight or nine having been met with together, and they are said to fly one after another like Wild Geese; but the general manners remain yet to be ascertained. The natives of New South Wales call this species Mulgo. chiefly on grass. It may be observed, that the Black Swan is smaller in the body than either the Wild or Tame Species; the neck very long, and at times the bird swells out the feathers, which are very long, especially about the middle, so as to give the appearance of being much enlarged at that part, though at top and bottom of a moderate size. It has also a singular way of carrying the head; not in a position nearly square, or right-angled, as in the Common Goose or Swan; but making a sharp angle with the fore part of the neck, as if resting thereon. This species is now no longer a rarity, as the living bird is to be seen in the possession of many collectors.

In the Black Swan in Mr. Bullock's Museum, I observed the second quills much curved at the ends.

## 6.—BLACK AND WHITE GOOSE.

Anas melanoleuca, Ind. Orn, Sup. p. lxix. Black and White Goose, Gen. Syn. Sup. ii. p. 344.

SIZE of a Goose. Bill not unlike that of the Wild Swan extending far backwards at the base, and including the eyes, where it is yellow; the middle part red, the point and under mandible pale;

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<sup>\*</sup> See Valentyn, Oud en Nieuw Oost Indien, Amst. 1726, where it is observed that two, and afterwards more, Black Swans were found in New-Holland. Two of them brought alive to Batavia. This account accompanied by an engraving, representing the Lagoon, with the Black Swans swimming in it; and the eatching of one by the boat's crew. Mr. Bass counted full 300 swimming within the space of a quarter of a mile on one of the rivers, in Port Dalrymple, Water-house Isle, in Bass's Straights, and compares the note to the creaking of a rusty sign, on a windy day.—Collins's Bot. Bay. ii. p. 167.

the head, neck, beginning of the back, greater part of the wing, quills, thighs, and tail, black; the lesser wing coverts and the rest of the plumage white. It stands high on the legs, which are yellow, or orange, bare a good way above the joint; and the webs do not reach more than half way between the toes.

Inhabits New South Wales; native name Bur-ra-yen-ne. I observe in some drawings that the lesser wing coverts are black, but the inner ridge of the wing is white. How far these distinctions are incident to difference of sex, or any age, has not come to our knowledge.

## 7. -LOGGERHEAD GOOSE.

Anas brachyptera, Ind. Orn. ii. 834.

— cinerea, Gm. Lin. i. 506.

Oisean gris, on Oie de plein, Pernet. Voy. ii. Ch. 19. p. 21.

Racehorse Duck, Pernet. Journ. 213, 214. Buf. ix. 414. III.

Loggerhead Duck, Gen. Syn. vi. 439. Ph. Trans. lxvi. 104. Penrose Falk. Isl. 35.

Forst. Voy. ii. 492.

LENGTH thirty-two inches; weight from twenty to thirty pounds.\* Bill three inches long, colour orange, the top of the upper mandible brown at the base, and black at the tip; irides orange, surrounded with black, and again with orange; head and neck deep ash-colour; upper parts of the body much the same; the outer edge of the secondary quills white, forming a band of the same on the wing; under parts of the body dusky down the middle; over the thighs cinereous blue; vent white; quills and tail black; the last short, and pointed in shape; the wings are likewise very short, not reaching to the rump; on the bend of the wing a double yellow knob, half an inch in length; legs brownish orange; webs dusky; claws black.

This species inhabits Falkland Islands, Staaten Land, &c. mostly seen in pairs, though sometimes in large flocks: from the shortness of the wings they are unable to fly; but make considerable use of them when in the water, on which they seem as it were to run; at least they swim, with the assistance of the wings used as oars, at an incredible rate, so that it is a most difficult thing to shoot them while in this situation; to remedy this, the sailors used to surround a flock with boats, and drive them on shore; where, unable to raise themselves from the ground, they ran very fast, but soon growing tired, and squatting down to rest, were easily overtaken, and knocked down with sticks. The flesh was sometimes eaten by the sailors, in defect of that of the Bustard Goose, but not much relished, being rank and fishy, and thought more proper for the hogs; which, after it had been boiled in the copper, ate it greedily, and fattened well.

### 8.—HYBRID GOOSE.

Anas hybrida, Ind. Orn. ii. 835. Gm. Lin. i. 502. Molin. Chil. 213. Id. Fr. ed. 221. Hybrid Goose, Gen. Syn. Sup. ii. 345.

SIZE of the Domestic Goose, but the neck somewhat shorter, and the wings and tail longer. The male has the plumage of a pure white throughout, with the bill and legs yellow; the bill is semicylindrical, with a red cere. The female is black, except some streaks of white, arising from the tips of several of the feathers being bordered with white. The bill and legs red; the legs nearly the same as in the Common Goose.

This species inhabits the Archipelago of Chiloë, in South America, and may be called monogamous, as the male and female are never found apart, not uniting in flocks as the other sorts; during the time of incubation they retire to the rivers, where the female generally lays about eight white eggs, in a hole, formed out of the sand.

228 Duck.

#### 9.--COSCOROBA GOOSE.

Anas Coscoroba, Ind. Orn. ii. 835. Gm. Lin. i. 503. Molin. Chil. 207. Id. Fr. ed. 213. Coscoroba Goose, Gen. Syn. Sup. ii. 345.

ACCORDING to Molina, this Goose is of a large size. The bill and legs red; eyes of a fine black; the plumage wholly white; but he does not mention whether the female differs in colour.

Inhabits Chili, and is valuable for its extreme docility and tameness in confinement, and particularly by attaching itself to the person who supplies it with food.

### 10.—ANTARCTIC GOOSE.

Anas antarctica, Ind. Orn. ii. 835. Gm. Lin. i. 505.

Antarctic Goose, Gen. Syn. vi. 442. Forst. Voy. i. 499, 518. Pernet. Voy. ii. 13.

Cook's Voy. ii. 186.

THIS is smaller than a Tame Goose; weight sixteen pounds. Bill narrow, short, and black; the whole plumage of a dazzling snowy whiteness. The female has a reddish flesh-coloured bill; head, neck, and body, black, crossed with transverse white lines; those of the head and neck very minute, but grow broader as they proceed downwards; the middle of the back plain black; wing coverts white; on the bend of the wing a blunt knob; speculum green, edged outwardly with white; legs yellow.

Inhabits Christmas Sound, in Terra del Fuego.

### 11.—BUSTARD GOOSE.

Anas leucoptera, Ind. Orn. ii. 835. Gm. Lin. i. 505. L'Oie des Malouines, Buf. ix. 69. Outarde, Hist. de la Louis. ii. 113?

White-winged Antarctic Goose, Brown, Ill. pl. 40. Sea Goose, Phil. Trans. lxvi. 104. Bustard Goose, Gen. Syn. vi. 440. Boug. Voy. p. 59.

LENGTH from thirty to forty inches. Bill scarcely two inches long, and black; head, neck, lesser wing coverts, and under parts of the body, white; lower part of the neck behind, and as far as the middle of the back, crossed with numerous dusky black lines; sides over the thighs the same; the greater wing coverts black, tipped with white, forming a bar of white on the wing; at the bend a blunt knob; second quills part black, part white; prime ones dusky black; speculum dark green; the two middle tail feathers black, the others white; legs black.

Another had almost the whole of the neck crossed with dusky lines, and the wings without any speculum, otherwise like the former: probably a young bird, or differing in sex.\*

Inhabits Falkland Isles, and called Bustard Goose. It stands pretty high on its legs, which serve to elevate it above the tall grass; and with the addition of its long neck, is able to observe any danger approaching. It walks, and flies with great ease, and has not that disagreeable cackling cry peculiar to the rest of its kind; it generally lays six eggs; the flesh is accounted wholesome, nourishing, and palatable; and it seldom happened there was any scarcity of it. Both the above were in the British Museum.

## 12.—VARIEGATED GOOSE.

Anas variegata, Ind. Orn. ii. 836. Gm. Lin. i. 505. Variegated Goose, Gen. Syn. vi. 441.

SIZE of a large Duck. Bill black at the base and tip; head, and neck above half way, white; lower part of the neck and breast

<sup>\*</sup> M. Bougainville calls the female yellow; and says, that the wings are adorned with changing colours.—See Voy. p. 59. perhaps he means our Magellanic Species.

deep red brown, beautifully mottled with black and white; back brown black, mottled with white; over the thighs the same; all the under parts marked as the lower part of the neck; rump and vent ferruginous; wing coverts white; second quills green, the greater and tail black; legs black.

Inhabits New Zealand; found at Dusky Bay in April, called there Pooa dugghee dugghee.—Sir Jos. Banks. It probably may be that mentioned in *Forster's Voyage*; which he says, is the size of the Eider Duck; plumage blackish brown, elegantly sprinkled with white; rump and vent ferruginous; secondaries green; quills and tail black.

Clayton, in his account of Falkland Islands, mentions a bird called Mountain Goose, bigger than the Muscovy Duck: plumage on the back speckled brown and greenish black; towards the neck glossy beautiful gold-colour; breast like that of a Pheasant. It is said always to feed on the mountains, to be well tasted, and preferable to the other sorts, but is scarce. He adds, that like other Geese, it is best in autumn, when the cranberries are ripe, on which they feed. Mr. Clayton talks of another, as large as a Tame Goose, the Gander black and white speckled; the Goose almost like the Mountain Goose, but darker, and not so beautiful. These feed in the vallies, on wild cranberries and grass; are in general good food, but best and fattest in February, March, and April. The first of these appears to be our Variegated one, but as to the last, we cannot easily determine.

### 13.—PAINTED GOOSE.

Anas picta, Ind. Orn. ii. 836. Gm. Lin. i. 504. Painted Goose, Gen. Syn. vi. 443. Cook's Voy. i. p. 96.

LENGTH twenty-eight inches. Bill small, black; irides ash-colour; head and neck white, inclining to ash-colour at the hind head; the feathers of the forehead produced forwards on each side

of the upper mandible; the lower part of the neck and breast white, marked across with numerous, narrow, black bars; the upper part of the back pale grey, barred in the same manner with black; the lower part of the back and scapulars dusky ash; wing coverts white; at the bend of the wing a blunt knob; below the white the feathers have glossy green, or bluish edges, forming a kind of speculum; secondary quills dusky, with pale edges; prime ones and tail black; the middle of the belly, thighs, and vent, white; over the thighs barred dusky and white; legs black.

This was met with at Staaten Land in January; but as the above is described only from a painting at Sir Joseph Banks's, we can only say, that it appears to be the Painted Duck, mentioned by Capt. Cook,\* which he says, in the size of the Muscovy Species; the plumage most beautifully variegated; the head and neck of the female white; but all the other feathers, as well as those of the head and neck of the Drake, are of a dark variegated colour: both male and female have a large spot of white on the wing.

We have been much disappointed in not being able better to ascertain the distinction between several of the last described; some of which we suspect to vary from difference of age or sex; for as it is well known, that many of this Genus are not complete in plumage till the third year; such Varieties may occur in the intermediate stages towards perfection.

## 14.—MAGELLANIC GOOSE.

Anas Magellanica, Ind. Orn. ii. 836. Gm. Lin. i. 505. Oie des Terres Magellaniques, Buf. ix. 68. Pl. enl. 1006. Magellanic Goose, Gen. Syn. vi. 443.

LENGTH twenty-four inches. Bill short, black, the upper mandible a little bent at the end; head and part of the neck ferruginous brown; the rest of the neck, beginning of the back, breast,

and all beneath to the vent, barred ferruginous and black; near the vent grey; lower part of the back and tail dusky; wing coverts white; quills dusky; the secondaries white, forming a bar on the wing.—Inhabits the Straits of Magalhaen.

I found this in the Museum of the late Dr. Hunter, and from information since, it seems to be the female of the Painted Goose; for Commodore Byron mentions one by that name found there, but without further description.

A.-Anas Magellanica, Mus. Carls. fasc. ii. t. 37.

In this the bill and legs are pale yellowish ash-colour; crown, as far as the nape, ash; sides of the head, throat, and greater part of the neck, grey brown; back and rump bronzed brown; feathers of the throat, breast, and belly, black, marked with four white bands, giving an undulated appearance; wing coverts white; the hindmost series green, forming a kind of speculum; second quills white, forming a bar; prime quills black; belly, thighs, vent, and tail, white. This probably also belongs to the Painted Goose.

## 15.—BLUE-WINGED GOOSE.

Anas cærulescens, Ind. Orn. ii. 836. Lin. i. 198. Gm. Lin. i. 513.

Anser sylvestris freti Hudsonis, Bris. vi. 275. Id. 8vo. ii. 434. Bartr. Trav. 292.

L'Oie des Esquimaux, Buf. ix. p. 80.

Blue-winged Goose, Gen. Syn. vi. 469. Id. Sup. ii. 346. Edw. pl. 152. Arct. Zool. ii. No. 474. Id. Sup. 75. Phil. Trans. lxii. 414.

THIS is rather less than the Tame Goose. Bill red; irides deep chocolate; crown of the head yellowish, appearing as if singed; the rest of the head and neck white; the last spotted all the way down at the back part with black; lower part of the neck, all round the breast, sides under the wings, and back dark brown, palest on the

breast; wing and tail coverts pale, bluish ash-colour; scapulars and tail striped white and grey; greater quills dusky; belly, thighs, and vent, white; legs red. The female has the upper mandible black; base of the lower lead-colour, with the tip black; forehead white; between the bill and eye blackish; the inner half of the tail feathers white, the outer black.

Inhabits America: found about the southern settlements of Hudson's Bay. In summer most numerous about Albany Fort; migrates according to the season, like many of the Duck kind: known by the name of Cath catue we we.\*

A,—Blue-winged Goose, Gen. Syn. Sup. ii. 346. Ind. Orn. ii. 827. β. & γ.

The head in this and a little part of the neck are white behind, mixed with black; half the neck before white; the rest of the bird before much the same as in common.

B.—In a third, the head, all the neck, the whole of the body, except between the wings, of a pure white; at the lower part of the neck behind, and between the wings, dusky black, or deep lead-colour; scapulars the same, margined with white; wing coverts as generally seen in this species, but paler, and inclined to white; the second and third greater quills black; the second quills black, beautifully fringed on each side with white, purer than the others, but not unlike; tail white; the four first feathers pale lead-colour down the middle for half way from the base.

A label attached to the last described, says, that it is produced from a blue and a white Way way,† but this is only according to the tradition of the Indians.

The Blue-winged and Snow Species seem to be allied to each other. It is probable that the Snow Goose may be the adult bird.

\* Mr. Hutchins. † Or Snow Goose.

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#### 16.-SNOW GOOSE.

Anas hyperborea, Ind. Orn. ii. 837. Gm. Lin. i. 504. Tem. Man. 525. Id. Ed. 2d. 816. Anser niveus, Bris. vi. 288. Id. 8vo. ii. 438. Klein, Av. p. 130.

Anser hyperboreus, Pallas, Spic. vi. p. 26. Borowsk. iii. p. 14.

Anser Branta, White Brant Goose, Bartr. Trav. 292. Laws. Car. p. 147. Am. Orn. viii. 76. pl. 68. f. 5.—male. Id. 69. f. 5.—female.

Anas nivalis, Phil. Trans. Ixii. 413. 443. No. 45. Fn. Amer. p. 16.

Die Schnee Gans, Bechst. Deuts. ii. 578.

L'Oie blanche, Voy. d'Azara, iv. No. 426.

Snow Goose, Gen. Syn. vi. 445. Arct. Zool. ii. No. 477.

SIZE of a Tame Goose; length two feet eight inches; weight five or six pounds; extent three feet and a half. Bill somewhat serrated on the edge; the upper mandible scarlet, the lower whitish; irides reddish; forehead very pale yellow; plumage in general snow white,\* except the ten first quills, which are black, with white shafts; lower order of coverts and bastard wing cinereous, with the shafts black; legs deep red. The young are of a blue colour, till they are a year old.

They are very numerous at Hudson's Bay, and called by the natives Way way, and Wapa whe whe. Visit Severn River in May, and stay a fortnight; but proceed farther north to breed;† they return to Severn Fort the beginning of September, and stay to the middle of October, when they depart southward, with their young, in flocks innumerable. At this time many thousands are killed by the inhabitants; who pluck them, and taking out the entrails, put their bodies into holes dug in the ground, covering them with earth, which, freezing above, keeps them perfectly sweet throughout the severe season; during which the inhabitants occasionally open one of these storehouses, when they find them sweet and good.

<sup>\*</sup> Mr. Hutchins observes, that the wing coverts are light blue; perhaps such birds may not have arrived at their state of perfection.

<sup>†</sup> Met with by Capt. Parry, at Cockburn Isle. Mr. Crozier found a nest of one with five eggs, Second Voyage, p. 462.

These birds seem to occupy also the western side of America, as they were seen at Aoonalashka,\* as well as at Kamtschatka,† but not common at either of those places. In the summer months are plentiful on the Arctic Coast of Siberia, but never migrate westward beyond latitude 130.‡ Supposed to pass the winter in more moderate climes, as they have been seen flying, at a great height, over Silesia, probably on their passage to some other country, as it does not appear, that they continue there; in like manner those of America pass the winter in Carolina; are taken by the Siberians in nets, being decoyed thereto by a person covered with a white skin, and crawling on all fours, at the same time others drive them; when these stupid birds follow the first man, mistaking him for their leader, into the net spread for them; or by the same means are led into a pound, or enclosed place made on the occasion.§

According to Azara, they reach as far as Paraguay, but do not seem to be common there; yet a small flock has been seen towards 28 deg. of lat. but they are very common about the River Plata; the cry like that of a Common Goose; are very shy, their flesh not thought good, and their quills too weak for writing pens, although of sufficient size. Male and female alike.

M. Temminck says, they are found chiefly within the Arctic Circle, and pass regularly into the eastern parts of Europe; met with now and then in Prussia and Austria; not found in Holland.

## 17.-GREAT GOOSE.

Anas grandis, Ind. Orn. ii. 837. Gm. Lin. i. 504. Great Goose, Gen. Syn. vi. 446. Arct. Zool. ii. 570. A.

THIS is a large bird, and weighs twenty-five or thirty Russian pounds. The bill is black, gibbous at the base, and tawny; on the

<sup>\*</sup> Ellis's Narrat. ii. p. 22. † Hist. Kamtsch. ‡ Arct. Zool.

<sup>§</sup> Id. The Kamtschatkans use a similar method. See Hist. Kamtsch. p. 158.

throat a large kind of pouch, but covered with feathers as the rest of the body; the plumage wholly white, but females and young birds are dusky above, and have also a smaller pouch; the legs are scarlet.

This species is found in the East of Siberia, from the River Lena to Kamtschatka, and taken in great numbers, together with the Red-necked Goose, in glades or avenues in woods, by means of nets placed in proper places, in the same way as Woodcocks are in England, but upon a larger scale;\* is often bred in menageries in England.

#### 18.—CHINESE GOOSE.

Anas cygnoides, Ind. Orn. ii. 837. Lin. i. 194. 2. a. australis. Fn. suec. No. 108. Gm. Lin. i. 502. Frisch, t. 153. 154. Pall. reise, iii. 700. Naturf. xii. 131. Id. xiii. 194. & xv. 160. Robert. Ic. pl. 22.

Cygnus sinensis, Gerin. v. t. 555, 556, 557.

Anser Guineensis, Bris. vi. 280. Id. 8vo. ii. 435. Klein, p. 129. 4. Raii, 138. 8. Will, 375.

L'Oie de Guinée, Buf. ix. 72. pl. 3. Pl. enl. 347.

Spanish Goose, Swan Goose, Albin, i. t. 91. Bewick, ii. 283.

Chinese Goose, Gen. Syn. vi. 447. Arct. Zool. ii. 571. B. Brown, Jam. 480. Ell. Narr. ii. 143?

THIS is between a Swan and Goose in size; length more than three feet. Bill orange at the base; on the forehead a large protuberance of the same colour; irides red brown; under the throat a large pouch, scarcely covered with feathers, of a dark colour; round the base of the bill a ring of white; the upper parts of the plumage pale greyish brown, the feathers sometimes edged with a paler colour; down the hind part of the neck to the back a list of black; fore part of the neck and breast yellow brown; belly white; sides over the thighs grey-brown and white; legs orange;† claws black.

<sup>\*</sup> See Arct. Zool. Pall. Trav. ii. 325. † In some the bill, knob at the base of it, and legs, are black.

A .- Anser cygnoides, spontanens, Pall. reise, in. p. 700.

Size of the other. Bill black: on the forehead a rugose, bifid, elevated excrescence, but not formed into a knob as in the last; under the chin no sack, or pouch; the ring round the base of the bill rusty white; crown testaceous brown, descending in a list of the same colour at the back of the neck; the rest of the plumage similar to the former; legs crimson.

B.—Anas cygnoides (orientalis), Lin. i. 124. 2. β. Ph. Tr. lvii. 347. Dec. russ, i. 466.
Anser Muscoviticus, Bris. vi. 277. Id. 8vo. ii. 435.
Anser Russicus, Klein, Av. 129. 5.
Crop Goose, Kolb. Cap. ii. 139.
Muscovy Gander, Albin, ii. pl. 91, 92. Gen. Syn. vi. 447. 12. A.

Length three feet six inches. Bill orange; irides yellow; on the forehead a large knob the same colour as the bill; and beneath the throat a wattle; head and neck brown, deeper at the hind part; back, wings, and tail, the same, but deeper, and margined with a paler colour; quills, breast, and belly, white.

The female smaller; head, neck, and breast, fulvous; paler on the upper parts; back, wings, and tail, much like the male; belly white; the rest as in the male, but the knob over the bill is smaller.

C.—This Variety differs in being wholly white; and both sexes were alive in the collection of Colonel Montagu. The person from whom he had them said they came from Java. The bill and legs orange. They produce more than one brood.

The above, we believe, constitute only one species; the characteristic marks of which are the knob over the bill, and the loose skin under the chin, and we find that the bird often varies in respect to the bill, knob, and legs, all of which have been black in the specimens we have seen.

The Chinese Goose inhabits China, and is common at the Cape of Good Hope;\* is found also wild about the Lake Baikal, in the east of Siberia, and in Kamtschatka,† but is also kept tame in many parts of the Russian Empire,‡ and we believe in most parts of Europe. Our late voyagers met with it, or at least one very like, at Owhyhee.§

In England they are sufficiently common; they freely mix with the Common Goose, and continue to produce as certainly as if no such mixture had taken place. They are a very noisy race, taking alarm at the least noise, and even without disturbance, will often scream the whole day through: they walk very erect, with the neck much elevated, and as they bear a middle line between the Swan and Goose, they have not improperly been called Swan-goose.

#### 19.—CANADA GOOSE.

Anas Canadensis, Ind. Orn. ii. 838. Lin. i. 198. Ph. Tr. lvii. 414. 46. Faun. Am. Sept. p. 16. Gm. Lin. i. 514. Bris. vi. 272. t. 26. Id. 8vo. ii. 433. Raii, 39. 10. Id. 191. 9. Will. 276. t. 70, 71. f. 3. Klein, 129. 6. Borowsk. iii. p. 10. C. Bart. Trav. 292. Am. Orn. viii. p. 60, pl. 67. f. 5. Robert, pl. 18.

L'Oie à cravate, Buf. ix. p. 82. Pl. enl. 346.

Canada Goose, Gen. Syn. vi. 450. Arct. Zool. ii, 471. Will. Engl. 361, t. 70. Cat. Car. i. pl. 92. Slan. Jam. ii. 323. Edw. pl. 151. Bewick, ii. p. 283.

THIS is larger than a Common Goose, and is sometimes three feet six inches long; and weighs nine pounds. Bill two inches and and a half long, and black; irides hazel; head and neck black; under the throat a broad white band, like a crescent, the horns

<sup>\*</sup> This is no doubt the species called by Kolben the Crop Goose; he says, that the sailors made tobacco pouches, and purses, of the membrane which hangs beneath the throat, as it is sufficiently tough for such purposes, and will hold two pounds of tobacco.—Hist. Cap. ii. 139.

<sup>†</sup> Arct. Zool. ‡ Dec. russ. i. 466. Frequent at Astrachan.

<sup>§</sup> A Goose, like the China Goose, at Karaca-kooah Bay, in Owhyhee, quite tame, called there Na na.—Ellis. Narr. ii. 143.

passing on each side upwards to the hindhead; breast, upper part of the belly, back, and wing coverts dusky brown; lower part of the neck and belly, vent, and upper tail coverts, white; quills and tail black; legs dark lead-colour. Both sexes alike in plumage.

Inhabits North America. Found in the summer in Hudson's Bay, and parts beyond; also in Greenland. Numbers breed in Hudson's Bay, and lay six or seven eggs, but the greater part retire still farther north; they appear first in the Bay, from about the middle of April to the middle of May,\* when the inhabitants wait for them with expectation, being one of the chief articles of food; and in some years kill three or four thousands, which are salted, and barrelled. The Indians, and frequently the servants of the English, form a row of huts, made of boughs, at a musquet-shot distance each, across the parts they are expected to pass; and as the flocks fly over, they mimic their noise so well, as to stop the Geese in their flight; when each person, having two guns, fires the first, and directly after the second; by this means a good marksman has killed 100 in a day; but in this spot they must be cautious to secrete themselves, for the birds are very shy, and on the least motion, fly off directly. On their return south, which is from the middle of August to the middle of October, much havoc is again made of them; but these are preserved fresh for winter store, by putting them, unplucked, into a large hole in the ground, and covering them with mould; and these, during the continuance of the frost, are found perfectly sweet and good. They are called by the Indians, at Hudson's Bay, Apistishish.

They sometimes proceed as far south as Carolina and Georgia; come to the latter the end of October and November, and their appearance reckoned a sign of cold weather; they frequent ponds during the winter, but in much fewer numbers than formerly, being too much disturbed, in proportion as the country becomes more populous. Mr. Abbot, who resides at Savannah, tells me, that they sometimes frequent Flint River, in great abundance.

<sup>\*</sup> The month in which the Geese appear, is called by the Indians, Goose-month.

In England they are pretty common in a tame state, as well as on the Continent; on the great canal, at Versailles, hundreds are seen mixing with the Swans with the greatest cordiality, and the same at Chantilly: in this kingdom they are likewise thought to be a great ornament to the pieces of water in many gentlemen's seats, where they become very familiar, and breed freely. The flesh of the young birds is accounted good; and the feathers equal to those of other Geese, so as to prove an article of commerce, much in favour of those places where they are numerous.

### 20.—BLACK-BACKED GOOSE.

Anas melanotos, Ind. Orn. ii. 839. Gm. Lin. i. 503. Zool. Indic. (folio) p. 21. t. 11. Nat. Misc. pl. 421.

Ipecati apoa, Marcg. Bras. pl. b. 218. Will. pl. 75.

L'Oie bronzée de Coromandel, Buf. ix. 71. Pl. enl. 937.

Le Canard à Crête, Voy. d'Azara, iv. No. 428.

Black-backed Goose, Gen. Syn. vi. 449, 13. Id. Sup. 272. Ind. Zool. 4to. p. 50. pl. 13.

SIZE of a Goose, but of a more slender make; length two feet nine inches. Bill pale, large, curved downwards at the point; in the middle, over the nostrils, rather more forward, a large, rounded, fleshy, black excrescence, or knob, of the same colour as the bill, and occupying the whole of it, almost to the point; the head and half the neck white, full of black dots in some, or in others short streaks; the feathers of those parts as it were ruffled, or reflected; the rest of the neck and under parts white, tinged with grey on the sides; the back, wings, and tail, black, brouzed with green, and inclining to blue towards the tail; legs dusky black. In the female the excrescence at the forehead is considerably smaller, and both sexes have a long and dangerous spur at the bend of the wing.

This species is very common in the Island of Ceylon, and also inhabits the Coast of Coromandel; chiefly to the north of the Gauges, but is not very common. We find it in great numbers at Paraguay,

though not at Buenos Ayres. Azara says, that females have neither crest on their bill, nor frisled feathers, nor yellow tint on the ears, or sides of the rump; neck entirely varied white and dusky purple; back rayed with white; otherwise like the male.

I find this bird well represented in various drawings from India. The bill black, with a white point, and in the male the excrescence of an enormous size; general colour of the plumage much the same, but about the usual place of the speculum the wing appears to be glossy green; the white surrounds the neck as a collar; tail short, that and the quills dusky black; on the sides of the vent some blue and yellow feathers; wings and tail even. In the above drawings it is called Nucta ka Hanse; but in some others, it is simply called Nuckdah.

Buffon supposes this may be the Goose found at Madagascar,\* called Rassangue, said to have a red crest on the head; by this is probably meant the knob, or protuberance, which may be of that colour during the life of the bird; unless, like the Chinese Goose, it may vary in this particular.

### 21.—SPUR-WINGED GOOSE.

Anas Gambensis, Ind. Orn. ii. 839. Lin. i. 195. Gm. Lin. i. 503. Bris. vi. 283. Id. 8vo. ii. 436. Raii, 138. 9. Will. 275. t. 71. Mus. Lever. 231. t. 56. Anser Chilensis, an the Gambo, Will? Klein, Av. 129. vii. L'Oie armée, Buf. ix. p. 76. Gambo Goose, Will. Engl. 360. pl. 71? Spur-winged Goose, Gen. Syn. vi. 452. pl. 102.

SIZE of the Common Goose, but stands higher on its legs. Bill two inches long, red, and at the base a red protuberance; cheeks and chin white; neck, sides of the breast, back, rump and tail, black, inclining to purple on the back; middle of the breast, and all the

<sup>\*</sup> Flacourt's Madag. 165.

under parts, white; outer wing coverts, the bend, and inner ridge the same, but the rest of the wing black; at the bend a strong, sharp spur, one inch and a half long, and horn-coloured; legs red.

Inhabits Gambia, and other parts of Africa. At Senegal it is called Hitt. Buffon's description (if he really means our bird), is delivered in a very obscure, and unintelligible mauner, and on comparing the text of the Hist. des Ois. with the plates he refers to in the Pl. enlum. we plainly see that they can only be the Egyptian Goose, in different stages of life. Ray and Willughby's concise descriptions prove them to have been the only persons who had formed a right idea of the bird; and we must own, that our complete knowledge of it is solely owing to a specimen in the Leverian Museum, and at that time the only one extant in any collection, as far as our own observations afforded us, or those of our friends. We have since, however, met with a female; and Mr. Thompson, through whose hands it passed in preparation, remarked, that the carunculated red bare part at the base of the bill occupied less space, and the spur at the bend of the wing was much smaller; nor had the windpipe in this sex any other conformation than is usually seen.

## 22.—BARRED-HEADED GOOSE.

Anas Indica, Ind. Orn. ii. 839. Barred-headed Goose, Gen. Syn. Sup. p. 277. View of Hind. ii. 159.

SIZE of a Tame Goose; length twenty-six inches. Bill two, of a bright yellow, with a bent, black nail at the tip; head, chin, throat, and stripe down the sides of the neck, white; at the back of the head a broad black bar, curving in a point to the eye; some way below it a second, not quite so broad, curving to a point on the ear; from this the back of the neck, the whole way, is dusky black; back fine pale grey, the edges of the feathers lightest; wings pale ash-colour; edges of the prime quills dusky; lower part of the neck

before, the breast, and upper part of the belly, of a most elegant, pale ash-colour, the feathers edged with white; lower belly deep brown, edged with the same; rump and vent snow white; tail short, cuneiform, fine light grey, tipped with white; the feathers pointed at the ends; legs reddish yellow; the wings, when closed, reach to the end of the tail.

Inhabits India. Often met with by hundreds in a flock during the winter months, and is very destructive to the corn; supposed to come from Thibet, and other parts to the north, departing as the summer approaches. Its flesh is much esteemed; it is often kept in menageries, but rarely becomes familiar; when in a cage hisses on the approach of any person. It is known by the name of Kauze and Loll Kauje, at Hindustan.

#### 23.—HINDUSTAN GOOSE.

LENGTH two feet and three quarters; breadth near four feet and a half. Bill and legs pink colour; head brown; neck and breast the same, but paler; back brown; breast waved with grey; behind the legs and vent white; quills and secondaries blackish, with very pale, or whitish edges; tail brown, the ends of the feathers very pale, nearly white.

Inhabits India, called at Hindustan Loll Kauje, as is the last, but differs materially, though blended with it in name; for the bill is uniform in colour, without the black nail at the tip; the pink of the legs inclines to purple; head and neck of one colour, not diversified with any marks of black; it therefore may be considered as a distinct species.

#### 24.--EGYPTIAN GOOSE.

Anas Ægyptiaca, Ind. Orn. ii. 840. Lin. i. 197. Gm. Lin. i. 512. Bris. vi. 284. pl. 27. Id. 8vo. ii. 437.

Anas hyberna fæmina, Gerin. v. pl. 578.

L'Oie d'Egypte, Buf. ix. p. 79. Pl. enl. 379.

Gambo Goose, Will. t. 71. f. 1?

The Ganser, Albin, ii. pl. 99.

Egyptian Goose, Gen. Syn. vi. 563. Bewick, ii. p. 287. Nat. Misc. pl. 605.

SIZE of the Common Goose; length two feet three inches. Bill two inches long, and red; nostrils dusky; tip black; irides yellowish white; evelids reddish; on each side of the head a large rufous chestnut spot, in the middle of which the eyes are placed; the crown, and the rest of the head and throat for the most part white; the last spotted with chestnut; the neck for about two parts of its length pale chestnut, growing much deeper in colour at the lower part: the upper parts of the back and scapulars brownish red, crossed with numerons, dusky lines; back and rump black; the lower part of the neck before, the breast, sides, and thighs, very pale rufous, crossed with numerous dusky lines; on the breast a large spot of deep chestnut; belly white; under tail coverts yellowish; wing coverts white, the greater, nearest the body, crossed at the ends with black; those farthest from it black; the greater quills black, and except the five first, edged with green gold; the secondaries margined with chestnut; on the bend of the wing a blunt spur, half an inch long; tail black; legs red; claws dusky.

The female has the chestnut patch round the eye smaller; chin white; the spot on the breast smaller, and in some wholly wanting; lesser wing coverts white, the others pale ash, with darker margins; the lower order fringed with white, forming a bar on the wing; scapulars and second quills much inclined to chestnut; in other things like the male.

This species inhabits Egypt, and other parts of Africa; and is sufficiently common at the Cape of Good Hope,\* from whence numbers have been brought into England; is also in Abyssinia, and now not uncommon in gentlemen's ponds, in many parts of this kingdom, being an admired and beautiful species.

Whether this breeds in a wild state in this kingdom seems uncertain, but instances are not wanting of being met with at large; five or six were shot near Buscot Park, not far from Farringdon, Berks, in 1803 or 1804; and in January 1805, one was killed by a gentleman's game-keeper, near Stamford, in Lincolnshire.

A.—L'Oie sauvage du Cap de B. Esp. Son. Voy. Ind. ii. 220. Pl. enl. 982, 983.
Gen. Syn. vi. 454. 16. A. Ind. Orn. ii. 840.

This is a mere Variety of the former. Bill greyish, with a black point; irides yellow; head, neck, belly, and vent, grey; eye surrounded with a naked skin of a chestnut-colour; on the breast a large black spot; back, wings, and rump, chestnut; on the edge of the wing some white feathers; tail black; legs red.

Inhabits the Cape of Good Hope.

## 25.—GREY-HEADED GOOSE.

Anas cana, Ind. Orn. ii. 840. Gm. Lin. i. 510.
L'Oie sauvage à tête grise de Coromandel, Son. Voy. Ind. ii. 220?
Grey-headed Goose, Gen. Syn. vi. 458. Id. Sup. 273. Brown, Ill. pl. 41. 42. Barr.
Trav. p. 264. Penn. Hindoost. ii. 160.

SIZE of a small Goose. Bill dusky, or black; head and neck whitish, with a rufous tinge; the rest of the plumage pale tawny; the margins of the feathers paler, appearing as waved semicircular

<sup>\*</sup> The vast numbers of the Egyptian and Mountain Goose, of Teals, and several species of Ducks, that harboured in the reeds about Swart-kops River Swamp, were incredible, and the damage they did to the corn very considerable.—Barrow's Trav.

lines; wing coverts white; below them a broad speculum of green; quills, tail, and legs, black. This description taken from the drawings of Sir John Anstruther; and in a second drawing, some little difference is seen; the general colour rufous; the feathers all over margined with brown; quills and tail black; bill and legs dusky; the rest as in the first described. That figured by Brown, had the head and neck pale grey; cheeks white; back, breast, and belly, bright ferruginous, marked with dark semicircular lines; vent orange, crossed with a black band; the rest of the plumage as before-mentioned. Mr. Brown describes one as a female, without any white on the cheeks, and the colours in general less bright.

Inhabits the Cape of Good Hope, and the coast of Coromandel. In India it is called Chuchwa; by the inhabitants Bramany Duck; is known to the Dutch, at the Cape of Good Hope, by the name of Bergenten.

#### 26.—MOUNTAIN GOOSE.

Anas montana, Ind. Orn. ii. 841. Gm. Lin. i. 510. Hill or Mountain Goose, Gen. Syn. vi. 458. Kolb. Cap. ii. 139. Barrow, Trav. p. 264.

THIS is said to be bigger than a Tame Goose. The wing feathers, and those of the head, of a bright red shining green.

Inhabits the Cape of Good Hope, chiefly on the hills, and feeds on grass and herbs. We may suspect this to be no other than the Grey-headed Goose in one of its stages to perfection, as Mr. Barrow says the Mountain Duck answers to the Anas cana, but that there is a mistake in giving the white head to the male which is found only in the female. This author adds, that they are seen at the Cape in great numbers, about Sea Cow River.

# 27.—RED-BREASTED GOOSE.

Anas ruficollis, Ind. Orn. ii. 841. Gm. Lin. i. 511. Pall. Spic. vi. 21. t. 4. Id. reise, iii. 701. 3. Decouv. russ. ii. 19. Frisch, v. 157. Tem. Man. 533. Id. Ed. 2d. p. 827. Gm. reise, ii. 181. t. 14. A. torquata.

Die Rothhals Gans, Bechst. Deuts. Ed. 2d. iv. 916.

Red-breasted Goose, Gen. Syn. vi. 455. Arct. Zool. ii. 571. C. Br. Zool. 1812. ii. p. 241. Bewick, ii. pl. p. 289. Lewin, vii. pl. 241. Orn. Dict.

SIZE of a Canada Goose; length twenty-one inches, breadth three feet ten; weight three pounds troy. Bill small, brown; nail black; irides yellow brown; round the eyes fringed with brown; fore part of the head and crown black, passing backwards in a narrow stripe quite to the back; forehead and cheeks sprinkled with white; between the bill and eye an oval, large spot of white, separated from the white of the forehead by a line of black; chin and throat black; behind the eye white, passing down on each side of neck, and ending in a point, the middle of this white is rufous; the rest of the neck deep rufous; on the breast a narrow band of white feathers with black ends, forming two bands of those colours; belly white; sides striped with black; back and wings black, the last even with the tail; greater wing coverts tipped with grey; upper and under tail coverts white; legs black.

This is a most elegant species, and every where met with on the northern Coast of Siberia. In Russia, from the River Ob to the Lena, breeding there, and retiring south in autumn; is called by the Ostiacs, Tschakwoi, from its voice; and by the Samoids, Tschagu; frequents the Caspian Sea, returning north in small flocks as the summer approaches; supposed to winter in Persia.

One of these was shot near London, in the beginning of the severe frost of 1766. Another taken alive near Wycliffe, in Yorkshire, about the same time; this latter soon became familiar, and was kept among other Ducks in a pond; but though it associated freely with them, and seemed partial to one in particular, never produced

young; this continued alive for several years, when it lost its life by an accident. The late Mr. Tunstall, from whom I had the above particulars, mentioned a third, having been killed in this kingdom; and a fourth was exhibited by Mr. Bullock, in 1818, shot near Berwick. This species is highly esteemed for the table, being quite free from any fishy taste.

# 28.—RUDDY GOOSE.

Anas Casarca, Ind. Orn. ii. 841. Gm. Lin. i. 511. Lin. iii. App. p. 224.

— rutila, N. C. Petr. xiv. 579. t. 22. f. I. Georgi, 167. Gmel. reise, ii. 182. t. 15.

Lepech. It. i. 180. Dec. russ. i. 417. 464. Tem. Man. 535. Id. Ed. 2d. 822.

Anas Boschas major, Gerin. v. t. 571.

Collared Duck, Gent. Mag. xlii. pl. p. I61.

Grey-headed Duck, Brown's Zool. p. 104. pl. 41, 42.

Ruddy Goose, Gen. Syn. vi. 456. Id. Sup. 273.

SIZE between a Mallard and Muscovy Duck, though it seems larger than it really is, from the length of wings, and standing high on the legs; length twenty-two inches. The bill black; irides yellowish brown; eyelids and just round the eye blackish; top of the head and nape white; forehead, cheeks, and throat, yellowish; neck before ferruginous, encircled with a collar of black, inclining to deep rufous on the throat; breast and sides pale rufous; belly obscure; vent deep rufous; beginning of the back pale; lower part of the back undulated hoary and brown, not very distinct; rump and tail greenish black, the last rounded in shape; prime quills black; secondaries edged with violet green; and some of the inner ones with ferruginous; the second wing coverts and whole base of the wing white; legs long, black.

The female is like the male, but wants the black collar round the neck.—Inhabits all the southern parts of Russia and Siberia in plenty; but seldom seen farther north than 55 deg. and always in the greatest numbers the more southward: in winter migrates into India, and returns north in spring; it is blended with the Grey-

headed Species, under the name of Bramany Duck, but these appear to be two distinct species; nor is it the same as the Egyptian Goose, though somewhat resembling it. Makes the nest in the craggy banks of the Wolga, and other rivers, or in the hollows of the deserted hillocks of the Marmots, after the manner of the Sheldrake, and like it is said to form burrows for itself; has been known also to lay in a hollow tree, lining the nest with feathers; is monogamous; the male and female sitting by turns, the eggs like those of a Common Duck. When the young come forth, the mother will often carry them from the place of hatching, to the water, in the bill.

Attempts have been made to domesticate this bird, by rearing the young under tame Ducks, but without success, as they are ever wild, and effect their escape the first opportunity; and if the old birds are confined, they lay the eggs in a dispersed manner, and never sit. The voice is not unlike the note of a clarionet, whilst flying; at other times cries like a Peacock, especially when kept tame, and now and then clucks like a Hen; is very tenacious of its mate, for if the male is killed, the female will not leave the place till it has been two or three times shot at. The flesh is thought to be good by some, but Baron de Tott, in his memoirs, says, "I tasted it, and only found it exceedingly good-for-nothing."

The Ruddy Goose is known at Bengal by the names of Chucua and Chucui, and in the Sanscrit Chucurbaco; common in the four months of cool weather, and always in the day time observed in pairs, on the sand banks of the river, or in marshes at a distance from houses; at night the sexes separate, and go to opposite sides of the pond or river, and there call to each other. This bird has a great variety of notes, loud when reposing at night; when with its mate, clucks like a Hen, and if angry or afraid, hisses like a Goose. In the hot weather goes away to the north to breed; lives on grain and water plants.

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#### 29.—GREY LAG GOOSE.

Anas Anser, Ind. Orn. ii. 841. Lin. i. 197. Fn. suec. No. 114. Gm. Lin. i. 510. Brun. No. 53. Muller, No. 112. Kramer, 338 4. a. Frisch, t. 155. Georgi, 166. Fn. arag. 74. Klein, 274. t. 69. Id. stem. 31. t. 34. f. 1. a—c. Id. Ov. 34. t. 19. f. 2. N. C. Petr. iv. 418. Schaf. el. t. 20. Raii, 136. A. 4. 138. A 3. Will. 274. t. 69. Borowsk. iii. p. 9. 2. a. Fn. Helv. Sepp, iii. t. 105. Tem. Man. 526. Id. Ed. 2d. 818.

Uæs Araka, Fn. arab. p. 3. No. 6.

Oca salvatica, Zinnan. Uov. 104. t. 17. f. 91.

Die wilde Gans, Bechs. Deut. ii. 586. Id. Ed. 2d. iv. 842. Id. Muster. 118. Naturf. xii. 134. 74. Schmid, p. 146. t. 127.

Wild Goose, Albin, i. pl. 90. Will. Engl. 358. pl. 69.

Grey-lag Goose, Gen. Syn. vi. 459. Id. Sup. ii. 346. Br. Zool. ii. No. 266. Id. fol. 150. Id. 1812. ii. p. 228. Arct. Zool. ii. No. 473. Id. Sup. p. 75. Ph. Tr. xv. No. 175. p. 1160. 5. Bewick, ii. pl. p. 292. Lew. vii. pl. 238. Id. pl. xlix. the egg. Walc. i. pl. 61. Pult. Dors. p. 20. Orn. Dict. & Supp. Wood's Zoogr. i. p. 535.

THE Grey Lag, or Wild Goose, weighs ten pounds; the length two feet nine inches; extent five feet. The bill is large and elevated, yellowish flesh-colour; nail white; head and neck cinereous, mixed with dirty yellow; neck striated downwards; back and primaries dusky, the latter tipped with black, shafts white; secondaries black, edged with white; lesser coverts dusky, edged also with white; breast and belly whitish, clouded with ash; rump and vent white; middle tail feathers dusky, tipped and edged with white; the exterior almost wholly white; legs flesh colour; claws black.

This species inhabits the fens of England, supposed not to migrate, as in many parts of the Continent, for they are not only met with in Summer, but breed also in Lincolnshire, Cambridgeshire, and other parts, and generally produce seven or eight young, which are often taken, and easily become tame. These unite into flocks in the winter, as numbers are then met with together. On the Continent, however, they certainly change place in large flocks, often 500, or

more; in this flight the flock takes a triangular shape, with the point foremost, and as the bird which is first becomes soonest tired, it has been seen to drop behind, and another to take its place. In very small flocks are observed to follow one another in a direct line. These birds seem to be general inhabitants of the Globe, being met with from Lapland to the Cape of Good Hope;\* frequent in Arabia,† Persia, China, India, and Japan; ‡ on the American Continent, from Hudson's Bay to South Carolina.§ They appear first at the former in May, alight, and feed on the grassy spots; collect in flocks of 20 or 30, and stay about three weeks, then separate into pairs, and resort to the coasts to breed; moult in July, at which time they are knocked down by the inhabitants, as they cannot fly, though some are saved alive, fed on corn, and thrive greatly; about the middle of August return to the marshes with their young, and continue there till September, when they depart southward.

Independent of the above, our voyagers met with them in the Straits of Magalhaen, Port Egmont in Falkland Isles, and Terra del Fuego; †† likewise in New-Holland; though probably not at New Zealand, as we find Capt. Cook making the inhabitants a present of a pair, in order to breed.

A.—Anas Anser, domesticus, Ind. Orn. ii. 842. β. Lin. i. 197. Fn. suec. No. 114. β. Scop. i. No. 69. Brun. No. 55. Kramer, 338. 4. β. Frisch, t. 157. Bris. vi. 262. 1. Id. 8vo. ii. 432. Raii, 136. A. 3. Id. 121. 8. Will. 273. t. 75. Klein, 129. 2. Id. Ov. 34. t. 19. f. 1. Borowsk. iii. p. 8.

Anser vulgaris, Gerin. v. t. 558, 559, 560. Naturf. xii. 133. 73. Die Zahme Gans, Bechst. Deuts. ii. 596.

Oca domestica, Zinnan. Uov. 103. t. 17. f. 90. Cet. uc. Sard. 317.

<sup>\*</sup> Kolben. † Forschal, p. 3. No. 6.—Uws Araki. ‡ Kæmpfer. § Kalm. Trav. || This is probably the sort called at Hudson's Bay Mistuhay Nesscock, Grey Goose, said to weigh about nine pounds, the same which Kalm mentions the taming of by the Americans, taking the chance of shooting them in the wing; these will often grow tame, though old birds, and have been kept for a dozen years, but never familiarize with the tame ones, nor lay eggs.—Trav. i. p. 209.

<sup>¶</sup> Hawkesw. Voy. ii. p. 31. \*\* Id. p. 65. †† Cook's Voy. iv. p. 43. K k 2

252 Duck.

Tame Goose, Gen. Syn. vi. 461, 21. Var. A. Id. Sup. p. 273. Will, Engl. 358. Fl. Scot. i. No. 206. Tour in Scot. 1769. 4to. p. 10. Id. 8vo. p. 8. Bew. ii. pl. p. 297. Orn. Dict.

THIS is the Grey-lag, in a state of domestication, and from which it varies in colour; though much less than in the Mallard, or Cock, being more or less verging to grey; but in all cases, the whiteness of the vent and upper tail coverts is manifest; frequently found quite, especially the males; and doubts have arisen, which of the two colours should have the preference in point of eating.

Tame Geese are no where seen in greater numbers than in the Fens of Lincolnshire, many persons keeping no less than one thousand breeders.\* The uses of the quills and feathers are too well known throughout Europe† to be here noticed, and for the sake of them the birds are stripped whilst alive, once in a year, and sometimes twice, for the quills, and from three to five times for the feathers, not sparing even Goslings of six weeks old, from which the feathers of the tail are plucked: the first plucking is about Lady Day, for both quills and feathers, the other four times between that and Michaelmas, for feathers only; in general the birds are not considerable sufferers, though if the cold weather comes on suddenly, numbers die in consequence. The possessors of these, except in the apparently cruel usage of plucking, treat them with sufficient kindness, lodging them in the same room with themselves; whilst sitting, each bird has its allotted space, in rows of wicker pens, placed one above another; and it is said that the person who takes charge of

<sup>\*</sup> The feeding of Geese would appear to be a business of some notice, as we find in the London Gazette, Jan. 31, 1793, the name of Thos. B. of Plaistow, in Essex, Goose-feeder, among the list of bankrupts.

<sup>†</sup> In the countries bordering on the Levant, and throughout Asia, the use of Goose feathers is utterly unknown; we find mattresses stuffed with wool, eamels hair, and cotton, instead. Pliny, indeed, mentions the use of bolsters of feathers to lay the head upon, in his time; but whether put to the same use now, seems not certain.

<sup>‡</sup> In Young's Agriculture of the County of Lincoln, he talks of Geese being plucked for the wing feathers four or five times in the year, taking ten feathers from each Goose.

them, called a Gozzard, or Goose-herd, drives the whole to the water twice in a day, and bringing them back to their habitations, places every one in its respective nest, without missing one.\* Independent of the use of the quills for writing, they were in early times in much demand for feathering arrows. In 1417 and 1418, King Henry V. attributes his victory of Agincourt to the archers, and directs the sherives of many counties to pluck from every Goose six wing feathers,† for the purpose of improving arrows, which are to be paid for by the King. It is scarcely credible what numbers of Geese are driven from the distant counties to London for sale, frequently two or three thousand in a drove.‡

Formerly the price of Geese in Wiltshire was regulated by that of mutton, both being the same by the pound, without the feathers. The usual weight of a fine Goose is 15 or 16 pounds; and we have known one to weigh 18 pounds or more without the feathers; but it is scarcely to be believed how far this may be increased by cramming them with bean meal, and other fattening diet. The victims destined for this surfeit are by some nailed to the floor by the webs of the toes, which gives little or no pain, and prevents the possibility of action; to which, we are told, the French add the refinement of putting out the eyes; § but what end this last barbarity can answer is hard to conjecture, nor are we informed to what weight they arrive in that nation; but it is said that 28 or even 30 pounds is not an uncommon thing in England. The Romans were fond of the livers of Geese, which they enlarged to a surprising degree, by means of particular fattening food; and we find that at this day the livers both of Geese

<sup>\*</sup> Tour in Scotland, 8vo. p. S. Br. Zool. ii. 571.

<sup>†</sup> These feathers should consist of the second, third, and fourth of each wing.—Archæol. vii. p. 52. [u].

<sup>‡</sup> A drove of above 9,000 Geese passed through Chelmsford, in the way to London, from Suffolk.—St. James's Chronicle, Sept. 2, 1783. In the journey from the distant parts they walk at the rate of eight or ten miles per day, travelling from three o'clock in the morning to nine at night; and when it happens that some are much fatigued, such are fed with oats instead of barley; their usual food during the journey.

