

Bequest of S. Stillman Berry



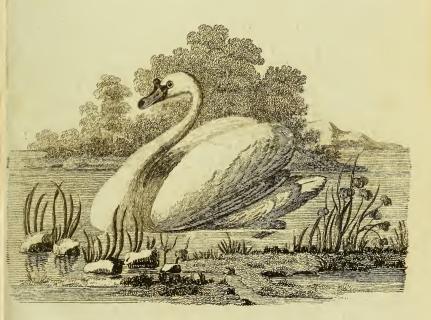


BRITISH ZOOLOGY.

J. IX.

CLASS II. BIRDS.

DIV. II. WATER FOWL.



L O N D O N. Printed for Benj.White, M D C C L XXVI.

Nº 26.;.



CEMBRE PLATES

то

BRITISH ZOOLOGY.

VOL. II. OCTAVO.

Plates.

Ţ

1 10000	•					
LX.	RONT	ISPIE	CE,	TA	me Sv	VAN,
	r to fac	e the 7	Fitle			
LXI.	COMMON H	Ieron		-	Page	42 I
LXII.	WHITE HI	ERON	4			427
LXIII.	CURLEW	- 1			-	429
LXIV.	Whimbrel		-		-	430
LXV.	RED SHANK		_			433
	Woodcock	S	-		_	433
LXVI.	CINEREOUS	Godw	TT -		æ	442
LXVII.	RED GODW	IT	-		-	443
LXVIII.	JACK SNIPI	εļ			_	448
	SNIPE	Z				440
LXIX.	RUFF 2		_			457
	REEVE S					407
LXX.	GAMBET		-		800	465
Vol. II	•	Εę	2		LX	KA

PLATES.

Plates.			
LXXI.	PURR - 7		
	SANDPIPER 5 - Pag	ge	470
LXXII	RED SANDPIPER 2		
	Golden Plover 5 -	•	474
LXXIII.	SANDERLING 7		
	Dotterel 5	•	477
LXXIV.	Oyster-Catcher -	- ,	482
LXXV.	WATER-RAIL	5	
	CRAKE GALLINULE 5		484
LXXVI.	RED and GREY SCOLLOP-TOER	07	10.
	SANDPIPER	Ś	49 I
LXXVII.	COMMON GALLINULE 7		101
	Соот		494
LXXVIII.	Dusky Grebe 2		496
	TIPPET GREBE 5		490
LXXIX.	BLACK-CHIN GREBE		r00
	EARED GREBE		500
LXXX.		4	504
LXXXI.			507
LXXXII.	LITTLE AUK ?	1	509
	RAZOR BILL 5		<u>چ</u> در
LXXXIII.	Lesser Guillemot ?		520 -
	SPOTTED GUILLEMOT	-)
LXXXIV.		4	523
	Northern Diver 5		-5
LXXXV.	Red-THROATED DIVER 3 -	6	526
	BLACK-THROATED DIVER S	-	
LXXXVI.	WINTER GULL ? -	L	532
	BLACK-TOED GULL S	-	
LXXXVII.	ARCTIC GULLS	5	533
	LXXX	(V)	III.

I

PLATES.

Plates.			
	HERRING GULL 2		
	WAGEL 3 - P	age	535
LXXXIX.	KITTIWAKE 7		0
	COMMON GULL	-	538
XC.	GREAT and LESSER TERN	S	545
XCI.	STORMY PETREL 7		
	Fulmar 5	-	54 9
XCII.	M. and F. GOOSANDER	-	556
XCIII.	M. and F. RED-BREASTED	2	558
	Goosander	S.	550
XCIV.	Bean Goose	7	
	WHITE-FRONTED WILD	3	57 5
	Goose	7	
	EIDER DUCK and DRAKE	-	58 I
	M. and F. VELVET DUCK	-	58 3
	WILD DUCKS -	-	59 c
ACVIII.	LONG-TAILED DUCK	Ł	599
VOIV	WHITE-THROATED DUCK	3	
ACIA.	FERRUGINOUS DUCK	7	
	LONG-TAILED DUCK, a Variety -	7	601
C	Scaup Duck 7	3	
с.	BIMACULATED DUCK	-	602
CI	GARGANEY ?		
01.	FEMALE GARGANEY	~	604
CII	SHAG -	-	610
	GANNET -	-	612

APPENDIX.

PLATES

APPENDIX.

Plates.

N° I.	Rough-LI	egged Fa	LCON	Page	623
II.	Roller	-	-	-	624
	NUTCRAC			-	625
IV.	M. and F	. Oriole			626
v.	Rose-col	oured Ou	JZEL	-	627
VI.	CRANE		-	-	629
VII.	Egret	-	-	- 1	631
VIII.	LITTLE B	ITTERN	-	-	633
IX.	SPOONBIL:	L ~		-	634
ompositio	ns for Tw	O PIPING	BULLF	INCHES	708

DIVISION II.

WATER-FOWLS.

Vol. II. Ff





allore iscon

11 horall

TP

DIV. II. WATER FOWLS.

SECT. I. WITH CLOVEN FEET. II. WITH FINNED FEET. III. WITH WEBBED FEET.

BILL long, ftrong and pointed. NOSTRILS linear. TONGUE pointed.

TOES connected as far as the first joint by a

ftrong membrane.

MALE.