<sup>§</sup> Salern. Orn. p. 407.

and Fowls are still enlarged in Sicily, by administering particular food, and considered as a great luxury.\*

The Goose generally breeds only once in the year, but if well kept, will often have two hatches in a season, seven or eight at each hatch: the female sits about 30 days, and will sometimes produce eggs sufficient for three broods, if taken away in succession. We have once heard of a Goose sitting on eggs the 11th of November, but this is a rare occurrence. This bird is very long-lived, and we have full authority for its arriving at no less than 100 years.†

When we consider the average profit of a Goose, from being plucked three times in a year for the feathers, and twice for the quills, added to its producing six or seven young for the market, annually; the profit appears to at least equal that of an ewe for the same period; especially if we take in the circumstance of a Goose thriving frequently in such places as are unfavourable as pasture for sheep.‡

Geese are in the best condition for the table about Michaelmas, at which time few families are without one, roasted, to grace the board on the feast of that Saint. § It has been said, that one poulterer, in London, has disposed of 1200 in one day, and that in ten days, full 200,000 have come to market, for eating in London alone.

#### 30.—WHITE-FRONTED GOOSE.

Anas albifrons, Ind. Orn. ii. 842. Gmel. Lin. i. 509.

- --- Casarca, S. G. Gmel. reise, ii. p. 177. t. 13.
- erythropus, Fn. suec. No. 116.—the female, Brun. No. 53, 54, Muller, No. 113. Kramer, 339. Georgi, 166. Borowsk. iii. p. 10. b. Sepp, iii. t. 207. Tem. Man. 529. Id. Ed. 2d. 822.

<sup>\*</sup> Smyth's Mem. of Sicily, p. 39. † Willinghby was told by a friend, of one that was known to be 80 years old, "and might have lived the other 80 years, had be not been constrained to kill it, for its mischievousness in beating the younger Geese." A family near Fife, kept a Goose for 70 years, and knew it must be still older, but of this there was no certainty.

‡ Orn. Dict.

<sup>§</sup> On the Continent Geese are supposed to be most in season about the 11th of Nov. the feast of St. Martin, or Martinmas.

Anser fuseus maculatus, Laughing Goose, Bartr. Trav. 292.

Anser septentrionalis sylvestris, Bris. vi. 269. Id. Svo. ii. 433.

Die Blassengans, Bechst. Deuts. ii. 576. Id. Ed. 2d. iv. 898.

Oca Lombardella, Gerin. v. pl. 560.

L'Oie rieuse, Buf. ix. p. 8.

Laughing Goose, Edw. pl. 153. Phil. Trans. lxii. p. 414. 3.

White-fronted Goose, Gen. Syn. vi. 463. Br. Zool. ii. No. 268. t. 94. 1.—the head.

Id. fol. 150. Id. 1812. ii. 235. pl. 39. Arct. Zool. ii. No. 476. Bewick, ii. p. 305. Lewin, vii. pl. 240. Walcot, i. pl. 64. Donov. pl. 102. Pult. Dors. p. 20. Orn. Dict.

THIS is smaller than the Grey-lag; length two feet four inches; weight five pounds;\* breadth about eight feet. The bill is yellowish red, elevated at the base; nail white; irides dusky; head, neck, and upper parts in general dark brown, with a little mixture of ash-colour on the wings; round the base of the bill, belly, and under parts, white, marked on the sides with black spots; rump, vent, and under tail coverts, white; tail dusky black, more or less edged with white; the outmost feather almost wholly white; legs orange, claws pale.—Inhabits the fenny parts of England, in small flocks, during winter; migrating before the end of March, but is not a plentiful species in general; though Dr. Lamb, of Newbury, informs me, that a flock of twenty-five or thirty appeared in January, within four miles of Reading, out of which eight were killed at one shot.

In summer it is found in the north of Europe and Asia, frequent in Siberia, and the east of Russia, but scarce in the west; breeds only in the extreme north; supposed to inhabit Greenland. Is very common in the summer at Hudson's Bay, with other sorts, and called Sasasque pe thesue.

#### 31.—BEAN GOOSE.

Anas Segetum, Ind. Orn. ii. 843. Gm. Lin. i. 512. Tem. Man. 527. Id. Ed. 2d. 820. Die Bohnengans, Bechst. Deuts. ii. 620. Id. Ed. 2d. iv. 883. Id. Must. 120. Anas sylvestris, Bris. vi. 265. Id. 8vo. ii. 432. Gerin. v. t. 561.

<sup>\*</sup> I have met with several specimens; the lightest weighed four pounds two ounces, the heaviest two ounces more. A friend of mine shot one, weighing five pounds; but Colonel Montagu says, he has met with them weighing seven pounds.

Oie sauvage, Buf. ix. p. 30. t. 2. Pl. cul. 989. Hist. Prov. i. 343.

Bean Goose, Gen. Syn. vi. 464. Br. Zool. ii. No. 267. pl. 94. f. 2. Id. 1812. ii. 233. pl. 39. Arct. Zool. ii. No. 472. Lewin, vii. pl. 239. Bew. ii. p. 306. Walc. i. pl. 65. Pult. Dors. p. 20. Orn. Dict. & Supp.

SMALLER than the Common Goose; length two feet seven inches; breadth nearly five feet; weight six pounds. Bill small, much compressed near the end, whitish, and sometimes pale red in the middle, and black at the base and nail; irides rufous brown; head and neck cinereous brown, tinged with ferruginous; breast and belly dirty white, clouded with cinereous; sides and scapulars dark ash-colour, edged with white; back plain ash; tail coverts white; at the bend of the wing a knob; lesser wing coverts light grey, nearly white; the middle deeper, tipped with white; quills grey, tipped with black; legs and feet saffron-colour; claws black.

It sometimes varies both in weight and size, as well as in plnmage, as a specimen sent to me out of Suffolk, was full three feet in length, and weighed seven pounds. Bill from the nostrils to the nail deep brownish red; wing coverts grey; the greater tipped with white; the second quills tipped, and margined with white; the greater plain dusky black; legs dull brownish red; claws black; the rest like the other.

Inhabits England in the winter, most frequent in Lincolnshire and Yorkshire, where it comes in autumn,\* and departs in May: they sometimes alight in the corn fields, and do much damage to the green wheat; breed in great numbers in Lewis, one of the Hebrides, and no doubt also where other wild Geese are found, having been, till lately, not distinguished from them. Observed also at Hudson's Bay,† but whether common there we do not learn.

<sup>\*</sup> Among them some have been observed quite white. - Arct. Zool. † Arct. Zool.

#### 32.—BERING'S GOOSE.

Anas Beringii, Ind. Orn. ii. 843. Gm. Lin. i. 508. Bering's Goose, Gen. Syn. vi. 465. Arct. Zool. ii. No. 475.

SIZE of a Wild Goose. At the base of the bill a yellow excrescence, radiated in the middle with bluish black feathers; round the ears a greenish white space; eyes black, encircled with yellow, and rayed with black; back, fore part of the neck, and belly, white; wings black; hind part of the neck bluish. Observed by Steller in July, on the Isle of Bering. The natives pursue these birds in boats, and kill them at the time of moulting; also sometimes hunt them on land, with dogs; and not unfrequently catch them in pits covered with grass.\*\*

#### 33.—GULAUND GOOSE.

Anas borealis, Ind. Orn. ii. 843. Gm. Lin. i. 512. Gulaund Goose, Gen. Syn. vi. 465. Arct. Zool. ii. No. 572. E.

SIZE between a Goose and a Duck. Bill narrow; head of a Mallard green; breast and belly white.

Inhabits the morasses of Iceland; lays from seven to nine eggs, and is a scarce species. The Icelanders call it Gulaund.†

### 34.—BERNACLE GOOSE.

Anas Erythropus, Ind. Orn. ii. 843. Lin. i. 197. 11. Fn. suec. No. 116.—male. Frisch, t. 189. Sepp, ii. t. p. 197. Gm. Lin. i. 512. Naturf. xxv. s. 9. Schr. d. Berl. Nat. viii. 75. 2d part.

Anas leucopsis, Tem. Man. 531. Id. Ed. 2d. 824.\* Parr. App. p. cevii. Anser Branta grisea maculata, Bartr. Trav. 292.

Anas Branta, Sepp., iii. t. 102. Klein, 130. 8. Id. 170, 12.

\* Descr. Kamts. p. 159.

† Arct. Zool.

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Bernicla, Bris. vi. 300. Id. 8vo. ii. 411. Raii, 137. A. 5. Will. 274. Anas Helsingen, Olaff. Isl. ii. t. 33. Die Blassengans, Naturf. xii. 135. 75. Id. xxv. s. 9. Die Bernakelgans, Bechst. Deuts. ii. 623. Id. Ed. 2d. iv. 921. La Bernache, Buf. ix. 93. pl. 5. Pl. enl. 855. Canada Goose, Albin, i. pl. 92. Black Goose, Rural Sports, ii. t. p. 465.

Bernacle, or Clakis, Gen. Syn. vi. 466. Br. Zool. ii. No. 269. Id. fol. 150. Id. 1812. ii. 237. Arct. Zool. ii. No. 479. Will. Engl. 359. Ph. Tr. ii. p. 853. Id. xii. 923. Gerard. Herb. p. 1587. Hayes, Birds, pl. 24. Bew. ii. pl. p. 307. Lew. vii. pl. 242. Walc. i. pl. 62. Pult. Dors. p. 20. Orn. Dict. & Supp.

LENGTH two feet, breadth four. Bill short, and black, with a spot of flesh-colour on each side; irides brown; forehead to the middle of the crown, sides of the head, chin, and throat, white; from the bill to the eye a black streak; the rest of the head, neck, and beginning of the back, black; breast and under parts, sides of the vent, and upper tail coverts, white; thighs mottled dusky and white; round the knee black; back black, the edges of the feathers margined with white; at the bend of the wing a hard knob; wing coverts and scapulars blue grey, the ends black, fringed with white at the tips; rump plain black; quills the same, edged with blue grey, except towards the ends; tail five inches and a half long, and black; legs dusky black.\*

This bird frequents many of the northern and western coasts of this kingdom, in winter; but in the south only in very inclement seasons;† departs hence in February, and retires north to breed, at which time it is found in the north of Russia, Lapland, Norway, and Iceland. In America, is now and then met with in Hudson's Bay.—This is the species which so many authors have handed down to us under the name of Tree Goose, and Clakis,‡ supposing it to

<sup>\*</sup> The name of Erythropus, given to it by Linnæus, is improper, as the legs are not red.

<sup>†</sup> These birds were in the greatest plenty at Sandwich, in the hard frost of 1739 & 1740, but in so starved a condition, as to be knocked down with sticks, and few sold for more than six-pence a piece; the same happened in 1803; and we learn from Colonel Montagu, that they were not nuknown about Christmas, on the Coast of South Devon, in the year 1800. 

‡ See Phil. Trans. Gerard Herb. Camd. Brit. (1695). p. 941. Will, Orn. 359.

originate from old decayed wood, and to have come out of the shell called a Barnacle,\* which is found adhering to old wood; and that the tail of the young bird, not yet arrived at perfection, may be seen protruding from the shell.† But this, like many ancient vulgar errors, is now exploded; for it is well known, that the bird is hatched and bred, like all others of the Duck kind. We have had more than one instance of its being domesticated, and living, seemingly with great content, among the poultry.

## 35.—BRENT GOOSE.

Anas Bernicla, Ind. Orn. ii. 844. Lin. i. 198. Fn. suec. No. 115. Gm. Lin. i. 513. Scop. i. No. 84. Brun. No. 52. Muller, No. 115. Frisch, t. 156. Fn. groenl. No. 41. Borowsk. iii. p. 11. 3. Sepp., ii. pl. 98. Amer. Orn. viii. p. 131. pl. 79. f. 1. Tem. Man. 531. Id. Ed. 2d. 325.

Brenta, Bris. vi. 304. 16. t. 31. Id. 8vo. ii. 442. Raii, 137. A. 6. Will. 275. t. 69. Klein, 130.

Anas Palumbum torquatum quodammodo referens, Gerin. v. t. 582.

Rotgans, Sepp. Vog. t. p. 189.

Die Brent gans, Bechst. Deuts. ii. 621. Id. Ed. 2d. iv. p. 911.

Le Cravant, Buf. ix. 87. Pl. enl. 342.

Brent, or Brand Goose, Gen. Syn. vi. 467. Br. Zool. ii. No. 270. Id. fol. 151. Add. pl. Q. Id. 1812. ii. p. 239. Arct. Zool. ii. No. 478. Id. Sup. 75. Albin, i. pl. 93. Will. Engl. 360. pl. 69. Hayes's Birds, pl. 24. Collins's Anat. ii. pl. 20. Bewick, ii. pl. p. 311. Lewin, vii. pl. 243. Walcot, i. pl. 63. Pult. Dors. p. 20. Orn. Dict.

LESS than the Bernacle. Bill black; irides hazel; head, neck, and upper part of the breast, black; on each side of the neck a large patch of black and white mixed; lower part of the breast, the scapulars, and wing coverts, ash-colour, clouded with a darker shade; vent, and upper and under tail coverts white; tail dusky black, and a little rounded in shape; legs reddish black.

<sup>\*</sup> Lepas anatifera.—Lin. Figures of the shell to be seen in Argen. Conch. t. 30. f. F.G. List. Conch. t. 440. f. 283.—Gerard Herb. p. 1587. ch. 171. In the last are rude figures both of the shell and bird.

<sup>†</sup> Authors also further relate this of a certain tree, the leaves of which, if they fell on land, became birds; if on the water, fishes.—Banh. Pin. 514. III.

The female is less bright in plumage; and in young birds the white on the sides of the neck is small, or wholly deficient; in this state is probably the following.

A.—Bernicla minor, Bris. vi. 302. Id. Svo. ii. 442. Ind. Orn. ii. 844. Brenthus, Raii, Syn. 137, A. 7. Id. 139. 11? Will. 276. t. 76. Anser Branta, Klein, Av. 130. 8. Rat-Goose, or Road Goose, Will. Engl. 361. § viii.

According to Mr. Johnson, the bill and legs are black; top of the head and part of the neck black, the feathers next the bill, throat, and breast, brown; rest of the under side white; upper side grey, but the ends of the feathers darken into a brownish colour, the edges changing into white, as is usual also in the Common Tame Goose; quills and tail black; the rump is also white.

"It is a very heedless fowl (contrary to the nature of other Geese) so that if a pack of them come into the Tees, it is seldom one escapes, for they be often shot at, yet they only fly a little, and suffer the gunner to come openly upon them."

The trachea in the male enlarges a little at its origin, and lessens again towards the breast bone, but has no labyrinth.

These birds, like the Bernacles, frequent our coasts in winter; and particularly so, at times, on those of Holland and Ireland, where they are taken in nets placed across the rivers. In some seasons resort to the coasts of Picardy, in France, in such prodigious flocks, as to prove a pest to the inhabitants, especially in the winter of 1740, when they tore up by roots all the corn near the sea coasts. On this the inhabitants every where attacked them with clubs, and killed great numbers, but the quantity was so great, that it did not avail much; nor were they relieved from this sconrge till the north wind, which had brought them, ceased to blow, when they took leave.

They easily become tame, and being fatted, thought to be delicate food: they breed pretty far north, returning southward in autumn. Observed to fly in the shape of a wedge, like Wild Geese, with great

clamour; called in Shetland, Horra Geese, from being found in that Sound; appear also in the Orknies, but do not continue there.

The Brent Goose is known in some parts of England by the name of Rat or Road Goose; also Clatter Goose. Colonel Montagu adds the name of Quink Goose.\* Met with also at Oonalashka and Shumagin Islands, by Capt. Billings.†

In America, frequent Hudson's Bay, and breed in the adjacent Islands, but never fly inland; feed about high water mark, return towards the south in vast flocks in autumn; they probably pass the winter in Carolina, as Lawson mentions a Grey Brent frequent in that season; called at Hudson's Bay, Wetha may pa wew: they stay there for about three months, and are very numerous. Those seen in Europe retire to the extreme north to breed; a few, after flying over Sweden, stop on the borders of Lapland; but the main body of them continue their flight even to the most northern Isles of Greenland‡ and to Spitzbergen. Their food chiefly consists of plants, such as the small bistort, § and black-berried heath, || berries, sea worms, and the like. In one we opened, the stomach was full of grass. They are in general thought to be good food, though some are apt to have a fishy taste. The same fable has been told of this as of the Bernacle, in respect to its being bred from trees.

#### 36.—TORRID DUCK.

Anas Torrida, Ind. Orn. ii. 845. Gm. Lin. i. 516. Scop. i. No. 86. Torrid Duck, Gen. Syn. Sup. ii. 349.

SIZE of the Crested Duck. The head white; upper part of the neck black; beneath chestnut.

<sup>\*</sup> Orn. Dict. In Boys's Coll. for Sandwich, I. p. 311, it is said, when the Mayor comes into the hall, at St. Peter's, a bell, called Brandegoose Bell, shall ring, and continue for half an hour, &c.

† See Voy. p. 179.

<sup>&</sup>lt;sup>‡</sup> They frequent the northern parts in summer, migrating in flocks to the south, in winter.—Fn. groenl.

<sup>§</sup> Polygonum viviparum.-Lin.

<sup>||</sup> Empetrum nigrum.-Lin.

### 37.—SCOPOLINE GOOSE.

Anas albicans, Ind. Orn. ii. 845. Gm. Lin. i. 516. Branta albifrons, Scop. i. No. 87. White-fronted Duck, Gen. Syn. Sup. ii. 349.

SIZE of a Cock. General colour of the plumage brown; head and neck inclining to rufous; forehead and beneath white; upper part of the breast cinereous, the feathers margined with pale ferruginous, with a rufous band near the tip; quills within and tips white.

#### 38.—EIDER GOOSE.

Auas mollissima, Ind. Orn. ii. 845. Lin. i. 198. Fn. snec. No. 117. Gm. Lin. i. 514. Brun. No. 57—66. Id. Monogr. t. 1. 2. Muller, No. 116. Borowsk. iii. 5. t. 32. Klein, 130. 10. Mus. Carls. i. t. 6. Am. Orn. viii. 122. pl. 71. f. 2.—male. t. 3.—female. Lin. Trans. xii. 554. pl. 30. f. 1.2.—the trachea. Tem. Man. 549. Id. Ed. 2d. 849. Parr. App. p. ceviii.

Anser septentrionalis, Gerin. v. t. 562.

Anser lanuginosus, Bris. vi. 294. t. 29, 30. Id. 8vo. ii. 440.

Anas S. Cutberti, Raii, 141. A. 3. F. Will. 278. t. 77. F.

Die Eidergans, Bechst. Deuts. ii. 625. t. 21, 22. Id. Ed. 2d. iv. 926. Waullb. Monog. Brun. Eder-fuglens. Schmid, Voy. p. 149. t. 121.

Oie à Duvet, Eider, Buf. ix. 103. t. 6. Pl. enl. 209.—male. 208.—female.

Great black and white Duck, Edw. pl. 98.—male and female.

Eider, or Cuthbert Duck, Gen. Syn. vi. 470. Id. Sup. 274. Br. Zool. ii. No. 271. pl. 95. Id. fol. 152. pl. Q. Id. 1812. ii. 242. pl. 40. Arct. Zool. ii. No. 480. Tour in Scotland, i. No. 209. Von Troil. Icel. p. 144. 146. Will. Engl. 362. pl. 76.§
I. &. H. Bewick, ii. pl. p. 314. Lin. Tr. viii. 268. Lewin, vii. pl. 244. 244.\*
Id. pl. L.—the egg. Walc. i. pl. 66. Orn. Dict.

LESS than a Goose; length twenty-six inches, breadth forty-four; weight three pounds and a half. Bill two inches, black; the feathers on each side come very forward, almost to the nostrils; the top of the head, taking in the eyes, black, continued in a line of the same on each side, where the feathers project on the bill; below the

nape, on each side of the neck, the colour is pea green; the rest of the head, neck, breast, back, wing coverts, and scapulars, white; the last curved at the ends, and hang over the quills, which are black; the under parts from the breast, and the tail, are also black; legs dull green.

In the female the general colour of the plumage is reddish brown, barred across with black; hind part of the neck marked with longitudinal dusky streaks; on the wings two bars of white; belly deep brown, indistinctly marked with black; tail dusky; legs black.

These birds do not arrive at complete plumage till the fourth year; the young of both sexes, for the first week, are covered with a brown down, throat and breast whitish, with a cinereous line from the bill, through the eyes, to the nape, and each downy feather ending in a bristly point, so as to give the appearance of the bird being covered with hairs. The male, for the first year, has the back white; lower part of the breast, belly, quills, and tail, black; the rest black, varied with white. The second year's male has a black crown; neck and breast marked with black and white in spots. A full grown male, in the third year, much resembles the completely plumaged bird, but the colour less vivid, and a few spots of black still remaining on the neck; the crown is black, dividing into two parts behind. In the male some variety has been observed; in having the base of the wings and middle of the back black.\*

The female has been found also to vary; in some the general colour is black; the neck and belly ash colour; and the white line across the wings very little conspicuous; in others the line entirely wanting; and in one specimen a mixture of many white feathers throughout the plumage, giving a spotted appearance. All the above M. Brunnich gives from his own observations.

This species frequents the northern regions, even to the highest latitudes yet discovered. In the southern part of this Island we only

<sup>\*</sup> Such an one was formerly in my possession.

hear of a single instance of its being met with; a male having been once shot in the 1sle of Thanet, in Kent; but in the western Isles of Scotland, † and on the Farn Isles is not unfrequent, by some called Colk; in these last it breeds, and is generally supposed to lay about five eggs,t these are placed on the ground, of a pale green, and glossy, about three inches inches in length; and the female secures them from cold in a bed of fine down, plucked from the breast: this down is of the lightest and warmest nature of any yet known.§ The natives, who know its value, plunder the nests, taking away both down and eggs; on which the female is said to lay again, furnishing a second parcel of down, her last stock; and if again robbed, the male must furnish the down for the egg to lie on; and if the eggs and down are then taken away, they will totally desert the place; for it is supposed to be constant to the same breeding places; a pair have been observed to occupy the same nest for twenty years together.

- \* Col. Montagu mentions one being shot on the Coast of South Devon, in the winter of 1807.—See Orn. Dict. Supp.
- † Most plentiful at Papa Westray, one of the Orknies.—Lin Trans. viii. 268. A nest found at Pentland Skerrie, very near the lighthouse.
- ‡ Von Troil observed sixteen eggs in one nest, which belonged to two females, who agreed remarkably well together; hence we may conclude, that one bird may sometimes lay eight.—Von Troil's Iceland, p. 144.
- § The quantity of down in one nest more than filled the crown of a hat, yet weighed only three quarters of an ounce.—Br. Zool. Three pounds of this down may be compressed in a space searcely bigger than the first, yet is afterwards so dilatable, as to fill a quilt five feet square.—Salern. Orn. p. 416. That found in the nest most valued, and termed Livedown, this is greatly more elastic than that placked from the dead bird, which is little esteemed in Iceland: the best is sold for 45 fish per pound, when cleansed, and at 16 when not cleansed.\* There are generally exported every year, on the Company's account, 1500 or 2000 pounds of both sorts, exclusive of what is privately exported by foreigners. In 1750 the Iceland Company sold as much as amounted to 3745 banco dollars, besides what was sent to Gluckstadt.—Von Troil, p. 146. See also Bechst. Deuts. ii. 635.
  - | Br. Zool. The whole of the time in which they lay eggs is about six or seven weeks.

<sup>\*</sup> When cleaned it sells for 20 species for six pounds, while the uncleaned fetches no more than 20 species per bag of 40 pounds.—*Brooke's Sweden*, p. 170.

The Eider Duck is a long-lived bird,\* and in the latter years becomes quite grey; the food is principally shells, for which it dives to very great depths. In Greenland is called Mittek; the male, Amaulik; young bird, Amaulicksak; and the female, Arnauick, or Siorartak. The natives kill them on the water with darts, striking them the moment they appear after diving, and know the place, from their being preceded by the rising of bubbles.† The flesh is much valued, and the eggs not less so.‡ In Iceland the bird is called Ædur;§ in Newfoundland, Gam Drake.

The St. Cuthbert's Duck, mentioned by Willughby, is no other than this; and so he thinks himself; and adds, that it breeds no where but in the Farn Isles. This species will by no means submit to domestication, as sufficient trials have been made for the purpose. This is mentioned as an article of food fit for a nobleman's house, under the name of Cutberduk, and Cudberduce; but this occurs but once. Said to be in season in January.

Mr. Hooker observes that the Stiftsamptman, or Governor of the Island of Vidoe, four miles from Iceland, and scarcely more than two miles in circumference, and very fertile, reaps a considerable revenue from the down and eggs; ¶ the former sells for three rix dollars (twelve shillings) a pound; immense numbers breed here, almost every little hollow place being occupied with the nest, and so numerons, that he was obliged to walk with the greatest caution, to avoid trampling upon them.

According to the Amer. Orn. this bird is met with in the United States; was seen at Kamtschatka and the neighbouring Islands by

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<sup>\*</sup> Believed in Iceland to live 100 years .- Bechst. Deuts. ii. 630. + Faun. groenl.

<sup>‡</sup> A singular occurrence is mentioned in *Naturf*. iii. s 221, of five of these eggs being put by in a dark closet; and three out of that number shining in a remarkable manner, so as to enable a person to see the shape of the hand.

<sup>§</sup> Birch, Roy. Soc. iii. p. 308. | Archæol. xiii. p. 341. 368.; called also Dunter Duck.

The Eskimaux catch these birds on the nest, with springes, made of split whalebone; and take the eggs wherever they can find them.—Parry's Second Voy. p. 823.

Billing.\* A Variety is said to be found at Spitzbergen, not so large as generally described, exceeding very little in size the Domesticated Duck.†

#### 39.—KING DUCK.

Anas spectabilis, Ind. Orn. ii. 845. Lin. i. 195. Fn. suec. No. 112. Gm. Lin. i. 907. Mus. Ad. Fr. ii. p. 25. Muller, No. 108. Mus. Carls. t. 39.—male. 40.—female. Fn. Groenl. 63. Tem. man. 551. Id. Ed. 2d. 852. Parr. App. p. ccvii.

Anser Hudsonis, Bris. vi. 365. Id. 8vo. ii. 458.

Canard à tête grise, Buf. ix. 253.

Grey-headed Duck, Edw. pl. 154.

King Duck, Gen. Syn. vi. 473. Arct. Zool. ii. No. 481. Lewin, vii. pl. 245. Orn. Dic. & App. Br. Zool. 1812. ii. 246. Lin. Trans. xii. 553.

SMALLER than the last; length near two feet; bill orangecolour; on the base of the upper mandible a semicircular ridged protuberance, compressed on the sides, and flat on the top, where it is divided into two, the elevated parts velvety black, passing on each side in a line to the eyes; crown of the head and nape of an elegant pale ash-colour; at the base of the upper mandible the feathers are pea-green, passing backwards on each side the neck, and including. half the eye; beneath this, and round to the chin, dirty white; but these two colonrs blend themselves by degrees into each other; under the chin two black streaks, meeting at top, and diverging as they advance downwards, like the letter V inverted; the rest of the neck and breast whitish; middle of the back, whole of the belly, and vent, black; wings dusky, middle of the coverts white; quills black, the secondaries somewhat curving over the greater; the shafts deep ferruginous; on each side of the outer ones a patch of white; legs reddish. The female is smaller; the gibbous part of the bill neither so large nor so high coloured, but the feathery part on the ridge broader; the colour of both bill and legs more dull, inclining to brown; the plumage is in general brown, the middle of cach

<sup>\*</sup> Voy. p. 225.

<sup>†</sup> Scoresby's Arctic Reg. vol. i. p. 527.

feather dusky or black; head and neck palest; throat, belly, four first quills, and the adjoining coverts, brownish; the six next tipped with white, hence appears a line of white on the wing; tail as the quills. Neither the males nor females obtain the compressed gibbosity of the bill, nor colours of the plumage, till advanced in age. A bird, which appeared to us as a young male, was in the Leverian Museum; the bill of a dusky red, the nail black; the elevation at the base not very far advanced; head and neck brownish ash-colour; top of the head streaked with a few white lines at the back part; body and wings dull black; a patch of white on the wing coverts, and another in the middle of the back; legs reddish brown.

Inhabits Greenland, where it is as common as the Eider, with much the same manners, and the down applicable to the same purposes; is found every where in the Islands, and breeds in the more northern of them, removing to the south in winter; not uncommon in Norway, and on the Arctic Shores of Siberia, extending to Kamtschatka; and has also been killed in the Orknies. The flesh is accounted excellent, and the crude, gibbous part of the bill a great delicacy. The skins are sewed together, and make warm garments.

The natives kill them with darts, and use the following method: a number of them in canoes, on meeting with a flock while swimming, suddenly shout very loud, making as much noise as possible, and the birds being too much frightened to fly away, dive under the water, but as the place at which they are again to rise is betrayed by the bubbling of the water above, the hunters follow as close as may be, and after acting this three or four times, the birds become so fatigned as to be easily killed.\*

This beautiful species is found at Hudson's Bay; is in plenty at Churchill River, in 59 degrees of north latitude, and remains there as long as the water is unfrozen; is scarce at York Fort. They build

on the sides of the rivers and ponds; the nest made of sticks and moss, lined with feathers from the breast, as in the Eider; the eggs four or five in number, yellowish white, and as large as those of a Goose. The young fly in July: the food is principally worms and grass. Known at Hudson's Bay by the name of Mis se sheep.\* We are now assured that it breeds in the Orkney Islands, since Mr. Bullock found it in Papa Westra, the latter end of June; he adds, that the eggs are six in number, yellowish white, rather smaller than those of the Eider Species, placed on a rock, hanging over the sea. Mr. B. also observed, that the eggs were bedded in a layer of down, in the manner of those of the Eider Species. The trachea of the King Duck is said to have so close a resemblance to that of the Eider Duck, that one description and figure will suffice for both.† Our late voyagers found both of them very numerous on the Coast of Greenland, but very shy.

# 40.--MUSCOVY DUCK.

Anas moschata, Ind. Orn. ii. 846. Lin. i. 199. In. suec. No. 118. Gm. Lin. i. 515. Scop. i. No. 85. Frisch, t. 180. Ph. Tr. lvii. 348. Bris. vi. 313. Id. Svo. ii. 446. Borowsk. iii. p. 11. 4. Cet. uc. Sard. 323.

Anas Sylvestris Brasiliensis, Raii, 148, 1-150, 3. Will, 249, t. 75.

— Indica Gesneri, Will. 295. Klein, 131, 2. Gerin, v. t. 568, 569.

--- Libyca, Will. 294.

Die Turkische Ente, Schr. d. Berl. Nat. iii. 372. t. 7. f. 1.—the trachea.

Die Bisamente, Bechst. Deuts. ii. 636. Gunth. Nest. U. Ey. t. 90. Naturf. xii. 135. 76.

Anitra muta, Zinnan. Uov. 105. t. 18. f. 92.

Le Canard musqué, Buf. ix. 162. pl. 9. Pl. enl. 989.

Le grand Canard, Voy. d'Azara, iv. No. 427.

Muscovy, (Cairo, Guinea, India), Duck, Gen. Syn. vi. 476. Id. Sup. ii. 348. Will. Engl. 381, 312. pl. 75. Albin, iii. pl. 97, 98. Descr. Surin. ii. 156. Bewick, ii. 320. Lin. Trans. iv. 113. pl. xvi. f. 5, 6.

LARGER than a Wild Duck; length two feet. Bill two inches long, and red, except about the nostrils and tip, where it is brown;

\* Mr. Hutchins. † It is equal in diameter throughout, with a moderate, rounded enlargement at the bottom, from which the two bronchiæ proceed to the lungs.—See Lin. Trans. xiii. p. 554. pl. 30. f. 1. 2. ‡ In a wild state thirty-four inches.

eyes surrounded with a naked skin, which is warty, and red; irides yellow; crown of the head black; sides, throat, and fore part of the neck, white, varied with black; lower part of the neck, breast, sides, lower belly, and thighs, brown, a little mixed with white; back and rump brown, glossed with green gold; the upper part of the belly white; the three first quills white, the nine following dusky brown, edged without, and tipped with green gold; the tail consists of twenty feathers, the outer one on each side white, the others green gold; legs red: this is the most common appearance. In a completely wild state the whole plumage is black, glossed with violet or green; some have small dots of white at the back of the head and wing coverts. The female does not greatly differ.

The species is sufficiently known, being not uncommon, and domesticated in almost every nation; is found in a state of nature about Brazil, and sometimes in vast flocks of a large size; is called there Patos; it is also not uncommon, with the plumage white, in our menageries, where it multiplies greatly; said to be in a wild state about the Lake Baikal, in Asia; when at large they make the nest on the stumps of old trees, and perch, during the heat of the day, on the branches of those which are well clothed; are naturally very wild, though, when kept tame, are sufficiently docile; the male will also sometimes associate with the Common Duck, and produce a mongrel breed: the eggs are rounder than those of the Common Duck, and in young birds frequently incline to green; they are esteemed, as they are said to lay more eggs, and sit oftener, than other ducks. The name given to them was on supposition of their being natives of Muscovy, according to some, but is more probably derived from their exhaling a musky odour, which proceeds from the glands placed on the rump, in common with other birds. the flesh is good, and of very high flavour, added to the bird being of a greater size, the breed ought to be encouraged, especially as it is as hardy as any other species: common at Paraguay and vicinity. The Guaranis call it Ypeguazo (Great Duck), and the Spaniards

Pato real ó grande, Greater Royal Duck; seen single, or in pairs; sometimes twenty together, or thirty, roost at night on high trees; lays in September from ten to fourteen eggs, in the hollow of a tree, on a bed of feathers from the breast of the male. The windpipe of the male is stout, nearly equal in diameter, but a trifle smaller towards the bottom; the bony arch, as in others, finishes the bottom part, and appears as if furnished with rings, but they are not moveable, as in the rest of the trachea; the orbicular labyrinth is attached to the side of it; this is not smooth on the surface, as in the Pintail and Wigeon, but universally rough and irregularly furrowed, with fine indented lines: the opposite side of a pear shape, and placed obliquely, with the point lowest, but is flattened considerably on the surface; the bony arch is on this side smooth, having no appearance of rings, and is bent at a small angle from the trachea, though it constitutes a continuance of it. In old birds the bony labyrinth is more rounded and larger, but still retains the roughness on the surface; in a very old subject, furnished to me by the late Mr. Boys, the labyrinth was not only much larger, but nearly globular, and the bony arch quite smooth, yet finely granulated, and faintly wrinkled, and the texture more bony; that figured by Dr. Bloch, in the Berlin Trans. † appears by much too large, but may not be faulty, for in case his figure was taken from a foreign specimen, and supposing the Muscovy Duck to arrive at twice the size of those in Eugland, and which they are said to do, no doubt but the labyrinth and trachea would be in due proportion.

## 41.—NILOTIC GOOSE.

Anas Nilotica, Ind. Orn. ii. 846. Gm. Lin. i. 508. Hasselq. It. 365. 36. Id. Voy. 201. Bauk, Baw Goose, Pocock. Trav. i. 210?

Nilotic Goose, Gen. Syn. vi. 488. Bruce, Trav. App. 154?

SIZE between the Pintail Duck and Common Goose, but stands higher on the legs. Nail of the bill hoary, the margin of it bounded

<sup>\*</sup> See Lin. Trans. iv. p. 113. pl. xvi. f. 5. 6. + Schr. d. Berl. Nat. iii. s. 372. t. 7. f. 6.

by a callus, or excrescence, a little elevated, equal, and of a purplish blood-colour; a second encompasses the base, somewhat elevated, dull purple, with four warts, two on each side; irides yellow; throat, sides of the neck, crown, and a line behind the eyes, whitish, spotted with hoary or cinereous; breast, belly, and thighs, whitish brown, crossed with dusky, transverse lines; sides of the breast and belly marked with oblong and hoary ones; tail longish, rounded in shape; legs red; claws black.

Inhabits the Nile, in Upper Egypt, but no where else, except perhaps on the Bays of the Red Sea. The Arabians call it Bah:\* it is easily tamed, and lives among other domestic poultry; and seems to approach near to the Muscovy Goose. Bruce observes, there are no Geese in Abyssinia, wild or tame, excepting the Golden Goose, Goose of the Nile, or Goose of the Cape; these are common in all the south of Africa, and build their nests in trees, and when not in the water generally sit upon them.

#### 42.—MERIAN DUCK.

Anas Merianæ, Merian Duck, Nat. Mis. pl. 69.

SIZE of the Mallard. Bill somewhat hooked at the end, red, the base and tip blackish; irides yellow; the head black, subcristated, and very much carunculated with bright red, currant-like, tubercles about the forehead, round the cheeks, and eyes, and the back of the neck a considerable way down; neck, breast, and belly, white; lesser wing coverts green, the next row ferruginous; second quills blue, with a double row of caruncles along their tips, forming a red band across the wings, the remainder of which is ferruginous; tail coverts green, and curled as in the Mallard; the

<sup>\*</sup> No doubt but this is the sort called by Pococke, Bauk; which he says, when sent England, are called Baw Geese.—Pocock. Trav. i. p. 210.

tail itself ferruginous; legs pale ferruginous, spotted with black, round marks, about the size of peas; the feet spotted in the same manner: said to inhabit Surinam; from the drawings of Mad. Merian. I suspect the above to be a mere Variety of the Muscovy Species, as I have observed, even in this kingdom, some birds with a few caruncles about the neck. Among some drawings done in India I remarked one with the carunculated parts occupying more than the usual space; and in another, with the plumage wholly white, were numerous red caruncles of various sizes, quite to the nape, and clustered down the middle of the crown; besides which, a series of the same red excrescences continued down behind the neck, to near the back, eight in number.

### 43.—ABHA DUCK.

Duck killed at Abha, Salt's Voyage to Abyssinia, p. xliv.

The size not mentioned. The upper mandible light grey, edged with red; top of the head brownish grey; irides yellow; round the eye and upper parts of the neck rusty iron-colour; the body speckled somewhat like that of a Guinea Fowl, whiter on the lower parts, inclining to yellow on the back; scapulars dark umber brown: in the wings twelve long black feathers, twelve glossy blue, and four hinder ones of yellowish brown; tertials seventeen, white, with a black stripe across them; rump and upper parts of the body black, the under yellowish; legs bright red.

Inhabits Abyssinia. The above specimen killed at Abha.

# 44. - SOLITARY DUCK.

Anas Monacha, Ind. Orn. ii. 847. Gm. Lin. i. 516. Scop. i. No. 86. Solitary Duck, Gen. Lin. Sup. ii. 350.

THIS is larger than the Mallard. Bill yellowish, with a black tip; lore grey; plumage varied black and white; head, and

beginning of the breast, spotted with black; prime quills white, tips variegated with brown; speculum violet green; tail pointed, the feathers white, marked with a brown spot at the tip.

# 45. -LOBATED DUCK.

Lobated Duck, Gen. Syn. Sup. ii. 349. Nat. Misc. pl. 255.

LENGTH two feet six inches. Bill to the forehead one inch and three quarters, to the gape two and a half; nostrils placed about the middle, near the upper ridge; general colour of the plumage dusky black, crossed with numerous, transverse, pale, or whitish lines, intermixed with minute irregular markings, and spots of the same; the chin, fore part of the neck, and belly, white, marked, and irregularly spotted with dusky black; wings short, at the bend a knob; quills and tail dusky black, the last somewhat pointed in shape: but the great singularity of this bird consists in a large flap, extending the whole length of the under mandible beneath; it is one inch and a half deep, irregularly rounded, and hangs in folds; the legs are lead-colour.

In the female the head, back of the neck, the back, wings, and tail, are black; sides of the head and all beneath pale grey brown, crossed with numerous dusky broken striæ, mixed on the breast with a few ferruginous ones; the whole of the back and wing coverts are also crossed with numerous, fine, undulated white lines; quills and and tail as in the male; legs black.

Inhabits New-Holland. The legs in both sexes are short, and placed very far behind, so as to oblige the bird to stand nearly upright, in the manner of a Pinguin. In this state it measures from the top of the head to the ground about thirty inches. In the Museum of the Linnæan Society are two specimens, one of them has the flap beneath the under mandible very short, which may probably be a young male, as the female is said to be destitute of

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any; yet I have been informed by a person from New-Holland, that both sexes, when adult, have the flap; but in the female it is much smaller.

#### 46.—ROYAL DUCK.

Anas regia, Ind. Orn. ii. 847. Canard royal, Molin. Chil. p. 206. Id. Fr. Ed. 212.

THIS is a trifle larger than a Mallard, with a compressed caruncle on the forehead, forming a sort of crest or comb; plumage on the upper part of the body fine blue, the under grey; about the neck a beautiful white collar.—Inhabits Chili.

### 47.—GEORGIAN DUCK.

Anas Georgica, Ind. Orn. ii. 847. Gm. Lin. i. 516. Georgia Duck, Gen. Syn. vi. 478.

LENGTH twenty inches. Bill two, yellow, and turns up a little at the end, edges and tip dusky black; irides reddish brown; head and neck pale reddish ash-colour, marked with dusky spots; scapulars the same, but darker; wing coverts pale ash; speculum of the wings pale verdigris green, edged with dusky, bounded above and beneath with a bar of white; sides pale cinereous, marked with spots of a deeper colour; quills and tail dusky; legs greenish ash.

Found in South Georgia the middle of January, and proved a male bird; the flesh said to be good eating.—Sir Jos. Banks.

Another, supposed to be allied, was met with at the Cape of Good Hope; the general colour dusky ash, mottled on the breast with white.

### 48.—BLACK DUCK.

Anas perspicillata, Ind. Orn. ii. 847. Lin. i. 201. Gm. Lin. i. 524. Ph. Tr. lxii. 417. Fn. Amer, p. 16. Am. Orn. viii. p. 49. pl. 67. f. 1. Frankl. Narr. App. p. 698. Tem. Man. Ed. 2d. 853.

Anas nigra freti Hudsonis, Bris. vi. 425. Id. Svo. ii. 472.

- nigra maxima, Great Black Duck, Bartr. Trav. p. 292.

Die Brillenente, Bechst. Deuts. ii. 574.

Macreuse à large Bec, Marchand, Buf. ix. 244, pl. enl. 995.

Black Duck, Gen. Syn. vi. 479. Arct. Zool. ii. No. 483. Edw. pl. 155. Cook's last Voy. ii. 378.

SIZE of the Velvet Duck; length twenty-one inches; weight two pounds or more. The bill compressed on the sides; the base of the upper mandible rises into a yellowish knob, with a black spot on each side of it, the rest of the bill orange; nail red, the sides of it, all round, black; plumage in general dull black, except a large patch of white on the crown of the head, and another of the same, but larger, at the back part of the neck; legs red; webs dusky. There is a singular, hard, expansion at the commencement of the windpipe, and another much larger, about three-quarters of an inch, near where it separates into the two lobes of the lungs; this last is larger than a Spanish hazel nut, flat on one side, and convex on the other.\* The female is smaller, of a sooty colour, and has no white spot at the hind part of the head; but the cheeks are marked with two dull white spots:† the prominence of the bill scarcely observable.

This is an American Species; breeds along the shores at Hudson's Bay, and feeds on grass; it also makes the nest with the same, lined with feathers, and lays from four to six white eggs; hatches them in July; called by the natives Misse qua guta vow: in winter proceeds as far as South Carolina: is frequently seen at New York, where it is by some called the Coot; this bird has also been met with in Prince William's Sound;; is a very shy species, and but little sought after, as the flesh tastes very fishy, and unpleasant.

<sup>\*</sup> Amer. Orn. † Arct. Zool. ‡ Cook's last Voy. ii. 378.

A.—Bill pale lead-colour, near the end of the upper mandible a patch of white; head and neck waved with dusky white and brown; hindhead rather full of feathers, and brown; hind part of the neck and back the same; the feathers of the last margined with pale brown; from the breast to the thighs dusky white, the margins pale ferruginous; thighs and vent like the neck; wing coverts cinereous brown, below them a dusky bar, followed by another of very pale blue; quills dusky; tail reddish brown, the two middle feathers dark ash-colour; legs pale blue.

A drawing of this, from Mr. Abbot, of Georgia, had the name of the female of the Black Duck. It has hitherto been supposed, that this bird was found in America only; but it is also known in the north of Europe, being seen in the winter, on the coasts of the Baltic, migrating in different seasons.

# 49.—SCOTER DUCK.

Anas nigra, Ind. Orn. ii. 848. Lin. i. 196. Faun. suec. No. 110. Gm. Lin. i. 508. Muller, No. 110. Bris. vi. 420. t. 38. f. 2.—male. Id. 8vo. ii. 471. Am. Orn. viii. 135 pl. 92. 2. Tem. Man. 554. Id. Ed. 2d. 857.

Anas niger minor, Raii, 141. A. 5. Will. 280. t. 74.

Die Trauerente, Bechst. Deuts. ii. 572. Id. Ed. 2d. iv. 963. Naturf. xii. 133. 72.

Zwarte zee-end, Sepp, Vog. iv. t. p. 335 .- male.

La Macreuse, Buf. ix. 234. pl. 16. Pl. enl. 978.

Whilk, Phil. Trans. xv. No. 175. p. 1160.

Scoter, Black Diver, Gen. Syn. vi. 480. Br. Zool. ii. No. 273. Id. fol. 153. Id. 1812. ii. 248. Arct. Zool. ii. No. 484. Id. Sup. p. 76. Will. Engl. 366. pl. 74. Ray's Letters, p. 160, 161. Bewick, ii. pl. p. 324. Lewin, vii. pl. 249. Walcot, i. pl. 59. Orn. Dict. & Supp. Graves, vol. i:

THIS is somewhat less than the Velvet Duck; length twenty-two inches; weight forty ounces. The bill is yellow above, edged with black; beneath wholly black, with a knob at the base, as in the Velvet Duck, which is red, and divided down the middle by a yellow line; eyelids yellow; eyes black; plumage wholly black;

head and neck glossy; under parts dull; legs brown. The female weighs twenty-three ounces. Bill black, without any knob; but otherwise shaped as in the male; eyes brown; plumage on the body above dark dusky brown; sides of the head, under the eyes, and half the neck, almost to the back, brownish white; \* lower part of the neck and breast like the back, but paler; belly dusky white, marked with dusky spots; greater wing coverts and second quills tipped with dusky white, forming two whitish bars on the wings, and when closed, reach to the beginning of the tail, which is dusky, and consists of sixteen feathers; vent the same colour; legs greenish brown, webs darkest. The tongue of this bird is of a singular structure—from the base to one-fourth of the length it appears glandular, with stiff bristles on the sides, the rest of the length fleshy; the end angular, with three distinct endings, each smaller, and thinner than the other, appearing attached to each other, the tip very small.

This bird is seen on various coasts of England in the winter, but most common on those of France, where they are in prodigious numbers, from November to March, especially if the wind be in the north or north-west. The chief food is said to be shell fish, but they will readily feed on corn;† they are perpetually diving, often to the depth of some fathoms; this affords an usual method of catching them, by placing nets under water, in such places as the shells are most numerous, and by this means 30 or 40 dozen have been taken in one tide.‡ It swallows the food whole, and soon digests the shells, which are found quite crumbled to powder among the excrements. Has been kept tame for some time on soaked bread.

<sup>\*</sup> This seems to be the case with a female sent to Mr. Willughby, which he says, has the neck and head, and both sides, as far as the eyes, white.—Will. Orn. 367.

<sup>†</sup> Mr. Youel kept one alive for several months fed with barley .- Lin. Tran. xiii p. 616.

<sup>‡</sup> Are amazing divers, so as to make the shooting them, whilst swimming, very difficult, as they drop under the water the instant they see the flash of the gun, so that twenty shots have been fired before one took effect.

The flesh has an exceedingly rank and fishy taste, and therefore allowed by the Roman Catholics to be eaten on fast days, and in Lent, and to say the truth, must be a sufficient mortification.

This is a common species in all the northern parts of the Continent, Lapland, Sweden, Norway, and Russia; and very plentiful on the great lakes and rivers of the north and east of Siberia, as well as on the sea shores.

Inhabits also North America; not uncommon at New York,\* and in all probability much more to the north on that continent, and that of Asia. Osbeck met with them in 30 and 34 degrees south latitude, between the Island of Java and St. Paul in the month of June †.

Authors agree in saying, that there is no enlargement of the trachea in either sex, but although it is in some measure true, if compared with that of the Velvet Duck, yet this organ deviates not a little from the simple structure. In the male it appears somewhat enlarged about the middle, growing smaller at the bottom; attached to this are the two divisions of the bronchiæ, each larger than the end of the tube they spring from, and consist of about eleven or twelve rings, which are very firm, and nearly osseous externally, but on the inside more tender and cartilaginous, contracting much in drying; beyond these the remaining part of the bronchiæ is very small, and so passes on to the lungs on each side.

### 50.—CINEREOUS DUCK.

Anas cinerascens, Tem. Man. 535. Id. Ed. 2d. 858.
— cinerea, S. G. Gmel. reise, ii. 184. t. 18.

LENGTH sixteen or seventeen inches. Bill long, strong, broad, black, with a nail at the end; nostrils and under mandible flesh-colour; irides brown; the eye, crown, hindhead, nape, and breast, deep brown; space under the eyes, sides, and fore part of the neck,

white; the rest of the plumage dusky brown. The female is smaller, more inclined to ash-colour; the ends of the feathers paler; the white on the neck less pure; the breast and belly crossed with greyish and brown stripes.

Inhabits the north-east parts of Europe, migrating into Germany, where two only have been met with; it most resembles the female of the Scoter, but whether it is a distinct species seems uncertain.

### 51.—VELVET DUCK.

Anas fusca, Ind. Orn. ii. 848. Lin. i. 196. Fn. suec. No. 109. Gm. Lin. i. 507. Scop. i. No. 68. Brun. No. 48, 49. Muller, No. 109. Frisch, t. 165. Georgi, p. 166. Jacq. Voy. p. 30. 15. t. 6. N. Act. Stockh. 1785. iii. No. 6. p. 188. Borowsk. iii. p. 17. 12. Nat. xxv. s. 10. Besch. d. Berl. Nat. iii. 374. t. 8. f. 1.—the trachea. Amer. Orn. viii. 137. pl. 72. f. 3. Tem. Man. 552. Id. Ed. 2d. 855. Anas nigra major, Bris. vi. 423. Id. 8vo. ii. 472. Raii, 141. A. 4. Will. 278, t. 70.

Klein, 133, 12. Act. Nidr. i. t. 5. Turpan, N. C. Petr. iv. 420. Buf. ix. 291. Bell, Trav. p. 42.

Die Sammetente, Bechst. Deuts. ii. 568. Id. Ed. 2d. iv. 954. Nat. xii. 132. 71.

Bruine Zee-Ecnd, Sepp, Vog. iv. t. p. 331.

Grande, ou double Macreuse, Buf. ix. 242. Pl. enl. 956-male.

Great Black Duck, Will. Engl. 363. pl. 70.

Velvet Duck, Gen. Syn. vi. 482. Id. Sup. 274. Id. Sup. ii. 350. Br. Zool. ii. No. 272. pl. 96. Id. fol. 152. Add. Id. 1812. ii. 247. pl. 41. Arct. Zool. ii. No. 482. Id. Sup. p. 75. Hist. Kamts. p. 160. Ell. Narr. ii. p. 43. Bew. ii. pl. in p. 322. Lin. Tr. iv. 119. pl. xv. f. 3—7.—the trachea. Lew. vii. pl. 247. Walc. i, pl. 58. Pult. Dors. p. 20. Orn. Dict. & Supp.

THIS is a trifle larger than the Mallard; length twenty-two inches, to the toes twenty-four, breadth three feet. Bill broad and flat, rising into a flattish black knob, just before the nostrils, almost circular; the sides lemon-colour, nail dull pink; edges of the bill black; between the bill and nail a whitish space; lower mandible straight, dull pink at the end, but black towards the throat; irides greenish yellow; plumage in general black, inclined to brown on the belly and vent; under each eyelid a white mark, passing in a streak behind the eye, and across the middle of the

wing a white band; legs red; claws black. One, supposed to be a young bird, had the tips of the greater wing coverts white, the secondaries white above, and below; next series, under the wing, white, with the shafts, and a small part of the webs, dusky; back and scapulars edged with light brown; the webs and claws black. The female is brown where the male is black, and the protuberance at the base of the bill wanting.

This species is now and then seen on the coasts of England in the winter; more frequently in Denmark and Russia; in some parts of Siberia very common, and known also at Kamtschatka; but probably neither this nor the last are found in Greenland, as the names do not occur in the Fauna. In breeding time goes far inland to lay the eggs, which are eight or ten in number, and white. After the breeding season the males are said to depart, the females staying behind, till the young are able to fly, when the two last go likewise away, though to what part is not certain. It appears to be the bird called at Kamtschatka, Turpan; though this is in greater plenty at Ochotska, especially about the Equinox, when fifty or more of the natives, in boats, surround the whole flock, driving them in the flood, up that river; as soon as it ebbs, the whole company fall upon them at once with clubs, and often kill so many, that each man has twenty or thirty for his share.

Inhabits also North America in the summer, and breeds about Hudson's Bay; the nest composed of grass, the eggs from four to six; hatches in July; feeds on grass; called there Cuscusi qua tum. It retires south in winter, at which season is frequently seenas far as New York; has been met with also at Aoonalashka: returns to Sweden the latest of any, and stays the longest; even the eggs have been found fresh laid the beginning of July, they are generally deposited under the juniper bushes, with a covering of elastic feathers; they live entirely on shells.

The windpipe of this bird is of a curious construction; just below the larynx is a bony cavity, of almost one inch long; from this the

trachea descends for nearly two-thirds of its length, when its swells out into a strong bony hollow, about the size of a small walnut, flat on one side; at the bottom, where the trachea divides, the parts again become bony, but not so much enlarged; at the under parts of this the two bronchiæ take rise. Some diversity is found to take place in birds of various sizes, but not enough to cause any mistake in regard to the Species.\*\*

A.—One, which appeared to me as a Variety, was sixteen inches long, breadth twenty-seven; weight twenty-one ounces; irides dirty white; forehead dark brown; crown black; under each eye a large white spot; neck rusty brown; scapulars and upper tail coverts black; breast shaded with black; belly white; in young birds black. Not uncommon at Hudson's Bay.

# 52.--HARLEQUIN DUCK.

#### THE MALE.

Anas histrionica, Ind. Orn. ii. 849. Lin. i. 204. Gm. Lin. i. 534. Brun. No. 84, 85. Muller, No. 127. Fn. groenl. No. 46. Georgi, 166. Phil. Trans. lxii. 417. Frisch, t. 157. Fn. Amer. p. 16. Am. Orn. viii. 139. pl. 72. f. 4. Shaw's Zool. No. 1005. Tem. Man. 573. Id. Ed. 2d. 879.

Anas torquata ex Insula Terræ novæ, Gerin. v. t. 580.

- principalis maculata, Bartr. Trav. 293.+
- --- torquata, Bris. vi. 362. Id. 8vo. ii. 457.
- Brimond, Olaff. Isl. ii. t. 34.

Die Kragenente, Bechst. Deuts. ii. 672. Id. Ed. 2d. iv. 1037.

Le Canard à Collier, Buf, ix. 250. Pl. enl. 798.

Stone Duck, Hist. Kamts. p. 160.

Painted Duck, Ell. Narr. ii. p. 43.

- \*Possibly this may be the bird which Ray calls the Sheldin, of which he says, "If you "steep one of the windpipes of these awhile in warm water, to make it lax, you may observe the pretty motion to be found in the middle protuberance, and pick out a little philosophy from it."—Ray's Letters, p. 21.
- † The Various-coloured Duck, his neck and breast as though ornamented with chains of beads.

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Dusky and Spotted Duck, Edw. pl. 99.

Harlequin Duck, Gen. Syn. vi. 485. Arct. Zool. ii. No. 490. Br. Zool. 1812. ii. p. 269. Gent. Mag. xliv. pl. iv. p. 464. Orn. Dict.

SIZE of a Wigeon; length seventeen inches, breadth twenty-six; weight eighteen ounces. Bill near one inch and a half long, and black; irides hazel; between the bill and eye white, in some yellowish, or saffron-colour, extending a little over the eyes, and beyond them; crown of the head black, bounded by a reddish streak; on each side of the neck a perpendicular line of white; and above it a white spot; excepting this, the whole of the neck is black; round the breast a white collar, broadest behind, where it is marked with black dots, and is bounded by a black one; between this and the wings a transverse mark of white; the breast, below the collar, bluish ash; back dusky brown, inclined to purple; rump deep blue black; belly and thighs black; sides dull orange; tail pointed at the end; on each side of it a spot of white; prime quills dusky ash, some of them tipped with white; tail brown; legs bluish black.

In one specimen were two streaks of black on the nail at the end of the bill, diverging like the letter V, the angle towards the tip.\*

#### THE FEMALE.

Anas minuta, Lin. i. 204. Gm. Lin. i. 534. Brun. No. 86. Fn. groenl. No. 46. Querquedula freti Hudsonis, Bris. vi. 469. Id. Svo. ii. 483. Die Zwergente, Bechst. Deuts. ii. 673. La Sarcelle brune et blanche, Buf. ix. 287. Pl. enl. 799. Little brown and white Duck, Edw. pl. 157. Cat. Car. i. pl. 98. Harlequin Duck, female, Gen. Syn. vi. 485.

LENGTH thirteen inches. Bill black; irides hazel; the forehead and between the bill and eye white; on the ear a spot of the same; head, neck, and back, brown, palest on the fore part of the neck; upper part of the breast and rump rufous brown; lower part of the breast and belly barred with rufous and white, but the lower belly and thighs with rufous and brown; scapulars and wing coverts

<sup>\*</sup> Brunnich, No. 85.

rufous brown; the outer greater ones blackish; quills and tail dusky, the last inclined to rufous; legs dusky.

The Harlequin Duck is found both on the Old and New Continent; on the former seen as far south as the Lake Baikal, and from thence to Kamtschatka, particularly up the River Ochotska; in Iceland, as low as Sondmor; also in Greenland: in the last frequents, during the summer, the mouths of bays and rivers, but not in great plenty, and is a very noisy species. The note sometimes whistling, at others not unlike that of the Brent; is fond of shady places, and makes the nest among the shrubs; frequents the neighbouring seas in winter; swims well, even in the most rapid streams, and dives to admiration; from these circumstances is not easily taken. Its food small shells, eggs of fishes, and particularly the larvæ of gnats. ‡

Inhabits America, from Carolina to Newfoundland; pretty frequent in small rivulets of Hudson's Bay, about 90 miles inland; seldom in large rivers; lays ten or more white eggs, like those of the Pigeon, on the grass: the young are spotted in a very pretty manner; migrates south in autumn. It is called in New England, the Lord. The name in the Algonquin language, Powistic ou Sheep; has also been met with at Aoonalashka.

This species has certainly been recognized in this kingdom, as the Little Brown and White Duck, of Edwards, was in my own collection, killed in Kent; and I was assured by Mr. Sowerby, that both sexes, in complete dress, were killed on the domain of Lord Seaforth, in Scotland; and where, it is not improbable, others may be met with; especially on the northern coasts.

<sup>\*</sup> Arct. Zool. † The people of Kamtschatka take advantage of this, as they do not fly off at the sight of mankind, they follow them closely on the water; and when tired, without difficulty knock them down with clubs.—Hist. Kamts.

<sup>‡</sup> Fn. groenl. § Arct. Zool. | Mr. Hutchins.

<sup>¶</sup> Ellis's Narr. ii. 43, called the Painted Duck.

A .- Anas torquata, Gm. Lin. i. 514. Ind. Orn. ii. 849. S. G. Gmel. reise, ii. 180. t. 14.

This appears to be a mere Variety of the male, and differs only in having the rump white.

Found on the Shores of the Caspian Sea.

From the various changes that many of the Duck Genus undergo before they attain complete plumage, we may infer, that it is the same with this species. I have described the above reputed female on the authority of writers, but have some doubts of the circumstance, and that it may prove rather an imperfect male. In the first place, the white space before the eye, and patch of the same behind on the ear, are precisely in the same place as in the adult male; but what seems most to oppose this sentiment, if the figure in the Pl. enl. be correct, is, that the feathers of the tail are not pointed, but rounded; nor does the tail itself end a point,\* as we are taught to believe it really does in both sexes. The bill too, is different in shape and size in the Pl. enlum. more like that of the Scaup.

The description of the female in Brunnich and the *Fn. groenl*. runs thus—general colour of the plumage a mouse-coloured brown; the belly paler, spotted with white; forehead, chin, region of the eyes, and ears, whitish; wing coverts, quills, and tail, like the back; under wing coverts like the belly; tail acuminated. We mention the above authors, not knowing any others who have been more conversant with the species in question.

### 53.—BROWN DUCK.

Anas fuscescens, Ind. Orn. ii. 849. Gm. Lin. i. 534. Brown Duck, Gcn. Syn. vi. 486. Arct. Zool. ii. No. 499.

THIS has a large, bluish bill; head and neck very pale brown; lower part of the last and breast the same, the feathers edged with rust-colour; wings cinereous grey; speculum blue, tipped with white; tail and legs dusky.—Inhabits Newfoundland.

<sup>\*</sup> It seems rather to correspond with the female of the Scaup.

### 54.—SPOTTED-BILLED DUCK.

Anas poecilorhyncha, Ind. Orn. ii. 850. Gm. Lin. i. 535. Zool. Indic. 23. t. 13. Spotted-billed Duck, Gen. Syn. vi. 487. Ind. Zool. 4to. 52. pl. 14.

I FIND in the drawings of Sir J. Anstruther most excellent representations of both sexes of this bird. In the male the bill is black, with the end for about one-fourth yellow; at the base, on the forehead on each side, a rufous bare spot; irides red; through the eyes a dusky streak; head and neck pale dusky grey; top of the head darker, mottled with brown; back and wings deep brown, the feathers of the first with pale margins; lower part of the back, rump, upper and under tail coverts, black; wing coverts dusky ash; bend of the wing white; on the wing a green speculum, bounded above and below with black; besides which is a bar of white above, from the ends of the larger coverts; the lower outside scapulars white, making a streak along the wing; quills and tail dusky brown, all but the two middle feathers of the latter paler on the margins, and rather pointed in shape; beneath the breast is pale rufous white, more or less spotted with brown; belly white, marked with large crescents of black; thighs brown, fringed with white; legs rufous brown, with some spots of dusky.

The general colour of the head, neck, and body in the female are cinereous brown, paler about the two first; most of the feathers fringed with white; the speculum green as in the other, but only bounded below with dusky, without any white bar above as in the male, or white on the bend of the wing; but the longitudinal streak on the outer scapulars is dusky white; legs deep red.

Inhabits the Island of Ceylon, in the East Indies, where it is very common; likewise found on the Coast of Coromandel, and there called Madun. In Lord Mountnorris's drawings is the male, from Oude, where it is named Gorumpoar, or Gerumpa.

#### 55.—DAMIETTA DUCK.

Anas Damiatica, Ind. Orn. ii. 850. Gm. Lin. i. 555. Hasselq. It. 264. Id. Voy. 201. Black-headed Duck, Shaw's Trav. 254? Damietta Duck, Gen. Syn. vi. 417. 41.

A TRIFLE bigger than the Mallard. Head, half the neck, shoulders, and tip of the tail, black; the rest of the neck before, breast, back, sides, and tail white; at the lower part of the neck, next the back, a ferruginous crescent; end of the wing the same colour near the back; quills greenish black; hind claw very obtuse.

Inhabits the Shores of Egypt: most frequent on those near the Mediterranean; chiefly in the Bay of Damietta, and between Alexandria and Rosetta, where they are taken in nets. It is probably too an inhabitant of Barbary, as it is not greatly unlike the one described by Dr. Shaw, if not the same bird.

### 56.—MALLARD DUCK.

Auas Boschas, Ind. Orn. ii. 850. Lin. i. 205. Fn. sacc. No. 131. Gm. Lin. i. 538. Phil. Trans. lxii. 419. Scop. i. No. 77. Brun. No. 87. Mull. No. 128. Kram. 341. 11. Frisch, t. 158, 159. Georgi, p. 166. Fn. groenl. No. 47. Fn. Arab. p. 3. 9. Fn. Arag. No. 76. Borowsk. iii. p. 18. Fn. Helv. Cet. Uc. Sard. 321. Scpp, iii. t. 111. 112. Blasii Anat. pl. 41? Phil. Trans. xvii. 711. pl. 15. Am. Orn. viii. 112. pl. 70. f. 7. Tem. Man. 537. Id. Ed. 2d. 836.

Anas fera, Gerin. v. t. 570. Bartr. Trav., p. 292 Bris. vi. 318. Id. 8vo. ii. 447, Boschas major, Raii, 145. A. 1. Will. p. 284. pl. 72.

Anitra, Zinnan. Vov. 105, t. 18, f. 93. Id. 106, t. 19, f. 94.

Die gemeine Ente, Bechst. Deuts. ii. 681, 682. Id. Ed. 2d. iv. 1046. Id. Must. 123. Naturf. xii. 132? Id. 137.

Wilde Ente, Gunth. Nest. u. Ey. t. 37. Schmid, p. 152. t. 131.

Canard Sauvage, Buf. ix. 115. pl. 7, 8. Pl. enl. 776. 777. Ferm. Surin. ii. 156.

Wild Duck, Mallard, Gen. Syn. vi. 489. Id. Sup. ii. 351. Br. Zool. ii. 279. pl. 97.
Id. fol. 175. Id. 1812. ii. 258. pl. 43. Will. Engl. 308. pl. 72. Albin, ii. pl. 10. Id. i. pl. 99. Arct. Zool. ii. No. 494. Bewick, ii. pl. p. 327. Lin. Tr. iv. 112. pl. I3. f. 10.—the trachea. Emb. to China, ii. p. 400. Lewin, vii. pl. 246. Id. pl. L. f. 2.—the egg. Donov. v. pl. 124. Walcot, i. pl. 77. Pult. Dors. p. 21. Orn. Diet. Graves, Vol. 1.

THIS species is nearly two feet in length, and weighs from two and a half to three pounds. The bill is greenish yellow; head and

neck glossy, changeable green; at the lower part of the neck a collar of white, passing almost round it; scapulars white, barred, or rather undulated, with minute lines of brown; back brown; rump black, glossed with green; on the wing coverts a transverse white streak, edged with a second of black; and below this the speculum, or large violet-green, lucid spot; the lower part of the neck and breast chestnut; belly pale grey, crossed with numerous, transverse dusky lines; the tail consists of twenty feathers, and is pointed in shape; the two middle greenish black, and curve upwards in a remarkable manner; and others as usual, of a grey brown, margined with white; legs orange.

The female is very plain. The bill smaller and shorter than in the male; the ground colour of the plumage pale reddish brown, spotted with black; the violet-green speculum on the wings as in the male, but none of the tail feathers are curved.

Wild Ducks frequent the marshy places in many parts of this kingdom, but no where more numerous than in Lincolnshire, where prodigious quantities are annually taken in our decoys.\* They pair in spring, and lay from ten to sixteen bluish white eggs; the nest is formed by collecting a little grass, or other vegetable near at hand, and the lining of some down plucked from the breast, with which also when the female leaves the nest, she generally covers the eggs. In respect to England, although many breed here, it is probably but a small proportion of the prodigious numbers seen in the winter, which must have emigrated from other parts. It is a very artful bird, not always making the nest close to the water, but frequently at some distance from it; in which case the Duck will take the young in its beak, or between the legs, to the water, into which they will enter as soon as hatched; has been known to lay the eggs in a high tree, in a deserted Magpie's or Crow's nest; and one has been found sitting on nine eggs, on an oak, twenty-five feet from the ground,

<sup>\*</sup> For the nature of these decoys see below, but for a more particular account consult Willughby's Ornith. p. 372, 373.; also Br. Zool. Art. Mallard.

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at Etchingham, in Sussex; the eggs were supported by some small twigs laid crosswise; in addition to which, Col. Montagn mentions one which made a nest in Rumford Tower, hatched her young, and brought them down in safety to a piece of water at a considerable distance. In France rarely seen except in winter; appearing in October, and going north in spring; they are caught in various manners, but in the greatest numbers by means of a decoy, as in England, of which the following may give an idea. It is generally formed where there is a large pond surrounded with wood, and beyond that a marshy and uninhabited country; producing a quiet There are several pipes or avenues covered at top with netting, which lead up a narrow ditch that closes at last in a funnel net: and to facilitate the entry of the Wild Ducks several tame ones, called Decoy Ducks, are used to invite the others, by which means multitudes are annually inticed into the various decoys, and are taken, and sold in the London markets. The full account of such modes of capture may be seen in Willughby's Ornithology. p. 372, and the Br. Zoology. The allowed season for catching fowl in decoys, is from the end of October till February; not being lawful from the 1st of June, to the 1st of October, under penalty of five shillings for each bird destroyed within that space. † The chief place in France for catching in decoys, is Picardy, where prodigious numbers are taken, particularly on the River Soame. In England the places are various; but chiefly in Lincolnshire, Somersetshire, &c. It is from the former that London is principally supplied; and according to the Br. Zoology, in one season, from ten decoys, in the neighbourhood of Wainfleet, no less than 31,200 were produced, but in these were included several other species, and in particular Wigeon and Teal are reckoned as one: this quantity makes them so cheap on the spot, that the decoy men would be glad to contract for years at ten-pence the couple. Another mode was

<sup>\*</sup> To set up trade it should seem to require no small capital, for in one decoy in Picardy, nets are used to the amount of 3000 livres.—Hist. des Ois. † Act. 10. Geo. II. ch. 32.

by what is is termed driving,\* practised on the young Ducks before they took wing; at other times when the old birds were in moult; in this case a number of persons assembled, who beat a vast tract, and forced the birds into nets properly placed; when in this state they are unable to take wing, and driven by men in boats, who by splashing the water frighten the birds into the places intended; and by such means 150 dozen have been taken; but this practice, being thought injurious, has been discontinued: † various other ways are resorted to; but the most singular mode is by means of a floating calabash. said to be put in practice on the River Ganges, and at Ceylon: ± a person wades into the water up to the chin, having his head covered with an empty calabash, by which he is enabled to approach the place where the Ducks are, without alarming them, suffering the man to mix freely with the flock; on which he has only to pull them by the leg under water one after another till he is satisfied, returning as unsuspected by the remainder, as when he first came among them: for this purpose the earthen vessels of the Gentoos, called Kutcharee Pots, are often used instead of calabashes; and Sir Geo. Staunton affirms, that this, or a similar method, is practised in China to the present day; | and some authors tell us that a hollow wooden vessel is used, with holes to see through.

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<sup>\*</sup> In the Bibl. Top. Galean. No. ii. part i. p. 359, I find an extract from the Antiquarian Society of Spalding, concerning the taking of Ducks—" At the Ducking on Thursday "last, were taken 174 dozen of Mallards or Drakes, moulting; and on Monday 46 dozen " and a half, in all 2646 bird." Also at Crowland in the same county, 3000 are said to have been driven into nets by dogs, aided by Decoy Ducks, at one time.

<sup>†</sup> For every Fowl so taken, between the 1st of June and the 1st of October, five shillings forfeit, and the nets seized and destroyed.—10 Geo. II. c. 32.

<sup>‡</sup> MS. in Br. Mus. 3324.

<sup>§</sup> The earthen pots used by the Gentoos for cooking are so called, and after being once used, are discarded: a dish for the table, made in them, is called a Kutcharee.

<sup>||</sup> Embassy to China, ii. p. 400.

<sup>¶</sup> Symson's Voyage to the East Indies. See Naval Chronicle, ii. 473, with a plate of the same, Also Zool. Ind. p. 21.; and Indian Zoology, p. 12. Pococke mentions the circumstance, but does not credit it.—Trav. i. 210.

A.—Anas domestica, Ind. Orn. ii. 851. β. Lin. i. 206. β. Bris. vi. 308. Id. Svo. ii. 431. Brun. No. 88. Borowsk. iii. 17. Klein, 131. Id. Ov. 34. t. 20. f. 1. Raii, 150, 1. Id. 191. 10. Will. 293. t. 75. Brown, Jam. 480. Sloan. Jam. 323. 7. Gerin. v. t. 563, 564.

Die Zahme Ente, Bechst. Deuts. ii. 705.

Tame Duck, Gen. Syn. vi. 454. Albin, iii. pl. 99. Bew. ii. pl. 333.

The above synonyms comprise the authors who have mentioned the Mallard and Duck in a domesticated state, the Varieties of which are so great, that no regular description can be given; besides, it would scarcely be in our power to add to the knowledge of the country housewife, as the general manners are so well known; no nation makes so great use of Ducks as the Chinese, but they do not prefer the wild sort, being in general extremely fond of tame ones. It is said, that the greater part of these are hatched by artificial heat; the eggs, being laid in boxes of sand, are placed on a brick hearth, to which is given a proper heat during the required time for hatching. The Ducklings are fed with crawfishes and crabs, boiled and cut small, and afterwards mixed with boiled rice; in a fortnight they shift for themselves, when the Chinese provide for them a step mother, who leads them where they may find provender; being first put on board a sampane, or boat, which is destined for their habitation, and from which the whole flock, often to the amount of three or four hundred, go out to feed, and return at command.\* method is used nine months out of twelve, (for in the colder it does not succeed) and is so far from a novelty, that it may every where be seen, more especially about the time of cutting the rice, and gleaning the crop; when the masters of the Duck sampanes row up and down the river, according to the opportunity of procuring food, which is found in plenty, at the tide of ebb, on the rice plantations, as they are overflowed at high water. It is curious to see how the Ducks obey their master; for some thousands, belonging to different boats, will feed at large on the same spot, and on a signal given

<sup>\*</sup> This I have heard several affirm. It is likewise mentioned by many authors, among which see Osb. Voy. i. 194. Toreen Voy. ii. 255.

follow their leader to their respective sampanes, without a stranger being found among them. This is still more extraordinary, if we consider the number of inhabited sampanes on the River Tigris, supposed to be no less than 40,000, which are moored in rows close to each other with a narrow passage for boats to pass up and down the river. The Tigris, at Canton, is somewhat wider than the Thames, at London, and the whole river is there covered in this manner for at least a mile.

In India, about Cochin, the bird is called Tarava,† and when first caught is almost unfit for food, living chiefly on pilchards; therefore on board a ship, the Ducks are kept for a long time on different food before they are killed. An immense trade is carried on with them in the maritime towns of India, giving employment in particular to the Christians, Mahometans, and black Jews.—Osbeck mentions two sorts of Ducks, one called Hina-a; the other, Kongo-a. He had not seen the latter, but says, that certain Wild Ducks were in such plenty as to greatly disturb the fishermen, by taking the fish out of their nets.‡

The windpipe of the male bird differs from that of the female, by having a globular or labyrinthic cavity about three quarters of an inch in diameter, just before the entrance into the lungs; independent of this, the windpipe is nearly of the same diameter the whole of its length.

<sup>\*</sup> This is a common name for a boat; those inhabited contain each a separate family, of which it is the only dwelling; and very many of the Chinese pass almost the whole of their lives on the water.

<sup>+</sup> Bartolom. Voy. to the East Indies, 8vo. Engl. ed.

<sup>‡</sup> We were (says he) astonished to see the Chinese, who had put their nets into the water, shoot constantly without aim; but found, they were forced to watch their fisheries, and to frighten away the Ducks, as they would else empty the nets sooner than the men could; never were such fearless, and numerous flights of Ducks as here, one flight after another came, notwithstanding the noise made on all sides, and endeavoured to settle near the nets; but were always hindered in the above manner.—Osb. Voy. ii. p. 33. Whether these were the Sampane Ducks, is not said; but he precisely determines them not to be the same with ours.

As our metropolis requires the earliest broods of young Ducks that can be obtained, several places within a moderate distance, think it worth while to rear them for that purpose; and none more than Aylesbury in Bucks, and its vicinity; almost the whole of which are hatched under Hens,\* as being more certain in sitting. To procure the eggs early, the first broods of the year are selected, and being well fed and kept warm, will begin to lay about October, and continue so to do during the winter. The eggs are put under the Hens, when after sitting a month, the Ducklings are taken away as soon as hatched, and fresh eggs put under the Hen for a second brood; and sometimes even a third set, by a few covetous people. The young birds are kept in a warm room, with a fire in it when the weather is cold, and fed with grains and barley meal, frequently boiled into a mess with graves, and other fattening ingredients, on which they soon become fit for the London markets; these are weekly collected by higglers, and sent alive to London in wicker baskets; seventy dozen, or more, are often collected by one higgler, and conveyed in carts to the poulterers. I find that the chosen breed is pure white, with pale bill and legs; those with yellow bills are less esteemed. We are informed, that more than 10,000 pounds worth are sent annually from Aylesbury, and its neighbourhood.

B.—Boschas major, Bris. vi. 326.
 B. Id. Svo. ii. 448. Ind. Orn. ii. 851. Gen. Syn. vi. 495.
 43. Var. A.
 Anas fera secunda, Klein, Av. 131.
 3.

This differs from the Common one in being larger, and measuring two feet six inches in length, and three feet nine inches in breadth. It is like the other in plumage, except the back, which is the colour of soot. This is probably the Variety, called by some the Roan, or Rouen Duck; which is considered by Colonel Montagu† only as a half domesticated species, obliged to leave the canals or pieces of water belonging to private persons when frozen.

<sup>\*</sup> In abundance in Spain, where they are chiefly hatched under Hens. † Orn. Dict.

I am informed by Mr. Abbot, that about the beginning of November, a great plenty of large Ducks frequent the rice fields in the lower part of the country about Savannah, and other parts of Georgia, in the rivers, lakes, and ponds; but the numbers depend on the greater or less plenty of mast, or acorns, in the swamps, on which they feed. These are known there by the name of Roan Ducks: and seem to differ from ours in many things, chiefly in size, being twenty-six inches long, and thirty-eight broad, with the head ash-coloured, mixed with numerous dusky dots as far as the middle of the neck; from thence brown, the feathers margined with dull ferruginous; wing coverts brown, edged with ash; speculum of the wing deep purple, nearly as in the Mallard, but not bounded by white; legs reddish. This sort is often seen with other Mallards in the swamps; and sometimes in great plenty to the southward, without any Mallards; it is said to differ too from the Common one, as it wants the two curled feathers of the tail.

C.—Boschas major grisea, Bris. vi. 326. B. Id. Svo. ii. 448. Ind. Orn. ii. 831. δ. Gen. Syn. vi. 495. Var. B.

Size of the last, but the plumage ash-coloured. Bill and legs black.

D.—Boschas major nævia, Bris. vi. 397. C. Id. Svo. ii. 449. Ind. Orn. ii. 851. ε. Gen. Syn. vi. 495. Var. C.

This is like the Common Mallard, but differs in having the back black, spotted with yellow.

E.—Anas adunca, Ind. Orn. ii. 851. Z. Lin. i. 206. Gm. Lin. i. 538.

Anas rostro incurvo, Bris. vi. 311. Id. 8vo. ii. 445. Borowsk. iii. p. 19. Raii, 150. Will. 280. t. 75. Klein, 133. Gerin. v. t. 565-6-7.

Die krummschnablige Ente, Bechst. Deuts. ii. 719.

Hook-billed Duck, Gen. Syn. vi. 495. D. Alb. ii. pl. 69. 97. Id. iii. pl. 100. Will. Engl. 381. pl. 75. Bewick, ii. 338. Graves, Vol. iii.

This differs not from the other Ducks, being seen in every variety of plumage incident to the Domesticated one; excepting in the bill,

which is rather longer, and bent downwards. This seems a mere Variety of the Common Duck, and breeds as well in a tame state. It seems to be kept in England from curiosity; but we are informed, that in some parts of Germany it is full as common, and the breed encouraged, to the exclusion of those with straight bills. Bancroft, in his History of Guiana,\* mentions a Wild Duck larger than the Tame one, and resembling it, except in the bill, which is black, and crooked at the end, the feet and legs being of an ash-colour; and adds, that they are found in the rainy seasons, on the banks of rivers near the sea.

Other Varieties might be here mentioned, such as those with tufted heads; and a few having some of the second quills distorted and turned upwards, called Four-winged Ducks;† and not unfrequently one or two in a brood, wanting the webs between the toes, whilst others of the same hatching have had them complete.

### 57.—MIXED DUCK.

AMONG the drawings of Mr. Dent is one, of the size of a Goose, with the air and habit of the Mallard. The bill pale blue; head to the middle of the neck black, with a purple gloss; then a narrow ring of white; below this to the breast fine ferruginous; from thence beneath white, mottled with dusky on the sides, vent dark; the lower part of the neck behind, back, and wings, deep blackish green, with a gloss of bronze on the margins of many of the feathers; second quills fringed white at the tips; greater quills black, and tail; but no recurved feathers as seen in the Mallard; legs orange.

In a note at the bottom, the above is said to be a mixed breed between the Muscovy and Common Duck.

<sup>\*</sup> p. 170. † See a Goose of this kind in Gent. Mag. vol. xxv. pl. op. p. 24. One is likewise mentioned in the Museum of Royal Cabinet of Sweden, having four legs. See Anas degener. Mus. Ad. Fr. i. p. 17.





Semifialmated Goose with the Frachea?

### 58.—CURVE-BILLED DUCK.

Anas curvirostra, Ind. Orn. ii. 852. Gm. Lin. i. 537. Pall. Spic. vi. p. 33. Curve-billed Duck, Gen. Syn. vi. 496.

SIZE of the Mallard, if not bigger. Bill as in that bird, but bent downwards; irides fulvons; general colonr of the plumage black, but more dull on the quills and under parts; the head, neck, and rump, tinged with shining grey; on the throat an oval spot of white; the five first quills white; the others black; the exterior secondary quill margined with white on the outer edge, at the end; but the outer margins in general have a gloss of blue black, forming a speculum of that colour on the wing; tail as in the Mallard, with the two middle feathers recurved as in that bird.

The above was described from a specimen in the late Museum of M. Vroeg, now dispersed, and in the Prince of Orange's Museum. The author supposed it not to be a Variety of the Mallard, with a hooked bill, but a distinct species.

# 59.—SEMIPALMATED GOOSE.—PL. CLXXVIII.

Anas semipalmata, Ind. Orn. Sup. p. lxix. Lin. Trans. iv. p. 103. vi.—the trachea. Semipalmated Goose, Gen. Syn. Sup. ii. 347. pl. 139. Penn. Outlines, iv. 129.

THIS is nearly the size of the Wild Goose. Bill brown, the cere at the base passing on each side to the eye; irides bluish; head, neck, and thighs, brownish black; round the lower part of the neck white, extending to the beginning of the back, and all beneath; the rump is also white; the rest of the back and wings deep brown; quills and tail darker, approaching to black; legs red; toes webbed only for about half way from the base. In some birds the white surrounds the neck as a collar, in others extends between the shoulders to the back.

Inhabits New-Holland: found in flocks near Hawksbury River, and called New Sonth Wales Goose; its note said to be tuneful, and melodious; and is sometimes observed to perch on trees, in the manner of the Whistling Duck. The native name is Newal Gang.

The trachea of this species, independent of the length, is singularly situated; for, after passing down on the fore part of the neck in the usual way, it makes several folds on the outside of the muscles of the breast, under the skin, before it enters the cavity; which circumstance is shewn on the plate, beneath the representation of the bird.—For the figure of the bird we are indebted to our friend Mr. Lambert; and for that of the trachea to Mr. Heaviside, in whose Museum, among very many professional and other subjects, may be seen well preserved specimens of this organ.

### 60.—CREAM-COLOURED GOOSE.

SIZE of a Common Goose. Bill very stont, deep red, with a black tip; plumage in general whitish dun, or cream-colour; across the shoulders two or three rows of transverse dusky blotches, and a few of the same on the wing coverts; ends of the quills chocolate; tail black; legs moderate in size, and red.

Inhabits New South Wales.

### 61.—RED-BILLED WHISTLING DUCK.

Anas autumnalis, Ind. Orn. ii. 852. Lin. i. 205. Gm. Lin. i. 537. Jacq. Vog. p. 6. 4.
— fistularis Americana, Bris. vi. 400. t. 38. f. 1. Id. Svo. ii. 466. Gerin. v. t. 588.

Bartr. Trav. 293.

Anas fera mento cinnabarino, Mars. Dan. 108. t. 52. Klein, Av. 105. Siffleur à bec rouge, et Narines jaunes, Buf. ix. 183. Pl. cnl. 826. Red-billed Whistling Duck, Gen. Syn. vi. 498. Id. Sup. 274. Edw. pl. 194.

SIZE of a Wigeon; length twenty-one inches. Bill two inches long, red, nail black; in young birds wholly black; irides hazel;

crown of the head chestnut; nape streaked with the same; sides of the head and throat dirty white; lower part of the neck rufous chestnut; breast and between the shoulders yellow ash, paler on the breast, and the feathers with yellowish margins; back and scapulars chestnut; inner wing coverts ash, inclining to rufous; greater coverts ash; quills black, but most of them have the base white, making an oblique bar on the wing; lower part of the back, the rump, tail, belly, and under the wings, black; under tail coverts mottled black and white; legs yellow, claws black; hind toe pretty long.—Inhabits the West Indies, also Cayenne, and other parts of the Continent contiguous.

Is said to be very common at New Granada, in South America, and frequently kept tame in the farm yards, between the tropics; but is apt to be quarrelsome, and will often fly away. The Spaniards call it Pisesic, from its voice; known to the English by the name of Spanish-main Duck; is now and then seen alive in our menageries, in England, and is said to have propagated in an aviary at Schonbrun, in Sweden.

### 62.—BLACK-BILLED WHISTLING DUCK.

Anas arborea, Ind. Orn. ii. 852. Lin. i. 207. Gm. Lin. i. 540. Lawson, Carol. 149.
——fistulans Jamaicensis, Bris. vi. 403. Id. Svo. ii. 467. Raii, 192. Sloan. Jam. 324. t. 273. Brown, Jam. p. 480.

Siffleur à bec noir, Buf. ix. 185. Pl. enl. 804.

Black-billed Whistling Duck, Gen. Syn. vi. 499. Edw. pl. 193. Arct. Zool. ii. No. 492. Cates. Car. App. xxxvii.

LESS than a Mallard. Bill black; irides hazel; crown of the head dusky, somewhat crested at the back part, and rufous brown; neck long and slender, hind part of it brown; back and scapulars the same, but the margins of the feathers rufous; sides of the head and throat white; fore part of the neck white; breast pale rufous; both the last spotted with black; belly, thighs, and vent, like the

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neck, but the spots are smaller, and most numerous on the sides; wing coverts rufous, spotted with black; rump and upper tail coverts dark brown, edged with rufous; quills and tail dusky; legs longer than in the Common Duck, and lead-colour; claws black.

Inhabits Jamaica, where it is remarked for making a whistling kind of noise, and is said to build in trees; in some seasons migrates into Guiana, and other neighbouring parts, and is valued for food. I once received a living specimen from Jamaica, and kept it for some time in my garden, but it was in the highest degree wild, and even ferocious; it would by no means become familiar, and rarely would take any food, while any one was near to observe it. Is supposed to frequent Carolina in the winter; at least one, like it in name, is said, by Lawson and Catesby, to be on that coast. One of these in the British Museum had the title of Opano Duck, which name, we are informed, it bears at Guiana.

### 63.—PIPING DUCK.

LENGTH eighteen inches. Bill two inches long, and black; the crown, and the middle of the nape, to about half of the neck, black brown; the rest of the neck pale rufous, but the middle of each feather is very dark, almost black, and the margins of the feathers pale brown; the lesser wing coverts ferruginous; the others, with the quills, brown; belly pale ferruginous; sides under the wings striped black and white; sides of the rump black and brown; vent dull white; across the thighs mottled with pale ash-colour; legs black brown, and fully webbed. In one specimen the belly had each feather dashed with brown down the shaft.

Inhabits New South Wales, where it has obtained the name of Whistling Duck, no doubt from the manners corresponding with that bird, and probably having a similar whistling kind of note; is observed to frequent the shores of the Coal River.

### 64.—FLUTING DUCK.

SIZE of the last. Bill black, and shaped much as in that bird; head and neck dun buff-colour, streaked a little with black; behind the neck a narrow list of black; sides of the neck transversely spotted with black; back undulated with rufous dun; breast plain; belly and shoulders rufous, the rest of the wing brown; but with no lucid speculum; beneath the wings, on the sides, the feathers are long and straight; vent and sides of the rump white, but the white not meeting at top; tail brown, short; legs black.

Inhabits New South Wales, with the last, and is perhaps related to it; but whether a Variety, or differing in sex, is not known. The note somewhat like the sound of a flute.\*

### 65.—SCAUP DUCK.

THE MALE.

Anas Marila, Ind. Orn. ii. 853. Lin. i. 196. Faun. suec. No. 111. Phil. Trans. lxii. 413. Gm. Lin. i. 509. Brun. No. 50, 51. Muller, No. 111. Frisch, t. 170? Georgi, p. 166. Am. Orn. viii. 84. pl. 69. f. 3. Tem. Man. 563. Id. Ed. 2d. 865. Anas hyberna mas, Gerin. v. t. 577.

- subterranea, Scop. i. No. 83?

- nigra ultima nova, Ström, Sönd. 230.

Glaucium minus striatum, Bris. vi. 416. 26. A. Id. 8vo. ii. 470.

Fuligula Gesneri, Raii, 142. A. 6. Will. 279.

Die Bergente, Besch. d. Berl, Nat. iv. 602. t. 17. f. 3, 4.—the trachea Bechst. Deuts. ii. 640. Id. Ed. 2d. iv. 1016.

Topper, of Veld-duiker, Sepp, Vog. iii. t. p. 269.

Scaup Duck, Gen. Syn. vi. 500. Id. Sup. ii. 351. Br. Zool. ii. No. 275. pl. 100. Id. fol. 153. pl. Q. Id. 1812. ii. 251. pl. 42. Arct. Zool. ii. No. 498. Bew. ii. pl. p. 339. Lin. Trans. iv. 115. pl. xvi. f. 3, 4.—the trachea. Lewin, vii. pl. 250. Walcot, i. pl. 60. Pult. Dors. p, 20. Orn. Dict. & Supp.

<sup>\*</sup> The Seety, or Whistler Duck, is said to be common in Bengal; but it is not described. See *Field Sports*, ii. p. 66.

THE FEMALE.

Anas frænata, Mus. Carls. fasc. ii, t. 38. Ind. Orn. ii. 853. Tem. Man. 570. Id. Ed. 2d. 866. Kramer, 342-17.—female?

Le Canard brun, Buf. is. 252. Pl. enl. 1007. Br. Misc. t. 62.

Duck with a circle of white feathers round the bill, Ray's Letters, p. 61.

Scaup Female, Lewin, vii. pl. 250.\* Gen. Syn. Sup. ii. 351.

The male Scaup Duck is about eighteen inches in length, twentynine in breadth, and weighs twenty-three onnces. The bill two inches long, and broader at the end, lead-colour, with a paler base; irides golden yellow; the head is full of feathers, and, as well as the neck, black, glossed with green; lower part of the neck and breast black; back and scapulars pale grey, finely undulated with numerous transverse lines of black; lower part of the back, rump, and vent, black; the wing coverts crossed with fine, alternate dusky and white lines, so minute as to appear, at a distance, as powdered with these two colours; the ten prime quills are greyish ash, the four outer ones dusky black on the outer webs; the other six greyish white, but the ends of all black; from the eleventh to the twentieth white, with dusky ends, forming a broad white bar on the wing; the five next the body, and the tail feathers dusky; the latter consists of fourteen feathers: the under parts of the body from the breast white, powdered with dusky between the legs, and sides over the thighs; legs pale lead-colour; webs and claws black.

In the female the bill is broad, flat, and pale blue, with a black knob; irides yellow; head dark brown; at the base of the bill a band of white, almost half an inch broad, passing quite round the forehead, cheeks, and throat; breast dark brown, the feathers tipped with darker brown; back and scapulars light grey, waved with irregular dusky lines; belly dirty white; vent the same, waved with narrow dark lines; rump and tail very dark brown; the last very short; greater quills as the tail; secondaries white, tipped with brown; but the ends of the greater quills are darker than the rest; legs dusky blue, webs black.

The male is found to vary exceedingly, especially about the head and neck,\* and has a tracheal labyrinth, which is placed the same as in the Mallard; it is rounded on one side, and flat on the other; in shape irregular; the flat surface is for the most part open, except round the rim, and an irregular bony arch crosses it from side to side; independent of these, the surface is covered with a delicate, fine elastic membrane, stretched over in the manner of the head of a drum. See the plate above referred to.

From these birds varying so much in plumage, it is no wonder that some of the males have been taken for the other sex, and it seems only of late, that this has been determined. I owe the first hint of this to the late Mr. Tunstall, but the positive certainty of the circumstance to that indefatigable naturalist the late Mr. Boys, who was at the pains to procure me several specimens.

The Scaup Duck is not uncommon in Eugland in the winter, but not confined to the sea coast, being frequently met with in fresh waters. Is supposed to feed on broken shells, called scaup, whence the name. It is amusing to see their great facility in diving when kept tame, and which these birds readily submit to.

Is found in the northern parts of Europe; common on the northern shores of Russia and Siberia, most frequent about the great River Ob; breeds in the north, migrating southward in winter; however, if the same as Scopoli's bird, it must breed in the more southern parts, as it is very common in Carniola, on the Lake Zirchnichew, where it makes the nest in subterraneous hollows in the banks; and this author observes, that they are often killed in vast numbers, by the countrymen, with clubs: being driven out of their holes in the full sunshine, in the middle of the day, which blinds them, so as to prevent their being able either to resist, or fly away.

Inhabits America, as high as Hudson's Bay; comes there in May, and retires in October. We find it also as far southward as

<sup>\*</sup> Willughby says, that among the pack of forty or fifty, you shall not find two alike.

Carolina; is known in Georgia, and called by some the Raft Duck,\* frequenting the ponds in flocks during the winter season; is commonly fat, and the flesh well flavoured. Drawings of both sexes sent from Savannah, in Georgia, by Mr. Abbot, were distinguished as such, by the names of Grey Duck and Blue Bill.

A.—Millouinan, Buf. ix. 221. Pl. enl. 1002. Ind. Orn. ii. 854. Gen. Syn. vi. 502, 49, A.

Size of the last; length twenty-one inches. Head, neck, and breast, black, bronzed with green, with a hue of copper about the eyes; lower part of the breast and belly white; back, scapulars, lesser wing coverts, and between the legs striated with fine transverse lines of black, and dusky white; lower part of the back, vent, and tail, black; greater wing coverts half black, half white; second quills much the same; prime quills dusky; legs black.

This was killed in France, on the coast of Picardy. Buffon also mentions another from Louisiana, but smaller. It is probably only a Variety of the Scaup Duck.

# 66.—WHITE-FACED DUCK.

THE MALE.

Anas Discors, Ind. Orn. ii. 854. Lin. i. 205. Gm. Lin. i. 535. Bartr. Trav. 293. Amer. Orn. viii. 74. pl. 68. f. 4. Frankl. Narr. App. p. 701.

Querquedula Americana, Bris. vi. 452. Id. 8vo. ii. 478. Klein, Av. 134. Brown, Jam. 481.

Sarcelle Soucrourou, Buf. ix. 279. Pl. enl. 966.—male.

Blue Wing, Burnab. Trav. p. 16.

White-faced Duck, Gen. Syn. vi. 502. Arct. Zool. ii. No. 503. Cates. Car. i. pl. 100. Brown, Jam. 481.

<sup>\*</sup> But the Raft Duck, truly so called, is another species, described by us hereafter.

#### THE FEMALE.

Querquedula Virginiana, Bris. vi. 455. Id. 8vo. ii. 479. Anas Quacula, Klein, 134. 23. Sarcelle Soucrourette, Buf. ix. 280. Pl. enl. 403. Blue-winged Teal, Gen. Syn. vi. 503. Cates. Car. i. pl. 99.

SIZE between a Wigeon and a Teal; length fifteen inches and a quarter. Bill black; crown the same; base of the bill surrounded with black; between the bill and eye a white stripe, ending on each side of the chin; the rest of the head and neck glossy green, changing to violet; back brown, transversely waved with lines of grey; lower part of the neck before, breast, and belly, pale rufous, marked with dusky spots; vent black; wing coverts blue; below them a white band; speculum green; quills and tail brown; legs yellow.

The female is rather smaller. Head and neck brown, mixed with pale grey; back deeper brown, the feathers margined with yellowish buff; breast and sides the same, but paler; belly and vent pale yellowish brown; scapulars dusky black; wing coverts pale blue; speculum green; between the two a narrow bar of white; quills and tail dusky; legs dusky yellow.

This is an American Species,\* but is rarely found more northward than New York. Catesby observes, that they come into Carolina in August, and feed on the rice, remaining there till October; and when the rice fails, attack the wild oats; chiefly frequent the ponds and fresh waters. The flesh is accounted delicious, and the bird, for the most part, very fat. It is met with also at Cayenne and Guiana. Mr. Abbot says, that the adult male is very rare in Georgia, and that in general these birds are more frequent in ponds, late in the spring. I observe in one drawing, sent from this Gentleman, that the back and sides of the neck are waved with small lines, as in the American Teal.

<sup>\*</sup> The American Shell-drake and Blue-wing exceed all of the Duck kind, and these are in prodigious numbers.—Burnab. Trav. p. 16.

# 67.-SHIELDRAKE.

Anas Tadorna, Ind. Orn. ii. 854. Lin. i. 195. Fn. suec. No. 113. Gm. Lin. i. 506. Brun. No. 45, 46, 47. Muller, No. 107. Frisch, t. 166. Georgi, 165. Gmel. reise, ii. 185. t. 19. A. cornuta. Schr. der Berl. Nat. iii. 373. t. 7. f. 3, 4.—the trachea. Bor. iii. p. 16. 11. Raii, 143. A. 1. Will. 278. t. 70, 71. Bris. vi. 344. t. 33. f. 2. Id. 8vo. ii. 477. Sepp. ii. t. 99, 100. Tem. Man. d'Orn. 536. Id. Ed. 2d. iv. 834.

Vulpanser, Klein, Av. 130. 9. Gerin. v. t. 576.

Die Brandente, Bechst. Deuts. ii. 570. Id. Ed. 2d. iv. p. 976. Naturf. xii. 132.

Tadorne, Buf. ix. 205. pl. 14. Pl. enl. 53.—male.

Shieldrake, Gen. Syn. vi. 504. Id. Sup. 275. Id. Sup. ii. 353. Br. Zool. ii. No. 278.
Id. fol. 154. pl. Q. Id. 1812. ii. 256. Arct. Zool. ii. 572. D. Albin, i. pl. 94.
Will. Engl. 363. pl. 70, 71. Hayes's Birds, pl. 28.—male. Bewick, ii. pl. in p. 341. Lin. Trans. iv. 117. pl. xv. f. 8, 9.—the trachea. Lewin, vii. pl. 348. Id. li. f. 1.—the egg. Walcot, i. pl. 57. Donov. pl. 71. Ost. Menag. Graves, Br. Orn. Orn. Dict. § Supp.

SIZE of the Wild Duck; length two feet; weight two pounds two ounces. The bill turns up much at the end, is pretty broad, and red; at the base a rising knob; the nostrils and nail at the end black; head, throat, and part of the neck, greenish black; the rest of the neck, back, rump, and upper tail coverts, white; on the breast a broad rufous bay band, which growing narrower, passes above the wings, and encircles the upper part of the back; scapulars black; wing coverts white; some of the outer ones, bastard wing, and quills, black; some of the quills part white part black; speculum green gold, glossed with copper; beneath from the breast white, down the middle an irregular list of black; vent pale rufous; tail white, of fourteen feathers, all but the two outmost tipped with black; the legs red. The female is smaller, but when adult does not essentially differ in plumage, except that the colours are less vivid.

The young, however, before the first moult, differ much from the old birds. The bill pale red; crown and neck behind dusky brown; forehead, cheeks, and all beneath from the chin, white; quills black; and except the two or three first, as well as the feathers of the speculum, tipped with white; wing coverts mixed with dusky.

This species, called also Scaledrake, or Skeel-goose, is common in the neighbourhood of the sea, in many parts of England; where it is found throughout the year. Inhabits the Orknies in the winter, and returns in spring northward. It frequently breeds in deserted rabbit burrows, which it occupies in the absence of their owners, who, rather than make an attempt to dislodge the intruders, are at the pains to form others, though, in defect of ready-made quarters, these birds will frequently dig holes for themselves. The female lays as many as sixteen, roundish white eggs; \* these are placed at the farthest part of the hole, covered with down, supplied from the breast of the female, who sits about thirty days. The young, as soon as hatched, take to the water, and swim surprisingly well. The mother is very careful of her brood, using many stratagems to favour their escape when in danger, and will often carry them from place to place in the bill. The young birds do not come to complete plumage till the second year at least. They may be hatched under a Tame Duck, and the young readily brought up, but are apt, after a few years, to attempt the mastery over the rest of the poultry, and sometimes attack every thing that comes in their way; though it is very rarely that they will breed during confinement. † The natural food of this bird consists of small fish, marine insects, and shells, with a portion of herbage; in a confined state will eat bread, grain, and greens; but it will never thrive so completely, as in the neighbourhood of salt water, which seems essential to its well being; however, as an article of diet, it is not coveted, as the flesh is rank and unsayoury, though the eggs have at all times been esteemed.

The male of this species, however externally similar to the other sex, is to be distinguished by means of the trachea, which has the

<sup>\*</sup> The younger birds lay only as far as twelve. - Hist. des Ois.

<sup>†</sup> One instance is recorded in the the Orn. Dict. Daubenton talks of a mixed breed between this and our domestic poultry; but adds, that the produce was not fertile. See Encycl. Method. i. p. 341. Mr. Lewin has observed beautifully plumaged Ducks, produced between the Common Duck and Shieldrake.

addition of a labyrinth at the lowest part, and is unlike that of any one hitherto mentioned; it consists of two roundish bladders, one bigger than the other, of unequal surface, and most delicate bony texture; being of so tender a fabric, as scarely to bear the pressure of the finger, without being indented in young subjects, or breaking in old ones. See the figure in the *Lin. Trans.* above referred to.

This species is found as far as Iceland to the north; visits Sweden in the winter, and returns in spring; frequent in Asia, about the Caspian Sea, and all the salt lakes of the Tartarian and Siberian Deserts,\* as well as in Kamtschatka.† Our voyagers, too, if they were right in the species, are said to have met with it at Falkland Isles,‡ also at Van Diemen's Land.§

A.—This is nearly the size of the Moscovy Duck. The bill shorter than in the Common Wild Duck; head and neck shining black; the remainder of the neck to the body pure white; wings to the quills white, the larger quills black, the second quills black, brown, and white; the belly varied in the same manner.

This bird, which appears to be no other than the Shieldrake, is said to be met with in the salt ponds of the Islands of Ivica and Formentera, in the Mediterranean, coming and departing with the Swan.

# 68.—NEW-HOLLAND SHIELDRAKE.

SIZE of the Shieldrake, with much of the habit of that bird; length twenty-four inches. Bill black; head and neck black, below

<sup>\*</sup> Between Sysran and Symbyrsk, in the spring, Mr. Lepechin met with the Shieldrake, and other sorts of Ducks, in such quantities, as to be obliged to stop his ears on account of their noise.—Decouv. russ. i. 472. † Arct. Zool.

<sup>‡</sup> The Sheldrakes swarmed in such a manner at Falkland Islands, that in sailing our boats under the rocks we have killed hundreds with our oars and boat-hooks,—Penrose, p. 34. § Cook's last Voy. i. p. 229. I rather suspect this to be the New-Holland, or following Species.

this a ring of white, about half an inch broad; next to this the breast is ferruginous for the breadth of five or six inches; back brown, marked with numerous, pale, undulated lines, giving a powdery appearance; wing coverts white; prime quills black; the secondaries deep shining green; the lower scapulars bright chestnut as far as the quills; from thence to the upper edge grey; belly dark brown, crossed with fine undulated grey lines like the back; rump and tail black; the last glossy, and short; legs black.

Inhabits New-Holland.

### 69.—ASH-HEADED DUCK.

LENGTH twenty inches. Bill one inch and three quarters, black, with a small nail at the end; head, neck, and breast, cinereous white, clouded a little with brown on the latter; middle of the back brown; scapulars ferruginous tawny; wing coverts above and beneath greenish black; in the middle, above, glossed with purple; below this a patch of white; from the middle of the second quills being so on the outer webs to within one inch and a half of the ends; otherwise black; greater quills plain black; belly and sides fine tawny chestnut, with a mixture of white down the middle; between the legs and behind deep chocolate brown; vent and under tail coverts white; tail black; legs stout, long, and red, bare one inch above the joint; hind toe long, claws black; at the bend of the wing a blunt, stout knob, or spur.

A second of these, supposed the other sex, was smaller, and not greatly different in colour; the beginning of the back, as well as the scapulars, tawny, and the belly paler; the deep brown behind the legs wanting.

Inhabits the Cape of Good Hope. These were formerly alive in the possession of the Rev. Mr. Bale, of Withiam, and are now in the

collection of Lord Stanley. One, greatly corresponding, was formerly in the Leverian Museum; and among Sir Joseph Banks's drawings another, brought from the Cape of Good Hope.

### 70.—CRIMSON-BILLED DUCK.

Anas erythrorhyncha, Ind. Orn. ii. 855. Gm. Lin. i. 517. Crimson-billed Duck, Gen. Syn. vi. 507.

LENGTH fifteen inches. Bill two inches long, turning up a little at the end, colour fine deep crimson; irides red; plumage on the upper parts dusky brown, palest on the forehead; the feathers of the back very pale on the margins; chin, sides of the head beneath the eye, and the rest of the under parts, white; but the sides of the breast are irregularly spotted with brown; on the wing a transverse narrow bar of white; below it another of buff-colour; tail and legs dusky black.—Inhabits the Cape of Good Hope.

### 71.—ILATHERA DUCK.

Anas Bahamensis, Ind. Orn. ii. 855. Lin. i. 199. Gm. Lin. i. 516. Bris. vi. 358. Id. 8vo. ii. 456. Klein, Av. 134. 18.

Mareca prima Aldr. Raii, 149. 4. Will. 292. Id. Engl. 379. § xi.

Le Marec, Buf. ix. 256.

Ilathera Duck, Gen. Syn. vi. 507. Arct. Zool. ii. No. 495. Cates. Car. i. pl. 93.

SIZE of the Common Duck; length seventeen inches. Bill lead-colour, marked on each side, near the base, with a triangular orange spot; top of the head rufous grey; neck behind, back, scapulars, and rump, rufous brown; cheeks, throat, and fore part of the neck, white; breast, belly, and thighs, rufous grey, spotted with black; under tail coverts plain; lesser wing coverts dusky brown, the greater green, with black tips; second quills dull yellow, prime ones dusky; legs lead-colour.

<sup>\*</sup> The whole breast and lower belly hath an obscure resemblance of the colour of oaken boards, and is besides variegated with black points.— Willughby.

In the collection of Lord Seaforth was one, with the speculum first fine rufous, then green bronze, or copper, with a black line below, and again rufous, making in all a large patch; the tail greatly cuneiform, tapering in a point, pale buff, or yellowish.

Inhabits Brazil, also the Bahama Islands, particularly that called Ilathera, whence the name, but is not a numerous species. Is said to perch, and roost on trees, like the Summer and Whistling Ducks, and does not migrate northward to breed.

### 72.—MARECA DUCK.

Anas Brasiliensis, Ind. Orn. ii. 856. Gm. Lin. i. 517. Bris. vi. 360, Id. 8vo. ii. 457. Raii, 149. 5. Will. 293. § xvi.

Le Mareca, Buf. ix. 256.

Mareca Duck, Gen. Syn. vi. 508. Will. Engl. p. 379. § xii.

THE bill in this bird is glossy black; top of the head, upper part of the neck, and back, umber colour; on each side of the head between the bill and eye a round yellowish white spot; chin white; fore part of the neck and under parts dark grey, with a mixture of gold; the upper wing coverts light brown, with a greenish gloss; the greater brown, edged outwardly with blue green, and tipped with black, forming two bands of these colours; quills brown, tipped with white; tail black, and cuneiform; legs red.

Inhabits Brazil, and seems to be a species not greatly differing from the former, both of them being called by the name of Mareca by the Brazilians.

# 73.—STRIATED DUCK.

Anas virgata, Maxim. Tr. i. 282.

LENGTH seventeen inches and three quarters. Plumage rusty yellowish, the whole internal wing black; first quills with white shafts; side feathers of the body with a yellowish white, longitudinal stripe.

Inhabits Brazil in flocks. The flesh is well flavoured.

#### 74.—SHOVELER DUCK.

Anas-clypeata, Ind. Orn. ii. 856. Lin. i. 200. Fn. suec. No. 119 Gm. Lin. i. 518. It. Gott. 167. Scop. i. No. 70. Brun. No. 67, 68, 69. Mull. No. 117. Kram. 342. 15. Frisch, t. 161, 162, 163. Bris. vi. 329. t. 32. f. 1.—male. Id. 8vo. ii. 450. Georgi, 166. Borowsk. iii. p. 12. Fn. Helv. Sepp, t. 130, 131. Amer. Orn. viii. 65. pl. 67. f. 7. Tem. Man. d'Orn. 543. Id. Ed. 2d. p. 843.

Anas latirostra, Gerin. v. t. 572.—male. Id. 573.—female. Klein, Av. 134. Id. Stem. 31. t. 35. f. 1. a.—c.

Anas platyrynchos, Raii, 144. 13. Will. 283. § xv. Id. 284. xvi.—female.

altera, Raii, 143. A. 9. Will. 283.—male.

Anas virescens, Mars. Dan. v. p. 120. t. 58.

Die Loffelente, Bechst. Deuts. ii. 675. Naturf. xii. 135. Id. xxv. s. 12. Schr. d. Berl. Nat. iii. 373. 17. t. 7. f. 2.—the trachea.

Stockente, Gunth. Nest. u. Ey. No. 92.

Souchet, Buf. ix. 191. Pl. enl. 971, 972.

Shoveler, Gen. Syn. vi. 509. Id. Sup. ii. 353. Br. Zool. ii. No. 280. Id. fol. 155. pl. Q. 4. Id. 1812. ii. p. 264. Arct. Zool. ii. No. 485. Will. Engl. 370. 15.—male. Id. 371. 16. 17.—female. Albin, i. pl. 97, 98. Cat. Car. i. pl. 96.—fem. Hayes's Birds, pl. 27.—male. Lin. Trans. iv. 109. pl. xiii. f. 4, 5.—the trachea. Bewick, ii. pl. in p. 345. Lewin, vii. p. 19. pl. 252. Walcot, i. pl. 67. Pult. Dors. p. 21. Ost. Menag. t. p. 52.—male. Orn. Dict. & Snpp.

LENGTH twenty-one inches, breadth thirty; weight twenty-two ounces. Bill almost three inches long, black, and remarkably broad at the end, the edges much pectinated; irides fine deep yellow; head and neck glossy green, changing to violet; lower part of the neck and breast white, marked with a few spots like crescents; scapulars white; back brown; belly chestnut; vent black; the first and second wing coverts pale blue, the greater brown, tipped with white, forming a band on the wing; quills brown; some of the middle ones edged with green, forming a spot of that colour; tail brown, of fourteen feathers, more or less edged with white, the outer ones wholly white, the shape cuneiform; legs orange red.

The female is a trifle smaller, and differs in plumage; the wing is marked much the same, though less bright; the rest of the plumage greatly approaching to that of the Wild Duck; for the first

year the wing is like the rest of the body: both sexes vary much in colour, before they acquire the adult plumage; and the male differs from the other sex inwardly, having, just above the divarication of the windpipe, where it passes into the lungs, an enlargement or labyrinth, which consists of a roundish bony arch, but very small in proportion to the bird, for the shape of which see *Lin. Transact*.

This species is now and then met with in England, but not in great numbers. Willughby mentions one found at Crowland, in Lincolnshire, and we have received the male more than once from the London markets. In April 1790, two males and three females settled on a pond near Sandwich, in Kent; one of each was shot, and forwarded to me by Mr. Boys, who informed me that two were killed near the same place a few years before; and the above were all he ever met with: and we are informed by Dr. Lamb, that four were seen together on the River Kennet, and three of them shot the beginning of September, 1814. We believe it does not often breed in this kingdom; \* but is said to come into France in February, and some of them to stay through the summer. It lays ten or twelve rufous eggs, placed on a bed of rushes, or dried grass, in the same places as the Summer Teal, and departs in September, at least the greater part, for it is rare to see one in the winter. The chief food is insects, for which it is continually muddling in the water with its bill; said also to be dextrous in catching flies, which pass in its way over the water; shrimps also have been found in its stomach.

This bird is likewise found in most parts of Germany, throughout the Russian dominions, and quite to Kamtschatka; extends southward as far as Spain, whence, as well as from Barbary, it finds its way to the markets at Gibraltar, in great abundance, along with Mallards, and others of the Duck Genns; yet, although with us

<sup>\*</sup> Mr. Youell, of Yarmouth, in Norfolk, procured from the marsh at Winterton, upwards of thirty eggs of the Shoveler Duck, which were put under some domestic Fowls, and most of them hatched. One of them, a male, lived ten months, and had then obtained, in a considerable degree, the adult plumage of the Shoveler.—See Lin. Trans. xiii. p. 616.

the flesh is thought pretty good, it is there reckoned coarse and unsavoury. It is likewise found in other parts of the Continent, for we have observed both sexes represented in various drawings done in India. Is known on the Coromandel Coast by the name of Lunkoor, and in some parts of India the male is called Lahkato, and the female Alpucheto.

Is met with in North America, about New York and Carolina, during the winter season. A bird similar to this, if not the same, comes to Hudson's Bay in the spring, and makes a whistling noise: is known there by the name of Mimenewick. Found in the rice fields near Savannah, in Georgia, but rare.

A.—Anas muscaria, Lin. i. 200. β. Fn. suec. No. 120. Raii, Syn. p. 146. Will. 287.
 Frisch, 262. Ind. Orn. ii. 857. β.

Anas clypeata ventre candido, Bris. vi. 337. A. Id. Svo. ii. 451. Gen. Syn. vi. 511. 55. A.

This differs from the former merely in having the belly white.

B.—Anas fera, Boschas Mexicana, *Bris.* vi. 327. *Id.* 8vo. ii. 449. Tempatlahoac, *Raii*, 176. *Will.* 299. *Id. Engl.* 387. *Gen. Syn.* vi. 511. *Ind. Orn.* ii.

Le Canard spatule, Voy. d'Azara, iv. No. 431.

Size of a Tame Duck. Bill broad, long, and black; tongue white; head and neck green, glossed with purple and black; irides pale; breast white; the rest of the body beneath fulvous, with two white spots on both sides near the tail; above beautified with certain semicircles, the outer edges of which from white incline to brown; the middle, or inner part from black to a shining green; wings at the beginning blue, next white, and then shining green; yet their extremes are on one side fulvous, on the other shining green; the circumference of the tail above and beneath white; else black underneath, and of a Peacock-colour above.

Inhabits Mexico. Its flesh like that of other marsh birds.

# 75.—RED-BREASTED SHOVELER.

Anas rubens, Ind. Orn. ii. 857. Gm. Lin. i. 519.

Barbary Shoveler, Shaw's Trav. 254?

Red-breasted Shoveler, Gen. Syn. vi. 512. Br. Zool. ii. No. 281. Id. 1812. ii. 265.

Bewick, ii. p. 349. Orn. Dict. & Supp.

SIZE of the Common Duck. Bill large, serrated on the sides, and brownish yellow; throat and breast reddish brown; back brown, growing paler on the sides; tips and pinions of the wings grey; quills brown, the rest greyish brown; speculum of the wings purple, edged with white; vent bright brown, spotted with darker; legs short, feet small, reddish brown. In the female the colours are more faint; speculum of the wings blue.

This bird has sometimes been taken in the decoys of Lincolnshire. Shaw mentions one by the name of Barbary Shoveler, much like the above, if not the same; but in that bird the speculum was composed of three colours—white, blue, and green.

We learn from Colonel Montagu, that having had an opportunity of dissecting a specimen of the Red-breasted Shoveler, he found the trachea so exactly corresponding with that of the Common Shoveler, as to leave no doubt of its belonging to that species, but in what stage of life at present seems uncertain; or whether the colour of the breast differs at any particular season of the year, as in several other birds. This was shot near Kingsbridge, in Devon, on the 5th of August.\*

# 76.—NEW-HOLLAND SHOVELER.

Anas Rhynchotis, Ind. Orn. Sup. p. lxx. New-Holland Shoveler, Gen. Syn. Sup. ii. 359.

LENGTH eighteen or nineteen inches. Bill like that of the Shoveler, and much pectinated; tongue pointed, with a membrane

<sup>\*</sup> See Orn. Dict. One killed at Berwick, in 1810.—Wern. Trans. iii. d. 526. VOL. X. S s

on each side, near the end; plumage in general as in the Blue-winged Shoveler, but darker, and without the white crescent behind the eye; wing coverts pale blue; speculum white; below this the teathers have a gloss of green; vent black, and contiguous thereto mottled only with black; legs pale flesh-colour; in some birds the chin is bluish white. The female differs in not having the vent black; but in other points both sexes agree.

Inhabits New-Holland. One shot at Botany Bay, in May, appears to agree in so many things with the Common Shoveler, that it might easily be taken for a Variety of that bird.

## 77.—JAMAICA SHOVELER.

Anas Jamaicensis, Ind. Orn. ii. 857. Gm. Lin. i. 519. Teal of Guiana, Hist. Guian. p. 170? Jamaica Shoveler, Gen. Syn. vi. 513.

SIZE of the Buffel-headed Duck; length sixteen inches. Bill one inch and three quarters; in shape very broad, and turns up a little at the end; upper mandible blue, but the place of the nostrils, the sides, and all the under mandible orange; eyes placed high up in the head; irides brown; top of the head, taking in the eyes, black; sides, beneath the chin, and throat, white, mixed with blackish spots; upper part of the neck brown; the lower all round, breast and belly, barred dusky, and deep ferruginous, inclining to saffron-colour; lower part of the belly, vent, and rump, barred dusky and dirty rufous white; under tail coverts dirty white; back and scapulars brown, a little marked with minute, yellowish dots; wings and tail plain dusky brown, the last cuneiform in shape, and rather long; legs orange.

This appears to be a distinct species. I received it with other birds from Jamaica, where it first appears in October, or November, and staying till March, retires north with several other species.

Bancroft, in his History of Guiana, mentions a Teal, somewhat larger than the Common one; the bill broad and black; feathers of the head whitish brown; those of the neck, back, and wings, grey brown, variegated with spots and bars of chestnut; breast and belly dull white. I suspect this to be the same with my bird, but certainly distinct from the European Shoveler. He says, that it frequents the rivers, like the Guiana Wild Duck, and at the same seasons.

#### 78.—URAL DUCK.

Anas leucocephala, Ind. Orn. ii. 858. Gm. Lin. i. 516. Scop. i. No. 78. Tem. Man. 557. Id. Ed. 2d. 860. Gunt. Av. t. 28.

Anas mersa, Pall. reise, ii. 713. 29. t. H. Gm. Lin. i. 520. Falck. It. iii. t. 23.

Weisskopfige Ente, Bechst. Deuts. Ed. 2d. iv. 1124.

White-headed Duck, Gen. Syn. vi. 478. Shaw's Trav. 254.

Ural Duck, Gen. Syn. vi. 514.

THIS is a trifle bigger than the Common Teal. Bill large, broad, very tumid above the nostrils, and bifid in the adult bird; the end marked with diverging striæ, colour blue; head and part of the neck white; on the crown a large patch of black; eyelids black; middle of the neck the same; fore part of the body yellowish brown, undulated with black; back clouded with cinereous and pale yellow, powdered with brown; under parts of the body and rump greyish brown, in some lights appearing glossy grey; wings small, without any speculum; tail longish, of eighteen feathers, cuneiform, and black; legs brown, bluish before, and placed far back, as in the Diver Genus.

The female, and young bird, have the bill less tumid at the base, and wholly brown; throat white, expanding towards the nape.—This species frequents the greater lakes of the al Mountains, and the River Ob, and Irtisch; not seen on the ground, for, from the situation of the legs, it is little able to walk, but swims very well, and quick; at which time the tail is immersed in the

water, as far as the rump, serving by way of rudder, contrary to the common method of a Duck's swimming. The nest is formed of reeds, and floats on the surface of the water, like that of the Grebe.

### 79.—SPANISH DUCK.

Anas viduata, Ind. Orn. ii. 858. Lin. i. 205. Gm. Lin. i. 536. Jacq. Voy. p. 3. t. 1.

leucocephala, Bartr. Trav. 292?

Le Canard à petit bec, Voy. d'Azara, iv. No. 432.

Spanish Duck, Gen. Syn. vi. 525. Id. Sup. 275. Gen. of Birds, p. 65. pl. 13.

SIZE a trifle less than the Red-billed Whistling Duck. Bill and eyes black; forehead, cheeks, chin, and back part of the head, pure white; crown black; round the neck a black collar; back and breast ferruginous, crossed with narrow, dnsky lines; wings pale brown, without any speculum; belly whitish brown, spotted with black; tail cuneiform, black; legs bluish.

This is a beautiful species, and inhabits the lakes about Carthagena, in South America; has a whistling note, and called by the Spaniards Viudita,\* or Little Widow; extends to Buenos Ayres, and in large flocks in Brazil. Male and female differ but little, in the latter the base of the bill is shorter.

Mr. Pennant figures this bird in his Genera of Birds,† and says, that the Spanish Duck frequents Spain and Barbary. We are told also of Ducks, resembling ordinary Wild Ducks, but not so big; the colour black, only white on the forehead; which are generated in the hollows of the Lake Zirknitz, under the Mountain Javornic; these are said to be, when they first appear, blind, and very sparingly feathered, but after fourteen days get feathers, recover their sight, and afterwards fly away in flocks; are well tasted, but too luscious, having nearly as much fat as lean.‡

<sup>\*</sup> Misprinted Vindila in the Syst. Nat. † Pl. 13.

<sup>‡</sup> See Description of the Lake Zirknits, in Carmola.—Phil. Trans. xvi. p. 425.

## 80.—WHITE-MASKED DUCK.

Canard à Face blanche de Maragnon, Buf. ix. 255. Pl. enl. 808. Ind. Orn. ii. 858. 65. β. Voy. d'Azara, iv. No. 435.

SIZE of the Mallard. Bill black; all the fore part of the head and face, much beyond the eye, white; nape and hind part of the neck black, advancing forwards on the throat, and surrounding it as a collar; below this on the fore part white; the lower part of the neck and breast fine rufous chestnut; the back rufous, waved and blotched with dusky; under parts of the body much the same, but paler, beautifully marked with crescents on the sides, and over the thighs; the whole of the wings, the middle of the belly, vent, and tail, black; thighs and legs black.

Inhabits Maragnon,\* in South America.

The White-masked has been by many thought to be a Variety of the Spanish Duck; but we are assured, that the two are distinct. The present one is common in Paraguay, throughout the year; sometimes seen in flocks of 200 in each, and so packed together that sixteen, or even twenty, have fallen at one shot. These Ducks fly well; and the male and female much alike: the length eighteen inches, breadth thirty-three. Bill black, with a bar behind the nail, of sky blue.

## 81.—DOMINICAN DUCK.

Anas Dominicana, Ind. Orn. ii. 859. Gm. Lin. i. 536. Canard Dominicain du Cap de B. Esp. Son. Voy. Ind. ii. p. 22. Dominican Duck, Gen. Syn. vi. 525.

SIZE of the Wild Duck. Bill black; face and throat white; through the eye, from the bill, a streak of black, ending in an angle

\* By this is no doubt meant the River Amazons, in South America, though Buffon does not say in what part of the world Maragnon is.

behind; hind part of the head, neck, and breast, black; back and lesser wing coverts deep cinereous grey, crossed with two bands of very pale grey; bill and vent pale grey; legs black.

Inhabits the Cape of Good Hope.

# 82.—PIED DUCK.

Anas Labradora, Ind. Orn. ii. 859. Gm. Lin. i. 537. Am. Orn. viii. 91. pl. 69. f. 6. — minor picta, called Butterback, Bartr. Trav. 293?

Pied Duck, Gen. Syn. vi. 497. Lawson's Carol, 148? Arct. Zool. ii. 576. M. pl. in frontispiece.

LENGTH nineteen inches. The base of the bill and round the nostrils, for about one-third, orange; the under mandible dusky; head and neck rufous white, the feathers of the crown rising in a narrow ridge, along the top of which runs a stripe of black to the nape; round the middle of the neck a collar of black, passing down the middle, at the back part of the neck, quite to the back; scapulars white, some of the inner edged with black, and curve downwards over the wings; back and tail brown, secondaries white; greater quills dusky; on the breast a black band; belly brown, like the back, but paler; legs yellow, webs brown.

The female has the plumage above dirty mottled brown; on the wing a white spot, arising from the tips of the second quills; under the body dirty white; legs black.

Inhabits the Coast of Labrador, from whence a pair in possession of Sir Joseph Banks was brought. That described in the Arctic Zoology, came from Connecticut. Mr. Pennant thinks them the same with the pretty Pied Ducks, which whistled as they flew, or fed; met with by Lawson, in the west branch of Cape Fear Inlet.

According to the Amer. Ornith. this bird is subject, when young, to a progressive change of colour; that it frequents the sand bars; its principal food being shell fish, hence called Sand-shoal Duck.

The windpipe of the male is ten inches long, and has four enlargements, viz. one immediately below the mouth, another at the interval of an inch, it then bends largely down the breast bone, to which it adheres by two strong muscles, and has at this place a third expansion: it then becomes flattened, and before it separates into the lungs has a fourth enlargement, much greater than either of the former, which is bony and round, puffing out from the left side.

# 83.—RUBICUND DUCK.

Auas rubidus, Ruddy Duck, Am. Orn. 8. 128. pl. 76. f. 5. 6. Frankl. Narr. App. p. 700.

LENGTH fifteen inches and a half; extent of wings twenty-two. Bill broad at the tip, under mandible much narrower, both rich blue; nostrils small, placed in the middle; cheeks beneath the eye, and the chin white; the front, crown, including the eye, and back part of the neck, down nearly to the back, black; the rest of the neck, whole of the back, scapulars, flanks, and tail coverts, deep reddish brown, like bright mahogany; wings pale buff brown, darker at the points; tail black, greatly tapering, having eighteen narrow pointed feathers; the feathers of the breast, and upper part of the neck, very remarkable, being dusky olive at bottom, ending in hard, bristly, points, of a silvery grey, very much resembling the hair of some kinds of seals; all these thickly marked with transverse curving lines of deep brown; belly and vent silvery grey, thickly crossed with dusky olive; under tail coverts white; legs ash-colour.

In the female the front, lores, and crown, are deep blackish brown; cheeks dull cream; neck plain dull drab, sprinkled about the auriculars with blackish; lower part of the neck and breast variegated with grey, ash, and reddish brown; belly dull white; tail brown; scapulars dusky brown, sprinkled with whitish, appearing grey.—Inhabits America, and considered as a new species has been compared with the Jamaica Shoveler, No. 77, but is certainly a different species.

## 84.—GADWAL DUCK.

Anas strepera, Ind. Orn. ii. 859. Lin. i. 200. Fn. suec. No. 121. Gm. Lin. i. 520. Brun. p. 21. Muller, No. 118. Frisch, t. 168. Georgi, p. 166. Gmel. reise, ii. 183. t. 17. Borowsk. iii. p. 12. Fn. Helv. Bris. vi. 339. t. 33. f. 1. Id. 8vo. ii. 452. Klein, 132. 6. Cet. Uc. Sard. 325. Gerin. v. t. 574, 575. Amer. Orn. viii. 120. pl. 91. f. 1. Tem. Man. 539. Id. Ed. 2d. p. 837.

Anas platyrhynchos, Raii, 145. A. 2. Will. 287.

Die Schnatterente, Bechst. Deuts. ii. 642. Id. Ed. 2d. iv. 1996. Nat. xii. 136.

Kraak Eend, Sepp, Vog. iv. t. p. 315 .- male and female.

Chipeau, Buf. ix. 187. pl. 12.—female. Pl. enl. 958.—male.

Gadwall, or Grey, Gen. Syn. vi. 515. Id. Sup. ii. 353. Br. Zool. ii. No. 288. Id. fol. 157. pl. Q. 3. Id. 1812, ii. p. 275. Arct. Zool. ii. 575. I. Will, Engl. 374. pl. 72. Bew. ii. p. 350. Lin. Trans. iv. p. 111. pl. xiii. f. 9.—the Trachea. Lewin, vii. p. 25. pl. 258. Walcot, ii. pl. 68. Pult. Dors. p. 21. Orn. Dic. & Supp.

SIZE of the Wigeon; length nineteen inches. Bill two, black; the head and greater part of the neck brown, mixed and spotted with rufous and black; sides of the head, throat, and fore part of the neck, rufous white, spotted with brown, palest near the head; lower part of the neck, beginning of the back, and breast, brown, marked with curved or waved white lines; lower part of the back black brown; rump, upper, and under tail coverts, black; breast and belly white, spotted with grey; lower belly, sides, and thighs, barred with whitish and grey brown lines; vent dark; on the wings are four distinct colours, the lesser coverts pale reddish brown, the following reddish, and below this black, and finally on the second quills a patch of white; tail ash-colour, edged with white; legs orange.

In the female the colours on the wings are much the same, but duller; breast reddish brown, spotted with black; chiefly in the shape of crescents; the feathers of the neck and back edged with pale red; rump the same, instead of black; and those elegant, semicircular lines on the neck and breast wholly wanting.

The windpipe \* of the male is of nearly equal dimensions throughout; at the bottom a bony bladder and arch, somewhat like that of the Pintail Duck, but the globular part not quite so large: we may observe, too, that it adheres to the sides of the arch, quite to the bottom, whereas in the Pintail, it is attached to the side of the arch by a small portion only.

This species inhabits England in the winter, but is by no means common; is also found at the same season in various parts of France and Italy; migrates as far as Sweden in summer, to breed; is found likewise throughout Russia and Siberia, except in the east part of the latter, and Kamtschatka. We find it, too, represented in various paintings from India, and may therefore conclude it to be a native of that part of the world.

One in General Hardwicke's collection, probably a female, has the head and neck pale ash-colour, with numerous dusky spots; breast, as far as the belly, pale rufons brown, with curved spots of black; upper half of the back brown, with double curved lines of white; the lower part with dark dusky spots; sides over the thighs brown, waved with white; tail pale ash, nearly white, but the two middle feathers are ash; wings as in the male, but more dull. Said to be found also in America, but more rare in the northern parts; seen on Seneca Lake, New York, in October; at Louisville, in February; also at Bigbone Lick, in Kentucky, but the breeding places unknown.

# 85.—FALCATED DUCK.

Anas falcaria, Ind. Orn. ii. 860. Lin. Lin. i. 521. Pall. reise, iii. 701. - falcata, Georgi, 168. Falcated Duck, Gen. Syn. vi. 516. Arct. Zool. ii. 574. I. pl. 23.

SIZE of a Wigeon; length eighteen inches; weight twenty-five ounces, and more. Bill one inch and a half long, and black; the

<sup>\*</sup> Lin. Trans. iv. pl. xiii. f. 7, 8. † In Lord Mountnorris's drawings called Aurgaw, also Ynga. Тт

feathers at the back of the head, and a little way down the neck, long and crested; forehead and crown dull ferruginous; near the base of the bill, in the middle, a white spot; round the eyes, hindhead, and crest, shining green, glossed with copper, especially on the temples; chin white; beneath this are two collars, the first greenish black, springing from the crest; the lower one white; the rest of the neck and breast cinereous, undulated with brown; back grey, the upper part obscurely lineated with a paler colonr; belly dotted grey and white; vent black, the sides of it white, divided transversely by a black band; shoulders grey, and somewhat undulated; scapulars grey, and curve inwards at the ends; speculum fine blue green, above it a white band; wings and tail equal in length; legs lead-colour.

Inhabits the east part of Siberia, from the River Jenisei to the Lena, and beyond Lake Baikal, but not in the West; found also at Kamtschatka, but rarely; probably winters in the Mongolian Deserts, and in China, but assuredly found in the last, as a specimen, brought alive from thence, lived for some time among other poultry in England, became tolerably familiar, and when it died was added to my collection.

A .- Sarcelle de Java, Buf. ix. 275. Pl. enl. 930. Gen. Syn. vi. 517. 62. A.

This differs in having the head very little crested on the crown; no falciform feathers falling over the wings; no white on the vent, or sides of it; instead of which they, as well as the back, are brown; and the thighs white; in other things it much resembles the former, and we suspect it to be the female, or young bird, of this beautiful species. I have also observed one very similar among some Chinese drawings; and as this last is said to be found at Java, it is probably no stranger to India likewise.\*

<sup>\*</sup> At Hindustan .- Penn. Hindoost. ii. 190.

# 86.—JAVAN DUCK.

Anas Javanica, Lin. Trans. xiii. p. 199.

LENGTH seventeen inches. Part of the wings and base of the tail are chestnut; the back, and inferior part of the wings brownish black; neck dull hoary fulvous; chin paler; belly vinaceous chestnut; top of the head, and tip of the tail dusky; vent and hypochondres whitish; feathers of the back with fulvous margins.

A .- Anas Javanica, Var. B.

This varies in having the interscapulary feathers, and those of the breast and belly, variegated with black fasciæ; those of the hypochondres white, barred with black; vent white: it is also near two inches longer than the other.

These birds inhabit Java, the former by the name of Melivis, the latter by that of Melivis-Kembang.

# 87.—WIGEON.

Anas Penelope, Ind. Orn. ii. 860. Lin. i. 202. Fn. suec. No. 124. Gm. Lin. i. 527. Brun. No. 72, 73. Muller, No. 121. Frisch, t. 164. 169. Kram. 342. Georgi, 166. Raii, 146. A. 3, Will. 288. pl. 72. Bor. iii. p. 13. Fn. Arag. 75. Fn. Helv. Cet. uc. Sard. 326. Sepp, iii. t. 109, 110. Gmel. reise, iv. p. 148. Tem. Man. 542. Id. Ed. 2d. 841.

Anas fistularis, Bris. vi. 391. t. 35. f. 2. Id. 8vo. ii. 464. Klein, Av. 132. 7. Id. 0v. 35. t. 21. f. 2. Gerin. v. t. 585, 586.

Anas alia, Querquedula major, Gerin. v. t. 596. Id. 597.—young.

Die Pfeifente, Bechst. Deuts, ii. 648. Id. Ed. 2d. iv. 1109. Bes. Vog. Kurl. No. 80, 81. Schr. de Berl. Nat. vii. 458. Id. Besch. d. Berl. Nat. iv. 601. t. 18. f. 5.—the trachea. Naturf. xii. 136.

Canard Siffleur, Buf. ix. 169. pl. 10, 11. Pl. enl. 825,-male.

à Queue pointue, Voy. d'Azara, iv. No. 429.

Wigeon, Whewer or Whim, Gen. Syn. vi. 518. Id. Sup. ii. 354. Br. Zool. ii. No. 286. Id. fol. 157. Add. pl. Q. Id. 1812. ii. 273. Arct. Zool. ii. 574. K. Will. Engl. 375. pl. 72. Albin, ii. pl. 99. Bewick, ii. pl. in p. 352. Lewin, vii. pl. 251. Walcot, i. pl. 71. Pult. Dors. p. 21. Orn. Dict. & Supp.

LENGTH twenty inches; weight twenty-three ounces. Bill narrow, one inch and a half long, and of a bluish lead-colour, tip black; top of the head cream, a little mottled with dusky spots; over the bill almost white; head and neck bright bay, spotted with dusky, the lower part of it behind, and the breast vinaceous; the lower part and belly white; back and scapulars minutely undulated across with black and white lines; sides of the body the same, but paler; wing coverts brown, more or less mixed with white; quills dusky, some of them banded with white; the outer webs of the middle ones green, forming a speculum, bounded above and below with black; belly white; vent black; legs dusky lead-colour.

The female is only seventeen inches long, brown, the middle of the feathers darker; fore part of the neck and breast paler; scapulars dark brown, edged with rufous white; wings and belly as in the male. Both sexes are alike till the following spring after hatching, when the male, about March, gains his full plumage, but is said to lose it again the end of July, and with it, in some measure, the voice, which is thought by some to be very like the sound of a flute. The flesh is much esteemed. Whether the female ever gets so high a state of plumage, is not said by authors; but on my receiving two birds, with the external appearance of being of the male sex, one of them, to my surprise, turned out to be a female: these were sent to me from Weymouth, January 1795.

The males vary exceedingly; some have the wing coverts wholly white, and the scapulars marked with long lines of white and black; in others the coverts have no white, and the lines of the scapulars are very obscure. These birds in the various stages of plumage are sold in London under the name of Easterlings, and the female that of Lady-fowl; they are called also Pandle-whews,

from feeding on shrimps. We had once a pair sent from the market, and called Easterlings, which proved no other than the two sexes of the common Wigeon; but have been told that birds in imperfect plumage, of different species, pass in the poulterer's shop under the same names.\*

The trachea of the male Wigeon does not seem materially to differ from that of the Pintail; the bony orb is most perfectly globular, and differs somewhat in respect to the attachment at the sides, which may be better noticed by comparison with each other than by any verbal description.†

This species is pretty common in England in the winter months, and caught among other Ducks in the decoys; is found on our various shores at that time, and is frequently in great numbers on the coasts of Kent, but it is not certain that it ever breeds in this kingdom, or in France, yet is sufficiently plentiful in most parts of the old Continent, migrating as low as Egypt; for it is caught there from the middle to the end of November, by nets, in the marshes, before the departure of the waters, though it is rarely, if ever, observed, to plunge therein; is in plenty at Aleppo in the winter, and in most parts of Europe, as far as Sweden; observed likewise in the Caspian Sea, and its neighbourhood, as well as that of Lake Baikal. A bird of this kind is said to migrate from Barbary into Spain and Gibraltar, differing merely in having no white on the belly.‡

I find a representation of the Wigeon among Gen. Hardwicke's fine drawings of birds, proving that it is a native of India. I have also been informed that one very like, if not the same, is found about

<sup>\*</sup>Ray observes, that the male was called the Widgeon, and the female Whewer; and rather quaintly adds, "It is usual to call a silly fellow a wise Widgeon, or to say, he is as wise "as a Widgeon;" and again, accordingly to the Drunkard's Song,

<sup>&</sup>quot; Mahomet was no divine, but a senseless Widgeon,

<sup>&</sup>quot;To forbid the use of wine, unto those of his religion."-Letters, p. 21.

Rutty thinks the Easterling and the Lady-fowl different from a Wigeon, see Nat. Hist. of Dublin, pl. iv. † Lin. Trans. iv. pl. 13. f. 6-9 ‡ Rev. Mr. White.

Buenos Ayres, in South America. Although the Wigeon is not known to breed in this kingdom at large, we are informed that it has in confinement; and not only so, but has paired with the opposite sex of a different species. We learn from Lord Stanley, that a male Wigeon had connected itself with a female Piutail, and produced nine or ten young the first year, and six the second. The hybrid birds, on growing up, resembled the female, appearing more like the male Wigeon about the head. These birds seemed to be endowed with the usual sensations of different sexes, but no produce took place. One remarkable circumstance attended the above union, which was, that there were female Wigeons in the same pond where the male attached itself to the female Pintail; and further, that a male Wigeon has been observed to pair with a female of the common Duck, and that the eggs were prolific.

A .- Anas Kogolka, N. C. Petr. xv. 468, 15, t. 21. Sch. d. Berl. Nat. vii. 451, No. 33.

The bill in this is black; irides yellow; head ferruginous brown; neck, as far as the breast, and to the back, striped with cinereous grey; the back, wings, and tail, blackish, crossed with dull stripes; speculum silver white; breast and belly white.

# 88.—BLACK-TAILED DUCK.

Anas melanura, Ind. Orn. ii. 861. Gm. Lin. i. 516. Scop. i. No. 82.

THIS is a little smaller than the Mallard. Bill clay-colour; sides of the head cinereous; crown of the head and the back rufous; rump black, spotted with white; breast cinereous, with a tinge of rufous; quills and tail black; legs clay-colour.

### 89.—CAPE WIGEON.

Anas Capensis, Ind. Orn. ii. 861. Gm. Lin. i. 527. Cape Wigeon, Gen. Syn. vi. 519.

SIZE of a Wigeon; length fifteen inches. Bill two, red, round the base black; the head is pale bluish ash, marked with minute dusky specks, as in the Wigeon; lower part of the neck and breast bluish ash, the feathers margined with ash; back reddish brown, edged cream-colour; quills dusky ash; speculum of the wings pale greenish blue, bounded above and below with white; legs pale red: webs dusky; claws black.

Inhabits the Cape of Good Hope.—Sir Joseph Banks.

## 90.—SUPERCILIOUS DUCK.

Anas superciliosa, Ind. Orn. ii. S52. Gm. Lin. i. 537. Supercilious Duck, Gen. Syn. vi. 497.

THIS is nearly the size of a Mallard; length twenty-one inches. Bill lead-coloured, with a black tip; general colour of the plumage cinereous brown, the edges of the feathers very pale; over the eye a white streak; beneath a second, broader; chin and fore part of the neck dusky white; speculum of the wings pale blue, tinged with green, bounded by black, edged with white; legs dusky ash.

Inhabits New Zealand. Found both in Charlotte's Sound and Dusky Bay; there called He-turrera.—Sir Joseph Banks. I suspect that this and the last are allied: probably differ in sex.

# 91.—CANVAS-BACKED DUCK.

Anas valisneria, Canvas-backed Duck, Amer. Orn. viii. 103. pl. 70. 5. Frankl, Narr. App. p. 699.

THIS approaches nearest to the Pochard, but is quite distinct; it is two feet long, three feet in extent of wing, and weighs three

pounds. The bill large, rising high in the head, three inches long, thick at the base, and glossy black; irides dark red; cheeks and fore part of the head blackish brown; the rest of it, and greater part of the neck, bright glossy reddish chestnut, ending in a broad space of black, that covers the upper part of the breast, and spreads round to the back; the back, scapulars, and tertials white, faintly marked with minute, transverse, waving lines or points, as if done with a pencil; lower part of the breast and belly white, slightly pencilled in the same manner, pretty thick towards the vent; wing coverts grey, with numerous blackish specks; primaries and secondaries pale slate; two or three of them nearest the body finely edged with deep velvety black; the former dusky at the tips; tail very short, pointed, with fourteen feathers, hoary brown; vent and tail coverts black; lining of the wing white; legs very pale ash; feet three inches in width, hence its great power in swimming.

The female somewhat less; crown blackish brown; cheeks and throat pale drab; neck dull brown; breast, as far as the black extends on the male, dull brown, skirted in places with pale drab; back dusky white, crossed with fine waving lines; belly dull white, pencilled as the back; coverts of the tail dusky; vent white, waved with brown. The windpipe of the male has a large, flattish, concave labyrinth, the ridge of which is covered with a thin, transparent membrane; where the trachea enters this is very narrow, but immediately above swells to three times of that diameter. Such is the description in the Amer. Ornith. by which it appears not to have been before described.

# 92.—AMERICAN WIGEON.

Anas Americana, Ind. Orn. ii. 861. Gm. Lin. i. 526. Am. Orn. viii. 86, pl. 69, f. 1. Frankl. Narr. App. p. 700.

Canard Jensen, Buf. ix. 174. Pl. enl. 955.

American Wigeon, Gen. Syn. vi. 520. Arct. Zool. ii. No. 502.

THIS is a trifle larger than the Wigeon; length twenty inches. Bill lead-colour, tip black; crown and forehead yellowish white,

the rest of the head and whole of the neck prettily speckled with black and white; behind the eye a large black spot, glossed with green in different lights, which in some specimens passes to the back of the neck; back and scapulars pale rust, inclining to cinnamon, waved with transverse black lines; second quills with black shafts, outwardly fringed with white; greater quills brown; in the middle of the wing coverts a large bed of white; quills and tail deep brown, the latter cuneiform; upper tail coverts black and white longitudinally, all beneath white; vent black; legs dusky. Called by Mr. Abbot, Bald-faced Duck.

The female has the head and neck spotted thickly with small dusky marks; round the breast and back pale ash, with larger rufous brown markings; lesser wing coverts plain pale ash; the middle ones margined with white; the larger nearly white, forming a bed on that part of the wing; quills and tail brown; under parts from the breast white, with a ferruginous tinge over the thighs, and the vent mixed dusky and white; bill and legs as in the male.

Inhabits North America, from Carolina to Hudson's Bay, but is no where common. Called at New York the Pheasant Duck. I find by Mr. Abbot, who furnished the above description, that it frequents the ponds about Georgia in the winter, but not common; is more plentiful at St. Domingo and Cayenne, where it is called Vingeon, or Gingeon. At Martinico great flocks of them often take flight from one plantation to another, where they make much havock, particularly during the rainy season; said to perch on trees, to feed in company, and have a sentinel on the watch, like some other birds. This species is seldom seen during the day, lying hid in places shaded from the sun, but coming forth in the dusk to feed; during which they make a particular kind of noise, so as to guide the sportsman in his researches after them, thereby betraying themselves; when otherwise, under cover of the evening, their silence would protect them; at other times their note is a kind of soft whistle, which is often imitated, in order to decoy them within reach of gun. The

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female sits in January, and in March the young are seen running about; the eggs are sometimes hatched under Hens, and such birds are, while young, familiar; though when grown up, exceedingly quarrelsome with other Ducks; yet being arrived at maturity they feed freely; and as the flesh is excellent, it is to be wished, that they could be fully domesticated. They appear on the coasts of Hudson's Bay in May, as soon as the thaw comes on, and chiefly in pairs; lay from six to eight eggs, and feed on flies and worms in the swamps; depart in flocks in antumn; are there called Atheikimo Asheep.\*\*

This is a constant attendant on the Canvas-backed Species, so abundant in various parts of Chesapeak Bay, and by the aid of whose labour he contrives to make a good subsistence. The Wigeon is very fond of the tender shoots of that particular species of aquatic plant, on which the Canvas-back feeds, and for which that Duck is in the habit of diving. The Wigeon, who never dives, watches the moment of the former rising, and snatches the delicious morsel from his mouth. They are called Bald Pates, and live on this account in perpetual contention; are common in the bays of Egg Harbour, and Cape May, and those of the Delaware, leaving them in April, and seen at Hudson's Bay in May.†

## 93—BIMACULATED DUCK.

Anas glocitans, Ind. Orn. ii. 862. Gm. Lin. i. 526. Act. Stock. 1779. xi. t. 33. f. 1. Bimaculated Duck, Gen. Syn. vi. 521. Br. Zool. ii. No. 287. pl. 100. f. 2. Id. 1812. ii. 274. pl. 42. Bewick, ii. 355. Orn. Dict.

LENGTH twenty inches. Bill deep lead-colour, nail black; irides brown; crown brown, changing into green, ending in a streak of brown at the hind part of the head, in a small crest; between the bill and eye, and behind each ear, ferruginous spots, the first round, the latter oblong, and large; throat fine deep purple; the

rest of the head bright green, continued in streaks down the neck; breast light ferruginous brown, spotted with black; hind part of the neck and back dark brown, waved with black; wing coverts ash; the lower streaked with rust; scapulars cinereous; quills the same, inclining to brown; secondaries fine green, ending in a shade of black, edged with white; tail coverts inclining to brown; secondaries fine green, ending in a shade of deep changeable green; tail of twelve feathers, the two middle black, the others brown, edged with white; belly dusky, finely granulated; legs small, yellow; webs dusky.

Inhabits the eastern parts of Siberia; has been met with along the Lena, and about the Lake Baikal; has a singular note, somewhat like clucking. Taken in a decoy near Sir G. Turner's, at Ambroseden, Bucks, in 1771.

## 94—MEMBRANACEOUS DUCK.

Anas membranacea, Ind. Orn. Sup. p. lxix.
—— fasciata, Nat. Misc. pl. 697.
New-Holland Duck, Gen. Syn. Sup. ii. 359.

LENGTH twenty inches. Bill almost three, and black, and of a singular construction, being greatly enlarged at the end, and rounded; appearing, when viewed above, not unlike that of the Spoonbill, and is occasioned by a thin, cartilaginous membrane; the sides beneath greatly pectinated, with the addition of a conspicuous black nail at the end; the nostrils quite at the base; irides blue; the general colour of the plumage rufous brown above, inclining to ash on the crown, and the nape nearly black, and a little elongated into a crest; the eye placed in a dark space, almost black; behind the eye a longitudinal, rose-coloured spot, about half an inch in length; the neck and under parts of the body dusky white, marked with numerous, transverse, dusky bands; sides under the wings fasciated with black; towards the vent, and sides under the wings, nearly black; legs bluish black.

The female differs but little, but the bars on the under parts of the body are more numerous than in the male; and in both sexes the vent is buff-colour.

Inhabits New South Wales, but is said to be a rare species, known to the natives by the name of Yeronge, or Wrongi. We have to observe, that the figure of this bird, in the Naturalist's Miscellany, has the bill too much elongated, and not swelling out at the end, which is the case in the real bird; the crown, too, in this representation is whitish, and not ash-colour.

# 95.—SOFT-BILLED DUCK.

Anas malacorhynchos, Ind. Orn. ii. 862. Gm. Lin. i. 526.

Blue-grey Duck with a soft bill, Cook's Voy. i. p. 72. 97. Forst. Voy. i. 157.

Soft-billed Duck, Gen. Syn. vi. 522. 67.

LENGTH eighteen inches. Bill one inch and a quarter long, of a pale ash, the end of it soft, membranaceous, and black; the top of the head greenish ash; body in general pale bluish lead-colour; across the wing a spot of white; on the breast a mixture of ferruginous; legs dusky blue.

Inhabits New Zealand: met with in Dusky Bay, in April. It is singular on account of the end of the bill being flexible and soft; is supposed to live chiefly by suction, searching out the worms, &c. in the mud, when the tide retires from the beaches. Said to whistle like the Whistling Duck. Called at New Zealand, He-weego.

# 96.—POCHARD DUCK.

Anas ferina, Ind. Orn. ii. 862. Lin. i. 203. Fn. suec. No. 127. Gm. Lin. i. 530. Brun. No. 80. Muller, No. 124. Frisch, t. 171. Fn. Helv. Fn. Arab. iv. No. 13. Batt. Amer. Orn. viii. 110. pl. 70. f. 6.? Tem. Man. 564. Id. Ed. 2d. 869. Anas fera fusca, Raii, 143. A. 10. Will. 288. t. 72. Id. 282. 12.—female. Klein, Av. 132. 5.

Anas erythrocephala, N. C. Petr. xv. 465. 14. t. 20.

Penelope, Bris. vi. 384. t. 35. f. 1. Id. Svo. ii. 462. Gerin. v. t. 583, 584.

Die Tafelente, Bechst. Deuts. ii. 656. Id. Ed. 2d. iv. 1028.

Rothhals, Besc. d. Berl. Nat. iv. 603. t. 17. f. 5, 6.—the trachea. Naturf. xii. 136. Schr. d. Berl. Nat. iii. 374. t. 8. f. 1.

Millouin, Buf. ix. 216. Pl. enl. 803.

Pochard, Gen. Syn. vi. 523. Id. Sup. ii. 354. Br. Zool. ii. No. 284. Id. fol. 156. pl. Q. 5. Id. 1812. ii. p. 271. Will. Engl. 367. pl. 72. Arct. Zool. ii. No. 491. Albin, ii. pl. 98. Lin. Trans. iv. 116. pl. xiv. f. 5, 6.—the trachea. Bewick, ii. pl. in p. 356. Lewin, vii. pl. 253. Walcot, i. pl. 74. Pult. Dors. p. 20. Orn. Dict. & Supp.

THIS is about the size of the Wigeon, but shorter; length nineteen inches, breadth two feet six inches; weight twenty-eight onnces. The bill one inch and three quarters long, broader than in the Wigeon, deep blue, with a black tip; irides orange; head and neck deep chestnut; lower part of the neck and breast, and upper part of the back, dusky black; scapulars, and wing coverts nearest the body, bluish white, minutely barred with dusky black; exterior wing coverts and quills dusky brown; belly dusky white, with numerous dusky lines on the sides; tail dusky grey, of fourteen feathers, dashed with ash; legs lead-colour.

The female has the head pale reddish brown; breast the same, but deeper; wing coverts and belly cinereous; back as in the male. The trachea of the last is like that of the Scaup, but two inches shorter, and of nearly the same diameter throughout; the drum-like labyrinth at the bottom is more round on the upper side, but crossed with a small bony partition, as in that bird. The bony box, of which the other partition consists, is scarcely elevated on this side, and on the other much less so than in the Scaup; it likewise forms an obtuse angle with the rest of the trachea; but in the Scaup it does not deviate from straight line, though forming a considerable enlargement.

Pochards are met with in the fens of England in the winter, whence they are brought up to the London markets; sometimes in considerable numbers, where they are known by the name of Dun

Birds,\* and valued much for the excellent flavour of the flesh; are known also by other names, as Attile Duck, Red-headed Poker, Great-headed Wigeon, Blue Poker, and Dun Cur. We believe that they rarely breed in this kingdom, but have been ascertained so to do by Mr. Youel, who informs us, that several were seen in May on Scoulton Mere, in Norfolk, sitting on their nests, and with the young nearly excluded.† They come into France the end of October, in small flocks, from twenty to forty, and one has been shot there in July; in winter found far to the south. Forschal describes it fully among the birds of Cairo, where its Arabian name is Batt.: To the North is found as high as Drontheim, and in the great rivers and lakes in all latitudes of the Russian Empire. Is well known in America, in winter as low as Carolina, and is probably the Redheaded Duck of Lawson; sometimes seen in the rivers and ponds about Georgia, but is rare; is known there by the name of Brownheaded Duck and Sheldrake; it feeds on small fish and shells, and has a hissing voice; the flight rapid and strong; the flocks form no particular shape in flying, but mix indiscriminate. These birds will bear confinement in the menagerie.§

A.—Penelope nigra, Bris. vi. 389. A. Id. Svo. ii. 463. Gen. Syn. vi. 524. 68. A. Ind. Orn. ii. 863. β.

This Variety differs from the last in a few particulars. The bill is black, with a blue base; irides yellow; head and neck chestnut; the lower part ash-coloured on the sides, and blackish before; the back, rump, and tail, of this last colour; breast and belly brown, mixed with dusky and ash; wings mixed black and white; legs olive; webs and claws black.—Originally described by Aldrovandus, but where found was not mentioned by him.

<sup>\*</sup> The female of the Wigeon is also so called. † Lin. Trans. xiii. 616. † Faun. Arab. || Cates. § Orn. Dic. Supp. Col. Montagu kept one for three years, at the end of which it was tame, and in good health.

# 97.—RUFOUS-NECKED DUCK.

Anas rufa, Ind. Orn. ii. 863. Gm. Lin. i. 515.
—— ruficollis, Scop. i. No. 81.
Rufous-necked Duck, Gen. Syn. vi. 477.

SIZE of the Mallard. Bill black; head and neck rufous; breast black; back variegated with lines of brown, tending backwards; wings plain cinereous brown; tail short, not longer than the wings, when closed; legs black.

Native place not mentioned: probably a Variety of the last.

# 98.---FULVOUS DUCK.

Anas fulva, Ind. Orn. ii. 863. Gm. Lin. i. 530. Quapach canauhtli, Raii, 177. Penelope Mexicana, Bris. vi. 390. Id. 8vo. ii. 464. Mexican Pochard, Gen. Syn. vi. 524.

BILL and legs dusky ash-colour; eyes black; head, neck, breast, belly, thighs, and under tail coverts, fulvous; back, scapulars, wing coverts, and rump, transversely barred fulvous and brown; tail black and white.—Inhabits Mexico.

# 99.—CHESTNUT-CROWNED DUCK.

SIZE of a Mallard; length two feet. Bill two inches long, dusky, the under mandible yellow, the upper much serrated on the edges, with a bent nail; feathers of the crown rather full, and including the eyes, fine brownish chestnut; this continues down the back of the neck, but becomes paler, blending with the colour of the back, which is pale rufous brown; wings and tail the same; speculum dirty white; quills dusky, the four outer ones nearly alike,

but those more inward are mostly dirty white, like the speculum, with brown ends; the under parts from chin to vent fine pale ash, but inclining on the breast and sides to brown; legs brown, claws moderate, hind toe placed high up; wings and tail nearly even, the quills reaching almost to the end of it.

In the collection of Lord Stanley.

## 100.--VARIED-BILLED DUCK.

THE general colour of the bill in this bird is yellow, near the base a square patch of red; close to this another of white, and adjoining to it a transverse band of black; the head and neck are dusky black; breast and all beneath dusky brown; beginning of the back and scapulars dark green, somewhat glossy; wings brown; at the bend a pale mark; on the middle of the wing a large square patch of white; middle of the back, the rump, and vent, very dark, almost black; quills dark; tail rather long, glossed with green on the edges; legs stout, dusky.

From the drawings in the collection of Mr. Dent.

# 101.—JACQUIN'S DUCK.

Anas Jacquini, Ind. Orn. ii. 863. Gm. Lin. i 536 Jacq. Vog. p. 5. 3.

SIZE of the Spanish Duck. General colour of the plumage chestnut; back dusky black; bill and legs black.

Inhabits the Island of Dominica, and has a very sharp and loud voice.

## 102.—PINTAIL DUCK.

Anas acuta, Ind. Orn. ii. 864. Lin. i. 202. Fn. suec. No. 126. Gm. Lin. i. 528.
Scop. i. No. 73. Brun. in App. Muller, No. 122. Kram. 340. 9. Georgi, 166.
Fn. Arag. 75. 3. Fn. Helv. Decouv. russ. i. 162. Sepp. t. 92, 93. Tem. Man. 541. Id. Ed. 2d. 839.

Auss caudacuta, Raii, 147. A. 5. Id. 192, 13. Will. 289. t. 73. Frisch, t. 160—168. Klein, 133, 15. Id. 139, 32. Sloan, Jam. 324. xi. Bartr. Trav. 292. Amer. Orn. viii, 72. pl. 68. f. 3.

Anas longicauda, Bris. vi. 369. t. 34. f. 1, 2. Id. 8vo. ii. 459. Gerin. v. t. 581.

Canard à longue Queue, Buf. ix. 199. t. I3. Pl. enl. 954-male.

Der Pfeilschwantz, Bechst. Deuts. ii. 651. Id. Ed. 2d. iv. p. 1116.

Die Spiessente, Schmid, Vog. p. 152. t. 130.

Tzitzihoa, Raii, 175.

Sea Pheasant, or Cracker, Will. Eng. 376. pl. 73. Albin, ii. pl. 94, 95.

Pintail, Gen. Syn. vi. 526. Id. Sup. ii. 352. Br. Zool. ii. No. 282. Id. fol. 156.
pl. Q. 8.—male. Q.—female. Id. 1812. ii. p. 266. Arct. Zool. ii. No. 500.
Bewick, ii. pl. p. 360. Lin. Trans. iv. 110. pl. xiii. f. 6—the trachea. Lewin, vii. pl. 261. Walcot, i. pl. 72. Pult. Dors. p. 21. Orn. Dic. & Supp. Graves Br. Orn.

LESS than a Wild Duck; length twenty-eight inches; breadth thirty-six; weight thirty-two ounces. Bill two inches and a half long, and black, on the sides bluish; head, and for an inch of the neck before, rusty purplish brown; nape dusky; forepart and sides of the neck white, a little mottled with dusky, the white rising upwards on each side at the back part, in a narrow streak, towards the hindhead; the neck long and slender, hind part of it and back greyish white, finely barred with black; sides of the body the same, but paler; scapulars long, pointed, and margined with very pale cream-colour; wings pale dusky brown; across them, first, a pale rufous bar, then a broad deep copper one, edged with black, and below this a narrow one of white; the two middle tail feathers are black, and more than three inches longer than the rest, the others dusky, edged with white; the under parts of the body white; vent black, the sides of it white; legs lead-coloured.

YOL. X. X X

The female is smaller; the head and neck dusky, minutely streaked with brown; back brown, margins of the feathers pale reddish white; the scapulars margined with pale rufous; wing coverts as the back, but with deeper margins; across the wing a cream bar, bounded above and below with white; tail as in the male, but the two middle feathers not elongated.

The young males remain of greyish brown, not greatly unlike the females, till February, when they first gain the proper dress of their sex. We learn that they moult twice in the year, throwing off the male dress in June, and regaining it the end of October, in the intermediate time the male may be easily mistaken for the female.\*

The trachea of the male ends in a bony arch, and attached to it a bony bladder, nearly round, about the size of the thumb, the upper part even with that of the bony arch, but the bottom greatly below it; from one of these the first division arises to pass to the lungs, and from the other the second.

This is a pretty common species, but not so plentiful in England as in many parts of the Continent; and only found on our coasts in winter;† it is also frequently taken in our decoys, and sold under the name of Sea Pheasant; it does not remain here to breed, but is supposed to migrate more northward for that purpose. Common in the Russian Dominions,‡ as far as Kamtschatka; seen in Sweden and Denmark in the spring, and breeds about the White Sea. In the winter is common in France, Germany,§ Italy,¶ Spain, and Switzerland. In plenty about the Lake Baikal, in Asia, and extends both to China and India, where it is caught in snares on the sea coasts. Feeds on small fish, which pass within reach while on the water, also on reptiles on shore, but is not found to dive under water,

<sup>\*</sup> See an account in Supp. to Orn. Dict.

<sup>†</sup> Visits the Orknics in great flocks in winter; in great quantities in Connaught, in Ireland, in February only.—Br. Zool.

<sup>‡</sup> In troops of hundreds on the borders of the Don.—Decouv. russ. i. p. 162.

<sup>|</sup> Arct. Zool. | § Kramer. | ¶ About Rome, there called Coda lancea. - Will.

or perhaps very rarely. In North America is in equal plenty; called at New York the Blue Bill; from thence as far north at least as Hudson's Bay, at which it is said to breed; and from whence I have received it. The flesh is very finely flavoured, and tender. Is seen as far south as Georgia, but not common, only met with at the end of winter and beginning of the spring, when it departs northward.

### 103.—LONG-TAILED DUCK.

Anas glacialis, Ind. Orn. ii. 864. Lin. i. 203. Gm. Lin. i. 529. Scop. i. No. 74. Brun. No. 75—79. Mull. No. 122. Phil. Trans. Ixii. 418. Besch. d. Berl. Nat. ii. S. 556. Lin. Trans. xii. 555. pl. 30. f. 3, 4—the trachea. Tem. Man. 559. Id. Ed. 2d. 861. Parry's App. ceviii.

Anas hyemalis, Lin. i. 202. Fn. suec. No. 125. Fn. groenl. No. 45.

longicanda Islandica, Bris. vi. 379. Id. 8vo. ii. 46.

- caudacuta, Havelda, Raii, 145. Will. 290.

Clangula glacialis, Northern Garrot, Ross's Voy. App. ii. p. xlviiii.

Die Winterente, Eisente, Bechst. Deuts. ii. 654. Id. Ed. 2d. iv. 1124.

Canard à longue Queue de Terre nenve, Buf. ix. 202.

Canard de Miclon, Pl. enl. 1008.

Swallow-tailed Shieldrake, Will. Engl. 364.

Long-tailed Duck, Gen. Syn. vi. 528, 529. Br. Zool. ii. No. 283. Id. fol. 156. pl. Q. 7. Id. 1812, ii. 268. pl. 44, 45, Var. Edw. pl. 280. Id. pl. 156—young male. Arct. Zool. ii. 501. Id. Sup. p. 76. Will. Engl. 364. § V. Bew. ii. pl. p. 363. Lewin, vii. pl. 262. Don. pl. 111. Walc. pl. 70. f. 1, 2. Pult. Dors. p. 20. Am. Orn. viii. 93. pl. 70. f. 1, 2. Lin. Trans. xii. 554. pl. 30. f. 3, 4—the trachea. Orn. Dict. Supp. last Plate, f. 3, 4.

SIZE of a Wigeon; length twenty-two inches; extent of wing twenty-nine; weight twenty-four ounces. The Bill is a little gibbous at the base, black, with a transverse mark of red in the middle, and an oval nail at the end; irides red; head white, varied with different coloured spots; the forehead, cheeks, and round the eyes, violet ash-colour, but the front and orbits are white; on the temples a large oval dusky spot, and behind that, beneath the ears,

<sup>\*</sup> Kalm. Trav. i. 137. By some the Sprig-tail.

an oblong, brown, bronzed one; neck white; breast and half the belly black, the rest white; back black, marked forwards with a cordated, dusky white, large spot; wings black, second quills brownish, the feathers greatly acuminated, and some of them hanging over the others; tail cuneiform, long, consisting of twelve feathers, the two outer ones white; the third longer, black, with the margins and tips white; fourth longer, the same, but not tipped with white; fifth wholly black, much longer, and more narrow than the others; but the two middle are black, very long, pointed, curved at the end; the upper coverts black, the lower white; legs lead-colour.

In the female the bill is rarely marked with a red spot; head white, above dirty-coloured; on the temples a small black spot, and beneath one of pale grey; neck white; on the breast begins a dirty circle, which, with the fore part of the belly, is cinereous, the hinder part white; back dusky; scapulars the same, but not so long as in the male; the tail cuneiform, but the four middle feathers only exceed in proportion as in other birds, with the wedge-shaped tail: the colour brownish, the outer ones paler, with the middle more obscure; in other things resembling the male. We have reason to believe that the male does not gain the elongated tail feathers till a certain period of life; for some of this sex, apparently adults, have been met with, having tails no longer than in the female. The young birds are in general more dull in colour than the adults, and the white parts not pure; belly white; back and wings black in all; the scapulars ash-colour, with pale margins, but they vary exceedingly according to their ages. M. Brunnich\* describes five birds of this species, but does not pretend to determine how they differ from each other in respect to sex or age. Steller, who observed them in Kamtschatka, says, that the larynx in the male has three openings, covered with a thin (supposed valvular) membrane, which forms the singularity of its voice;† but in the female

<sup>\*</sup> Orn. boreal. No. 75-79. † Descrip. Kamtsch. 498. However this may be, the females are uniformly the more noisy.

the windpipe is of an uniform thickness throughout. Captain Ross observes, that the lower portion has six bony ribs on each side, uniting posteriorly, forming a convexity; anteriorly they advance to complete the tube, but terminating abruptly; they form on each side a ridge of small tuberosities, leaving an open space, broader at the lower than the upper end, &c.

This species inhabits the northern regions, and now and then in severe weather comes into England, but never in numbers; met with in the Orknies, in considerable flocks, from October to April;\* on the Continent frequents Sweden, Lapland, and Russia; seen often in the neighbourhood of St. Petersburgh, also in Kamtschatka; is found the whole year in Greenland, and adjoining Islands. Feeds on various small shells, which it gets by diving, especially the Mytilus discors; it makes the nest in the grass near the water, in the manner of the Eider, and lays five bluish white eggs;† it flies in an undulating manner, and sometimes with the back and sometimes with the belly uppermost; swims and dives well; the note of the male imitates the word A-a-glick. The feathers, could they be had in sufficient plenty, are equal in quality to those of the Eider.

Is met with in India at some seasons, as I have found it represented in drawings from that part of the world, where it is called Degonja. Is found also in North America, from Hudson's Bay to New York; remains in the former, as in Greenland, the whole year; called there Hahaway, and sometimes appears numerous, flying in large flocks; the flight short, and near the surface of the water.

<sup>\*</sup> Arct. Zool. A female once met with in Devonshire-Orn. Dic. Supp.

<sup>†</sup> Seldom fewer than ten, and often as far as fourteen or fifteen.-Mr. Hutchins.

<sup>‡</sup> About Chesapeake Bay called South-Southerly, from the cry imitating these words; or as some think, when clamorous, it betokens a southerly wind; at New Jersey known by the name of Old Wife.—Am. Orn.

A.—Querquedula Ferroensis, Bris. vi. 466, t. 40, f. 2. Id. 8vo. ii. 482. Ind. Orn. 865, 8. Sarcelle de Ferroe, Buf. ix. 278. Pl. enl. 999—young bird. Gen. Syn. vi. 531.

LENGTH sixteen inches and a half. Bill dusky, at the base of the upper mandible a spot of pale grey, from thence a black streak down the middle of the crown to the hindhead; sides of the head pale grey, inclining to yellow; and just round the eye white; hind part of the head, and neck, dusky and white mixed; sides of the last dark brown; throat, and forepart of the neck, white, minutely spotted with brown; back, wings, rump, and upper tail coverts, brown; the last white on the sides; scapulars long, brown, with rufous margins; breast and belly white; tail pointed, the four middle feathers grey brown, the five on each side pale grey, with whitish edges; legs brownish lead-colour.

Inhabits the Ferroe Isles, and there called Oedel; supposed to be a variety of the female. Further descriptions might be added from other authors, but we trust that the above will be sufficient to discriminate the species.

# 104.—WESTERN DUCK.

Anas dispar, Ind. Orn. ii. 866. Gm. Lin. i. 535. Mus. Carls. fasc. i. t. 7, 8, —— occidua, Nat. Misc. pl. 34. —— Stelleri, Pall. Spic. vi. 35. t. 5. Gm. Lin. i. 518. Western Duck, Gen. Syn. vi. 532. Id. Sup. 275. Art. Zool. ii. No. 497. pl. 23.

LENGTH seventeen inches. Bill like that of the Wigeon, black; irides hoary brown; top and sides of the head and neck, and hind part of the last, for half way, white; across the forehead, from eye to eye, a pea-green band; at the nape a transverse one of the same, but much deeper in colour, beneath which is a round black spot, the size of a pea; at the lower angle of the eye, behind, another of the same, but irregular in shape; the chin, throat, and neck before, black, communicating with a collar of the same, which surrounds the neck about the middle; from the hind part of this the



# PL. CLXXIX.



Pink-hended Duck.

black passes down over the back, quite to the tail; breast and sides pale and ferruginous, deepening into chestnut in the middle, growing still deeper as it passes towards the vent, where it is black; the second quills are six inches long, and curve downwards, partly white and partly black, the colour divided obliquely on each feather; the scapulars are also long, pointed, and curve elegantly downwards over the greater coverts, as in the Garganey; each has the web next the body very little broader than the shaft itself, and both of them white; the other very broad, and black; legs black.

In that of Pallas the head is said to be somewhat crested, the green spot before the eye not uniting across the head, and is broader than in the above bird; the black spot at the angles of the green band not mentioned, otherwise one description might suffice.

The female has the whole plumage mixed brown and ferruginous, somewhat in the manner of the Woodcock; the quills all straight and dusky; some of the secondaries have white tips, making a spot on the wing; and some of the lower coverts are also tipped with white, forming a large spot of white forwards; legs black.

This is a rare and elegant species. Found about the sea coasts of Kamtschatka, and breeds among the inaccessible rocks: flies in flocks. A pair of them were shot at one time, on a river in Ostrogothia, in Sweden; frequents also the western side of America. Mr. Pennant observes, that the female has much resemblance to the Red Duck, or Ferruginous Duck of the Br. Zool. which, is said to have been killed in Eugland, in Lincolnshire, but later observations have not furnished us with a similar instance.

# 105.—PINK-HEADED DUCK.

Anas caryophyllacea, Ind. Orn. ii. 866. Pink-headed Duck, Gen. Syn. Sup. 276. pl. 119.

SIZE of the Black-billed Whistling Duck; length twenty or twenty-one inches. Bill two inches and a half long, a trifle bent at

the point, colour pale red, with the base and point pink; and in some subjects mottled with black; head and half the neck pink, the feathers short and downy; irides red, the general colour of the rest of the plumage deep chocolate brown, with a tinge of pink throughout the whole; wings paler brown, and the outer edges of three or four of the quills pale red, giving the appearance of a speculum; bend of the wing white, and some of the lower coverts curve downwards at the ends, as in the male of the Western Duck; tail about two inches long, and darker than the quills, which reach to about two-thirds of the length; legs pale, reddish brown, or blue grey, with dark webs.

The adult female is said not to differ from the male, except in the plumage being less brilliant in colours; and, according to some drawings, none of the wing coverts curve downwards.

Inhabits various parts of India; most frequent in the Province of Onde; is rarely seen in flocks, for the most part only two being found together; is often kept tame, and becomes tolerably familiar.

### 106.—SPIRIT DUCK.

#### THE MALE.

Anas Albeola, Ind. Orn. ii. 866. Lin. i. 199. Gm. Lin. i. 517. Phil. Trans. lxii. 416. Am. Orn. viii. p. 51. pl. 57. f. 2, 3. Frankl. Narr. App. p. 701.

Anas bucephala, Lin. i. 200. Gm. Lin. i. 521. Bartr. Trav. 292.

Querquedula Ludoviciana, Bris. vi. 461. t. 41. f. 1. Id. Svo. ii. 481.

Anas hyberna, Bris. vi. 349. Id. 8vo. ii. 454.

Der Dickkopf, Schr. d. Berl. Nat. vii. 455. Bes. Vog. Kurl. No. 77. Nat. xii. 138.

Sarcelle blanche et noire, ou la Religieuse, Buf. ix. 284. Pl. enl. 948.

Petit Canard à grosse tête, Buf. ix. 249.

Little Black and White Duck, Edw. pl. 100.

Spirit Duck, Arc. Zool. ii. 487.

Buffel-headed Duck, Gen. Syn. vi. 533. Arc. Zool. ii. No. 489. Cat. Car. i. pl. 95.

#### THE FEMALE.

Anas rustica, Lin. i. 201. Gm. Lin. i. 524. Bartr. Trav. 292. Querquedula Carolinensis, Bris. vi. 464. Id. 8vo. ii. 482.

Sarcelle de la Caroline, Buf. ix. 286. Little Brown Duck, Gen. Syn. vi. 534. Cat. Car. i. pl. 98.

THIS is rather larger than a Teal; length sixteen inches. Bill near one inch and a half long, and black; head and neck green gold, with a violet gloss in some lights; behind each eye the feathers are white, passing in a broad patch to the back of the head; the lower part of the neck all round, the breast, and under parts, white; outer scapulars white, forming a longitudinal band on each side of the back, which, with the remainder of the scapulars, is black; lesser wing coverts dusky, edged with white; the middle ones white; the greater, down the middle, white, but those on each side black; quills dusky black, some of the inner ones marked with white on the inner webs; tail cinereous, the three outer feathers edged outwardly with white, the shape cuneiform; legs orange, claws black.

Inhabits North America, found at New York in the winter, migrating also as far as Carolina; called in Georgia the Spirit Duck; frequents the ponds there, but is not common: is a most difficult bird to shoot, as it dives in a moment at the flash of a gun; and as it frequently does this, and rises again at a great distance, is called by some the Spirit Duck: \* appears at Hudson's Bay, about Severn River, in June; and makes the nest in trees, in the woods, near ponds.

The Buffel-headed and Spirit Duck of authors seem to differ only in the fullness of the plumage about the head, for in every other respect they agree minutely. That figured by Catesby seems the same as we usually see specimens of in cabinets, with the head feathers very full; but in the British Museum is one with the head smooth, and similar to that from which Mr. Edwards made his figure.

To what extent this species is known on the Continent of Enrope we do not learn, but according to M. Beseke, it is met with on the coasts of Livonia and Courland.

<sup>\*</sup> This said of the male.—Edwards.

# 107.—GOLDEN-EYE DUCK.

#### COMPLETE BIRD.

Anas Clangula, Ind. Orn. ii. 867. Lin. i. 201. Fn. suec. No. 192. Gm. Lin. i. 523. Scop. i. No. 71. Brun. No. 70, 71. Muller, 119. Klein, 133. 13. Id. 135. 27. Kram. 341. 13. Frisch, t. 181, 182. Georgi, 166. Fn. groeul. No. 43. Bris. vi. 416. t. 37. f. 2. Id. 8vo. ii. 470. Raii, 142. A. 8. Will. 282. t. 73. Ph. Tr. 1xii. 417. 48. Fn. Helv. Gerin. v. t. 593, 594. Amer. Orn. viii. 62. pl. 67. f. 6. Tem. Man. 566. Id. Ed. 2d. 871.

Die Quacherente, Besch. d. Berl. Nat. iv. 599. t. 17. f. 1, 2.—the trachea. Bechst. Deuts. ii. 645. Id. Ed. 2d. iv. 985. Naturf. xii. 136.

Bel-duiker, of Ewaker, Sepp, Vog. iv. t. p. 337.

Le Garrot, Buf. ix. 222. Pl. enl. 802.

Golden Eye, Gen. Syn. vi. 535. Id. Sup. ii. 355. Br. Zool. ii. No. 296. Id. fol. 154.
pl. Addend. Id. 1812. ii. 253. Arct. Zool. ii. No. 486. Albin, i. pl. 96. Will. Engl. 368. pl. 73. Lin. Trans. iv. 118. pl. xv. f 1, 2.—the trachea. Bewick, ii. pl. p. 367. Lewin, vii. pl. 255. Walcot, i. pl. 69.

#### YOUNG BIRD.

Anas Glaucion, Ind. Orn. ii. 868. Lin. i. 401. Fn. suec. No. 123. Gm. Lin. i. 525. Scop. i. No. 72. Brun. No. 89. Muller, No. 120. Frisch, t. 156. Raii, 143. 11. Id. 144. Will. 282. § ix. x. xi. xii. Gerin. v. t. 589, 590. Robert, Ic. pl. 21. Anas peregrina, S. G. Gmel. It. ii. 183. t. 16.

Glaucium, Bris. vi. 406. t. 36. f. 1, 2. Id. 8vo. ii. 468. Arct. Zool. ii. 573. E.

Brumkop Zee-Duiker, Sepp, iv. t. p. 311.

Die Spattelente, Bechst. Deuts. ii. 677.

Brown-headed Duck, Lewin, vii. pl. 256.

Grey-headed Duck, Br. Zool. Ed. 2d. ii. p. 470.

Glaucium or Morillon, Gen. Syn. vi. 537. Br. Zool. ii. No. 277. Id. 1812. ii. p. 254. Arct. Zool. ii. 573. F. Will. Engl. 367. § xii. Bewick, ii. p. 371.

THE length of this species is nineteen inches, breadth twenty-six; weight near two pounds. Bill two inches long, and black; irides gold-colour; head, and half the neck, black, glossed with green and violet; at the angle of the mouth, between the bill and eye, a large white spot; \* the lower part of the neck, the breast, and

<sup>\*</sup> We have seen some in which the rudiment only of the white spot was visible, and one specimen entirely without it; these no doubt were young birds.

under parts, white; some of the feathers on the sides tipped with black; back, rump, and upper tail coverts, black; scapulars black and white; wing coverts black, marked with two patches of white, the first on the lesser; quills black, except seven of the middle ones, which are white; legs orange. The female is smaller; bill somewhat more narrow at the base, upper part of it on each side at the base yellowish red; head reddish brown, and full of feathers; neck grey, with a few dusky streaks; breast and belly dirty white; wing coverts and scapulars dusky and ash-colour; middle quills white, the rest, and tail, black; legs dusky orange, webs black.

The Morillon, or Grey-headed Duck of authors, has been formerly considered as distinct in species, but is now known to be no other than the Golden Eye, in imperfect feather. It is true, that the birds known under this appellation are to be distinguished, the one sex from the other, by the male having the formation of the trachea precisely the same with that of the complete male Golden Eye.

The male of this bird is said to have the head and neck black, with a violet gloss; lower part of the neck rufous brown; back, scapulars, and rump, glossy blackish brown, tinged with violet; breast brown, edged with white; belly white, near the vent mixed with brown; quills nearly corresponding with the complete bird; legs lead-colour.

The female has the head and neck brown, mixed before with dusky; back and scapulars bright brown, dotted with minute grey points; lower part of the back and rump dark greenish brown; under tail coverts white, with black bands. We might proceed yet farther in the descriptions of incomplete specimens, but we trust the above will be sufficient.

The conformation of trachea in the male is different from that of any other of the Duck kind; about the middle of its length is an enlargement, consisting of divers plaits, or joints placed obliquely, not differing in texture from the other parts of it, and folding over each other, so as to admit of being contracted into a space of

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little more than an inch, or dilated to more than four; and being cartilaginous, the joints easily recover their tone; from this part downwards the whole is bony, swelling out into a double expanded enlargement, covered in part with a skin as in others.\*

This species is not unfrequent on our coasts in winter, appearing in small flocks, but passes northward in spring to breed; inhabits Sweden and Norway during the summer; is an excellent diver, and feeds on small shells; is rarely seen on land, as it is very awkward in walking. Attempts have been made to domesticate this bird, but it seems out of its element when on land, and with difficulty can be brought to eat any thing but bread; the feet, too, soon get injured, so as finally to prevent it walking at any rate. The flesh is much esteemed, and the birds are often brought to the markets under the name of Pied Wigeons. Is found in Greenland, but considered there as a rare species; is seen in North America in winter, as low as New York; in summer frequent at Hudson's Bay, on the fresh water lakes; makes a round nest of grass, lined with feathers from the breast;† lays from seven to ten white eggs; is called there Miste pe squa pe wew.

# 108.--MEXICAN DUCK.

Anas novæ Hispaniæ, Ind. Orn. ii. 868. Gm. Lin. i. 525. Querquedula Mexicana, Bris. vi. 458. Id. Svo. ii. 480. Toltecoloctli, Metzcanahachtli, Raii, 175. Sarcelle du Mexique, Buf. ix. 285. Descr. Surin. ii. 158. Mexican Duck, Gen. Syn. vi. 539.

SIZE of our Teal; the upper mandible blue, the under black; irides black; the head is fulvous, with a mixture of blackish, and glossy greenish blue; between the bill and eye a large white spot; neck and body white, speckled with black dots, most numerous on the breast; scapulars and upper tail coverts the same; under tail

<sup>\*</sup> See the figure in the Linnar Transactions. † In hollow trees. - Faun. suec.

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coverts blue; those of the wing blue, crossed with a white band; the greater, farthest from the body, blackish; quills black, some of the middle green outwardly, and tipped with fulvous, forming a band across the wing, but those nearest the body white, dotted with black; tail dusky black, margined with white; legs pale red.

In the female the head, neck behind, back, and scapulars, wing coverts, and rump, are black; some of the feathers with fulvous edges, and others with white; throat, fore part of the neck, breast, and under parts, black and white mixed; prime quills black, edged outwardly with white; the next green on the outer webs; and black within, and those nearest the body black, outwardly banded with white; tail as in the male; legs ash-colour.

Inhabits the Lakes of Mexico, where it is said to be a general feeder, continually dabbling in the mud with the bill for worms, dead fish, &c.; fond also of frogs, and not refusing any sort of filth; however, its flesh is accounted excellent: said to lay three large eggs. Is found also at Surinam.

# 109.—TUFTED DUCK.

Anas Fuligula, Ind. Orn. ii. 869. Lin. i. 207. Fn. suec. No. 132. Gm. Lin. i. 543. Scop. i. No. 78. Kramer, 341. 12. Georgi, 167. Brun. No. 90. Muller, No. 129. Frisch, t. 171. Klein, 133. 11. Will. 280. t. 73. Bor. iii. p. 19. 15. Fn. Helv. Tem. Man. 568. Id. Ed. 2d. 873.

Glaucium minus, Bris. vi. 411. t. 37. 1. Id. 8vo. ii. 156. Gerin. v. t. 591, 592. Cet. Uc. Sard. p. 327?

Anas cristata, Raii, 142. A. 7. Ferm. Surin. ii. 156. 3.

Roepertje, of Kamduiker, Sepp, iii. t. p. 277.-male and female.

Die europaische Haubenente, Bechs. Deuts. ii. 721. Id. Ed. 2d. iv. p. 997. Besek. Kurl. 51. 4. Bes. d. Berl. Nat. iv. 603. t. 17. f. 5, 6.—trachea. Naturf. xii. 138. Morillon, Buf. ix. 227. 231. pl. 15. Pl. enl. 1001.

Tufted Duck, Gen. Syn. vi. 540. Id. Sup. ii. 355. Br. Zool. ii. No. 274. Id. fol. 153. Id. 1812. ii. 249. Arct. Zool. ii. p. 573. G. Albin, i. pl. 95. Will. Engl. 365. pl. 73. Hayes's Birds, pl. 26. Bcwick, ii. pl. p. 372. Lin. Trans. iv. p. 117. Lew. vii. pl. 257. Walc. i. pl. 78. Pult. Dors. p. 20. Orn. Dict. & Supp.

LENGTH sixteen inches, breadth twenty-nine; weight from twenty-two to twenty-five ounces. Bill broad, a little turned up

towards the end, deep blue grey, with the tip black; irides golden; head feathers three inches long, forming a pendent crest; head, neck, and breast, black; the first glossed with green; scapulars deep blackish brown, sprinkled with minute cream-coloured dots, or points, but not visible at a distance; under wing coverts next the body white; wings dusky brown; across them a narrow white bar; tail of fourteen brown feathers; belly and vent white, the last mixed with dusky; legs dusky blue, webs black.

The female is like the male, but the crest is wanting, and the black colour verges to brown.

The young birds vary exceedingly in size and colour; differing as much as eight or nine ounces between the weight of different specimens; the plumage in such is more or less tinctured with brown, with a greater or less mixture of it on the breast; but the belly is in general white, and the white line across the wing conspicuous; but in both sexes, and at all ages, may be noticed the seven sub-axillary white feathers, the longest three inches and a half, decreasing outwards to about two inches; and for the most part the minute cream coloured specks on the wings may be observed. Young birds of this species, as well as of the Golden Eye, may be seen in the London markets, with those of the Pochard and Wigeon, under the common name of Dun Birds, and nothing but a knowledge of the fact would prevent the purchaser from thinking them distinct in species; but in respect to the males of either, they may be easily detected, by means of the trachea, which in shape and texture much resembles that of the Pochard, but the bony, box-like portion is elevated, and scarcely to be distinguished from that of the Scaup, except in being smaller; the trachea itself also is of smaller dimensions throughout. These comparisons can scarcely fail to identify the species, if properly attended to. Scopoli mentions three Varieties.

A.—Less than the Wild Duck. Head black, with a violet green tinge; crest as long as the finger; quills white on one side; body brown; bill and legs black; wings beneath white; rump sooty, varied with white.

B.—Size the same. Head and beginning of the neck rufous; crest more obscure; the rest of the neck, breast, belly, legs, and rump, black; bill yellowish; back brown; wings cinereous brown, margined with white; quills white; thighs brown; at the base of the wing a conical white band.

C.—Head and crest rufous; temples shining green; breast whitish, spotted with black; belly pure white; under tail coverts black; wings brown at the base, then a band of rufous, after that glossy green, and lastly black; quills brown: how far these are really Varieties of the Tufted Duck I will not undertake to determine. I suspect them to be immature birds, but by no means of the same species.

The Tufted Duck is found in the winter in this kingdom, and probably in sufficient plenty; as we often see it in the London markets, sometimes till the end of March, and the flesh is thought delicate; reaches to the west as far as South Devon, and there called Black Wigeon: is an excellent diver, and observed to feed on the Helix putris, which it obtains by diving, searching for it in the mud, into which it retreats in the winter season.\*

Inhabits the Continent of Europe, as far as Norway; common also throughout the Russian Empire, going northward to breed; frequent also in Kamtschatka. We have it mentioned also as a bird of Surinam, by Mr. Fermin; but as no other author has given it as

a native of this part of the world, we cannot be positive of the circumstance; it certainly is found in India, and there called Kuyla, and Kra chuckroonali.

### 110.—RAFT DUCK.

Anas fuligula, Am. Orn. viii. 60. pl. 67. f. 5?

LENGTH seventeen or eighteen inches. Bill two inches long, a little turning up at the end, and bent into a black nail at the point, colour dusky black; about half an inch from the tip an irregular pale blue grey bar, a quarter of an inch broad, surrounded at the base by a ring of the same; irides yellow; head and neck bright black; with a purplish gloss; hindhead full of feathers, but not sufficient to form a crest; just under the bill a triangular white spot; round the middle of the neck a deep chestnut collar about an inch in breadth; from thence, all round to the breast, dusky black, but without any gloss of purple; back, wings, rump, and tail, the same, but with a tinge of brown; under parts of the body from the breast white, passing upwards on each side in a line before the wings; in the place of a speculum a large patch of pale dove, or pale ashcolour, with a tinge in some lights of lilac; and some of the feathers composing it fringed with white, with a line of white at the hind part; above this very deep glossy green, but neither very bright; vent and under tail coverts deep chocolate brown; under wing coverts mostly white; sides under the wings and lower belly undulated with numerous lines of grey; under scapulars six in number, and white, as in the Tufted Duck; legs dusky.

Inhabits America: met with by Mr. Abbot about Georgia, and is frequent in the ponds in the winter; sent by him to England, by the name of Black Duck, and called there by some the Raft Duck.

In the collection of India drawings is a similar bird, having a transverse patch of white on the wings, bounded with a narrow

dusky band; many of the quills wholly white, the rest dusky. This last drawing seems to prove the bird a native of India, but how far, or whether at all, connected with the Tufted Species we are not able to determine. In the Amer. Ornith, this is called the Tufted Duck, and it is added, that in young birds the head and neck are purplish brown; in some the chestnut ring is obscure, in others very rich and glossy; and it says also, that in one or two specimens this ring was wholly wanting. This bird has many things in common with the Tufted Duck, but is probably distinct.—Among a collection of drawings sent by Mr. Abbot, is one by the name of the Female Black Duck. Bill much as in the other, tip dusky black; plumage in general pale brown, darker on the back; the head and neck the same in colour, not purplish black as in the other, nor with the least appearance of the rufous or chestnut ring; but the nape is full of feathers, or somewhat tufted; the wing coverts are pale ash, the speculum exactly as in the other, but the lower series of feathers greyish white, not pure; the thighs, and behind them to the vent, instead of dusky black, brown; tail in both rounded, the two middle feathers darker than the rest; legs bluish.

# 111.--LAPMARK DUCK.

Anas Scandiaca, Ind. Orn. ii. 859. Gm. Lin. i. 520. Tem. Man. 570. Id. Ed. 2d. 875.

— latirostra, Brun. No. 91. Muller, No. 130. (Skoora).

Anatra Canone Domenicano, Gerin. v. pl. 594.

Lapmark Duck, Gen. Syn. vi. 515. Arct. Zool. ii. 576. M.

SIZE of the Mallard; length nearly sixteen inches; weight sixteen ounces. Bill broad, and black; head, neck, and breast, chestnut brown; irides white; at the base of the bill pale, inclining to yellow; back, wings, and tail, black; second quills white, tipped with black, appearing as a white line on the wing; breast and belly white; lower part of the last ash-colour; sides under the wings ferruginous; legs black.

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Inhabits the Coasts of Denmark and Norway; common about Christianstadt, also Lapmark, frequenting both sea and fresh waters; extends also to India.

One, supposed a female. Bill bluish black; head, neck, and breast, brownish cream-colour, approaching to dun; back and wings chocolate, with a greyish tinge; feathers of the back margined with light rufous; across the wing a series of dusky red feathers; upper tail coverts the same; quills and tail like the back, but plain; beneath from the breast light rufous red; legs blue, with dusky black webs.

In one of these, among General Hardwicke's drawings, the head, neck, and breast, are fine chestnut brown; middle of the belly white; beyond this brown; vent white; outer webs of all the quills white for nearly the whole of the length, ends dusky; tail pale ash-colour.—M. Temminck joins this with the Tufted Duck, as a bird in incomplete feather.

# 112.—AFRICAN TEAL.

Anas Africana, Ind. Orn. ii. 875. Gm. Lin. i. 522.

——leucophthalmos, Tem. Man. 572. Id. Ed. 2d. 876.

Sarcelle d'Egypte, Buf. ix. 273. Pl. enl. 1000.

Bruine Duiker Eend, Sepp. iv. t. p. 323.

African Teal, Gen. Syn. vi. 555. Orn. Dict. Supp. Lin. Trans. xi. p. 178.

LENGTH sixteen inches. Bill dusky; head, neck, breast, and belly, deep bright rufous brown; on the lower part of the breast a patch of white; the rest of the plumage black; above and across the wing a bar of white. The female differs in being more dull, and the breast waved with brown.

Inhabits Egypt, and seems much allied to the Lapmark Duck, if not the same. Several of these were bought in Leadenhall Market, in London; said to have been taken in Lincolnshire.\*

<sup>\*</sup> Mr. Bullock-See Lin. Trans.

## 113.—NYROCA DUCK.

Anas Nyroca, Ind. Orn. ii. 869. Gm. Lin. i. 542. N. C. Petr. xiv. 403. Olive-tufted Duck, Br. Misc. i. t. 21. Tufted Duck, Gen. Syn. vi. 541. 79. Var. A.

LENGTH sixteen inches and three quarters. Bill two inches, black, toothed on the edges; irides whitish; head compressed, deep glossy chestnut; neck, breast, and sides, the same; lower part of the neck behind, back, and rump, olive black; belly and vent white, sides of the last brown; wings shorter than the tail; some of the quills edged, and others tipped with olive black; from the seventh to the twentieth white, except at the ends, which are black, forming, when closed, a large patch, or speculum; tail pointed, black brown; legs deep lead-colour, claws black.

The female is smaller, dirty rust, where the male is chestnut; belly whitish, clouded; vent paler brown; back inclined to rufous; the rest as in the male.

Inhabits Russia; frequent about the River Don; the male and female always found together; lays from six to eight whitish eggs, in a hollow, on the rising ground, in May: the female, while sitting, drives off the male, lest he should break the eggs, which he is sometimes known to do. The flesh is well tasted, as the bird chiefly lives on vegetables.

This is by many supposed to differ only in sex or age from the Tufted Species,\* but the tail feathers in the last named are rounded at the ends, and in the Nyroca they run to a point. In India it is called Chuta-chkrionat. The trachea of the male is not unlike that of the Tufted Duck, swelling out in the middle, but contracting into a much smaller diameter than in that bird.†

<sup>\*</sup> Lin. Trans. + See Montag. Sup. plate at the end, f. 1, 2.

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A.—Anas ferruginea, Ind. Orn. ii. 866. Gm. Lin. i. 528.

Anas rufa, Faun. suec. No. 134.

Red Duck, Arct. Zool. ii. No. 576. N. Br. Zool. Ed. 1812. pl. 45.

Ferruginous Duck, Gen. Syn. vi. 526. Br. Zool. ii. No. 285. pl. 99. Bewick, ii. 359.

Orn. Dict. & Supp. & App. with a figure of the bird.

WEIGHT twenty ounces. Bill pale blue, long, flattened, a little rounding at the base, with a nail at the end, serrated on the edges of both mandibles; head, neck, and the whole of the upper part of the head, reddish brown; throat, breast, and belly, the same, but paler; legs pale blue, webs black.

Inhabits Sweden, said to be found in the rivers there, but rarely. Mr. Pennant has received it from Denmark. An account of one killed in Lincolnshire, was also sent to him by Mr. Bolton. By some it has been thought to be the female of the Nyroca Duck; by others that of the Western Species. The one described and figured in the Supp. to the Orn. Dict. was shot in the north of England. Colonel Montagn considers it as a distinct species.

## 114.—NEW ZEALAND DUCK.

Anas novæ Zealandiæ, Ind. Orn. ii. 870. Gm. Lin. i. 541. He patek, Forst. Voy. i. 168. Cook's Voy. i. p. 72? New Zealand Duck, Gen. Syn. vi. 543.

SIZE of a Teal; length fifteen inches. Bill bluish white, two inches long, and somewhat stout; nail black; irides golden; head and neck black; hind part glossed with purple, changing in some lights to blue; upper parts of the body and wings black, glossed with green; under parts of the body pale ash; quills deep ash; on the secondaries a bar of white; tail short, dirty green; legs pale ash-colour.

Inhabits Dusky Bay, in New Zealand, where it is called Hepatek.—Sir Joseph Banks. Capt. Cook also mentions one in his

voyage bigger than a Teal, all black, except the Drake, which has some white in the wings, but met with only at the head of the bay. The above seems to bear some affinity to the Tufted Duck.

# 115.—CRESTED DUCK.

Anas cristata, Ind. Orn. ii. 870. Gm. Lin. i. 540. Crested Duck, Gen. Syn. vi. 543.

SIZE of the Mallard; length twenty-eight inches. Bill two inches long, black, turning up at the end, edges of the under mandible yellowish; irides red; top of the head dusky, crested at the nape; forehead, sides under the eyes, and neck, pale ash-colour; chin, and neck before, pale cream, transversely spotted round the lower part with dusky and ferruginous; back and wing coverts deep dusky ash; lower part of the back and rump inclining to rufous; speculum of the wings fine blue, bounded below with white; quills and tail black; the last pointed in shape, and longer than the wings.

Inhabits Staaten Land. From the same drawings as the last. In some other drawings is one, answering to the above description, but with no blue speculum on the wing; instead of which is a large patch of white, arising from the second quills being of that colour, and some of the greater ones edged with white.

# 116.—HAWKESBURY DUCK.

Anas jubata, Ind. Orn. Sup. p. lxix. Hawkesbury Duck, Gen. Syn. Sup. ii. 358.—pl. in title page.

LENGTH twenty-two inches; size of a Wigeon; but the bill rather shorter and black; head and neck chocolate brown; at the nape the feathers are much lengthened, somewhat paler, and black

<sup>\*</sup> In the drawing is some appearance of a knob on the joint of the wing, but as nothing is said about this in the MS the circumstance must remain uncertain.

at the ends; upper part of the back and wing coverts brownish ash-colour, the last palest; lower part of the back, rump, tail, and middle of the belly, vent, under tail coverts, and quills, black; but the sides of the breast and belly under the wings are grey, crossed with minute undulated lines; speculum of the wing green, bounded on each side with white, but the white is broader beneath than above; the outer webs of the scapulars black; but the most distinguishing character is, that the feathers of the breast have silvery grey ends, and on each side of the grey a blackish spot, giving that part an undulated appearance, spotted with blackish; the wings, when closed, do not reach quite to the end of the tail; legs brown.

The female differs in having the vent white, instead of black, and the green speculum smaller, and less conspicuous.

Inhabits New South Wales, most frequent about Hawkesbury River, and now and then seen to perch on trees.

Some birds have a longer crest than in others; the head and neck, too, are fine rufous, not unlike the same parts in the Pochard; from the lower part of the breast to the middle of the belly ash-colour, beautifully marked with curved lines of brown; on the back four or five irregular large patches of black; legs black.

## 117.—DUSKY BAY DUCK.

SIZE of the Mallard. Bill black; plumage above ferruginous; head and neck black; speculum of the wing green, bounded below with a broad white bar; tail dusky. In the female the head and neck are white.

Inhabits New-Holland: in plenty about Dusky Bay.

# 118. - RED-CRESTED DUCK.

Anas rufina, Ind. Orn. ii. 870. Gm. Lin. i. 541. Pall. reise, ii. 713. Fn. Helvet. Tem. Man. 560. Id. Ed. 2d. 865.

Anas fistularis cristata, Bris. vi. 398. Id. Svo. ii. 465. Gerin. v. t. 587.

- cristata flavescens, Mars. Dan. 108. t. 52. Klein, 135. 26.

\_\_\_\_ capite rufo major, Raii, 140. 2. Will. 279.

Canard siffleur huppé, Buf. ix. 182. Pl. enl. 928.

Kolben Ente, Bechst. Deuts. Ed. 2d. V. iv. 1021. Schmid, Vog. p. 156. t. 129.

Great Red-headed Duck, Will. Engl. 364.

Barbary Shoveler, Shaw's Trav. 254?

Red-crested Duck, Gen. Syn. vi. 545.

THIS is a large bird; length two feet; weight three pounds or more. Bill fine red; irides brown; upper part of the head and neck deep testaceous red; crown pale rufous, the feathers of it thick set, standing up, and forming a pretty large globular crest; body in general black, but the under parts incline to dusky; beginning of the back, between the wings, grey brown; bastard wing paler; at the base of it a transverse, lunated, white mark; wings blackish brown; speculum white, in some surrounded with black; tail short, that and the vent dark brown; the margins of the feathers whitish; legs brown, reddish on the fore part. The female is brown, paler, with a reddish bill, and without the crest.

Inhabits the Caspian Sea, and vast lakes of the Desert of Tartary, and is a solitary species: sometimes seen in the great lakes, lying on the east side of the Uralian Chain, but not in the rest of Siberia. I observe this in India drawings, where it is called Bhoora; the female has a dusky head; and the male has not so fine a crest as we see in the *Pl. enl*. The speculum of the wings is dusky white; legs pale red, with dusky blue webs.

This species is found in Italy, as Willughby met with it at Rome; inhabits also Switzerland, and if the same with Shaw's Red-necked Shoveler, is found in Barbary. It has also been once shot in a decoy in this kingdom.\*

<sup>\*</sup> Mr. Edwards.

### 119.—ICELAND DUCK.

Anas Islandica, Ind. Orn. ii. 871. Gm. Lin. i, 541. Hrafn-ond, Muller, No. 131. Isl. reise, 688. Arct. Zool. ii. 574. H. Iceland Duck, Gen. Syn. vi. 545.

GENERAL colour black; head crested; fore part of the neck, breast, and belly, white; legs saffron-colour.

Inhabits Iceland, and called Hrafn-ond.

### 120.—DUSKY DUCK.

Anas obscura, Ind. Orn. ii. 871. Gm. Lin. i. 541. Amer. Orn. viii. pl. 72. 5. Dusky Duck, Gen. Syn. vi. 545. Arct. Zool, ii. No. 496.

LENGTH two feet. Bill narrow, dusky, tinged with blue; crown dusky; neck pale brown, streaked downwards with dusky lines; back and wings deep brown; breast and belly the same, edged with dirty yellow; primaries dusky; speculum of a fine blue, bounded by a black bar; tail cuneiform, dusky, edged with white; legs dusky, or yellow. The female chiefly differs in having more brown in the plumage.

Inhabits North America; called on the Coast of Jersey, Black-Duck, chiefly in the salt marshes, generally migratory, but some remain and breed. The eggs eight or ten, most like those of the Domestic Duck; the chief food minute snail shells, found in the marshes. The flesh inferior to that of the Wild Duck; are in abundance from Florida to New England, but chiefly on the sea coast.

#### 121.-SUMMER DUCK.

Anas Sponsa, Ind. Orn. ii. 871. Lin. i. 207. Gm. Lin. i. 539. Bor. iii. p. 20. 16. Bartr. Trav. p. 293. Amer. Orn. viii. 97. pl. 70. f. 3. Shaw's Zool. pl. 1037. Frankl. Narr. App. p. 702.

Anas æstiva, Bris. vi. 351. t. 32. f. 2. Id. Svo. ii. 455. Gerin. v. t. 579.

Yztactzon Yahauhqui, Raii, 176. Will. 299. Klein, 134. 21.

Beau Canard huppé, Buf. ix. 245. Pl. enl. 980, 981.

American Wood Duck, Brown, Jam. 481.

Summer Duck, Gen. Syn. vi. 546. Cat. Car. i. pl. 97. Edw. pl. 101. Arct. Zool. ii. No. 493. Orn. Dict. Supp. pl. in ditto, f. v.—trachea.

SIZE of a Wigeon; length from seventeen to nineteen inches, breadth twenty-nine. Bill white, the upper mandible red at the base, tip and ridge black; irides hazel; eyelids crimson; the hindhead much crested; the feathers very long, and hang down the neck; the head and crest are glossy green, appearing purple in some lights; from the nostrils a white line passes on each side, over the eye, to the hindhead; and from the back of the eye a second, tending to the same part; the hindhead, beneath the crest, black; chin and throat white, forming a slender curve upwards round the jaw, ending in a point at the back of the eye; below this is a second curve, tending towards the nape; the neck below the crest, and breast, of a ruddy vinaceous colour, inclining to brown behind; the breast marked with triangular spots of white; from thence, as far as the vent, white; the feathers which fall over the wings barred black and white; back glossy brown; scapulars glossed with blue green; second quills with blue; sides of the body finely barred with dusky and cream-colour; over the thighs marked with black and white; tail pointed, black; sides of the vent purplish chestnut; legs orange.

The female is smaller. The feathers round the base of the bill white; round the eyes the same, passing in a streak behind, and finishing in a point; chin and throat white; fore part of the neck and breast brown, spotted as in the male, but much less distinct;

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back and tail brown; wings the same, mixed with blue green on the coverts and second quills; across the wing a narrow white bar; quills dusky, edged near the ends with grey, and within with green; belly white; legs as in the male.

The trachea of this sex has some things in common with the Pintail, Gadwal, Wigeon, and Mallard, having like them the lower part, at the divarication, firm and bony: it may be compared to that of the last named bird, but differs in the labyrinthic enlargement, in respect to shape, which is irregularly oval, and placed transversely; the utmost length three quarters of an inch: it appears on the fore part attached only to one side, but at the back it spreads nearly over the whole of the rings; and at the bottom has a narrow connection with the opposite side of the bony part.

This beautiful species inhabits Mexico, and some of the West India Isles, migrating in summer as far north as 40 deg. or a little beyond. Appears at New York early in spring, and breeds there; makes the nest in the decayed hollows of trees, or such as have been made by Woodpeckers, and often between the forks of the branches, hence called the Summer, or Tree Duck;\* when hatched, the mother takes the young on her back to the water. Very common in Georgia and Louisiana the whole winter, and sometimes breeds there; the eggs twelve in number at least,† pale greenish white, and highly polished. The flesh is much esteemed; Mr. Abbot observes, that if you put the young ones into a tub, they will climb out by means of the bill and feet. Are often kept tame in our menageries, and breed freely. Of the neck of this species the Americans of Louisiana make their ornaments to the pipes, or calumets of peace. They are frequently brought into the markets of Philadelphia for sale.

<sup>\*</sup> Yet some proceed much farther to the north, as one was shot by Lieutenant Hood, at Cumberland House, in May 1820.

<sup>†</sup> Twelve eggs were found in Long Island, on the stump of a decayed tree, and put under a Hen; eleven were hatched, viz. eight males and three females, the twelfth was destroyed by accident.

#### 122.—CHINESE TEAL.

Anas galericulata, Ind. Orn. ii. 871. Lin. i. 206. Gm, Lin. i. 539. Mus. Lev. t. 10. Shaw's Zool. v. 21. pl. 885.

Querquedula Sinensis, Bris. vi. 450. Id. Svo. ii. 478. Gerin. v. t. 599.

Kinmodsui, Kæmpf. Jap. 129. pl. 10. f. 3.

Sarcelle de la Chine, Buf. ix. 276. pl. 19. Pl. enl. 805, 806.

Chinese Teal, Gen. Syn. vi. 548. Edw. pl. 102.

THIS is somewhat less than a Wigeon. Bill dull red; irides hazel; hind part of the head and part of the neck full of feathers, and elongated into a flattish crest; top of the head, down the middle of the crown, greenish black; between the bill and eye pale rufous; behind the eye white, passing backwards into the crest, which is dark glossy green; the feathers round the upper part of the neck, all round, are long and pointed, as in the cock, and dull orange: lower part of the neck and upper part of the breast chestnut; at the bend of the wing three transverse black streaks, and two of white alternate; scapulars black, margined with white; back and rump dusky brown, glossed in some parts with blue green; on the wings a blue green speculum, bounded below with white; quills dusky brown, edged near the ends with pale grey; one of the second quills much broader on one web than on the other, and curves upwards in an elegant manner, standing upright, when the wing is closed; the broader web is pale brownish red, tipped with black, the under, or parrow one, dusky black; tail pointed, dull brown, fringed with blue green: sides of the body brownish cream, transversely marked with fine lines of black; and over the thighs barred black and white: the lower part of the breast and belly white; legs orange.

The female is not unlike that of the Summer Duck, but has two bars of white on the wing; the breast seems more clouded with brown, and the spots are not of a triangular shape, but rounded; however, there appears at first sight very little difference between the females of the two species.

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This handsome bird inhabits China and Japan, and we believe also India, as it appears frequently in drawings from the latter; it is a most singular and elegant species, and kept deservedly for the sake of its beauty, by the inhabitants. We do not find that it is near so common in China as many other kinds, unless the Chinese politically hold them dear to the European purchasers; but they are frequently exposed to sale at Canton, in cages, and the common price is from six to ten dollars the pair; they are not unfrequently brought to England alive, but require much care, being more tender than our species, nor can they be bred in this country, though they are sufficiently familiar. It may not be amiss here to hint, that in any future attempt, care should be taken that both sexes are of Chinese origin; for the female of the Summer American Duck is so like that of China, as to be mistaken for it. This species is called in Japan Kimnodsui; in China Yun-iang; and by the English Mandarin-Duck.

# 123.—SUMMER TEAL.

Anas Circia, Ind. Orn. ii. 873. Lin. i. 204. Fn. suec. No. 130. Gm. Lin. i. 553. Scop. i. No. 76. Brun. No. 83. Raii, 148. 7. Will. 291. t. 76. Klein, 132. 8. Querquedula æstiva, Bris. vi. 445. 33. Id. 8vo. ii. 477.

Die Sommer Halbente, Bechst. Deuts. ii. 669. Id. Ed. 2d. iv. 1150. Schr. de Berl. Nat. vii. 457. Besc. d. Berl. Nat. iv. 604. t. 18. f. 4.—trachea.

Sarcelle d'Eté, Buf. ix. 268. Pl. enl. 946.

Summer Teal, Gen. Syn. vi. 552. Will. Engl. 378. pl. 76. Albin, ii. pl. 103, 104. Orn. Dict. & Supp.

THIS is thirteen inches in length, and weighs twelve ounces. Bill dark; the plumage on the upper parts greyish brown, margined with white on the back; over the eye a white streak; cheeks and throat chestnut; fore part of the neck rufous, margined with brown; under parts of the body rufous white, spotted with black on the belly; scapulars like the back, the larger white down the middle; wing coverts cinereous; across the wing a white streak; quills

brown; speculum green,\* edged with black, bounded below with white; legs bluish. The female smaller; above cinereous brown, feathers of the back edged with rufous; cheeks, throat, and under parts, white; over the eye a white line; wing coverts and scapulars grey brown, edged with rufous; the rest of the wing as in the male, but no black in the speculum.

Buffon seems dubious of its being distinct, yet gives a full account of its remaining in France, throughout the summer, and breeding there, in all respects like the Teal; and he adds, that the male, when the time of incubation is over, becomes so like the female, as not to be distinguished, but regains its plumage after January.

This bird has given rise to various opinions. It is thought by some to be the young of the Common Teal, by others that of the Garganey, which is rarely seen here beyond the month of April; nor do we know for certain that either of them has bred in England, except perhaps in the more northern parts. M. Temminck thinks the Summer Teal to be the Garganey in complete plumage, and this may now be fully ascertained from the trachea of the male, which differs so much in the Garganey and Summer Teal,† as to furnish an unerring guide to those who may have an opportunity of observing the same in a recent state, and serve at least to prove that the Summer Teal cannot be the Common Teal in any stage of life.

## 124.—GARGANEY DUCK.

Anas Querquedula, Ind. Orn. ii. 872. Lin. i. 203. Fn. suec. No. 128. Gm. Lin. i. 531. Scop. i. No. 75. Brun. No. 8. Muller, No. 125. Kram. 343. 18. Frisch, t. 176. Bris. vi. 427. t. 39. f. 1, 2. Id. 8vo. ii. 473. Raii, 148. 8. Will. 291. t. 74. Klein, 132. 8. Fn. arag. 75. Fn. Helv. Tem. Man. 545. Id. Ed. 2d. 845.

Anas Querquedula major mas, Gerin. v. t. 595.

- Circia, Sepp, Vog. ii. 182. t. 94, 95.

Phascas fortè Gesnero D. Johnson, Raii, 147. A. 4.-female. Will. 289.

Die Knackente, Bechst. Deuts. ii. 662. Id. Ed. 2d. iv. p. 1135.

<sup>\*</sup> Linnæus in his Faun. suecica, calls it blue. 

† See Lin. Trans. V. iv. pl. 13. f. 1, 2.

Winter halbente, Bes. d. Berl. Nat. iv. 60, t. 18, f. 6,—the trachea. Naturf. xii, 136, Sarcelle, Buf. ix. 260. Pl. enl. 946,—the male.

Garganey, Gen. Syn. vi. 550. Id. Sup. ii. 360. Br. Zool. ii. No. 289. pl. 101. Id. fol. 158. pl. Q. 9. Id. 1812. ii. 277. pl. 46. Art. Zool. ii. p. 576. O. Will. Engl. 377. pl. 74. Bewick, ii. pl. in p. 374. Lin. Tr. iv. 108. pl. xiii. f. 2, 3. the trachea. Lewin, vii. pl. 259. Walcot, i. pl. 75. Don. i. pl. 21. Pult. Dors. p. 21. Orn. Dict. δ Supp.

THIS is a beautiful species, and a trifle larger than the Teal; length seventeen inches, breadth twenty-eight; weight fourteen ounces. Bill dark lead-colour; irides light hazel; crown and hind-head dusky brown; from over the eye a white streak passes to the hindhead; on the chin a large black spot; cheeks and upper part of the neck pale purple, marked with oblong, minute lines of white, pointing downwards; breast light brown, with semicircular bars of black; belly white; lower part of it and vent varied with dusky specks; wing coverts grey, the lowest tipped with white; the prime quills are cinereous; the exterior webs of those in the middle grey; second quills green, forming a speculum; scapulars long, and narrow, elegantly striped with ash, white, and black; tail of fourteen feathers, dusky; legs lead-colour.

The female has an obscure mark over the eye; the rest of the plumage brownish ash, not unlike that of the hen Teal, but the wing wants the green speculum, which sufficiently distinguishes the sexes.

This species is found in England in the winter, at which time it is also seen in France, migrating northwards as summer advances, but rarely remains here beyond the month of April, about which time it is taken in the decoys of Somersetshire, and called there the Summer Teal.\* On the Continent it is noticed as far north as Sweden; is common throughout Russia and Siberia, as far as Kamtschatka; and southward to Italy, and Spain; on the borders of the Caspian Sea, and from thence to India, where we believe it is known

<sup>\*</sup> So called in Leonard Baltner's fine drawings of birds on the Rhine, in the collection of Lord Dartmouth.

both on the Coasts of Malabar and Coromandel,\* and there called Krah. The male of this species has a labyrinth at the end of the trachea, of the size of the tip of a finger; in shape nearly oval; it appears in one view as a continuation of the trachea, but a trifle flattened on one side, to admit of the insertion of the usual muscles; at the upper part, on the side next the breast, it is also flattened; and from thence the two bronchiæ take rise.

## 125.—COMMON TEAL.

Anas Crecca, Ind. Orn. ii, 872. Lin. i. 204. Fn. suec. No. 129. Gm. Lin. i. 532. Brun. No. 82, 83. Muller, No. 126. Kramer, 343. 19. Frisch, t. 174, 175. Georgi, 166. Sepp, ii. p. 147. t. 75, 76.—male and female. Klein, 133. 14. Id. 136, 31. Id. 132, 8. Id. Stem. 31. t. 35. f. 2. a. b. Fn. Arag. p. 75. Bor. iii. 13. 8. Schaf el. t. 19. Fn. Helv. Phil. Trans. lxii. 419. 51. Schr. d. Berl. Nat. vii. 456. Tem. Man. 547. Id. Ed. 2d. 847.

Anas Querquedula minor, Gerin. v. t. 598. Bris. vi. 436. t. 40. f. 1. Id. 8vo. ii. 475. Querquedula secunda Aldr. Raii, 147. A. 6. Id. 192. 14. Id. 148. 9.—female. Will. 290. t. 74.

Die Kriekente, Bechst. Deuts. ii. 666. Id. Ed. 2d. iv. 1143. Bes. d. Berl. Nat. iv. 600. Naturf. xii. 137.

Petite Sarcelle, Buf. ix. 265. pl. 17, 18. Pl. enl. 947.—male.

Green-winged Teal, Am. Orn. viii. 101. pl. 70. f. 4.—male.

Common Teal, Gen. Syn. vi. 551. Id. Sup. 276. Id. Sup. ii. 360. Lin. Trans. iv. 108. pl. 13. f. 1.—trachea. Bewick, ii. pl. p. 376. Br. Zool. ii. No. 290. Id. fol. pl. Addend. Id. Ed. 1812. ii. p. 279. Arc. Zool. ii. 577. P. Will. Engl. 377. § vi. pl. 74. Albin, i. pl. 100. Hayes, pl. 29. Lew. vii. pl. 260. Walc. i. pl. 76. Pult. Dors. p. 21. Orn. Dic. & Supp.

LENGTH fourteen inches; weight twelve ounces. Bill black; irides pale hazel; head and neck reddish bay; sides of the head, behind the eye, green, passing backwards to the nape, bounded below with a white line; lower part of the neck behind, the beginning of the back, scapulars, and sides of the body, white, marked with transverse, fine black lines; fore part of the neck and breast dusky white, with roundish black spots; belly white; middle of the

<sup>\*</sup> View of Hindoostan, ii. 160.

vent black; wing coverts brown; quills dusky; speculum green, bounded obliquely above with black, and edged with white; tail cuneiform, brown, edged with white; legs brown.

The female has the head and neck dusky white and brown mixed; the lower part of the neck and sides over the wing brown, edged with dusky white; legs brown.\*

The male has not only a slender windpipe in proportion to the size of its body, but a very small labyrinth, being not much bigger than a pea. See the figure in *Lin*. *Trans*.

The Teal is frequently seen in our markets in the winter, and often on our fresh waters; retires to the northern parts in the summer to breed, which it is known to do in the mosses about Carlisle, in Cumberland; besides which, we are informed, that it has been met with on Wolmer Forest, among the Flappers, or young Wild Ducks; several of both of them having been caught alive there in July 1773; and the late Mr. Boys supposed them to breed about Sandwich, from his meeting with them very late in spring. Mr. Youel had four young birds of the Teal hatched at Rudham, in Norfolk. The nest is generally of a large size, composed of bents, flags, or rushes, and the tenderest stalks of them, with the addition of the pith, and a quantity of feathers; and placed so close to the water, as to rise and fall with it: the eggs dirty white, the size of those of the Pigeon, marked with dusky, or hazel spots. Is said to feed on the grass and weeds, which grow on the edges of ponds, or the seeds of rushes, also small fish. The flesh is accounted excellent. Is found on the Continent as high as Iceland; also in France, Italy, Spain, and Germany; frequent about the Caspian Sea, and extends both to China, and India; and we are certain also, that the Garganey, Wild Duck, Shoveler, and Gadwall, as well as this species, are found on the Coast of Coromandel, and there called Sohn Churucha.

<sup>\*</sup> Dr. Lamb, some time since informed me, that he has more than once observed a large number of female Teals with no males among them.

Mr. Bullock met with them at Vera Cruz, and about Mexico,\* in plenty.

A.—Anas Bulbul, Fn. Arab. iv. No. 12. Gm. Lin. i. 543. Ind. Orn. ii. 874. d.

This has a spot of black at the base of the bill; the body cinereous, waved with white, paler beneath; head brown, with a large and long reddish green spot on the temples; on the neck behind a blue black spot, uniting with the green one; speculum of the wing oblique, green, beneath obliquely black. The female has the head waved with cinereous.

This bird is common at Cairo, in Egypt, and is most probably related to the Common Teal.

#### 126.—SIRSÆIR TEAL.

Anas Sirsæir, Ind. Orn. ii. 877. Gm. Lin. i. 524. Fn. Arab. p. 3. 11. Sirsæir Duck, Gen. Syn. Sup. ii. 357.

THE bill in this is lead-coloured, beneath yellow; chin white; crown brown; back brown, margins of the feathers whitish; belly whitish; speculum of the wings divided obliquely, above silky green, beneath black; before and behind white; legs grey.

Inhabits Arabia, and called there Sirsæir. This seems to correspond with the Common Teal, and is not improbably the male in imperfect plumage.

# 127.—CHESTNUT-WINGED TEAL.

SIZE of our Teal; length thirteen inches. Bill as in the Wigeon, black; head and neck to the breast pale brown; the chin

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<sup>\*</sup> The Common Teal and Pintail were exceedingly common about Mexico, and the neighbouring parts; but our Common Ducks, or any other kept tame, were rarely met with. Bullock's Mexico.

dusky white; breast buff; belly pale rufons, the ends of the feathers chestnut; under tail coverts white; the back brown, the feathers edged with paler brown; wings deep ash, inclining to lead-colour; upper wing coverts fine rich chestnut; lower part of the back and rump like the wing coverts; under wing coverts and tail brown; legs black.

A specimen of this was in the Museum of Mr. Bullock, but from whence it came uncertain.

## 128.—GREY-SHOULDERED TEAL.

LENGTH thirteen inches. Bill one inch and three quarters, blue black; head and neck white, with slender dusky streaks; down the middle of the crown a dark brown streak; between the bill and eye one of the same, passing through the eye, and finishing in a point, near an inch beyond it; breast rufous white, marked with dusky crescents; below this paler, with crescents and blotches, but more obscure; back deep ash brown; wing coverts pale blue grey; on the middle of the wing a speculum of green, bounded above and below with white, broadest on the upper part; quills deep ashbrown; tail pale, the feathers running to a point; legs pale blue grey.

One, said to be the female, is very similar, but the brown streak on the head obscure; wing coverts very pale, greyish ash; speculum the same, not green, but the feathers deeply margined with pale grey; the rump in both is pale, blotched with brown; tail darker than in the male.

Inhabits India. Probably related to our Common Teal.

## 129.—BILIBI TEAL.

Bilibi Teal, Lin. Trans. xiii. 331.

LENGTH twelve or fourteen inches. Crown of the head dark brown; neck cinereous, passing into ferruginous on the breast and

abdomen; back blackish, the feathers on the upper part tipped and edged with brown; upper part of the wings dark chestnut; quills black.—This is very common in the Island of Sumatra, and called Bilibi.

### 130.—AMERICAN TEAL.

Anas Carolinensis, Ind. Orn. ii. 874. Gm. Lin. i. 533.

— migratoria, Least Green-winged Teal, Bart. Trav. 293.

— Crecca var. Phil. Trans. lxii. 419. Fn. Am. p. 17.

American Teal, Gen. Syn. vi. 554. Arct. Zool. ii. No. 504.

LENGTH fourteen inches, breadth twenty-one. Bill black; head and upper part of the neck fine deep bay; from each eye to the hindhead a changeable, broad, green bar; at the nape a conspicuous tuft of glossy black feathers, inclining to steel blue; beneath the eye a faint white line; fore part of the neck and breast spotted with black; over each shoulder a lunated white bar; back waved black and white, inclining to brown on the rump; wing coverts brown; speculum green; on the scapulars a streak or two of black; the lower feathers white at the tips, forming a narrow bar; above these a pale rufous patch; vent black in the middle, curving upwards; sides of the vent and tail pale tawny, or cream-colour; body under the wings crossed with numerous slender lines of blackish, like the back; belly white; legs black.

The female is reddish cinereous brown, spotted with black; the wings as in the male.

Inhabits America, from Carolina to Hudson's Bay, breeding in the last; has from five to seven young; retires south in autumn: found in Georgia in the winter, and frequents ponds in the spring. The male called the Green-winged Teal, for the speculum in both sexes is green, with the lower half black, bounded before and behind with buff-colour. It seems much allied to our European Teal.

### 131.—ST. DOMINGO TEAL.

Anas Dominica, Ind. Orn. ii. 874. Lin. i. 201. Gm. Lin. i. 521. Querquedula Dominicensis, Bris. vi. 472. t. 41. f. 2. Id. 8vo. ii. 484. Sarcelle rousse à longue queue de la Guadaloupe, Buf. ix. 283. Pl. enl. 968. Chilcanauhtli, Raii, 177. Colcanauhtli—female. St. Domingo Teal, Gen. Sun. vi. 554.

LENGTH from twelve to fourteen inches. Bill one inch and a half, bluish, with a black nail; chin, close to the base beneath, white; the rest of the head and neck fine rufous; above the same, the middle of the feathers black; under parts rufous, inclining to grey, with a little mixture of dusky, most so, and darker near the vent; quills brown, six of the middle ones white halfway from the base, or in some to two-thirds of the length, forming a kind of white speculum; tail cuneiform, dusky purple, the feathers pointed at the ends, the two middle ones near four inches long, the outmost only two; legs short, and yellow.

Inhabits the Isle of Trinidad.—In the collection of Lord Seaforth.

### 132.—SPINOUS-TAILED TEAL.

Anas Spinosa, Ind. Orn. ii. 874. Gm. Lin. i. 522. Sarcelle à Queue epineuse, Buf. ix. 282. Pl. enl. 967. Spinous-tailed Teal, Gen. Syn. vi. 555.

LENGTH eleven or twelve inches. Bill blue; top of the head black; through the eye a streak of black; beneath it a second of the same; beneath these white; the rest of the plumage dusky brown, with a darker mixture, paler beneath, the chin palest; on the wings a small portion of white on the outer coverts; tail short, but each feather has the end unwebbed, and prolonged into a sharp point; legs yellowish flesh-colour.

Inhabits Cayenne and Guiana. Said to be the female of the former species. In a dried specimen of the above I observed the tail feathers to decline over each other, as in the Common Hen.

## 133.—SILEY TEAL.

LENGTH eighteen or nineteen inches. Bill longish and black, the end bent downwards; nostrils rather elevated, and pervious; irides brown; round the eyelids a rim of yellow; crown rufous brown; the rest of the head and neck buff; breast, belly, and over the thighs pale ferruginous; back deep bluish ash, the upper half with large and deep waves of pale rufous, or buff, the lower quite plain; inner half of the wing coverts rufo-ferruginous, the remainder deep ash; the outer part of the wing and quills black; upper tail coverts ferruginous; vent and under tail coverts yellowish, or straw-colour; tail brown; legs bluish lead-colour; claws black.

Inhabits the Coast of Coromandel, and there called Siley.

#### 134.—MADAGASCAR TEAL.

Anas Madagascariensis, Ind. Orn. ii. 875. Gm. Lin. i. 522. Sarcelle male de Madagascar, Buf. ix. 274. Pl. enl. 770. Madagascar Teal, Gen. Syn. vi. 556.

SIZE of our Teal. Bill one inch long, yellow, tip black; irides yellow; top of the head to the crown, forepart of the head, and neck, white, passing on the sides behind the eyes, and there ending in a point; but part of the head and neck dusky, greenish black; on the middle of this, below the ears, a large oval patch of paler green, bordered all round with a rim of black, and accompanied with a line of white; lower part of the neck and breast pale rust, undulated with dusky lines, and passing behind in a collar;

upper part of the body, wings, and tail very dark glossy green; sides clouded with ferruginous; middle of the belly and vent white; quills dusky; on the wings a streak of white; legs dusky.

Inhabits Madagascar.

#### 135.—COROMANDEL TEAL.

Anas Coromandeliana, Ind. Orn. ii. 875. Gm. Lin. i. 522. Sarcelle de Coromandel, Buf. ix. 274. Pl. enl. 949, 950. Coromandel Teal, Gen. Syn. vi. 556.

THIS is about one-fourth less than the Garganey. Bill dusky; top of the head black; the rest of it and neck white, speckled with dusky black; lower part of the neck striated across with fine lines of the same; the upper parts of the body and wings brown, with a green and reddish gloss; breast and belly white; sides of the vent inclining to ferruginous; legs black.

The female differs in having the white on the under parts mixed with grey; the lines on the lower part of the neck broader, and less distinct; and in general the plumage less beautiful than in the male.

Inhabits the Coast of Coromandel.

### 136.—GIRRA TEAL.

SIZE of the other. Bill and down the middle of the crown black; the rest of the head and neck white, marked on the breast with pale brown; round the lower part of the neck a collar of black, broadest before; across the middle of the wings a broad space of green; back greenish chocolate; wings the same, but more inclined to green; quills deep chocolate, at the base, and tips in the middle, white, forming a patch; tail deep chocolate; all beneath, from the breast and the upper tail coverts, white, minutely speckled with chocolate points; vent barred with dusky black; legs dusky yellow; webs and joints dusky.

Inhabits India; named Girra. Said to build the nest in trees.—In the female the head and neck are white, crossed round the lower part with dusky lines; upper parts of the body brown; beneath, from the breast, dusky white; down the crown a dusky streak; the same through the eye, from the nostrils; across the quills a narrow white bar; tail black.

Inhabits India. Met with in various drawings, and probably allied to the last. The eggs are white.

### 137.—MANILLA TEAL.

Anas Manillensis, Ind. Orn. ii. 875. Gm. Lin. i. 523. Sarcelle de l'Isle de Luçon, Son. Voy. 91. pl. 54. Manilla Teal, Gen. Syn. vi. 523.

LESS than the Common Teal. Bill black; upper part and sides of the head and throat white; neck, breast, and wing coverts, reddish brown; back yellow, the feathers margined with black; those of the belly white, with black margins; quills and tail slate black; legs blackish.

Inhabits the Island of Manilla.

## 138-BAIKAL TEAL.

Anas formosa, Ind. Orn. ii. 876. Gm. Lin. i. 525. Georgi reise, i. 168. Baikal Teal, Gen. Syn. vi. 557.

SIZE of a Teal; length from twelve to fifteen inches; weight eighteen ounces. Bill black; crown of the head the same, edged with white; sides of it, taking in the eye, yellowish cream-colour; the eye surrounded with black, passing in an irregular stripe down the middle of the cream-colour, and curving to the chin; behind this, over the ears, a large curved patch of fine green, bounded all round with white; breast rufous fawn-colour, with small black spots;

back brown, inclining to dove-colour on the wings; before the wing a white bar; speculum first ferruginous, then green, edged with black; after that white, edged above with ferruginous; the scapulars are long, narrow, and pointed, some half black, half tawny; others plain tawny, and fall elegantly over the wings on each side as in the Garganey; above the tail a bar of white; under tail coverts black; tail brown, the feathers pointed at the ends; legs dull red.

The female very nearly resembles that sex of the Common Teal.
Inhabits the neighbourhood of the Lake Baikal, and extends to India, and among others called Sohn churucka. The trachea of this bird is much like that of the Common Teal.

## 139.—HINA TEAL.

Anas Hina, Ind. Orn. ii. 876. Gm. Lin. i. 523.

— Chinensis regione o ulorum (Maris) viridi, Osb. Voy. ii. p. 33.

Hina Teal, Gen. Syn. vi. 558.

LENGTH thirteen inches and a half. Bill blackish grey, and soft; head and chin brown; a white line passes below the eyes; all above them green; neck and upper part of the back white, spotted with black; the lower, and rump, ash; upper part of the neck white, spotted with black; breast and belly white, spotted with black backwards; the feathers of the rump edged with white; legs ash-coloured. The female said to have the head, and all about the eyes, whitish grey; chin white; body above black, in some parts reddish white; beneath white, spotted with black.

Inhabits China: called Hina-a. We much suspect that this and the last described are nearly allied. Found also at Bengal, where it is called Toolsee.

### 140.—SPARRMAN'S DUCK.

Anas Sparrmanni, Ind. Orn. ii. 876.

— Alandica, Mus. Carls. fasc. iii. t. 60.
Sparrman's Duck, Gen. Syn. Sup. ii. 357.

LENGTH twenty-three inches. Bill black; top of the head ferruginous, spotted with black; sides of it, nape, chin, and throat, cinereous, with brown spots; lower part of the throat spotted ferruginous and black; between the shoulders, scapulars, and some of contiguous feathers black, with pale ferruginous margins, marked in the middle, towards the tip, with two reddish white bands, meeting at an angle; upper and under wing coverts sooty brown, with whitish margins; the first prime quill dusky white, with a brown tip; the rest pale brown, with the outer margins and tips blackish brown; rump ferruginous and white, spotted with black; vent elongated, white; tail ferruginous, crossed with five or six bands of black; legs black.

Inhabits Sweden: found in Aland, towards Abo: called Sjö-And.

### 141.--GMELIN'S DUCK.

Anas Gmelini, Ind. Orn. ii. 876. Anas lurida, Gm. Lin. i. 531. S. G. Gmel. It. i. p. 70. 2. 182. t. 16. Gmelin's Duck, Gen. Syn. Sup. ii. 356.

THIS is larger and stouter than the Teal; at the corners of the mouth a spot of white; plumage in general black; head chestnut; breast crossed with reddish lines; belly whitish, with dusky spots; sides and vent white; the first four outer quills are black, but within cinereous; from the fifth to the tenth wholly cinereous, to the nineteenth white, to the twentieth half white, half dusky on the vol. x.

fore part, hinder cinereous; the tips of these and the rest wholly black; wing coverts and tail black.

Inhabits the Caspian Sea and the neighbouring parts of the South of Russia.

#### 142.—KEKUSCHKA DUCK.

Anas Kekuschka, Ind. Orn. ii. 877. Gm. Lin. i. 531. S. G. Gmel. It. iii. 249. t. 26, 27. Kekuschka Duck, Gen. Syn. Sup. ii. 356.

LENGTH nineteen inches; general colour yellow oker; under parts white; back ash-colour; rump and tail deep black; the quills, from the fifteenth to the nineteenth, white at the tips.

Inhabits the parts about the Caspian Sea. The flesh said to be rancid.

### 143.—ARABIC DUCK.

Anas Arabica, Ind. Orn. ii. 877. Gm. Lin. i. 542.

—— Scar chir, Forsk. Fn. Arab. p. 3. 7.

Arabic Duck, Gen. Syn. Sup. ii. 357.

BILL yellow, with the middle part black; the body spotted with grey; beneath and on the rump whitish, with cinereous spots; speculum of the wings dusky, banded before and behind with white; legs yellowish ash-colour.

Inhabits Arabia. The name Scar chir.

### 144.—ALEXANDRINE DUCK.

Anas Alexandrina, Ind. Orn. ii. 877. Gm. Lin. i. 542.
—— Sau Sarai, Forsk. Fn. Arab. p. 3. 8.
Alexandrine Duck, Gen. Syn. Sup. ii. 357.

IN this the bill and vent are black; neck ash-colour, marked with black crescents; belly white; legs yellowish ash-colour.

Inhabits Alexandria, and is called Sáu Sárai.

## 145.—GATTAIR DUCK.

Anas Gattair, Ind. Orn. ii. 877. Gm. Lin. i. 542. Fn. Arab. p. 3. 10. Gattair Duck, Gen. Syn. Sup. ii. p. 357.

BILL brown; plumage in general the same; wings black, beneath white, margined with brown; the quills from the fourth to the twentieth white in the middle; belly and tail coverts white; legs bluish ash-colour.

Inhabits Alexandria, known there by the name of Gattair.

# GENUS CVIII.-PINGUIN.

1 Cape Pinguin	4 Red-footed	10 Patagonian
A Var	5 Little	11 Collared
B Var.	6 New-Holland	12 Hairy
	7 Chiloe	13 Woolly
2 Magellanic	8 Papuan	14 Three-toed
3 Crested	9 Antarctic	15 Apterous

IN the Pinguin Genus the bill is strong, straight, more or less bending at the point, and furrowed on the sides.

Nostrils placed in the furrows. Situation undetermined.

Tongue covered with strong spines, pointing backwards.

Wings small, and useless for flight, for the most part imitating fins, covered with scaly feathers, in a few only a bare stump.

Tail various, in some scarcely appearing beyond the rump.

Legs short and thick, placed near the vent.

Toes generally four in number, united by webs as in the Duck Genus; in several the back toe wanting.

This tribe of birds seems to hold the same place in the southern parts of the world, as the Auks do in the northern; but the one, by no means to be confounded with the other, however authors may differ in opinion on this point.

The Pinguin is seen only in the temperate and Frigid Zones, on that side of the Equator which it frequents; and the same is observed of the Auk in the opposite latitudes; and neither of the Genera has yet been observed between the Tropics.\*\*

The Auk has true wings and quills, though small, and, one only excepted, capable of flight; but the Pinguin has mere fins, instead

<sup>\*</sup> Saw one for the first time in lat. 48. S. Forst. Voy. i. p. 92. Not met with nearer than 40 deg. S. Id. Ib.—See Introd. Disc. on Penguin's, Comm. Goett. vol. 3. Clayton's Account of Falkland Islands. Phil. Trans. vol. 66. p. 99.

of wings, and in more than one instance not outwardly apparent, and consisting of little more than a stump; on this account none of the Genus are capable of flying at all. The Pinguin, while swimming, sinks quite above the breast, the head and neck only appearing out of the water, rowing itself with its finny wings as with oars; while the Auk, in common with most other birds, swims on the surface. Several other circumstances, peculiar to each, might be mentioned; but the above will be fully sufficient to characterise the Genus.

### 1.—CAPE PINGUIN.

Aptenodytes demersa, Ind. Orn. ii. 879. Gm. Lin. i. 557. N. Comm. Goett. iii. 144. Diomedea demersa, Lin. i. 214. Bor. iii. p. 28. 2. Spalowsk. iii. t. 24. Spheniscus, Bris. vi. 97. Id. 8vo. ii. 385. Tem. Man. Anal. exiii.

Anser Magellanicus Clusii, Will. 242.
Plautus pinguis, Klein, Av. 147.
Penguin, or Magellanic Goose, Will. Engl. 322.
Black-footed Penguin, Edw. pl. 94. f. 2. Kolb. Cap. ii. 144.
Lesser Pinguin, Ph. Tr. lviii. 97. 2. Sparrm. Voy. i. p. 24.
Cape Pinguin, Gen. Syn. vi. 566.

THIS and the Red-footed Species were, till of late years, the only two known. The Cape one is twenty-one inches in length. Bill blackish, crossed with a transverse yellowish band near the tip, the upper mandible hooked; from the base, about half way, is a furrow, in which the nostrils are placed; the under mandible truncated at the end; the plumage on the upper parts from head to tail black; sides of the head and throat dirty grey; breast, belly, thighs, and under the tail, white; in the place of wings two short appendages like fins; black above; white on the lower edge, and white varied with black beneath; tail short, and cuneiform; legs black,\* furnished with four toes; the hind one placed high up, and inwards.

<sup>\*</sup> Kolben says pale green. In a drawing of the late Mr. Edwards in my possession, the legs are red; we may therefore conclude that the legs vary much in colour.

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    A.—Spheniscus nævins, Bris. vi. 99. t. ix. Id. 8vo. ii. 386. Gerin. v. t. 498.
    Manchot à bec tronqué, Buf. ix. 411. pl. 31. Pl. enl. 382.
    Black-footed Pengin, Edw. pl. 94. f. 1. Gen. Syn. vi. 567. 5. A.
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In this the plumage on the upper parts is blackish, the feathers dashed with deep black down the shafts, and marked with very small, whitish grey dots on the margins; on each side of the head a stripe of white, beginning at the base of the bill, passing over the eyes to the hindhead, and joining with the white on the sides of the neck; sides of the head and throat blackish brown, marked like the back, with small, dirty white specks, but less conspicuous; on the breast an arched, blackish brown band, passing in a line on each side, quite to the thighs: the wings, tail, and legs, as in the former.\*

B.—Pinguin à lunettes, *Pernet. Voy.* ii. 17. pl. 7, f. 3. *Id. Engl.* p. 243. pl. 15. *Gen. Syn.* vi. 563. Var. B.

In the Leverian Museum I observed a farther Variety, in which the crown of the head, hind part of the neck, and all the upper parts, are black; the under mostly white, except the chin, which is black, and surrounds the eye as in the last; but at such a distance, and in so circular a manner, as greatly to give the appearance of wearing a pair of spectacles: it has the same band over the breast, and passing down on each side to the thighs, as the last described.

The two first are supposed to be male and female, and perhaps such as vary from those descriptions may prove the young birds of one or other sex.

These are found in the neighbourhood of the Cape of Good Hope, particularly in Robben, or Penguin Isle, near Saldanie Bay. Like all of the Genus this is an excellent swimmer and diver, but hops and flutters in a strange awkward manner on the land, and,

<sup>\*</sup> Edwards's bird differs, in having the black more inclined to brown, and wanting the whitish spots; which also was the case in a specimen in my own collection.

if hurried, stumbles perpetually; will frequently run for some distance like a quadruped, making use of the finny wings instead of legs, till it can recover its upright posture, crying out like a Goose, but in a much hoarser voice. Said to clamber some way up the rocks to make the nest, in doing which has been observed to assist with the bill. It lays two white eggs, the size of those of the Duck, which are thought to be delicious, and brought in great numbers for the table. These birds are often kept tame, but in general do not survive the confinement many months.

### 2.—MAGELLANIC PINGUIN.

Aptenodytes Magellanica, Ind. Orn. ii. 880. Gm. Lin. i. 557. Com. Goett. iii. 143. t. 5. J. F. Miller Ill. t. 34. Magellanic Pinguin, Gen. Syn. vi. 569.

LENGTH two feet or more; weight eleven pounds. Bill black, with a transverse band across the tip; under mandible obliquely truncated; irides red brown; sides of the head, beneath the eye, and the chin, black; from the base of the bill, through and over the eye, a white streak, surrounding the black on the sides of the head, and meeting on the throat; the rest of the head and neck, the upper parts of the body, and wings, black; wings beneath, and body, from the breast, white, except a narrow band of black, which passes at a little distance within the white on the breast, and downwards on each side, quite to the thighs; the legs reddish flesh-colour, spotted irregularly on the toes; claws black.

It seems to be much allied to the last, differing chiefly in having the middle of the neck black all round, and the feet spotted.

Inhabits the Straits of Magalhaen, Staatenland, Terra del Fuego, and Falkland Isles, and is a very numerous species; often seen by thousands retiring at night to the highest parts. The voice not unlike the braying of an ass. Is not timid, for it will scarcely get

out of the way of any one, but frequently attacks and bites a person by the legs so as to fetch blood. These were killed by the sailors of Captain Cook's ships in great numbers with sticks, and found not unpalatable as food, but have a musky flavour; often mix with the sea wolves, among the rushes, burrowing in holes like a fox; when they swim, only the neck and shoulders appear out of the water, and they advance with such agility, that no fish seems able to follow them; if they meet with any obstacle, leap four or five feet out of the water, and dipping into it again, continue their route.—This is probably the species that Penrose alludes to; when he says, the chief curiosity is the laying their eggs; this they do in collective bodies, resorting in incredible numbers to certain spots, which their long residence has freed from grass, and to which were given the name of Towns.\* Here, says he, during the breeding season, we were presented with a sight, which conveyed a most dreary, and I may say awful idea of the desertion of these Islands by the human species; a general stillness prevailed in these towns; and whenever we took our walks among them, to provide ourselves with eggs, we were regarded with side-long glances, but carried no terror with us.

The eggs exceed in size those of the Goose, and are laid in pairs; when taken once, and sometimes twice in the season, they were as often replaced; but prudence prevented going farther, lest a future supply in next year's brood might be prevented; they lay in November, driving away the Albatrosses, which have hatched their young before them. The eggs were found palatable, and remained good for three or four months.

<sup>\*</sup> The nests said to be composed of mud a foot in height, and placed as near one another as may be. It is possible that they may have different ways of nesting, according to the places they inhabit; or perhaps, the manners of this may be blended with those of another species.

# 3.—CRESTED PINGUIN.

Aptenodytes chrysocome, Ind. Orn. ii. 878. Gm. Lin. i. 555. Com. Goett. iii. 135. t. 1. Spheniscus, Tem. Man. Ed. 2d. Anal. p. cxiii.

Pinguinaria cristata, Nat. Misc. pl. 437.

Manchot huppé de Siberie, Pl. enl. 984.

Manchot Sauteur, Buf. ix. 409.

Die Gelbschöpfige Fettgans, Schmid, Vog. p. 163. t. 146.

Hopping Pinguin, Boug. Voy. p. 64, 65. Ph. Trans. lxvi. p. 103.

Crested Pinguin, Gen. Syn. vi. 561. Cook's last Voy. i. 82? Staunt. Chin. i. 222. Nat. Misc. pl. 437.

THIS beautiful species is twenty-three inches in length. Bill three inches long, red, with a dark furrow running on each side to the tip; the upper mandible curved at the end, the under obtuse; irides dull red; head, neck, back, and sides, black; over each eye a stripe of pale yellow feathers, which lengthen into a crest behind, and are nearly four inches long; the feathers on each side of the head, above this stripe, are longer than the rest, and stand upwards; those of the crest are decumbent, but can be erected on each side at will; the wings, or rather fins, are black outwardly, edged with white, within white; breast, and all the under parts, white; legs orange. The female has a streak of pale yellow over each eye, but not prolonged into a crest behind.

Inhabits Falkland Island, or Isle of Desolation, as well as Van Diemen's Land, and several parts of New-Holland, as in Adventure Bay; were called Hopping Pinguins, and Jumping Jacks, from their habit of leaping quite out of the water on meeting with the least obstacle; and indeed do it frequently without any seeming cause, appearing chiefly to advance by that means. This species appears to be more lively than others, but in fact they are very stupid birds, so as to admit of being knocked down with sticks when on land,\* and are frequently so regardless, as to suffer

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<sup>\*</sup> These were found difficult to kill, and when provoked, ran at the sailors in flocks, and pecked their legs, and spoiled their clothes.—Forst. Voy.

themselves to be taken with the hand; \* when enraged they erect the crests in a beautiful manner. They make the nests among those of the Pelican Tribe, living in tolerable harmony with them; seldom lay more than one egg, which is white, and larger than that of a Duck; but they are mostly seen by themselves, seldom mixing with other Pingnins, and often met with in great numbers on the outer shores, where they have been bred. The females lay the eggs in burrows, which they easily form of themselves with the bill, throwing out the dirt with their feet. In these holes the eggs are deposited on the bare earth. The general time of sitting is in October; but in some of the species, especially in the colder parts, not till December, or even January. The length of time for sitting is not known.†

We learn from the Embassy to China, that they were found in vast abundance in the Island of Amsterdam; often basking and standing erect on the rocks, in company with the seals. Found also in countless multitudes in the Isle of Tristan da Cunha, concealing themselves among the long grass, and in the bottoms of the ravines, where they open upon the shore; and keep up a moaning noise, which can be heard at a great distance.‡

### 4.—RED-FOOTED PINGUIN.

Aptenodytes Catarractes, Ind. Orn. ii. 881. Gm. Lin. i. 558. Com. Goett. iii. 145. Phaeton demersus, Lin. i. 219. Borowsk. iii. 24. 2. Catarractes, Bris. vi. 102. Id. 8vo. ii. 387. Spheniscus, Tem. Man. Ed. 2d. cxii. Le Manchot des Hottentots, Pl. enl. 1005. Red-footed Pinguin, Gen. Syn. vi. 572. Edw. pl. 49. Phil. Trans. lviii. p. 98.

SIZE of a Goose. Bill two inches and one-third long, and red, both mandibles pointed, the upper a trifle bent; fore part of the head dirty brown; the back part and all above the neck and body dirty purple; beneath white; wings brown, fringed with white; tail short, bristly, black; legs dirty red, claws brown.

<sup>\*</sup> Cook's last Voy. † Disc. on Pinguins, Commentat. Goett. ‡ Lin. Trans. xii. 497.





Little Pinguin.

Inhabits the South Seas, also the Cape of Good Hope; thought to be the last in imperfect plumage.

### 5.—LITTLE PINGUIN.—PL. CLXXX.

Aptenodytes minor, Ind. Orn. ii. 881. Gm. Lin. i. 558. Com. Goett. iii. 147. Spheniscus, Tem. Man. Ed. 2d. Anal. p. exiii. Small Penguin, Cook's last Voy. i. 151. Little Pinguin, Gen. Syn. vi. 572. pl. 103.

SIZE of a Teal; length fifteen inches. Bill one inch and a half long, dusky, the under mandible a trifle truncated, base blue; all the upper parts of the bird cinereous blue, the ends of the feathers being of that colour; but the remaining part brown black, and the shafts quite black; round the eye, and a little way below on each side, is a bed of pale, brownish ash-colour; under parts from the chin to the vent white; wings dusky, beneath white; tail very short, consisting of sixteen stiff feathers, but is scarcely perceivable; legs dull red; webs dusky, claws black.

Inhabits the rocks in the south part of New Zealand, but in the greatest plenty at Dusky Bay. They make deep burrows on the sides of the hills, in which they lay their eggs; these holes are so thick in some parts, that a person is scarcely able to walk three or four steps without falling into one of them up to the knees. The inhabitants of Queen Charlotte's Sound kill the birds with sticks, and after skinning them, esteem the flesh good food; are known by the name of Koròra. They are apt to vary in size and colour; some are only thirteen inches long; others larger, and plain lead-colour on the upper parts, and the wings black; though all are white, or nearly so, beneath; the legs, too, marked with black at the ends of the toes.

#### 6.—NEW-HOLLAND PINGUIN.

LENGTH two feet or more. Bill black, the upper mandible hooked at the tip, the under truncated; plumage above brown, the feathers tipped with grey, giving a mixed appearance; chin, throat, and the rest of the parts beneath rufous white; wings as in other Pinguins, and brown; legs pale flesh-coloured brown; webs black.

Inhabits New-Holland, met with at Port Jackson, but is scarce, called there Gur-roo-mul.

### 7.—CHILOE PINGUIN.

Aptenodytes Chiloensis, Ind. Orn. ii. 881. Gm. Lin. i. 559. Buf. ix. 415. iv. Tem. Man. Ed. 2d. Anal. exiii.

Diomedea Chiloensis, Molin. Chil. 210. Id. Fr. Ed. 219.

Chiloe Pinguin, Gen. Syn. Sup. ii. 361.

SIZE of a Duck. The body covered with a kind of ash-coloured down, of so fine a texture, as to admit of being spun into threads, and made into garments, coverings of beds, and other purposes, for which it is greatly valued. The wings in this bird are bare of feathers: and the feet are furnished with four toes.

Inhabits the Archipelago of Chiloë in South America, where it is very common, and called Quethu.

## 8.—PAPUAN PINGUIN.

Aptenodytes Papua, Ind. Orn. ii. 879. Gm. Lin. i. 556. Com. Goett. iii. 113. t. 3. Le Manchot Papou, Son. Voy. 181. pl. 115. Papuan Pinguin, Gen. Syn. vi. 565. Cook's last Voy. 1. 88.

LENGTH two feet and a half. Bill four inches long, and red; the upper mandible bent at the tip, the under moderately pointed;

irides yellow, or pale red; the head and half the neck dusky black, inclining to blue; on each side, over the eye, a large patch of white, tending backwards to the hindhead, but not surrounding the eye below; across the top of the head a narrow bar of white, uniting the patches on each side; the under parts from the neck are also white, and the upper bluish black; the wings black, the lower edge and inside white; tail cuneiform, the middle feather seven inches in length; legs red, in some yellow, webs dusky, claws black.

Inhabits the Isle of Papos, or New Guinea; likewise Falkland Isles, and Kerguelen's Land.

#### 9.—ANTARCTIC PINGUIN.

Aptenodytes antarctica, Ind. Orn. ii. 879. Gm. Lin. i. 557. Com. Goett. iii. 141. t. 4. Antarctic Pinguin, Gen. Syn. vi. 565. Forst. Voy. i. 98.

SIZE of the Magellanic Species. Bill nearly three inches long, and black; the under mandible somewhat truncated; irides pale yellow; upper parts of the body black, the under glossy white; beneath the chin a narrow, blackish streak, passing backwards towards the hindhead, somewhat bent about the ears; wing blue black, edge and inside white, tip black; tail cuneiform, of thirty-two feathers, black, very stout, narrow, and imitating bristles; legs flesh-colour, soles black.

This species inhabits the South Sea, from 48 deg. to the Antarctic Circle: is frequently found on the Ice Mountains and Islands, on which it ascends; and is pretty numerous: voyagers have found them in plenty in the Isle of Desolation; and in an Island not far distant, the rocks were almost covered with Pinguins and Shags; the first were most probably of this sort.

#### 10.—PATAGONIAN PINGUIN.

Aptenodytes Patachonica, Ind. Orn. ii. 878. Gm. Lin. i. 556. Com. Goett. iii. 137. t. 2. T. F. Miller, Ill. t. 20. Tem. Man. Ed. 2d. Anal. exiii.

Pinguinaria Patachonica, Mus. Lev. t. 11. Nat. Misc. pl. 409.

Grand Manchot, Buf. ix. 399. Pl. enl. 975.

Manchot de la nouvelle Gninée, Son. Voy. 179. t. 113.

Especie de Paxara, Gabin. de Madrid, ii. p. 29. lam. 50.

First Class of Penguins, Bong. Voy. p. 64.

Patagonian Pinguin, Gen. Syn. vi. 563. Phil. Trans. lviii. 91. pl. 5. Gen. of Birds, 66. pl. 4. Gent. Mag. xxxix. pl. p. 489. Naturf. I. s. 258. Wood's Zoogr. i. p. 568. pl. 25.

THIS is the largest of the Genus yet known, being four feet and a quarter in length, and stands erect at least three; weight forty pounds. The bill four inches and a half long, slender in proportion, and bends towards the tip; colour black for two-thirds, the rest of the length vellowish; beneath orange at the base, and black at the tip: the feathers coming very forward on the nostrils; the tongue half the length of the bill, and armed on each side with spikes, turning backwards; irides hazel; sides round the eye covered with feathers: head, throat, and neck behind, deep brown; the back deep ash-colour, each feather bluish at the tip; under parts pure white; on each side of the head, beginning under the eye, and behind it, a broad stripe of fine yellow; this advances forwards as it proceeds down the neck, growing narrower, and paler; and at last blends itself with the white on the breast; this appearance, however, is only when the neck is stretched, for the state in which the bird usually carries itself, is with the head rather crouched in between the shoulders, when the yellow appears encircling the neck as a collar; the wings are formed as in the others, but longer in proportion; tail conspicuous, three inches in length; legs scaly and black, with three toes only, all placed forwards.

Some are much paler in plumage, and the yellow less bright than in others, and perhaps are the females, if not young birds.

This species was first met with in Falkland Islands, also in Kerguelen's Land, New Georgia, and New Guinea.\* M. Bougainville caught one, which soon became so tame, as to follow, and know the person who had the care of it; and fed on flesh, fish, and bread, but after a time grew lean, pined away and died; the chief food, when at large, is supposed to be fish; the remains of which, as well as crabs, shell fish, and molluscæ, were found in the stomach. This is the fattest of the Genus; most so in January, when they moult; lay and sit in October; are met with in the most deserted places; the flesh is black, though not very unpalatable: has been considered as a solitary species, but now and then met with in considerable flocks; are found in the same places as the Papuan and Crested ones, and not unfrequently mixed with them; but in general associate with their own species, which are said to lay their eggs in holes in the ground; hence we may suppose that the different species vary one from another in this particular.

#### 11.—COLLARED PINGUIN.

Aptenodytes torquata, Ind. Orn. ii. 880. Gm. Lin. i. 558. Com. Goett. iii. 146. Manchot à collier de la nouvelle Guinée, Son. Voy. 181. pl. 114. Collared Pinguin, Gen. Syn. vi. 571.

LENGTH eighteen inches. Bill like that of the Patagonian Pinguin, and black; irides black; eye surrounded with an oval, bare, blood-coloured skin, three times as large as the eye itself; head, throat, neck behind, and sides, back, wings, and tail, black; neck before, breast, belly, and thighs, white, extending round the neck,

<sup>\*</sup> Son. Voy. Forst. Voy. ii. 214. 528. † Bougainville.

<sup>‡</sup> Cook's last Voy. i. p. 87. Pinguins were seen by thousands in New Year's Island, near Staaten Land, of which more than 500 were had by the ship's company for food.

where the white begins, like a collar, not quite meeting behind; legs black.—Inhabits New Guinea; seen also by Dr. Forster, near Kerguelen's Land, and again on two Isles adjoining to the Island of South Georgia.

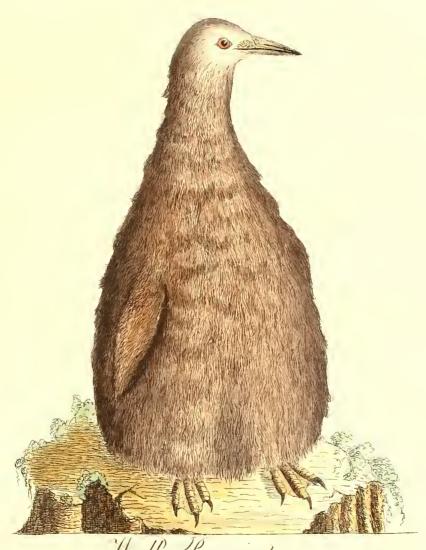
#### 12.—HAIRY PINGUIN.

LENGTH two feet six inches. Bill three inches and a half, black, the upper mandible bent at the tip, with a furrow running the whole of its length, but no appearance of nostrils; tongue half the length of the bill, armed with numerous spikes, tending backwards; in the palate a long eleft, passing deep into the bill; eyelids prominent, but the parts round them covered with short, downy hairs; the whole bird, otherwise, covered with a thick set hair, having no resemblance either to down or feathers; for the most part two inches in length; wings hanging down, and covered in the same manner, but the hair short in proportion; tail not distinguishable from the rest of the plumage; colour of the whole uniform brown, not paler, as is usual in other birds, beneath; legs very stout, and scaly, deep brown, webbed quite to the toes, which are three in number, all placed forwards; claws stout, and black, the middle one sharp on the inner edge.

Inhabits South America.—Mr. Bullock.

# 13.—WOOLLY PINGUIN.—PL. CLXXXI.

THE total length of this singular bird is two feet eight inches; in shape, as it stands upright, giving the idea of a bottle. The bill to the gape three inches and three quarters; bare space beneath it one inch and a half, pale brownish yellow, with a blackish point; from the base, to about one-third, a finely granulated skin or cere, and a seam continued to the point, but the nostrils are not clearly



Hoolly Honguin?



distinguishable; from the point of the bill to the eye four inches and a quarter; whole length of wing one foot; to the bend six inches; body in general covered with a kind of downy brown fur, in some parts three inches in length; orbits somewhat downy, but not quite bare; circuit of the body, just above the legs, two feet ten inches; round the neck, at the throat, eleven inches and a half; round the base of the bill four inches and a half; length of foot seven inches; toes three in number, all placed forwards; colour yellow; toes and webs, nearest the claws, brown black, the rest yellow; the webs continue quite to the claws, which are nearly straight; claws black.

A specimen of the above is in the collection of Lord Stanley. The native place uncertain. In the woolly texture of the plumage it seems much allied to the Chiloe Species, but is certainly a different bird: the wings covered with a short down, and, when hanging downwards, reach to within four inches of the ground; of what length the tail was originally does not seem clear. One in the collection of Mr. Brookes had several feathers, but worn quite to the stump, probably by resting on that part when sitting in an erect posture.

### 14.—THREE-TOED PINGUIN.

SIZE of the Chiloe Species, but the neck longer, the head compressed on the sides. and small in proportion; bill slender, a little bent towards the point; the feathers on the upper parts of the body blue, changing in some lights to grey; breast and belly white; tail not discernable, being a mere elongation of the feathers of the rump; legs furnished with three toes only, all placed forwards, and situated almost at the vent, as in others of the Genus.

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Inhabits Chili, and lays five or six white eggs, spotted with black, placing them on the sand; the skin said to separate easily from the body, and perhaps, as the plumage consists of fine hair rather than feather, might be made use of for clothing. The natives give it the name of the Infant, from the manner of walking, its gait being unsteady, like that of a child. The flesh is not esteemed.

#### 15.—APTEROUS PINGUIN.

Apterix Australis, Southern Apterix, Shaw's Zool. xxiv. pl. 1057, 1058. Tem. Man. Ed. 2d. Anal. p. exiv.

SIZE of a Goose; length two feet and a half. Bill yellowish brown, long, and slender, somewat in the form of the Patagonian Species; length from the gape to the tip six inches and three quarters, at the base rather stout, and covered with a kind of cere; it is also a trifle enlarged at the end, and somewhat enrved; the under mandible shutting beneath the upper; the nostrils linear, near the tip of the bill, scarcely to be detected, placed at the end of a tubular furrow; \* plumage ferruginous grey; the feathers not greatly unlike those of the New-Holland Cassowary, but only one from each shaft; the wings not perceivable, except on close examination, being only a small stump, with a claw or spur at the end, furnished with a few straggling feathers, and quite hid in the plumage; some of the feathers of which are weak, and four inches or more long, and the edges of them incline to dusky, giving a mottled, or mixed appearance: there is no appearance of a tail; the legs are short and stout, the colour of the bill, but rather darker; the feet have three toes before

<sup>\*</sup> On examining this bird with Dr. Shaw on his first receiving it, no appearance of nostrils was to be detected, but a furrow ran the whole length, at the end of which were two minute holes, into which a bristle being introduced, passed up quite to the base, and no doubt were the nostrils.

separate, and one behind,\* but the last is placed much within, and so high up, as to be useless, with no apparent membrane between the toes; claws strong, sharp, very little bent; the inner one almost straight.

Inhabits New Zealand, brought from the south coast by Captain Barclay, of the ship Providence, who presented it to Dr. Shaw, as an addition to his collection of natural history. The Doctor, it is true, has made this bird the basis of a new Genus, and it certainly differs in some things from the general tribe of Pinguins, yet it coincides with them in so many, as to render this separation less needful: and the reader cannot fail to observe, that not only in the present instance, but in several others in the course of this work, the great desire of the author to accommodate many new species to some Genus already fixed; so as to give the least violence possible to the general system; being of opinion, that creating a single new Genus, when it can possibly be avoided, will serve only unnecessarily to burthen the memory, as well as to distract the mind.

<sup>\*</sup> The form of the foot is not greatly unlike that of the Dodo, and in the above specimen the toes were not connected by an intervening membrane; yet from certain inequalities on the sides, it is possible that there may have been one, and that it had been eaten away by insects.

#### GENUS CIX.--PELICAN.

*	Bill	smooth—Pouch	very
		large.	

#### PELICANS.

- 1 White Pelican
- 2 Rose-coloured
- 3 Manilla
- 4 New-Holland
- 5 Philippine
- 6 Javan
- 7 Black-bellied
- 8 Rcd-backed
- 9 Brown
- 10 Charles Town
  - A Var.
  - B Var.
  - C Var.
- 11 Rough-billed
- 12 Saw-billed

\*\* Bill smooth—Pouch moderate—Tail forked.

#### FRIGATES.

- 13 Greater Frigate Pelican
- 14 Lesser Frigate
- 15 White-headed Fr.
  - A Var.
- 16 Palmerston Fr.
- \*\*\* Bill smooth, Tail rounded.
  CORVORANTS.
- 17 Common Corvorant
- 18 Javan Corv.
- 19 Shag
  - A Var.
- 20 African Sh.
- 21 Crested Sh.
- 22 Chinese Sh.
- 23 Brown-necked Sh.
- 24 Violet Sh.

- 25 Red-faced Sh.
- 26 Spotted Sh.
- 27 Pied Sh.
- 28 Carunculated Sh.
- 29 Magellanic Sh.
- 30 Tufted Sh.
- 31 New-Holland Sh.
- 32 Dwarf Sh.

\*\*\*\* With a serrated Bill, and slightly wedged Tail.

#### GANNETS.

- 33 Common Gannet
  - A Var.
- 34 Lesser G.
- 35 Booby
- 36 Tuckey's B.
- 37 Brown B.
- 38 Brown and white B.
- 39 Lesser B.

THE bill in this Genus is long, and straight, the end either hooked, or sloping.

Nostrils in a furrow, running along the sides of the bill, and in most of the species scarcely distinguishable.

Face, for the most part, destitute of feathers, being covered only with a bare skin.

Gullet naked, in some capable of great distention.

Toes four in number, all webbed together.

We cannot but notice here the seemingly different characters of the various birds enumerated under this head, by some thought sufficient to justify the separating them into three or more Genera;\* and to avoid this we have adopted the division of them into families,

<sup>·</sup> Brisson.

yet comprising the whole under one Genns, as has already been done. It is true, that the Pelicans, so called, differ from the rest of the species in the length and shape of the bill. The Frigates, too, as well as the Corvorants and Shags, vary much in the bills, and the same may also be said in respect to the Gannets and Boobies; but these differences alone have less weight, since a precisely similar structure of the feet reigns through the whole, added to a certain degree of nakedness, and dilatability of the skin of the throat, which in many species forms a large pouch, or reservoir; and in most of them, likewise, the eye is equally surrounded with a naked skin. Having the above in view, we have thought right to continue in our former opinion, by retaining the whole under one Genus.

\* WITH A SMOOTH BILL-POUCH VERY LARGE-TRUE PELICANS.

#### 1.--WHITE PELICAN.

Pelecanus Onocrotalus, Ind. Orn. ii. 882. Lin. i. 215. Gm. Lin. i. 569. N. C. Petr. xv. 471. 16. Scop. i. No. 97. Hasselq. It. 288. Georgi, 169. Kramer, 345. Bris. vi. 519. Id. 8vo. ii. 497. Bor. iii. p. 40. Fn. Helv. Dod. Mem. iii. 189. t. 26. Raii, 121. Will. 247. t. 63. Phil. Trans. 66. p. 29. Id. 57. p. 348? Gerin. v. t. 499. Tem. Man. 585. Id. Ed. 2d. p. 891. Robert, Ic. pl. 11.

Il grotto ossia Pellicano, Cet. Uc. Sard. t. p. 329. f. 2.

Baba, Bell's Trav. p. 41.

Tubano, Wheeler's Trav. t. p. 304.

Tacab, Mise, Chard. iii. p. 40?

Der grosse Pelecan, Schmid, Vog. p. 155. t. 133.

Die Kropfgans, Bechst. Deuts. ii. 750. Id. Ed. 2d. iv. 738. Naturf. xii. 140. Frisch, t. 186.

Pelican, Buf. viii. 282. pl. 25. Pl. enl. 87. Hist. Prov. i. 342.

White Pelican, Gen. Syn. vi. 575. Id. Syn. Sup. ii. 362. Edw. pl. 92. Will. Engl. 327. pl. 63. Arct. Zool. ii. No. 505. Penn. Hindoost. ii. 160. Gen. of Birds, 65. pl. 15. Wood's Zoogr. i. p. 553.

THIS bird is greatly superior in size to a Swan, sometimes having an extent of wing of fifteen feet; and weighing twenty-five

pounds. The bill is fifteen or sixteen inches long, the upper mandible flat and broad, furnished with a hook at the end; the skin between the sides of the under jaw red or yellowish, very flaccid, and dilatable, reaching eight or nine inches down the neck, and sometimes capable of containing three gallons of water;\* the gape of course is very wide;† on the top of the upper mandible is a rib of crimson, the rest pale red at the base, growing yellow towards the point; the under one pale red; tongue scarcely perceivable; irides hazel; sides of the head bare, and flesh-coloured; hindhead somewhat crested; the plumage in general white, with a flesh-coloured tinge, except the bastard wing and prime quills, which are black, with white shafts; legs lead-colour; claws grey; beneath the plumage is a fine soft down. The bill in young birds is wholly yellow.

This species is common in some of the warmer parts of the Continent of Europe, but chiefly frequents the Torrid Zone; seen in incredible numbers in the Russian Dominions, about the Black and Caspian Seas; and sometimes proceed a good way up the rivers which fall into them, coming and going with the Swans, Geese, Storks, and other birds; are scarce towards the east, and seldom met with so far north as the Siberian Lakes, though now and then seen on that of Baikal, and on many of the coasts of the Mediterranean, and the Islands therein; common in Greece, and said to build in some of the rivers which flow into the Danube, straying sometimes into Switzerland, one having been shot at Zurich; but so rare there, as not to be known by common people; is now and then seen in

<sup>\*</sup> This is often used by the sailors for tobacco pouches, bringing it into form by putting in a weight, and hanging the bag to dry in this state. We have, however, seen the ponch dressed, and made into a lady's work bag, elegantly ornamented, appearing not unlike a well dressed parchment, or vellum skin, but very pliant.

<sup>†</sup> In one shewn some years since in London, the keeper could easily put in his head; and mention has been made of another, shewn in France, whose gape was so wide as to admit of the legs of a man with boots on.—Salern. Orn. 369.

<sup>‡</sup> In the Island of Majorca.

<sup>§</sup> Hist. des Ois.

France, as one was killed in the province of Dauphiny, and another on the River Saone, in Lorraine.\* I find an account of one being shot in England, at Horsey Fen, in May, 1663, which measured three yards from the tip of one wing to that of the other; † and some vears since, a Pelican was seen to fly over the seat of the late Sir Gregory Page, on Blackheath, in Kent, but this was of a brownish colour. In Africa they are pretty numerous, coming there in September, flying in flocks, forming a wedge shape, with the point foremost, like Wild Geese. Often seen in Barbary, at no great distance from Tangier, and from thence sometimes visit the coast of Andalusia, and this in the winter season; as it is observed by Hasselquist, that Pelicans migrate at that time from Asia into Egypt. In Damietta and other parts not uncommon, as well as on the Coast of Senegal, and parts adjacent; that of Guinea, and the Gold Coast: also from thence to the Cape of Good Hope, in the bays and rivers; and in many other parts both of Asia and Africa. The female makes the nest of reedy grass, in the mossy, turfy places, chiefly in the Islands of the Lakes, remote from man, a foot and a half in diameter. deeply hollowed, and filled with soft grass; laying two or more white eggs, much like those of the Swan, and sits about the same length of time. If any person disturbs the bird whilst sitting, she is said to take the eggs out of the nest with the bill, and to drop them into the water, returning them to their place, as soon as the enemy is out of sight. §

The chief food of the Pelican is fish; is frequently observed hovering over the water, and as soon as it sees a fish beneath, plunges in an instant, seldom missing its aim, the enormous gape of the bill

<sup>\*</sup> Hist. des Ois. † See MS in Br. Mus. No. 1830, 16 E. in a Memoir by T. Brown, Norwich, a quere is put here, whether it might not be one of the King's Pelicans, kept at St. James's, which had been lost about the same time.

<sup>‡</sup> In Sea Cow River, in December.—Phil. Trans. lxvi. 29. And by hundreds in Verloore Valley.—Id. 309. By thousands in Mossel Bay according to Levaillant. "J'y tron-"vois par milliers des Pelicaus, et des Phænicopteres on Flamans."—Voy. Fr. ed. i. p. 101.

<sup>§</sup> Dec. russ, i. 141.

giving a greater chance of securing its prey; after having filled the pouch with as great a number as it can carry, it flies off to some convenient point of a rock, to swallow them at leisure; when several are together, they fish in a different manner, especially when in company with the Corvorants: these two spread into a large circle, at some distance from the land; the Pelicans flap with their extensive wings above, on the surface, while the Corvorants dive beneath; hence the fish at last are driven into a small compass, when their pursuers find no difficulty of filling their bellies. In this they are attended by the Black-cap, and sometimes other Gulls, who come in for their share. The Pelican is also observed to make a nest in the deserts, very far from water; for what reason Providence alone can suggest, as the bird's only supply of sustenance must arise from that element; hence it must bring water to the young, by filling the pouch with it.† It is said that Camels, and other beasts, take the advantage of quenching their thirst, by resorting to their nests, and as if grateful for the supply, never do the least injury to the young. ± This bird is said to be used sometimes for domestic fishing, in the same manner as the Corvorant, by the Chinese. \ We do not find the flesh much commended for food, though better tasted than that of the Booby, or Man of War Bird. The Great White Pelican in seen in vast abundance in India, every where in Hindustan, particularly on the Ganges; as is also the Roseate sort. It is said, that when young the plumage is chiefly brown; as it advances the head, neck, and under parts, are partially, or wholly white; after this the brown on the upper parts is mixed with patches of white, and finally wholly

<sup>\*</sup> The ancients noted this—" 1 am like a Pelican in the Wilderness."—Psalm cii, v. 6.

<sup>†</sup> Hence called by the Persians, Kik, Tacab, or Water Carrier.

<sup>‡</sup> Osbeck. Voy. The Pelican has been remarked for peculiar tenderness to its young, in feeding them with the blood from the breast; but this has arisen from seeing one of these empty the contents of the red water bag, which it does by pressing it on the breast, and a person ignorant of the matter might easily be mistaken. § Hist. des Ois.

<sup>§</sup> Dampier's Voy. Part II. p. 71. Forbidden to be eaten by the Jews, as well as the Corvorant,—Levitic. xi. v. 17, 18.

white, gaining by degrees a reddish tinge; and at a still more advanced period, becoming wholly of a rose-colour.\*

A tame one, in this last dress, made part of a travelling exhibition not long since. The bill and pouch were pale; head, neck, and body, fine rose-colour; wing coverts the same, but dusky; scapulars, and second quills, margined with black; greater quills wholly black; legs brown.

#### 2.—ROSE-COLOURED PELICAN.

Pelecanus roseus, Ind. Orn. ii. 883. Gm. Lin. i. 570. Pelican rose de l'Isle de Luçon, Son. Voy. p. 91. t. 54. Rose-coloured Pelican, Gen. Syn. vi. 579.

SIZE of a Goose. Bill black; round the eyes bare and yellow; pouch the same; the plumage wholly rose-colour; legs black.

Inhabits the Isle of Manilla. In the Leverian Museum I formerly observed one greatly corresponding, in which the whole of the plumage, including the quills, was white; the bill black, with some red markings near the end, and the hook also red; the pouch, space round the eyes, and legs, yellow. No further account could be obtained. It is supposed by many that the Rose-coloured one is merely a very old bird of the white species; but if so, there must have been much change in the quills, which are in all others described black; nor do we find the bill, except in the present one, otherwise than brown, or yellow.

# 3.—MANILLA PELICAN.

Pelecanus Manillensis, Ind. Orn. ii. 883. Gm. Lin. i. 571. Lin. Trans. xiii. 330. Pelican brun de l'Isle de Luçon, Son. Voy. p. 91. pl. 53. Manilla Pelican, Gen. Syn. vi. 583.

THIS is exactly like the Rose-coloured, except in the plumage, being wholly brown, and is probably a young bird.

Inhabits Manilla, also Sumatra, and there called Lampipi.

<sup>\*</sup> Sonnerat. Said to live 100 years.

#### 4.—NEW-HOLLAND PELICAN.

LENGTH five feet, extent of wings seven. Bill, and round the eye, yellow; plumage in general white; the beginning of the back, the quills, and tail, black; inner half of the lesser wing coverts white; legs pale blue; webs dusky; the quills reach to above the middle of the tail.

Inhabits New-Holland, known by the name of Karrang-aba.

#### 5.—PHILIPPINE PELICAN.

Pelecanus Philippensis, Ind. Orn. ii. 883. Gm. Lin. i. 571. Tem. Man. 685. Id. Ed. 2d. 892, Lin. Trans. xiii. 197. 330.

Onocrotalus Philippensis, Bris. vi. 527. t. 46. Id. 8vo. ii. 500.

Alcatraz, Phil. Trans. xxiii. p. 1397. 40.

Philippine Pelican, Gen. Syn. vi. 583.

THIS exceeds four feet in length. The bill fourteen inches long, and reddish white, on the top a strong rib running down the middle, on each side of which are fourteen or fifteen oblique dusky marks, having the appearance of a saw; the bare space round the eyes the colour of the bill; the pouch very pale; head and neck whitish; from the hindhead to the back a stripe of feathers somewhat longer than the rest, mixed white and brown; those of the hindhead still longer, so as to form a crest; the plumage of all these parts very soft and silky; the upper parts of the back, and scapulars, cinereous grey; the lower, and rump, white; wing coverts cinereous grey, with the shafts and margins white; the outer greater ones, and bastard wing, darker, almost black; quills dusky black; base of many of the secondaries white; tail, composed of eighteen feathers, greyish white; all but the two middle ones white within at the base, shafts black; legs red.

Inhabits the Philippine Islands, and is probably the bird known there by the name of Alcatraz, and by the inhabitants Pagala. The natives say, that the skin of the breast, dressed with the feathers on, has a sweet smell; and being worn on the stomach of a person afflicted with the asthma, proves a remedy for the same: is very common at Bengal. We are informed by Dr. Buchanan that it roosts in large trees in remote places. In the day time frequents lakes and marshes, to collect fish. It is the Garapulla of the Bengalese; Gogaubhere of the Mussulmans. Found also in Java, and called there Walang-kadda. The Bengalese name signifies the small fishing-basket; that of the Mussulmans, in the Hindustany dialect, means a bird that reaches the sky, for it often flies very high.

#### 6. -JAVAN PELICAN.

Pelecanus Javanicus, Lin. Trans. xiii. p. 197 .- Horsfield.

THIS is four feet in length. The plumage white, with an obsolete crest, and a broad bill; the prime quills black, the secondaries and feathers of the back margined with black, and the shafts white.—Inhabits Java, and called Bakkul. In the Leverian Museum was one greatly corresponding with the above. In this the bill was yellow; plumage white, except the quills which were dusky black, and the shafts white; the tail white, the two middle feathers a trifle shorter than the others; legs black.

# 7.—BLACK-BELLIED PELICAN.

Pelican brun d'Amerique, Pl. enl. 957.

SIZE large.\* Bill pale red; irides red; pouch beneath the throat large and pale; head and neck before to the breast white;

<sup>\*</sup> By the scale in the plate being one-twelfth of the real size, the length should be at least five feet.

face and fore part of the head naked and bare; the nape and hind part of the neck black, passing round just above the breast, as a collar; feathers of the nape a trifle elongated; the breast and thighs grey and black in fine streaks; all the under parts of the body from the breast black; upper parts, wings, and tail, greyish white; legs reddish brown.

The above description taken from drawings in the collection of the late Mr. Bruce, supposed to have been met with in Abyssinia. It appears to be the same as that figured in the Pl. enlum. above referred to. M. Buffon, under his article Pelican brun,\* refers to this plate, though he does not at all describe the bird. But supposing he could mean that mentioned above from Mr. Bruce's drawings, he must have been indulged with a copy of it by that gentleman; who certainly displayed his drawings in Paris, before we had a sight of them in England. On this account we have some reason for supposing it not to be of American origin. Mr. Bruce's bird was named Gungunnalı; and one not far different, in the late Mr. Middleton's India drawings, was called Gungunneer.

#### 8.—RED-BACKED PELICAN.

Pelecanus rufescens, Ind. Orn. ii. 884. Gm. Lin. i. 571. Red-backed Pelican, Gen. Syn. vi. 584.

SIZE of a large Swan; length five feet. Bill thirteen inches long, of a pale dirty yellow; space round the eyes, and pouch the same; the last reaches eight inches down the neck; the hindhead is crested, some of the feathers four inches in length; head and neck dirty brownish white; back fine pale reddish cinnamon; wing coverts like the neck, but darker; lesser quills the same, with dark grey ends, and black shafts; scapulars pale greyish lead-colour; prime quills black; tail deep grey, the shafts white at the base, and

<sup>\*</sup> Hist. des. Ois. iii. 306.

black towards the ends; belly, thighs, under wing coverts, and vent. like the back, but pale; the feathers of the breast, wing coverts, and lower part of the neck, are long, narrow, and pointed, especially those of the breast; legs vellow.

This bird I received from Mr. Lewis, Navy Surgeon, who informed me, that he had it alive from the Governor of one of our Forts on the Gold Coast, where it had been kept tame for a long time; it was reckoned a scarce bird, by reason of its being crested.

#### 9.—BROWN PELICAN.

Pelecanus fuscus, Ind. Orn. ii. 883. Lin. i. 215. 1. β. Gm. Lin. i. 570. Georgi, 169. Onocrotalus fuscus, Bris. vi. 524. Id. 8vo. ii. 499. Raii, 191. 3. Sloan. Jam. 322. Brown, Jam. 480. Klein, 142. 1.

Onocrotalus Americanus, Gerin. v. t. 500. Bartr. Tr. 293.

Pelican brun, Buf. viii. 306?

Pelican of America, Edw. pl. 93. Ellis's Huds. Bay, i. pl. 1.

Great Gull, Hist. Californ. i. p. 40.

Brown Pelican, Gen. Syn. vi. 580. Arct. Zool, ii. No. 506. Gent. Mag. xx. pl. p. 210.

THIS is in length nearly four feet. Bill fifteen inches, at the base greenish blue, mixed with a little red near the end; the pouch bluish ash-colour, streaked with reddish lines; irides deep bluish ash; bare skin round the eyes whitish; the head and neck white; the first a little crested at the back part; back, scapulars, and rump, cinereous brown, the middle of each feather whitish; breast and under parts like the upper, but plain; wing coverts like the back; but some of the outer greater ones plain brown; the shape of most of the above feathers pointed, narrow, and long; prime quills black; the secondaries hoary brown; tail the same, and consists of eighteen feathers; legs lead-colour; claws black.

This appears to be the bird called a Gull, in the *History of California*, and found in vast numbers in that place, the Isle of Assumption and San Roche; said to have a vast craw, hanging

down like the Peruvian leather bottles,\* and that it is usual for them to bring food to a wounded or sick companion. The natives, therefore, take the advantage of confining one of them near the shore, by which means they procure a dish of fish, without further trouble.

The Brown Pelican is very common in many parts of the Coasts of America, but no where more so than in the West India Islands, Jamaica, Barbadoes, &c.; also in the Bay of Campeachy, and as low as Carthagena. In summer found as far north as Hudson's Bay. While fishing in the water it is sufficiently active, but having filled the pouch, and retired to the rocks to swallow the contents, is observed to be to a degree stupid and senseless, remaining without motion for hours together, half asleep, with the bill resting on the breast; when it is no uncommon thing for a person to steal upon the bird unawares, and seize it by the neck without resistance.

It is observed, that none of the true Pelicans are capable of diving to any great depth; probably owing to their great levity, and consequently chiefly seize their prey by darting their necks suddenly into the water; on the contrary, those of the Corvorant tribe are not only expert divers, but often make their way to great distance under the water.

# 10.—CHARLES TOWN PELICAN.

Pelecanus Carolinensis, Ind. Orn. ii. 384. Gm. Lin. i. 571. Charles Town Pelican, Gen. Syn. vi. 585. Arct. Zool. ii. No. 507.

SIZE of a Canada Goose. Bill brown; space round the eye dusky; colour of the plumage dusky above; white on the breast and belly; with a dusky yellow, dilatable pouch.

<sup>\*</sup> Now well known by the name of Caoutchouc, and applied to various uses, as a containing vessel; pieces of it are also used for destroying pencil marks, and called India Rubber; also being dissolved in a proper menstruum, serves as a coating to air balloons, or other articles, required to be impenetrable to air and moisture.

These abound in the Bay of Charles Town, in America, where they are continually fishing.

A.—Size the same; length four feet. Bill thirteen inches long, differing from many, in having the part of the upper mandible which is next the base almost cylindrical, and not flat, though spreading out considerably near the end; the plumage brown above; head, neck, and under parts, brownish white; the lower half of the back striped black and dusky white, the feathers being narrow, and edged with the last colour. One of these was in the Leverian Museum.

B.—Is in most things the same; but the back wholly plain; the bag in both of an enormous size, taking up the greatest part of the neck before; at the hind part of it, the whole length, the feathers much longer than the rest; though the nape of the neck and back part of the head, were not at all crested.

These last were brought from Cayenne.

C.—Size much the same. Bill yellow, upper mandible dusky above, base cylindrical; back of the neck soft, the feathers short, like down; plumage in general white, except the quills, which are black; the lower mandible furnished with a large pouch, as others.

Inhabits Georgia, in North America, where it is reckoned a rarity. One of them shot the 24th of June, in a pond, in company with the Wood Ibis, by Mr. Abbot; he informs me, that these birds are frequent on the southern parts of the sea coast; and considered there as a Variety, or more probably the foregoing in mature plumage.

#### 11.—ROUGH-BILLED PELICAN.

SIZE between a Goose and a Swan; length four feet six inches. Bill thirteen inches, shaped as in other Pelicans, with the addition of some singular protuberances on the top of the upper mandible; from the base of which, for above seven inches, the surface in plain; at this part an elevated ridge begins, about one inch and a half in height, and one-third of an inch in thickness; this continues about one inch and a half on the bill, and then other smaller ones take rise, of different sizes, and continue decreasing in size, in an abrupt manner to the end of the bill; the colour of both reddish vellow, here and there inclining to red; the under mandible and pouch as in other species, but on each side, about the middle of the first, is a black spot, the size of a silver penny; and the bag is streaked with fine lines of black, which are pretty numerous on the fore part of it, most so next the end of the bill; the plumage is wholly of a pure white, except the bastard wing and quills, which are black; the shafts of the larger ones white; at the hindhead the feathers are greatly elongated, forming a crest, of four inches and a half in length; the legs are black.†

This species, which appears to be distinct, is found in some parts of America. We have only seen three specimens, two of which were brought from Hudson's Bay, and the third from New York; but Mr. Pennant mentions its having been also sent from South Carolina. The most perfect was in the Leverian Museum; one, formerly in my

<sup>\*</sup> It may be here observed, that M. Gmelin has mistaken the English word Rough for the French Rouge, as his specific name means a bird, having a red bill.

<sup>†</sup> In the bird described in the Phil. Trans. they are said to be yellow.

own collection, had the elevated part of the bill injured in many places, but sufficient to shew the original state. A third in the British Museum, has the ridged part reduced to a mere fibrous tuft, the rest having been beaten off; hence we may conclude, that Nature has intended this additional ridge for defence; and as it is full as hard in texture as the rest of the bill, nothing but repeated and violent blows could have occasioned the breaches made in my specimen, and especially the total destruction of shape seen in that of the British Museum.

#### 12.—SAW-BILLED PELICAN.

Pelecanus Thagus, Ind. Orn. ii. 884. Gm. Lin. i. 577. Molin. Chil. 212. Id. Fr. Ed. 220.

Onocrotalus rostro denticulato, Bris. vi. 523. A. Id. 8vo. ii. 499.

Mexicanus dentatus, Alcatraz, Raii, 122. Hern. Mex. t. p. 672.

Pelican à bec dentelé, Buf. viii. 309.

Saw-billed Pelican, Gen. Syn. vi. 579. A.

SIZE of a Turkey. The bill one foot long, a little bent at the point, and indented like a saw on the edges; the neck one foot long, and the bird, when erect, stands twenty-two inches high; extent of wing nine feet; the tail short, and rounded; and the general colour of the plumage brown.

This is said to inhabit Chili, and to be a solitary species; that the natives make great use of the membrane, or throat bag, for tobacco pouches; and when stretched and dried becomes so transparent, as to serve for lanterns, &c. The quills, too, are thought preferable to those of any other bird for writing pens. It usually frequents rocks near the sea, and lays generally five eggs. The Spaniards call it Alcatraz, by which name the Philippine Species is also called. As to the bill being serrated on the edges, we must rely solely on Molina; for although the older authors have said as much, and had

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even given a figure of the bill, Mr. Ray rather conjectured that the indentations might have arisen from injury; we have never seen such a bird.

# \*\* BILL SMOOTH—POUCH MODERATE—TAIL FORKED. FRIGATES.

#### 13.—GREATER FRIGATE PELICAN.

Pelecanus Aquilus, Ind. Orn. ii. 885. Lin. i. 216. Gm. Lin. i. 572. Osb. It. 292?

Borowsk. iii. p. 42. Forst. Voy. i. 588. Id. ii. 433. Bartr. Trav. p. 293. Lin.

Trans. xiii. p. 1.

Fregata, Bris. vi. 506. t. 43. f. 2 .- male. Id. 8vo. ii. 493.

Tachypetes Aquila, Vieillot, Tem. Man. Anal. p. cx.

La Fregate, Buf. viii. 381. Pl. enl. 961. Pern. Voy. i. 125. Hist. Louis. ii. 118.
 Man of War Bird, Brown, Jam. 483. Damp. Voy. i. p. 49. Id. iii. pt. 2d. pl. p. 99.
 Sloan. Jam. i. p. 30.

Frigate Bird, Albin, iii. pl. 80. Gen. Birds, 67. pl. 16.

Frigate Pelican, Gen. Syn. vi. 587. Wood's Zoogr. i. p. 557.

SIZE, in the body, of a large Fowl; length three feet, breadth seven or eight; weight two pounds and three quarters. Bill slender, dusky yellow, five inches long, and much curved at the point; in the place of nostrils a fine line, or fissure, on each side of the upper mandible; from the base a reddish, dark-coloured skin spreads on each side of the head, taking in the eyes; from the under mandible hangs a loose membranaceous bag, attached some way down the throat, as in the Common Pelican, and applied to the same uses; the colour fine deep red, sprinkled on the sides with a few scattered feathers; the whole plumage glossy brownish black, except the wing coverts, which have a rufous tinge; tail long, and much forked, consisting of twelve feathers; the outer ones about eighteen inches in length, the middle

from seven to eight; the legs are small, all the toes webbed together, and the webs deeply indented;\* colour of them dusky red, in some black. The female wants the membranaceous pouch under the chin, and the belly is white; in other things resembles the male.

This bird † is chiefly, if not wholly, met with between the Tropics; always out at sea, being only seen on the wing. It is usual with other birds, when fatigued with flying, to rest themselves on the surface of the water; but from the exceeding length of wing, the rising from thence is rendered impossible, as writers inform us, and every one with whom we have talked on the subject, assures us of the fact; though, perhaps, the bird scarcely seems to require rest, for if we may judge from its apparently easy gliding motion (much like that of the Kite) it would seem capable of sustaining very long flights; as it is often seen above 100, and not unfrequently 200 ± leagues from land. It has, indeed, been known to settle on the masts of ships, but this is not a frequent circumstance; though it will often approach near, and hover about the top mast flag; § sometimes it soars so high in the air as to be scarcely visible, yet at other times approaches the surface of the sea; and on spying a fish, darts down with the utmost rapidity, and seldom without success, flying upwards again as quick as it descended; | will also attack Gulls and other birds which have caught a fish, which it obliges them to disgorge, and will generally seize it before it falls into the water. Is an enemy to the flying fish; for, on their being attacked beneath by the dolphin, and other voracious fish, to escape their jaws these semivolatiles leap out of the water in clusters, making use of

<sup>\*</sup> In the *Planches enluminées* the webs are not sufficiently expressed. The figure in Brisson comes nearer the truth, the toes are webbed to the second joint.

<sup>†</sup> Also called Tailleur, or Taylor, by the French, from the motion of the tail representing a pair of shears when opened; and when on the wing it opens and shuts the tail feathers frequently, in the manner of using that instrument.—Ulloa's Voy. ii. 304.

<sup>#</sup> Forst. Voy. i. 47. Id. Obs. p. 212. as far as 400.—Pernetty.

<sup>§</sup> Cook's last Voy. i. p. 81. || Dampier. He observes, that they do not take their prey in the bill.

their long fins, as wings, to buoy them up in the air, which they are enabled to do, so long as they remain wet; but on becoming dry are useless, and of course they drop again into their proper element; during their flight the frigate darts in among the shoal, and seizes one or two at least. These birds appear to know the exact place where the fish are to rise, from the bubbling of the water, which directs them to the spot.\* In this they are often accompanied by Gulls and other birds, who act in concert with them. Said to make their nest on trees, if any within a proper distance, otherwise on the rocks;† lay one or two eggs, flesh-colour, spotted with crimson.‡ The young birds covered with greyish white down; legs of the same colour; bill white.

# 14.—LESSER FRIGATE PELICAN.

Pelecanus minor, Ind. Orn. ii. 885. Gm. Lin. i. 572. Fregata minor, Bris. vi. 509. Id. 8vo. ii. 494. Petite Fregate, Buf. viii. 390. Man of War Bird, Edw. pl. 309. Lesser Frigate Pelican, Gen. Syn. vi. 590.

THIS is less than the last, and only two feet nine inches in length; extent of wing five feet and a half. The bill red; the base and bare space round the eye, the same; head, neck behind, and upper parts of the body, and wings, ferruginous brown; throat, fore part of the neck, and breast, white; tail greatly forked as in the other; legs dirty yellow.

In a bird very similar to this, if not the same, the plumage is full black; the breast and belly mottled with ash-colour; the inner ridge of the wing the same; the bill has the long furrow, as is seen

<sup>\*</sup> Hist. Barb. p. 86. † Dampier. Said to build in numbers on a small Island contiguous to Guadaloupe.—Hist. des Ois. note (s.)

<sup>†</sup> Mr. Barton says they lay but one white egg, and that the male sits upon it, and hatches the young, while the female is on the wing procuring food: this seems probable, since the birds taken on land are all males, and those flying at sea all females.—Lin. Trans.

in the greater one, but the nostrils are clearly distinguishable, being about half an inch in length, rather broader at the part which is next the base. This has a light red pouch at the chin and throat, as in the former species. It is most likely that this is a male bird; as others, said to be of the opposite sex, have little or no traces of the jugular pouch.\* Some have supposed, that the Greater and Lesser Frigates are the same bird, in different periods of age.

#### 15.—WHITE-HEADED FRIGATE PELICAN.

Pelecanus leucocephalus, Ind. Orn. ii. 886. Gm. Lin. i. 572. Amæn. Acad. iv. 238? Osb. Voy. ii. 87? Lin. Trans. xiii. 330.

La Fregate, Buf. viii, pl. 30.

White-headed Frigate Pelican, Gen. Syn. vi. 591.

LENGTH nearly three feet. Bill five inches long, dusky, tip nearly white; both mandibles hooked; sides of the head covered with feathers; head and fore part of the neck white, finishing in a point on the last; breast and belly white; except these, the rest of the plumage is brown; tail forked; legs pale reddish brown.

In the Museum of the late Dr. Hunter, from whence uncertain.

A.—In the same collection was one, with the head and half the neck all round white, passing before down the breast, and ending between the legs; sides of the body, the vent, and rest of the plumage, brown; legs reddish brown; neither of the two were bare on the sides of the head, with very little appearance of a pouch under the lower mandible. This is probably the one met with in Sumatra, and there called Danding Laut.

<sup>\*</sup> This supposition seems justified from a pair in the late Hunterian Musuem, in both of which the plumage was wholly black; the one has a large pouch, the other destitute of it.

#### 16.—PALMERSTON FRIGATE PELICAN.

Pelecanus Palmerstoni, Ind. Orn. ii. 886. Gm. Lin. i. 573. Palmerston Frigate Pelican, Gen. Syn. vi. 592.

LENGTH three feet. Bill black, five inches and a half long, and hooked at the end; space round the eyes well feathered; the upper part of the head, neck, and body, brown, with a greenish gloss; wing coverts nearest the body dark glossy green; fore part of the neck mottled brown and white; the rest of the under parts white; vent black; tail forked; the shafts of the feathers white; legs dusky black; the middle claw serrated on the inside.

Inhabits the Island of Palmerston, in the South Seas. From the collection of Sir Joseph Banks. We suspect that this and the last form but one species, although probably different from the first described, as the head in both is entirely covered with feathers round the eyes.

# \*\*\* BILL SMOOTH—TAIL ROUNDED. CORVORANTS.

## 17.—COMMON CORVORANT.

Pelecanus Carbo, Ind. Orn. ii. 886. Lin. i. 216. Fn. suec. No. 145. Gm. Lin. i. 573. Scop. i. No. 98. Brun. No. 120. 122. Muller, No. 146. 148. Georgi, 169. Frisch, t. 187, 188. N. C. Petr. iv. 423. Fn. groenl. No. 57. Bor. iii. 38: t. 40. Fn. Helv. Sepp, t. 98, 99. Tem. Man. 587. Id. Ed. 2d. 893.
Corvus aquaticus, Raii, 122. A. 3. Will. 248. t. 63. Klein, 144. 5. Mars. Dan.

rvus aquaticus, Raii, 122. A. 3. Will. 248. t. 63. Klein, 144. 5. Mars. Do 16. t. 36. Besl. Mus. t. 8.

Phalacrocorax, Bris. vi. 511. t. 45. Id. 8vo. ii. 495. Gerin. v. t. 501. Der Kormoran, Bechst. Deuts. ii. 756. Id. Ed. 2d. iv. 750. Seerabe, Sehr. d. Berl. Nat. viii. s. 430.\*

\* In this Essay will be found a full description of the bird, as to the internal as well as external appearance.

Le Cormoran, Buf. viii. 310. pl. 26. Pl. enl. 927. Hist. Prov. i. 341. Il Corbo aquatico, Osb. Voy. ii. 35. Du Halde Chin. t. p. 162.

Cormorant, or Corvorant, Gen. Syn. vi. 593. Id. Sup. 279. Id. Sup. ii. 363. Br. Zool. ii. No. 291. Id. fol. 159. pl. 1. Id. 1812. ii. 281. Arct. Zool. ii. No. 509. Albin, ii. pl. 81. Cook's last Voy. ii. 297. Will. Engl. 329. pl. 63. Bewick, ii. pl. p. 381—388. Lewin, vii. 263. Walcot, i. pl. 92. Pult. Dors. p. 21. Phil. Trans. 1807. 160. pl. x. f. 2, 3.—the stomach. Pitf. Mem. pl. p. 132. Orn. Dict. & Supp.

SIZE of a Goose, but more slender; length three feet, breadth four feet two inches; weight seven pounds. The bill dusky, three inches and a half long, the upper mandible hooked at the end, with a furrow running longitudinally from the base to great part of its length, but no appearance of nostrils; the under mandible is covered with a kind of yellowish green membrane, passing under the chin and throat, forming there a kind of pouch; and from thence extending backwards, and round the eye; irides green; top of the head and part of the neck black, variegated with perpendicular white lines; at the back part the feathers are longer than the rest, and form a short crest; throat white, passing upwards behind the eyes; the lower part of the neck, the breast, and all the under parts, greenish black; over the thighs a large white patch; back, scapulars, and wing coverts, brownish, reflecting purple and green in different lights; each feather margined with black; the second quills like the wing coverts; the prime ones dusky black; tail the same, much rounded in shape, consisting of fourteen feathers; legs black, middle claw serrated within.

The female partakes of the same variety as the male, but in a complete state is observed to be paler coloured. This species is called by some Cole-Goose, and Skart; by others Brougie, and Norie.\* We find a remark in the Br. Zoology, that the chin of the male is white, and in that sex is also a short, loose pendent crest at the hind head, with a large patch of white feathers over the thighs; but this, perhaps, is not peculiar, since it has been ascertained, that a specimen with all these markings has proved, on dissection, to be a

May we not, therefore, conclude that these birds vary much in plumage, either at different seasons or periods of age: that the latter does take place we learn from Colonel Montagn, who mentions having one of the first described, with the striped head and the white patch over the thighs,\* brought to him alive; this was perfectly familiar, following any one of the family for the sake of a fish. After the autumn, the period of moulting, the plumage completely changed to black, losing both the streaked neck and white over the thighs; and on a second moulting the year following. the same black plumage was renewed, but the streaked head and white over the thighs never appeared again; among those with the black plumage, the chin is more or less white; in some is a portion of white on the breast and belly, in others the belly is wholly white; and in one in the Leverian Collection, the hindhead and nape had a narrow series of long feathers serving as a crest. We may hence probably conclude, that the two, figured by Mr. Bewick,† form but one species, and are Varieties only; for we do not yet learn whether the younger birds have invariably the striped heads.

These birds are sufficiently common in England, and breed on most of our rocky coasts, generally on the highest, and most inaccessible cliffs; sometimes in concert with the shags; but the latter are by far the most numerous. The nest is composed of a mixture of sticks and sea weed; the eggs generally three in number, dusky, or greenish white, about three inches in length, and weighing about two ounces. In the winter often found at some distance from the sea. In the year 1750, one of these perched upon the castle at Carlisle, and soon afterwards removed to the Cathedral, where it was shot at upwards of twenty times without effect, at last a person got upon the Cathedral, fired at, and killed it; in another instance, a flock of fifteen

<sup>\*</sup> We learn from the Orn. Dict. that the Corvorant is plentiful on the Coast of Devonshire and Cornwall, but those with streaked heads very rare; this latter is well represented in Hist. des Ois. viii. pl. 26. Pl. enl. 927. and Bewick's Birds, ii. pl. in p. 388.

<sup>†</sup> Compare Bewick, ii. pl. p. 381.

or twenty perched in the evening on a tree, on the banks of the River Esk, near Netherby, the seat of Sir James Graham. A person who saw them settle, fired at random in the dark, six or seven times, without success; surprised at this, he returned at daylight, and killing one, the rest flew away. At the end of July, 1793, one of these was found sitting on the vane of St. Martin's Church Steeple, on Ludgate Hill, London, and was shot from thence in the presence of a number of people. Some other instances might be mentioned, but we trust that the above are enough to shew, that they are not easily frightened from the places on which they perch. This is in general a very wary bird, yet at times is unaccountably torpid or heedless; for, after a full surfeit of fish, or when asleep, it will, like the Pelican, suffer a net to be thrown over it, or a noose put round the neck, so as to be easily taken. The chief food is found to be eels, flukes, and, as the sea goby has also been found in the stomach, it may be supposed that they prey on other kinds of fish likewise. It is no uncommon thing to see twenty of these birds together on the sand by the river side, with extended wings, drying themselves in the wind, and to remain in this position for nearly an hour, without closing them; and as soon as the feathers are fit to imbibe the oil, they press a portion thereof from the usual receptacle on the rump, and dress the feathers with it; for it is only in one particular state that the oily matter can be spread thereon; not dry, but while damp, and the proper moment known to the bird by instinct. It is not an easy matter to make the old bird rise from the water, especially if pursued, and obliged to dive often, for then the feathers imbibe so much wet, as to disable it totally; and after long fishing is the occasion of the bird coming on shore at intervals to dry and dress them.

We learn that a species of this Genus, described hereafter, is frequently made use of by the Chinese for fishing; and it is also said, that the custom was formerly practised in this kingdom, of applying a leather thong about the neck, to prevent the bird swallowing the fish, which it is taught to bring to its master; and the

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Corvorant was kept in the house with the same care, as is used in respect to the Falcons; but we do not find it to have been very common, since it has not been generally noticed by authors. Willighby, who mentions the circumstance, # quotes, in the margin, his authority from Faber's Notes on Recchus's Animals; but on inspecting the passage,† we are merely told, that some Corvorants, which had been trained for fishing, were sent, with a Vulture, as a present from England to the King of France; that they were hoodwinked, till they were let off to fish, in the manner of the Falcon, and would fetch trouts out of the river very dexterously. That they were used now and then, is plain, both from the above passage, as well as what we learn from the British Zoology. ‡ A circumstance is likewise mentioned by Swammerdam, § who seems to imply that the birds, though used in England, were not taught there. It appears, that the Corvorant is more or less a general inhabitant of the Continent of Europe; common in Greenland, where the inhabitants, from necessity, make much use of it. The jugular pouch serves as a bladder to keep their darts affoat after they are flung; for the dexterous natives procure these and other birds by this mode, while

<sup>\*</sup> Engl. Ed. 329. † See Hernand. Mexic. p. 693.

<sup>‡</sup> Whitelock says "that he had a cast of them, manned like Hawks, and which would "come to hand. He took much pleasure in them; and relates, that the best he had were "presented to him by Mr. Wood, master of the Corvorants, to King Charles the First." Br. Zool. ii. 610.

<sup>§ &</sup>quot;Some few years ago many of these birds were carried to England, (from Holland), "and sold for that purpose. In the first place, they make them so tame, that they may be brought to perch and stay upon the hand of their own accord; when after this they are inclined to go out fishing with them, they tie to one of their legs a thin bnt strong cord, which they keep rolled up in a ball: afterwards they hold this ball, by a bobbin-handle, as our girls do their bobbins, while they roll off of them the threads made on the reel: these things being prepared, they put the ring round the Cormorant's neck, and being now come to the fish-pond, they let the Cormorant fly down into the water; then the cord is rolled off of the ball with a whizzing twirl, and the Cormorant, to the great amazement of the spectators, quickly seizes some fishes; these, however, are stopt at the ring that has been put about its neck; therefore when the Cormorant is afterwards drawn out by the cord, he may easily be made to throw out again the fishes it had taken into the mouth, only by squeezing its stomach and throat upwards."—Bibl. Nat. i. p. 193.

swimming; they are also taken in snares and nets; the skins are used by them in clothing. The flesh is eaten; but the eggs are rejected, as being excessively fetid. Reach even to Kamtschatka; are found every where in the Russian dominions; on the shores of the Caspian Sea, sometimes in immense flocks; frequent also on the Lake Baikal; common in India, China, the Philippine Isles, New Zealand, and other parts; not uncommon at the Cape of Good Hope; are frequent in many parts of the Continent of America, at Hudson's Bay, New York, and from thence as low at least as Carolina; at the last seen especially in March and April, when the herrings run up the creeks, at which time they may be observed sitting on the logs of wood, which fall into the water, waiting for the fish passing by; \* are found also at Nootka Sound. †

## 18.—JAVAN CORVORANT.

Carbo Javanicus, Lin. Trans. xiii. p. 197.—Horsfield.

LENGTH sixteen inches. Bill blackish, under mandible pale; body and wings black, with a hoary, silvery gloss, and the feathers margined with black; chin white; neck beneath variegated with black, brown, and fuliginous; thighs black; belly marked with narrow cinereous bands.

Inhabits Java, called there Pechuch.

#### 19.—SHAG.

Pelecanus Graculus, Ind. Orn. ii. 887. Lin. i. 217. Fn. suec. No. 146. Gm. Lin. i. 574. Brun. No. 121. Muller, p. 147. Fn. Helv. Tem. Man. 590. Id. Ed. 2d. 897. Phalacrocorax minor, Bris. vi. 516. Id. 8vo. ii. 496. Gerin. iv. t. 502. Corvus aquaticus minor, Raii, 123. A. 4. Will. 249. t. 63. Cormoran, Dod. Mem. iii. 213. f. 31. Pitfield Mem. pl. p. 132.

<sup>\*</sup> Arct. Zool. Lawson's Carolina. † Cook's last Voy. ii. 297.

Der Wasserrabe, Bechst. Deuts. ii. 761. Id. Ed. 2d. iv. 762. Naturf. xii. 140. Petit Cormoran, ou Nigaud, Buf. viii. 319.

Le Zaramagullon noir, Voy. d'Azara, iv. No. 422.

Shag, or Crane, Gen. Syn. vi. 598. Will. Engl. 330. pl. 63. Br. Zool. ii. No. 292.
pl. 102. Id. 1812. ii. 285. Arct. Zool, ii. No. 508. Bewick, ii. pl. in p. 390.
Lewin, vii. pl. 264. Walcot, i. pl. 93. Pult. Dors. p. 21. Orn. Dict. & Supp.

LENGTH two feet six inches, breadth three feet eight inches; weight four pounds. Bill nearly four inches long, dusky; sides of the mouth and chin covered with a yellow skin, minutely speckled with black on the latter; the head and neck are black, glossed with green; back and wing coverts the same, edged with purplish black; belly dusky and dull, in the middle cinereous; tail, consisting of twelve stiff feathers, dusky, dashed with cinereous; legs black, the middle claw serrated.

The female is smaller, and weighs less by three quarters of a pound. The feathers on the upper part black, though less deep, and without the green gloss, but the margins of the feathers of the scapulars and coverts are black; under parts of the body dusky and grey mixed; the legs and toes dusky.

Shags frequent several parts of Great Britain and Ireland, and like the Corvorant, will now and then build in trees when growing near the water, but more frequently on the rocky coasts, making a nest like that of the Corvorant. The eggs are long, oval, and white, weighing each about one ounce and three quarters. Is a very stupid bird when on shore, but difficult to shoot while in the water; swims with the head erect, and body almost immersed in the water, and when a gun is discharged at it, the moment it sees the flash, it darts beneath. It is probable that this bird rarely leaves the rocky shores in search of food, in the fresh or brackish waters; as it is not often seen in such places, whilst the Corvorant is frequently met with far inland.\*\*

<sup>\*</sup> On September 25, 1794, a Shag was shot on a newly built house of S. Gardner, Esq. at Whitchurch, within seven miles of Reading; and another the same week near Wallingford, Berks.—Dr. Lamb.

Col. Montagu informed me, that on the rocky coast of Tenby, in Wales, they are more numerous than the Corvorants; but they breed together, having taken the young of both from the same rocks, not many yards distant from each other, though there were at least twenty of the Shag to one of the other; and we may conclude, that the Corvorant greatly prefers places of more difficult access. The Shag, too, is more tenacious of the nest, and less shy than the Corvorant, as she scarcely quits it till the hand approaches her, shewing many signs of defence, by stretching out the neck, and snapping her bill.

Both the Shag and Corvorant are well known about Sandwich, where they are equally called Cole-Goose; and in some parts Green Corvorant, and Skart.

This species inhabits Sweden, Norway, and Iceland, and said to have formerly built in the trees of the Wood of Sevenhuys, near Leyden, in Holland.

In the account of the Shag given by Willughby, as also that of Brisson, the chin is said to be white, and the under parts more or less inclining to ash-colour. Linnæus observes, that the Shag and Corvorant agree in all things but size, and that the whole under side from chin to thighs is marked with testaceous white spots; and even supposes it to be merely a young Corvorant: but this bird having fourteen feathers in the tail, and the Shag but twelve, seems to decide this matter indisputably. This indecision, we believe, has arisen from various authors having taken descriptions from younger Corvorants, which vary exceedingly.

The Shag said to be found very far to the southward; Captain Cook having met with it in the Isle of Georgia, in vast numbers, as well as Penguins, insomuch that one Island has obtained the

<sup>\*</sup> Linnæns separates the Pelican Genus into two divisions; the one with the edges of the mandible serrated, the other smooth; but, by mistake, the separation takes place before his Graculus, or Shag; whereas it should not have done so till after the description of that bird, or before Pelecanus Bassanus.—See Syst. Nat. i. 217.

name of Shag Island. Shags, too, are by no means rare about Paraguay, or on the River Plata; oftener indeed single, or in pairs, than in large flocks, though sometimes as many as one hundred are seen together.

The bird quoted from Azara, by the name of Zaramagullon, is probably a Shag, from having only twelve feathers in the tail.

A.-Le petit Fou brun de Cayenne, Buf. viii. 374. Pl. enl. 974. Ind. Orn. ii. 888.

This is twenty-six inches long. Bill pale; plumage dusky, brown beneath; on the upper parts the feathers margined with black; legs dusky.—Inhabits Cayenne, and the Caribbee Islands: probably a young bird.

### 20-AFRICAN SHAG.

Pelecanus Africanus, Ind. Orn. ii. 890. Gm. Lin. i. 577. Tem. Man. d'Orn. 590. Id. Ed. 2d. 899.

Pelecanus Capensis, Mus. Carls. pl. 61.

African Shag, Gen. Syn. vi. 606.

SIZE of a Teal; length twenty inches. Bill dirty yellowish white, upper mandible brown black; middle of the back and rump glossy black; scapulars and wing coverts blue grey, each feather margined and tipped with black; the three first greater quills pale brown, inclining to cinnamon, the rest brown black; secondaries as long as the quills, dusky black, edged with brown; in the tail twelve feathers, cuneiform, the two middle seven inches long, the outmost three inches and an half, the four middle ones and outer on each side pale brown, the others black; chin white; fore part of the neck mottled dusky white and black; belly much the same, with a mixture of brown; legs black.

Inhabits Africa. This seems allied to the common Shag. M. Temminck supposes it to be in its first year's plumage.

#### 21.—CRESTED SHAG.

Pelecanus cristatus, Ind. Orn. ii. 888. Gm. Lin. i. 575. Fn. groenl. No. 58. Brun. No. 123. Ström. Söndm. 250. Olaff. ii. t. 39. Muller, No. 150.
 Crested Shag, Gen. Syn. vi. 600. Br. Zool. 1812. ii. p. 284. pl. 47. Id. fol. 159. Arct. Zool. 583. A. Orn. Dict. & Supp.

THIS is a trifle smaller than the last. Bill four inches long, narrow, dusky, and hooked at the end; irides fine green; on each side of the head a long tuft of dusky feathers, reaching beyond the crown, forming a fine crest; head, neck, and lower part of the back, fine glossy green; the upper parts of the back and wing coverts the same, edged with purplish black; belly dusky; tail dusky green, consisting of twelve feathers; legs dusky black.

This inhabits Great Britain, and the vast precipices about Holyhead; and Mr. Pennant observes, that he met with several in the Hebrides, but saw none with the crest; is found in Norway, Iceland, and Greenland, but is rare at the last, and only found in the southern parts. It is allowed on all hands to be rare, but whether distinct in species, or only a Variety, is uncertain.\*

I observe among the drawings of Sir J. Anstruther one appearing as the common Shag, under the name of Gyar, in the Bengalese tongue, and Banwar, in that of Hindustan. The Darter seems also to pass under the same names.

#### 22.—CHINESE SHAG.

Pelecanus Sinensis, Ind. Orn. Sup. p. 1xx. Leu-tze, Embassy to China, ii. 388. pl. 37. Id. 389. pl. at the bottom. Loofoo, Du Hald. China, ii. 142. pl. in p. 162. Osbeck Voy. ii. 35.

<sup>\*</sup> In the Supplement to the Ornithological Dictionary, it is said that this bird is no other than a Variety of the Common Shag, differing therefrom in the same manner as the Crested Corvorant does from the Common Sort, but of this we cannot of our own experience give an opinion.

Louwa, Ogilb. China, pl. in p. 92. Id. pl. p. 699. Chinese Corvorant, Gen. Syn. Sup. ii. 364. 3. Nat. Misc. pl. 529.

MUCH has been said heretofore concerning the bird used by the Chinese for fishing; and from what Linnæus had been informed, we were led to think that one of the sexes was white, but we owe to Sir George Staunton, the entire development of the true species, not only by his own observation while in China, but by having brought home various specimens for examination; from whence it appears, that the bird is strictly neither a Corvorant nor Shag, but a distinct species, though approaching to both.

The size is about that of the Shag. The bill yellow, irides blue; general colour of the plumage brownish black; chin white; the body whitish beneath, spotted with brown; tail rounded, consisting of twelve feathers; legs black.

In the journey to Han-choo-fou, on the River Luen, Sir George observed, on a large lake, close to this part of the canal, and to the eastward of it, great numbers of small boats and rafts, built entirely for this species of fishery; on each boat or raft were ten or twelve birds, which at a signal from the owner plunge into the water; and it is astonishing to see the enormous size of the fish with which they return grasped in their bills. They appeared to be so well trained, that it did not require either ring or cord about their throats, to prevent their swallowing any portion of their prey, except what the master was pleased to return to them for encouragement and food.\* The boat used by these fishermen is of a remarkably light make, and is often carried to the lake, together with the fishing birds, upon poles by the men,† who are there to be supported by it.

<sup>\*</sup> Mr. Ellis observed one with a stiff collar round its throat to prevent its swallowing the fish.—Ellis's Journ, 1817. p. 278. The name there given to it is Yu-ying, (Fish Vulture) or Yu ye (Fish Bird).

<sup>#</sup> See Embassy to China, ii. p. 389 .- the Vignette.

# 23.-BROWN-NECKED SHAG.

THIS is in shape much like the Shag; length twenty one inches and a half. Bill nearly three inches, cinereous, the under mandible naked to the base; orbits naked, brown; irides very dark; front and lore black, marked with white irregular spots; the feathers of the front erect, and form a kind of short crest; crown and upper part of the neck black, mixed with brown, sides of the neck rufous brown; the rest of the plumage black, with a degree of gloss; scapulars and upper wing coverts sharp-pointed; tail five inches and a half in length, rounded at the end, and consisting of twelve feathers, and the wings reach to the beginning of it; legs black.

Inhabits Bengal, where it is not uncommon, is called there Pan Cowree; by the Mussulmans, Ponkoul; is seen swimming all the day on the water, and roosts at night on the trees.

I am indebted for this account to Dr. Buchanan.

In General Hardwicke's drawings is a Shag called Pawnkole. This has a black bill, with a white tip; plumage black, and glossy; lore spotted whitish, also a small space on the crown, and the whole of the nape the same; the sides of the neck are of the same colour as the rest of the plumage, not rufous brown.

### 24.--VIOLET SHAG.

Pelecanus violaceus, Ind. Orn. ii. 888. Gm. Lin. i. 575. Violet Corvorant, Gen. Syn. vi. 600. Arct. Zool. ii. p. 581. B.

SIZE uncertain. Plumage wholly black, glossed with violet. Found about Kamtschatka and the Isles. One greatly similar was in the Leverian Museum, the colour of the plumage as here described, and carrying a most splendid gloss, but the top of the head furnished with a long, pointed crest, standing upright; the bill pale, with a dusky tip; legs dusky black.

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## 25.—RED-FACED SHAG.

Pelecanus Urile, Ind. Orn. ii. 888. Gm. Lin. i. 575. Urile, or Sea Raven, Hist. Kamtsch. 117. Phil. Trans. li. 481. Red-faced Corvorant, Arct. Zool. ii. 514. C. Red-faced Shag, Gen. Syn. vi. 601.

LESS than the Corvorant; length two feet ten inches. Bill three inches and a half long; the base reddish green, the end black; round the eye a bare reddish skin; head and neck dark blackish green; on the middle of the neck before a few slender narrow white feathers, thinly interspersed among the others, many of them two inches and a half in length; back and wings dusky black, but glossy, with a lustre of green, as well as copper, on the back in some lights, and here and there a slender white feather; the belly black; on each side of the rump a large patch of white; tail six inches long, consisting of twelve feathers; quills and legs black.

Inhabits Kamtschatka, chiefly about the rocky and craggy places on the sea coasts, where it builds the nest in June; the eggs the size of those of a Hen, green, and very ill tasted, yet the natives venture to climb the rocks for them at the hazard of their lives; feeds on fish, swallowing them whole: they fly well and swiftly, but rise with difficulty from the ground; while sitting on the rocks are stupid, and not easily roused, hence the natives catch them easily, by nets thrown over them, or nooses at the ends of long poles, and not unfrequently these silly birds suffer themselves to be taken, one after another, to the very last. As food, every one but a Kamtschadale must abhor it, yet these people think it very tolerable; whether owing to the method of cooking or not, does not seem certain; their method is to roast it in holes in the earth, whole, without plucking off the feathers, or taking out the entrails, and when done enough, they





skin, and eat it. It is said to have no tongue; yet it is averred, that it cries morning and evening, not greatly unlike the blowing of a trumpet. By some this bird is called the Sea Raven.

# 26.—SPOTTED SHAG.—PL. CLXXXII.

SIZE of the Shag; length two feet. Bill three inches long, pale bluish lead colour, in some yellow, the tip hooked; round the eyes bare and dusky red; the chin, throat, and forepart of the neck nearly black, also the forehead, neck behind, and beginning of the back; just over the forehead some long feathers, forming a pointed crest, and at the hind part a second, not unlike the first, but rather longer, some of the feathers being one inch and half in length; just over the eye begins a streak of white, passing down on each side of the neck quite to the wing, growing broader as it proceeds downwards; the middle of the back and wings brownish ash colour, each feather marked at the end with a round spot of black, largest on the wing coverts, but no where bigger than a small pea: quills not spotted; from the middle of the back to the end of the tail, and from between the legs to the vent, black, glossed with green; tail three inches long, rounded at the end, or very slightly cuneiform; that and the quills plain black; legs deep brown, or black.

In some specimens the bill is reddish, and the legs dull yellow; the chin white, covered with feathers, and without any crest; the feathers of the sides, near the vent, streaked with white; thighs black; the stripe on the sides of the neck less distinct, and the black on the neck less pure. This is probably a female, or young bird.

In others I observe the crest as in the first described, but the distensible pouch of the throat not bare, and seemingly much less capacious. I have also met with one, in which the white on the sides of the neck did not pass above half the length of it.

Whether the above Varieties constitute difference of sex, or are the effect of different periods of age, I am unable to determine.

Inhabits New Zealand; frequent in Queen Charlotte's Sound; builds among the rocks, and not unfrequently on trees, when growing near the water. The name it is there known by is Pa-degga-degga.

### 27.--PIED SHAG.

Pelecanus varius, Ind. Orn. ii. 890. Gm. Lin. i. 570. Pied Shag, Gen. Syn. vi. 605. Cook's Voy. i. 151.

LENGTH two feet six inches. Bill four inches and an half, formed as in the Shag, the top dusky, the rest of it, and bare space about the eye, yellow; over the eye a narrow pale streak; the top of the head, neck behind, back, wings, and tail brown, the middle of the back and wing coverts palest; the margins of the last almost white, or very pale; lower part of the back, rump, and thighs very deep brown, nearly black; some of them nearest the body have pale tips; tail brown black, rounded in shape, and six inches or more in length; the outer margins and shafts white; beneath from chin to vent white; legs flesh-colour; claws dusky.

Inhabits New Zealand; met with frequently in Queen Charlotte's Sound. It builds in trees, on which a dozen or more are seen at once, being more numerous than the Spotted Sort,\* of which it is probably the young bird. The egg is two inches and a half long, rather smaller than that of a Hen, of a pale bluish white.

The above description was taken from a specimen in the Leverian Museum; and I observe one, differing in a few particulars, among the drawings of Sir Joseph Banks.

<sup>\*</sup> Cook's last Voy. i. 151.

The plumage in this is much the same, except that in the brown parts the colour has universally the same shade, but inclining to black; round the eye the skin is bluish; and the sides of the head, as well as the under parts, white; legs black.

### 28.—CARUNCULATED SHAG.

Pelecanus carunculatus, Ind. Orn. ii. 889. Gm. Lin. i. 576. Forst. Voy. i. p. 41. Carunculated Shag, Gen. Syn. vi. 603.

ALMOST the size of the last. Bill dusky; sides of the head bare; between the bill and eye much carunculated and red; the rest of the space round the eye ash-colour; the orbits fine mazarine blue, and elevated; over the eye a tubercle much larger than the rest; irides whitish, or very pale brown; the head somewhat flat on the sides, and the crown rather full of feathers; top of the head and sides of it, neck behind, and all the upper parts of the body, the wings, and tail, black, except a longish patch of white on the wing coverts; the forehead, chin, and all beneath, white; legs flesh-colour, or very pale brown.

Inhabits New Zealand; chiefly in Queen Charlotte's Sound, though not in plenty; but met with by millions in Staaten Land; and said by the voyagers to build in towns. By this is meant, when they form themselves into societies, and take certain places to themselves. They make the nests near the edges of the cliffs, on the tops of the tufts of grass;\* which are flat and broad above, occasioned by these birds building upon them from year to year.

<sup>\*</sup> Dactylis glomerata, Lin.—See Forst. Obs. i. p. 41. This grows frequently four feet high, and is two or three times as much in breadth at top. The Penguins often take shelter beneath it.—Id. Obs. p. 41.

### 29.—MAGELLANIC SHAG.

Pelecanus Magellanicus, Ind. Orn. ii. 889. Gm. Lin. i. 576. Forst. Voy. ii. 494. Magellanic Shag, Gen. Syn. vi. 604.

LENGTH thirty inches. Bill three inches long, black; sides of the head and the chin bare, and reddish; but the middle of the last somewhat downy; the head and neck, as far as the breast, the back, wings, and tail, are deep black; the head and neck somewhat glossy, and the feathers of the first seem full, making that part appear larger than it really is; but the head is by no means crested; behind each eye a white spot; the under parts from the breast are also white; and the side feathers under the wings striped with white; thighs black; quills and tail deep black; the last cuneiform, and four inches long; legs pale brown.

Inhabits Terra del Fuego; also Staaten Land, and is gregarious, like others of the Genus. In Christmas Sound build by thousands among the rocks, chusing such places as project over the sea, or at least where they rise perpendicularly, that in case the young fall out, they may take no harm, only dropping into the water. Said to make holes in the rock, suited to their purpose, by their own efforts, or at least enlarging the natural cavities so much, when the rock is not of the hardest sort, as to make room for their offspring in them. Shags, both in this as well as other places, unfrequented by man, are so tame as to be very little frightened at the report of a gun; for on being fired at, though they seem at first disturbed, they immediately return to the nest; and they cause no great difficulty to shoot them on the wing, as they mostly fly heavily.\*

<sup>\*</sup> Forst. Voy. ii. 494, 495.

# 30.—TUFTED SHAG.

Pelecanus cirrhatus, Ind. Orn. ii. 890. Gm. Lin. i. 476. Tufted Shag, Gen. Syn. vi. 606.

LENGTH two feet ten inches. Bill two inches and a half long, dusky yellow; round the eye bare; the head and sides above the eye, neck behind, and all the upper parts of the body, wings, and tail black, with a gloss of green on the back and scapulars; the feathers on the top of the head very long, forming a pointed, upright tuft or crest, somewhat tending forwards; on the wing coverts an oblong irregular white patch; the under parts from chin to vent white; tail four inches and an half long, rounded in shape, and said to have fourteen feathers; the legs pale yellow brown.

This was brought with the others from Queen Charlotte's Sound, in New Zealand. In the Leverian Museum.

## 31.-NEW-HOLLAND SHAG.

LENGTH twenty inches. Bill two inches and half long, and pale; round the eye bare and pale yellow; plumage on the upper part in general black; the feathers on the wing coverts have pale edges, and those of the neck fringed with rufous; under parts paler, and mottled; tail six inches long, composed of twelve feathers, cuneiform; legs black.

Inhabits New Holland. In some things this corresponds with the African Species; but is probably distinct.

## 32.—DWARF SHAG.

Pelecanus pygmæus, Ind. Orn. ii. 890. Gm. Lin. i. 574. Pall. reise, ii. p. 712. 16. t. G.—male & fem. Dec. russ. iii. 504. Tem. Man. d'Orn. 591. Id. Ed. ii. 902. Dwarf Shag, Gen Syn. vi. 607.

THIS is scarcely so big as a Teal. The bill, legs, and shape exactly corresponding with those of a Shag; the body black,

with a cast of green about the neck and breast; wing coverts obscure brown, the feathers margined with glossy black; about the eyes dotted with white, but the spots not very numerous; on the neck, breast, and sides are also a few scattered spots, which arise from pencils of very tender hairs of that colonr, which are intermixed, and appear here and there among the feathers; the tail consists of twelve feathers, is stiff, long, and cuneiform, as in the Shag. The female is wholly brown, or dull black, and not spotted.

Inhabits the Caspian Sea, among others of the Genus; also seen about Gurjef, on the River Jaick.

A .- Pelecanus pygmæus, It. Poseg. p. 25. Ind. Orn. ii. 890.

In this the head and upper part of the neck and sides of it are chestnut, sparingly scattered with points of a pure white; chin mouse-colour; lower part of the head, and under part of the body, covered with brown feathers, margined with chestnut; belly hoary, spotted with brown; wing coverts black, marked on the edges with black, denticulated with brown; legs black; edges of the bill smooth.—Inhabits Possega, in Sclavonia.

\*\*\*\* WITH A SERRATED BILL, AND A SLIGHTLY WEDGED TAIL.

GANNETS.

#### 33.—COMMON GANNET.

Pelecanus Bassanus, Ind. Orn. ii. 891. Lin. i. 217. Fn. snec. No. 147. Gm. Lin. i. 577. Brun. No. 124. Muller, No. 147. Fn. groenl. No. 59. Bor. iii. p. 42. Sepp, v. t. p. 301.

Sula alba, Tem. Man. d'Orn. 593. Id. Ed. 2d. 907.

Anser Bassanus, Raii, 122. A. 2. Will. 247. t. 63. Sibb. Scot. Ill. 20. t. 9, f. 2. Klein, Av. 143. 2. Gerin. v. t. 515.

Rothgans, Schmid, Vog. p. 158, t. 134.

Sula Hoieri, Raii, 123, 5. Will. 249.\*

— Bassana, Bris. vi. 505, 5, t. 44. Id. 8vo. ii. 492.

Fou de Bassan, Buf. viii. 376. Pl. enl. 278.

Der Bassanische Pelikan, Bechst. Deuts. Ed. 2d. iv. 765.

Soland Goose, Will. Engl. 328. pl. 63. Albin, i. pl. 86. Ray's Select. Rem. p. 191.

Gannet, Gen. Syn. vi. 608. Id. Sup. 280. Id. Sup. ii. 365. Br. Zool. ii. No. 293.

pl. 103. Id. fol. 160. pl. L. Id. Ed. 1812. ii. 286. pl. 48. Arct. Zool. ii. No. 510. Tour in Scotland, 1769. pl. p. 199. Bewick, ii. pl. in p. 393. Lewin, vii. pl. 265. Id. lii. No. 1.—the egg. Walcot, i. pl. 94. Pult. Dors. p. 22. Orn. Dict. & Supp. Wood's Zoogr. i. p. 561.

SIZE of a Goose; weight seven pounds, length nearly three feet, breadth six. Bill bluish ash-colour, stout at the base, and very little curved at the point, the length six inches; in the place of the nostrils a long furrow, but with no perceivable perforation: + inside of the mouth black; tongue minute; a naked blue skin surrounds the eyes and base of the bill; throat bare, and the skin somewhat dilatable, forming a small pouch, but the oesophagus extremely capacious, as well as the skin for some way downward, so as to be capable of containing five or six herrings, or fish of equal bulk; irides yellowish, furnished with a nictitating membrane, very strong, and almost as transparent as glass; general colour of the plumage white; but the crown and upper parts of the neck are buff-colour; the bastard wing and greater quills black; the tail has twelve feathers, and cuneiform; the legs black, marked with a stripe of pea-green before, and placed more forwards than in the Corvorant; the claw of the middle toe pectinated, as in the Heron.

The male and female are much alike. Young birds, during the first year, are dusky, speckled with white.

The Gannet inhabits the coldest parts of this kingdom, more especially several of the Northern Isles, as that in Scotland, called

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<sup>\*</sup> The Sula Hoieri has some of the secondary feathers black, and the middle tail feathers of the same colour. The Gannet of New South Wales, has both quills and tail black; and the wings, when closed, are of equal length with the tail.

<sup>†</sup> On minute examination, an opening will be found at the end of the furrow, not far from the point of the bill.

Bass, whence the Latin name. It generally makes its first appearance in March, and departs in August or September, according as the inhabitants take or leave the first egg. The nest is composed of various materials, such as grass and sea plants, intermixed with any thing that the bird finds floating on the water. It is the general opinion that the female lays only one white egg, rather less than that of the Goose; \* if this egg is taken away, the bird will lay a second, and should this be taken, a third, but beyond that can furnish no more for the season. The young Gannets are brought to Edinburgh, and sold at 20d. a piece; and being roasted, are served up a little before dinner by way of whet; but the inhabitants of St. Kilda make these birds a great article of food, and are said to consume annually no less than 22,600 young birds, besides an amazing quantity of eggs. They preserve both eggs and fowls, in small, pyramidical stone buildings, covering them with turf ashes, to preserve them from moisture. To procure these birds, the natives run great hazard, in being lowered from the tops of the cliffs by ropes, and not unfrequently perish in the attempt. † The Laird of the Bass Island said to make £130 sterling of the Soland Geese there taken. 1 After leaving their breeding places, they are found in various parts of our Island, pursuing the herrings and pilchards round the coast, and returning there in spring; it has been observed, that when they pass from place to place, which they sometimes do in flocks, of five to fifteen each, they keep low, near the shore, but never pass near the land; on the contrary, doubling the Capes, and projecting parts, keeping at nearly the same distance. The inhabitants of St. Kilda sometimes tie a herring to board, and set it afloat, so that the Gannet, by falling furiously upon it, may break it's neck in the attempt. This, however, appears to be discouraged.

<sup>\*</sup> Weighs three ounces and a quarter .- Orn. Dict.

<sup>†</sup> Br. Zool. See this represented in Arct. Zool. Introd. p. xxix. pl. iv.

<sup>‡</sup> Ray's Select Remains, p. 193.

<sup>§</sup> Are seen also in winter, though in smaller numbers, but all depart for their breeding places in April.

It is an unusually voracious bird, not caring to eat any thing worse than herrings or mackerel, unless it chances to be in a very hungry place, which it endeavours to avoid or abandon; 100,000 of them are supposed to be round the rocks of St. Kilda, which is far too moderate, as 20,000 of them are killed annually for food, including the young ones; and we shall suppose that the Soland Goose sojourns in these seas for about seven months in the year, and that each of them destroys five herrings in a day, a subsistence by no means adequate to so greedy a creature, unless more than half supported by other fish. Here we have 105,000,000 of the finest fishes in the world devoured every year by one Species of St. Kilda Birds.\* During the winter they are frequently found off the coast of Cornwall, and are seen in every part of the British and Irish Channel, but generally keep far out at sea. One was shot in February, 1781, near Sandwich, in Kent,† and another in January, 1791, on the coast of Sussex, t but in both places considered as a rare bird; one was also killed in the winter of 1794, not far from Romsey, in Hants, by a man with a stick, as it was fast asleep at the edge of the river. Mr. Martin informed me, that he had some reason to think the Gannet may sometimes breed near Teignmouth, as he has seen it there in summer.

This race seems to be constant in pursuit after herrings and pilchards, whose motions it watches, and the fishermen know the coming of the fish by the appearance of the birds. That this is the inducement seems probable, as they are likewise seen in December as far south as the coasts of Lisbon and Gibraltar, plunging for Sardinæ. The Gannet is also common on the coasts of Norway and Ireland, and now and then on the southern coasts of Greenland, but is rather a rare bird, and never known to breed there. In America

<sup>\*</sup> See Buchanan's View of the Fishery of Great Britain.

<sup>†</sup> Communicated by Mr. Boys. ‡ Linn. Trans. ii. p. 353.

<sup>||</sup> Clupea Sprattus, our Sprat, according to some; but it is more probably a fish resembling, if not a small variety of, our Pilchard.—Br. Zool.

it is found on the coasts of Newfoundland, where it breeds, migrating in winter as far as Carolina. It is probably farther spread than we formerly imagined, as a specimen has been met with in New Holland.\*\*

In addition to what has been said above in respect to the Gannet, we are greatly indebted to Col. Montagu for a most acute investigation of many curious particulars, not before known. It must have been observed, that this bird does not dive after its prey in the manner of the Corvorant, but appears to be incapable of so doing, on account of the comparative lightness of the body in respect to its bulk, owing chiefly to the air vessels in different parts of the body, communicating with the lungs, whereby it is rendered so remarkably buoyant. This circumstance has been before treated on by the late Mr. J. Hunter, † who informs us, that birds in general are more or less provided with such air vessels, and besides, that in many the bones likewise are filled with air; but, we believe, that no bird is so completely furnished with them as the Gannet; indeed the Gull tribe are never known to dive; for it is probable, that this incapacity may be partly owing to the density of plumage, few birds being more fully clothed with feathers. But as the observation of Col. Montagu, above alluded to, will be more fully understood in his own words, we cannot do better, than recommend the perusal of his researches in the Supplement to the Ornithological Dictionary.

We have also to notice here the detection of an apterous insect in the cellular membrane,‡ at present, we believe, the only instance of such a circumstance.

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A.—Sula major, Bris. vi. 97. Id. 8vo. ii. 490, Tem. Man. d'Orn. 595. Id. Ed. ii. 907. Grand Fou, Buf. viii. 372. Great Booby, Gen. Syn. vi. 610. 25 A. Cat. Car. i. pl. 86—the head.
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Size of a Goose, but the tail longer. Bill a little more than five inches long and grey brown; irides hazel; space between the

<sup>\*</sup> Drawings of Mr. Lambert. † Phil. Trans.

<sup>#</sup> Wernerian Transactions, vol. i. p. 192. pl. 7. f. 1, 2, 3.

bill and eye bare and dusky; the head, neck, breast, and all the upper parts deep brown, marked with white spots, which are small and more numerous on the head, and larger and fewer on the back and breast; the belly and rest of the under parts dirty white; quills and tail brown; legs black.

B.—Pelecanus maculatus, Gm. Lin. i. 579. Ind. Orn. ii. 892. Fou tacheté, Buf. viii. 375. Pl. enl. 986. Spotted Booby, Gen. Syn. vi. 614.

The bill in this bird is pale brown, yellow towards the tip; the plumage in general dusky brown, spotted with white throughout, the spots smaller on the head, and larger on the back and wings; breast and belly white, waved and spotted with dusky brown; the wings remarkably short, much more so than in any other of the known species; quills and tail plain brown; legs the same.

These two birds are said to inhabit America; the former frequents the shores of Florida, and the latter those of Cayenne; but they appear to us no other than the young of the Gannet, which answers to these descriptions; being, for the first year at least, brown or dusky, marked with white spots, and is an elegant bird. One of these, answering most precisely to the figure in the *Pl. enlum.* 986, under the title of Fou tacheté de Cayenne, was brought to me in September, 1798, taken alive near Salisbury, but died in a few days; it weighed three pounds and a quarter, was three feet long, in breadth six; irides bluish grey; the rest according to the description above.

## 34.—LESSER GANNET.

Pelecanus Piscator, Ind. Orn. ii. 892. Lin. i. 217. Amæn. Acad. iv. 239,—female. Gm. Lin. i. 578. Borowsk. iii. 43.
Sula candida, Bris. vi. 501. Id. Svo. ii. 491.

Le Fou blanc, Buf. viii. 371. Tem. Man. Ed. 2, Anal. p. cxi. Lesser Gannet, Gen. Syn. vi. 611.

SIZE of a Duck; length two feet seven inches. Bill five inches long, serrated on the edges, and reddish; space between the bill and eyes naked, and of the same colour; throat naked, dusky black; the general colour of the plumage white, except the greater wing coverts and quills, which are black; the scapulars also are black at the ends; the tail consists of fourteen feathers, cuneiform in shape, the base white, but black the rest of the length; legs red, the middle claw broad and serrated.

This is said to inhabit China, where it is called Bubbi,\* and has been supposed to be one of the sorts of birds trained by the Chinese for fishing; which although we cannot deny, yet we are clear that it is not the one commonly used, having to a certainty determined this matter, on the authority of Sir George Staunton, who proves it a species much allied to the Shag.†

The male of the above is said to be wholly black, with the belly hoary, and to have the bill and legs like the other; but we may rather suspect it to be the Brown Booby, or next Species; or if related to the first at all, may possibly be a bird in the first year's plumage. We have seen a drawing of this supposed male, said to be common in the Isle of Ascension; and, in the notes accompanying, it is observed, that there is no difference of plumage in either sex.

The Lesser Gannet is also found in New Holland, and called by the natives Doo ro dang; but in this the bill is pale blue, the edges serrated as in the other; legs dull yellow; webs brown.

<sup>\*</sup> This word seems to correspond so much with our name of Booby, that we may be inclined to think it derived from that source.

<sup>+</sup> See Chinese Shag, No. xx.

#### 35.—BOOBY.

Pelecanus Sula, Ind. Orn. ii. 892. Lin. i. 218. Gm. Lin. i. 578. Bris. vi. 495. Id. 8vo. ii. 489. Borowsk. iii. 44. Bartr. Trav. 293. Lin. Trans. xiii. 330.

Phalacrocorax rostro et pedibus luteis, Gerin. v. t. 503.

Anseri Bassano congener fusca avis, Raii, 191. 6. Sloan. Jam. 322. pl. 271. f. 2.\*

Plancus Morus, Klein, Av. 144. 4.

Fou commun, Buf. viii. 368. pl. 29.

Booby, Gen. Syn. vi. 612. Brown, Jam. 481. Cat. Car. i. pl. 87.

SIZE of the Lesser Gannet; length two feet six inches. Bill nearly four inches and a half long, toothed on the edges, and grey, with a pale brown base; space round the eyes and the chin bare of feathers, and yellowish; irides pale grey; the head, neck, upper part of the body, wings, and tail, cinereous brown; the greater quills much darker; tail brownish at the end, composed of fourteen feathers, and in shape greatly cuneiform; the breast, belly, thighs, and vent, white; legs pale yellow; claws grey.

According to Catesby, some have white bellies, and others not; and no perceivable difference between male and female.

The young birds have the head and neck white, with a very slight tinge of brown; but may be distinguished, from having the feathers of those parts downy and soft, and not of the usual texture. In some birds the parts usually brown are deep black.

This is frequent in the Bahama Islands, and we have received it from Cayenne, but it appears to be common in many other parts of the world. It may probably be the sort mentioned by Dampier, as plentiful in the Island of Aves, eight or nine leagues E. of Buenos Ayres, and described as being a very simple creature, that will hardly go out of a man's way. They are said to make the nests on the ground, in places where no trees grow; but on the latter, whenever they can be found. The flesh is black and fishy, yet is often eaten by navigators for want of better food.

Is met with in New Guinea; has been seen at Kamtschatka; and is said to be found in the Ferroe Isles; but we rather suspect it to have been mistaken for another Species.

However stupid this bird may in general be, Mr. Abbot gives one instance of its ferocity. One of them was met with in a path distant from the water in Burke County, in Georgia, and when approached by the person who found it, the creature ran directly at him, and, before he could make a blow at it, stuck the bill in his leg to the bone. This bird is described, as having the white of the under parts continued wholly round the middle of the neck; and Mr. A. observes, that they are not unfrequent near the mouths of large rivers.

### 36.—TUCKEY'S BOOBY.

Pelecanus Sula, (Booby) Tuck. Narr. p. 46.

THE length of this bird is eighteen inches. Bill conical, slightly curved, nostrils very open, being two wide longitudinal slits on the sides of the upper mandible; plumage in general rusty brown, deepest, and rather glossy on the quills, which are black; but the under part of them dirty white; crown of the head dove-colour, lightest towards the forehead; the eye dark brown, surrounded by a circle of white feathers; bill and legs black.

The female somewhat less; the colour of the crown deeper, nearly mixing with the general brown, and the circle of minute feathers round the eye black.

These were met with in May, by Capt. Tuckey, in his voyage, not far from the African coast, near Prince's Island, having settled on the yards of the ship in the dusk of the evening; and though the circumstance frequently occurred, only the above two specimens were taken. They were observed generally in pairs, and flying close to the water, with the neck stretched out, and the tail spread.

#### 37.—BROWN BOOBY.

Pelecanus Fiber, Ind. Orn. ii. 893. Lin. i. 218. Gm. Lin. i. 579.
Sula fusca, Bris. vi. 499. t. 43. f. 1. Id. 8vo. ii. 491.
Anseri Bassano congener cinereo-albus, Sloan. Jam. i. præf. p. 31. pl. 6. f. 1. Raii, 191. 5.
Brown Booby, Gen. Syn. vi. 613.

SIZE bigger than a Mallard; length two feet or more. Bill three inches and three quarters, reddish, bent at the point, and somewhat serrated on the edges; space about the eyes naked, and red; general colour of the plumage pale cinereous brown, darker on the back and scapulars, and paler on the under parts of the body; the rump, upper, and under tail coverts, pale grey; greater quills dusky ash-colour; tail of fourteen feathers, and cuneiform; the two middle ash-colour; others the same, inclining to brown, with the tips grey; legs red.

Inhabits Cayenne, and other parts of America, as well as several of the West India Islands; found also in Africa.

### 38.—BROWN AND WHITE BOOBY.

SIZE of the Common Booby. Bill brown; head, neck, beginning of the back, the rump, breast, and all beneath, pure white; top of the head and nape pale brown; middle of back, the wings in general, and two middle tail feathers, dusky brown, nearly black; some of the second quills margined with white; tail long, cuneiform, the outer feathers white; legs pale yellow brown.

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A specimen of this was in the Museum of the late Dr. Hunter, I also find it copied among Mr Dent's drawings; the place it came from not mentioned, but I suspect it to be from Cayenne, as the Dr. had a large collection of birds from that part.

## 39.—LESSER BOOBY.

Pelecanus parvus, Ind. Orn. ii. 893. Gm. Lin. i. 579. Le petit Fou de Cayenne, Buf. viii. 374. Pl. enl. 973. Lesser Booby, Gen. Syn. vi. 614.

LENGTH scarcely eighteen inches. Bill pretty straight, and the space round the eye bare; bill and legs yellow; throat, breast, and belly, white; the rest of the plumage dusky black.

Inhabits Cayenne.

## GENUS CX.—TROPIC BIRD.

1 Common Tropic Bird B Var. 3 Red-tailed A Var. 2 Black-billed 4 New-Holland

BILL compressed, slightly sloping down; point sharp; under mandible angular.

Nostrils pervious.

Tail cuneiform, the two middle feathers extending for a vast length beyond the others.

Toes four in number, all webbed together.

### 1.—COMMON TROPIC BIRD.

Phaeton æthereus, Ind. Orn. ii. 893. Lin. i. 219. Gm. Lin. i. 581. Borowsk. iii. 23. t. 34. Bartr. Trav. p. 293. Gerin. v. t. 516. Tem. Man. Anal. p. cxi.

Larus rarissimus, Robert, Ic. pl. 6.

Lepturus, Bris. vi. 480. t. 42. f. 1. Id. Svo. ii. 48.

Avis Tropicorum, Raii, 123. 6. Id. 191. 4. Will. 250. t. 76. Kalm. It. ii. 144. Osb. It. 291. Tertr. Antill. ii. 276. t. 246.

Plancus tropicus, Klein, Av. 145. 7.

Der fliegende Sonnenvogel, Schmid, Vog. p. 152. t. 136.

Rabijuncos, Ulloa's Voy. ii. 305.

Cola de Junco, Gabin. de Madrid, ii. p. 1. lam. 36.

Grand Paille-en-Queue, Buf. viii. t. 48. pl. 28. Pl. enl. 998. Pernet. Voy. ii. pl. 75. Tropic Bird, Gen. Syn. vi. 685. Will. Engl. 331. pl. 75.

THIS bird is about the size of a Wigeon; length two feet ten inches to the end of the long tail feathers. The bill more than three inches long, and red; the head, neck, and under parts of the body, white; near the base of the upper mandible begins a streak of black, which curves round the upper part of the eye, and ends a little way behind in a straight direction; the back, rump, and scapulars, are white, crossed with curved streaks of black; the lesser wing coverts white, some of them transversely marked with black; greater quills black, margined with white; sides over the thighs black, or

dusky and white mixed; the tail consists of fourteen feathers, twelve of which are of a moderate length, the longest about five inches and a half long, and shorter as they proceed outwards, hence the shape of these is cuneiform; but the two middle ones measure above twenty inches, and finish in a point; the colour of all of them white, except the long ones; which are black for one-fourth from the base; legs dusky yellow; claws black.

The name given to this Genus arises from being found chiefly within the tropics, with very few exceptions; but we are not to conclude, that they never stray voluntarily, or are driven beyond them, for we have met with a few instances to prove the contrary.\* It is however, so generally seen within the tropical limits, that the sight of this bird is alone sufficient to inform the mariner of a very near approach to them, if not his entrance therein. It has also been thought to portend the contiguity of land;† but this has often proved fallacious, as it is not unfrequently found at great distances therefrom. The flight of this bird is often to a prodigious height: but at other times is seen, with the Frigates, Boobies, and other birds, attending the flying fishes, when they rise from the water, driven from their native element into the air, from their enemies beneath, as the Shark, ‡ Porpoise, Albicore, Bonito, and Dolphin, which pursue and prey upon them. These birds are sometimes observed to rest on

<sup>\*</sup> Dr. Forster observes, that they are never seen beyond 28 degrees of latitude; but others talk of their spreading far beyond it. In lat. 34.45.—Ellis's Narr. ii, p. 64.33. 10. N.—Cook's last Voy. iii. 178. In 38. 34. S.—Park. Voy. 132. In 38. 29. S.—Hawkes. Voy. iii. p. 77. This is mentioned as not being common; but Kalm says, he saw them in 40 deg. N.—See Trav. i. p. 22. And a friend of mine assured me, that he once saw one in lat. 47½. N.; but at the same time observed, that it was the first instance he had known of the circumstance.

<sup>+</sup> Ulloa's Voy. ii. 301. He says seldom above eight or ten leagues from land.

<sup>‡</sup> aSqualus Conductor, b Delphinns Phocœna, c Scomber Thynnus, d Scomber Pelamis, c Coryphæna hippuris.—See Phil. Trans. Ixviii. p. 800. It is there observed that the Flying Fish is able to fly 60 or more yards at one stretch, and repeat it a second, or even a third time, with only the slightest momentary touch of the surface that can be conceived intervening; and it is common in these flights for them to fly against ships, or fall on the deck.

the surface of water; and to be now and then seen, in calm weather, upon the backs of the drowsy tortoises, supinely floating in the sea, so as to be taken by the long boat manned. On the shore they will often perch on trees; are said to breed in the woods, on the ground beneath them\*. Have been met with in plenty on the Islands of St. Helena, Ascension, Manritius, New-Holland, and various places in the South Seas, but no where more numerous than at Palmerston Island, where these birds, as well as the frigates, were in such plenty, that the trees were absolutely loaded with them, and so tame, as to suffer themselves to be taken off the boughs with the hand.† At Otaheite and in the Friendly Isles the natives call them by the names of Haingo and Toolaiee.

As the Tropic Bird sheds the long tail feathers every year, the inhabitants collect and make use of them in various manners as ornaments. They are worn in the caps and other parts of the dress of the Sandwich Islanders, being in great plenty at Taboora,‡ but they appear no where more conspicuous than in the mourning garments of Otaheite, where great numbers are picked up in the mountainous parts, and where the bird also breeds. The flesh is certainly not good, but was found sufficiently acceptable to sailors who had long been confined to salt provisions.

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A.—Lepturus caudidus, Bris. vi. 485. t. 42. f. 2. Id. 8vo. ii. 487. Ind. Orn. ii. 894. β.
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This is less than the last. Bill cinereous at the base, the rest of the length yellowish; plumage in general silvery white; round

Paille-en-Queue de L'Isle d'Ascension, Buf. viii. 355. Pl. enl. 369.

Tropic Bird, Gen. Syn. vi. 1. A. Cates. Car. App. pl. 14. Brown, Jam. 482. Edw. pl. 149. f. 2,

<sup>\*</sup> Breed in the crevices of the elevated rocks, near the shores of the Cape Verd Islands.

Tuckey's Narrative, p. 82. † Ellis's Narr. p. 53.

<sup>‡</sup> Cook's Last Voyage, ii, 232. Id. iii, 172. || Forst. Voy. ii. p. 92.

the eye a black crescent, as in the other, and the scapulars, like that, marked with black; legs yellowish; base of the toes the same; the rest of the length, the webs, and claws, black.—Found in various places, with the other, of which it appears to be a Variety.

B.—Lepturus fulvus, Bris. vi. 489. Id. 8vo. ii. 488. Ind. Orn. ii. 894. γ. Gen. Syn. vi. 619. 1. B.

This is a further Variety, and differs merely in having the plumage of a yellowish white, instead of being of a pure silvery hue. These differences may perhaps arise merely from age, if not the distinguishing mark of sex.

# 2.—BLACK-BILLED TROPIC BIRD.

Phaeton melanorhynchos, Ind. Orn. ii. 894. Gm. Lin. i. 582. Black-billed Tropic Bird, Gen. Syn. vi. 619.

THIS is smaller than either of the former; length nineteen inches and a half. Bill three inches long, greatly compressed on the sides, and black; plumage on the upper part of the body and wings interruptedly striated black and white; before the eye a large crescent of black; behind it a streak of the same; the forehead and all the under parts of the body pure white; the quills and tail marked as the upper parts, but the ends of the first are white; and most of the feathers of the last dusky black at the tips; sides over the thighs striated black and white; legs black.

It was found at Turtle and Palmerston Islands, in the South Seas.—Sir Joseph Banks.

This had before the eye a large black patch passing over it, divided into two behind, and bending downwards.



PI. CJ.XXXJII.

Red tailed Otrapic - Bird.

## 3.—RED-TAILED TROPIC BIRD.—Pl. clxxxIII.

Phaeton phœnicurus, Ind. Orn. ii. 894. Gm. Lin. i. 583. Nat. Misc. pl. 177. Paille-en-Queue à brins rouges, Buf. viii. 357.

de l'Isle de France, Pl. enl. 979.

Red-tailed Tropic Bird, Gen. Syn. vi. 619, pl. 105.

THE length of this species is two feet ten inches, of which the two long tail feathers measure eighteen inches. Bill three inches and a half long, and red; plumage more or less of an elegant pale rose-colour; the crescent over the eyes as in the others, but somewhat abrupt in the middle; the ends of the scapulars marked with black; but what chiefly distinguishes the bird is the two middle long tail feathers, which are of a beautiful deep red their whole length, except the shafts and base, which are black; the sides over the thighs dusky; legs black.

This bird is seen frequently at large, as the first, but does not seem to be so far spread. Our navigators met with them in various places, though they were seldom seen on shore, except in the breeding season, which is in September and October; are found in great numbers in the Island of Mauritins, where they make the nest in the ground, under the trees; the eggs two in number, vellowish white, marked with rufous spots.\* Mention has been made in another place, t of the introduction of Paradise Grakles, into the Island of Bourbon, from whence they spread into the Isle of Mauritius; at first intended for the very useful purpose of destroying the locusts and grasshoppers, which swarmed there to a great degree: the result of their prodigious increase, and the unlooked for consequence of it, has been there likewise mentioned. These birds, we are told, are great enemies to the Tropic Birds, and M. de Querhoent had ocular demonstration of it; for being seated beneath a tree, on which were perched a number of the Grakles, he observed a Tropic Bird come to its hole, in order to go to the nest; but the Grakles attacked the

<sup>\*</sup> Voy. to Mauritius, 66. Hist. des Ois. 

† See Paradise Grakle, vol. iii. p. 147.

bird all at once, and obliged it to fly off; it then returned with its mate, but without effect, for both were driven away, as the single one had been before; when the Grakles returned to the tree, and the spectator left them.

This species has been met with in several places of the South Seas; is very common at Palmerston and Turtle Islands; at Hervey's Island in the greatest plenty, and considerable numbers were killed for provisions; and here also they make the nests, in the same manner as at Mauritius. The name known by at Otaheite and the Friendly Isles is Twagge and Totto. We are not without our doubt whether the abovementioned birds do not belong to one and the same species, in different stages of life. M. Temminck supposes the Red-tailed one to be in the highest perfection of feather.

#### 4.—NEW-HOLLAND TROPIC BIRD.

IN a collection of drawings from New-Holland, is a black-billed one, said to be a young Tropic Bird, but without any elongated tail feathers; length to the end of the tail eighteen inches. This corresponds with our second as to plumage, but differs in having the legs yellow, instead of black, and no markings of black whatever on the thighs, or under parts; and the inner coverts of the wings only spotted with black, but the quills have a sagittated dash of black; at the end of each is a streak of black, continued from the black web; the tail feathers are also crossed with three or four bars of black.—A specimen of this last has not yet been seen here, but from every appearance, it is most probably a distinct species.

In addition to the above, we have met with one of the long centre tail feathers of a Tropic Bird, different from any others; length much as in the Red-tailed; the shafts black; webs buff-colour, not continued to a point in the usual way, but rather rounded at the end. All we could learn concerning it was, that it was brought from the South Seas, but the precise place not mentioned.

## GENUS CXL-DARTER.

1 White-bellied Darter A Var. 4 Rufous-winged 2 Black-bellied 3 New-Holland 5 Black

BILL long, straight, sharp-pointed.

Nostrils a long slit near the base.

Face and chin bare of feathers.

Neck of a very great length.

Legs short, toes four in number, all webbed together.

# I.—WHITE-BELLIED DARTER.

Plotus Anhinga, Ind. Orn. ii. 895. Lin. i. 218. Gm. Lin. i. 580. Borowsk. iii. 25. t. 35. Tem. Man. Anal. exi.

Colymbus colubrinus, cauda elongata, Bartr. Trav. 130. 293.

Anhinga, Bris. vi. 476. Id. 8vo. ii. 485. Raii, 124. 7. Will. 250. Id. Engl. 332. pl. 72. Klein, 145. 8. Buf. viii. 448. Schmid, Vog. p. 158. t. 135.

Le Zaramagullon tacheté, Voy. d'Azara, iv. No. 424.

White-bellied Darter, Gen. Syn. vi. 622. Id. Sup. ii. 367.

THIS is about the size of a Mallard in the body; the length from the tip of the bill to the end of the tail two feet ten inches; extent of wings, three feet or more; the bill three inches long, straight, jagged on the edges, colour greyish, with a yellowish base; irides gold-colour; head very small, the neck slender, of a great length, and covered with downy, soft, rufons grey feathers; but the throat and fore part of the neck, the upper part of the back and scapulars, are dusky black, the middle of the feathers dashed with white; lower part of the back, rump, and upper tail coverts, fine black; all the under parts from the breast are pure silvery white; the lesser and middle wing coverts like the upper parts of the back; the larger, nearest the body, black spotted with white; but the outer ones are plain black; the tail consists of twelve very broad feathers,

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450 DARTER.

ten inches long, and the wings, when closed, reach to about the middle of it, the colour glossy black; legs and toes yellowish grey, the middle claw toothed, or serrated, on the inner edge.

Inhabits Brazil, and parts farther south, at least as far as Paraguay, and called Myua. Said to be very adroit in catching fish, for, after the manner of snakes, it first draws up the neck, and darting forth the bill upon the fish, catches it in the claws. Like the Corvorant, it builds the nest on trees, and roosts on them at night, in the manner of that bird; and, when not on the water, is for the most part perched on the highest branches of those which grow in the moist savannas and river sides, being scarcely ever seen on the ground; when at rest, frequently sits with the neck drawn in between the shoulders, in the manner of the Heron; whereby the breast appears fuller than it naturally is, and the neck considerably shorter. Mr. Bartram adds, that this bird has a way of spreading out the tail like an unfurled fan.

They like to sit in little peaceable communities, on the dry limbs of trees, hanging over still waters, with the wings and tails expanded: and when any one approaches, drop off the limb into the water as if dead, and for a minute or two are not seen; when on a sudden, at a vast distance, their long slender heads and necks only appear, having much the resemblance of snakes, as no other part of them is visible, whilst swimming, except sometimes the tip of the tail. In the heat of the day are seen in great numbers, sailing very high in the air, over lakes and rivers.

Mr. Abbot, of Georgia, informs me, that this bird is found throughout the year in his neighbourhood, having seen it at times the whole of the winter. The flesh is very fat, but of an oily and disagreeable taste; and according to Marcgrave, not better than that of a Gull.

<sup>\*</sup> Willinghby.

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## 2.—BLACK-BELLIED DARTER.

Plotus melanogaster, Ind. Orn. ii. 895. Gm. Lin. i. 580. Am. Orn. ix. 79. pl. 74. f. 1, 2. Lin. Trans. xiii. p. 198. 330.

Anhinga melanogaster, Zool. Indic. p. 22. t. 12.

- de Cayenne, Pl. enl. 959.

Black-bellied Anhinga, Ind. Zool. 4to. p. 53. pl. 15. Nat. Misc. pl. 373. Penn. - Hindoost. ii. 160.

Black-bellied Darter, Gen. Syn. vi. 624.

SIZE of the Common Duck, but the neck extremely long; the bill straight, long, and sharp-pointed; above pale blue; beneath reddish; eyes very piercing; head, neck, and upper part of the breast, light brown; each side of the head, and upper parts of the neck, marked with a broad white line; crop very large; back, scapulars, and wing coverts, marked lengthwise in equal portions with stripes of black and white; quills, belly, thighs, and tail, deep black; the last remarkably long and slender, and when spread out appears greatly rounded; the two middle feathers undulated twenty or thirty times, and some of the longer scapulars have the same appearance; legs as in the other.

Inhabits the Islands of Ceylon and Java, where it sits on the shrubs that hang over the water; and in a country where every idea is filled with serpents, often terrifies the passengers by shooting out its long slender neck, which in their first surprize they take for the darting of some fatal reptile; common also on the coast of Coromandel, as we find it well represented among the drawings of Sir J. Anstruther, and others. In some specimens the chin, throat, and fore part of the neck, are white, in others the white is spotted with black; but independent of this, the plumage is much the same. Whether this distinction may arise from difference of sex, is quite uncertain.—In the above drawings the neck seems to be composed of five or six angles, giving an undulated appearance at the back part; and it is said, that the bird, when alive, carries the neck after this fashion. By some it is called Bauber, and by others Lug Lug. In Sumatra, Danding Ayer.

M M M 2

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The author of the American Ornithology is of opinion with Mr. Abbot, that the two last described are only sexual differences; that they build in the trees in the swamps and islands of the ponds; and the nest composed of sticks. Mr. A. says they lay four eggs each, but that he once found a nest with two eggs and six young birds, and was inclined to think, that more than one female was concerned; and that they build year after year in the same tree, unless the surrounding spots are dried up.

#### PL. CLXXXIV.

A.—Anhinga, Buf. viii. pl. 35. Ind. Orn. ii. 896. β. Gen. Syn. vi. 624. Var. A. pl. cvi. Nat. Misc. pl. 373.

Size of the last; length three feet three inches and an half. Bill four inches and an half, dusky vellow, covered at the base with a skin of the same colour, occupying the space between the bill and eye, and surrounding the latter; nostrils an oblique slit, not far from the base; the upper mandible finely serrated; head small, the neck long and slender, both covered with dusky white downy feathers. inclining to brown, paler on the fore part; back, scapulars, and wing coverts the same, but deeper coloured; the lower part of the neck on the sides, and wing coverts, marked with oval spots of white, forming regular rows on the latter; the scapulars streaked longitudinally with white, giving the bird an elegant appearance: across the lower part of the breast a dull rufous bar; from thence to the vent black; quills and tail the same, the last eleven inches long, consisting of twelve feathers, the middle ones undulated as in the last; legs clumsy, stout, four inches and an half long, and vellowish brown.

The above said to have been brought from India; the description taken from one in the British Museum; one similar to this was also in Mr. Bullock's fine collection, but this last had the feathers at the nape elongated into a sort of crest.



Alack - Collied Darter.



### 3.—NEW-HOLLAND DARTER.

SIZE of the Black-bellied Species. Bill straight, horn-coloured, long, and pointed; irides yellow; neck rufous brown; on each side from the mouth, half down the neck, a long streak of white; and above this, on the under jaw, another shorter, both streaks edged all round with black; throat black, and varying; at the lower part of the neck the feathers edged with brown; back black, shafts of the feathers white; upper wing coverts half black, half white, appearing for the most part white, the black space being nearly hid; breast black and glossy; belly black, the feathers here and there tinged with rufous; quills black; tail black, pretty long, the feathers equal in length, uncommonly undulated, and stiff as parchment, the quills extend almost to the end of it; legs yellow.

Inhabits New South Wales. In the collection of Mr. H. Brogden, of Clapham.

#### 4.—RUFOUS-WINGED DARTER.

Anhinga roux du Senegal, Buf. viii. 453. Pl. enl. 107. Ind. Orn. ii. 896. 2. γ. Rufous Darter, Gen. Syn. vi. 627. 2. Var. C.

SIZE of the others; and differs in having the head, neck, and wing coverts dirty rufous and dusky brown, mixed in streaks; the rest of the plumage black.

Inhabits Africa, particularly Senegal, known there by the name of Kandar.

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## 5.—BLACK DARTER.

Anhinga noir de Cayenne, Pl. enl. 960. Ind. Orn. ii. 896. Black Darter, Gen. Syn. vi. 625. B

SIZE of the others; length three feet. Bill pale yellow; round the eye and throat pale dusky white; wing coverts yellowish white; the rest of the plumage black, except the feathers on the beginning of the back, and some of the scapulars, which are streaked down the middle with white, somewhat like the others; tip of the tail dirty rufous; legs brownish yellow.

# CONCLUSION.

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WE here close our General History of Birds, with the satisfaction of experiencing that it has been favourably received during its progress.

In a work of this extent, some errors must be unavoidable: among which may be remarked a mistake in the first volume, p. 32, in respect to what is called New-Holland Vulture. A drawing of this was, many years since, communicated by our late friend, Gen. Davies, under that appellation, but the source he took it from cannot now be known. It should appear, that the want of feathers on the head and neck had induced the General to suppose it a Vulture; yet the shape of the bill and claws scarcely satisfied us that it belonged to that Genus, and it is but very lately that our doubts have been confirmed, through the kindness of Lord Stanley, who put into our hands a specimen for examination. In respect to the plate given of this bird, the outline and colour are sufficiently correct, though the bill and claws are not equally so; the former is too long, and the upper mandible should be more curved, approaching to that of the Gallinaceous tribe; the claws should be shorter; but what more pointedly determines it not to belong to the Vulture is the tail, which consists of eighteen feathers, whereas the number in the Vulture is never more than twelve; in shape too it is singular, the feathers being decumbent, or placed declining over each other, as in the common Poultry Hen, and the tail itself also seems to have been carried in an erect situation; hence it can scarcely be reconciled to any Genus yet known. But as it clearly belongs to the Gallinaceous order, it might have place after the Menura, and form a Genus by the name of Alectura, unless one more appropriate may be found, on account of its manners, which at present are unknown.

It will be found that the Berbice Falcon, p. 292, No. 240, has been wholly omitted. The description of this is: Length fourteen inches Bill black; cere yellow; head, neck, back, and wings pale ash, with, darker marblings on the two first; beneath the body buff, with numerous dusky bars; second quills barred dark ash, the greater rufous red, for three quarters of the length barred with black, from thence to the end black; tail as the back, with four curved black bars; legs yellow. Inhabits South America, by the name of Maujacana.

An unaccountable misrepresentation has also occurred in respect to the bill of the Black Skimmer, vol. 10, p. 96, where it is said, that the upper mandible is bifid beneath, so as to admit of the under one entering the shallow groove; on the contrary, it should have been said, that the under one was bifid, to admit of the upper one entering into the cavity of the under, formed to receive it.

It appears too, that the Yellow-fronted Thrush, vol. 5, p. 64, and the Var. A of the Black-chinned, vol. 4, p. 189. are allied to Hurrnwa Bee-Eater, p. 120.

Independent of the above, we are not conscious of errors, except those of the press, which may be corrected by the reader in the course of his perusal.

FINIS.









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