Heron cendrè. Belon. av. 182. Alia ardea. Gefner av. 219. Ardea cinerea major. Aldr. av. iii. 157. Scopoli, No. 117. Common Heron, or Heron-

fhaw. Wil. orn. 277. Ardea cinerea major feu pel-

la. Raii syn. av. 98.

Garza cinerizia groffa. Zinan. 113. Le Heron hupé. Briffon av. v. 296. tab. 35. Reyger. Frifch II. 199. Blauer Rager. Kram. 346. Ardea major. Lin. fyft. 236. Hager. Faun. Suec. fp. 59. The Heron. Br. Zool. 116. tab.

FEMALE.

Ardea Pella five cinerea. Gefner av. 211.
Ardea cinerea tertia. Aldr. Lav. III. 159. Wil orn. 279. & Raii fyn. av. 98. F
Ardea cinerea. Lin. fyf. 236. L
Danis et Norvegis Heyre v.

Hegre. Cimbris Skid-Heire Skredheire. Brunnich, 156. Le Heron. Briffon av. v. 292. tab. 34. Reyger Frifch, II. 198. Brit. Zool. 116.

HIS bird is remarkably light in proportion to its bulk, fcarce weighing three pounds and a half: the length is three F f 2

173. Coma Mon.

XXVIII. HERON,

COMMON HERON. CLASS II.

422

feet two inches; the breadth five feet four inches. The body is very fmall, and always lean; and the fkin fcarce thicker than what is called gold-beater's fkin. It must be capable of bearing a long abstinence, as its food, which is fifh and frogs, cannot be readily got at all times. It commits great devastation in our ponds; but being unprovided with webs to fwim, nature has furnished it with very long legs to wade after its prey. It perches and builds in trees, and fometimes in high cliffs over the fea, commonly in company with many others, like rooks. At Cress Hall near Gosbertan in Lincolnshire I have counted above eighty nefts in one tree. It makes its neft of flicks, lines it with wool; and lays five or fix large eggs of a pale green color. During incubation, the male paffes much of its time perched by the female. They defert their nefts during winter, excepting in February, when they refort to repair them. It was formerly in this country a bird of game, heron-hawking being fo favourite a diversion of our anceftors, that laws were enacted for the prefervation of the fpecies, and the perfon who deftroyed their eggs was liable to a penalty of twenty fhillings, for each offence. Not to know the Hawk from the Heronhaw was an old proverb*, taken originally from this diversion; but in course of time ferved to ex-

* In after times this proverb was abfurdly corrupted to, He does not know a harwk from a hand-farw.

DSI

prefs

CLASS II. COMMON HERON.

prefs great ignorance in any fcience. This bird was formerly much effeemed as a food; made a favourite difh at great tables, and was valued at the fame rate as a Pheafant. It is faid to be very long lived; by Mr. *Keyfler*'s account it may exceed fixty years *: and by a recent inftance of one that was taken in *Holland* by a hawk belonging to the ftadtholder, its longevity is again confirmed, the bird having a filver plate faftened to one leg, with an infcription, importing it had been before ftruck by the elector of *Cologne*'s hawks in 1725.

The male is a most elegant bird: the weight about three pounds and a half, the length, three feet three; the breadth, five feet four; the bill fix inches long, very firong and pointed: the edges thin and rough; the color dusky above, yellow beneath; nostrils linear; the irides of a deep yellow; orbits and space between them and the bill covered with a bare greenish skin.

The forehead and crown white, the hind part of the head adorned with a loofe pendent creft of long black feathers waving with the wind; the upper part of the neck is of a pure white, and the coverts of the wings of a light grey; the back clad only with down, covered with the fcapulars; the fore part of the neck white fpotted with a double row of black: the feathers are white, long, narrow,

* Keyfler's Travels, I. 70.

unweb-

BITTERN. CLASS II.

unwebbed, falling loofe over the breaft; the fcapulars of the fame texture, grey ftreaked with white.

The ridge of the wing white, primaries and baltard wing black; along the fides beneath the wings is a bed of black feathers, very long, foft and elegant; in old times ufed as egrets for the hair, or ornaments to the caps of Knights of the garter; the breaft, belly, and thighs white: the laft dafhed with yellow. The tail confifts of twelve fhort cinereous feathers: the legs are of a dirty green: the toes long, the claws fhort, the inner edge of the middle claw finely ferrated.

FEMALE

The head of the female is grey: it wants the long creft, having only a fhort plume of dufky feathers: the feathers above the breaft fhort; the fcapulars grey and webbed: the fides grey. This has hitherto been fuppofed to be a diffinit fpecies from the former; but later obfervations prove them to be the fame.

Garza bionda, o di color d'oro. Le Butor. Belon av. 192. 174. BIT-Zinan. 112. Scopoli, No. TERN. Brrind, Rordump. Gesner av. 215. 125. Rohrtrummel, Mosskuh. The Myredromble. Turner. Kram. 348. Trombone, Terrabuso. Aldr. av. III. 164. Rohrdommel. Frisch, II. 205. Ardea stellaris. Lin. Syst. 239. Bittour, Bittern, or Miredrum. Wil. orn. 282. Rordrum. Faun. Suec. Sp. Raii Syn. av. 100. 164. Danis Rordrum. Brunnich, Botaurus, le Butor. Briffon av. V. 444. tab. 37. 155. Br. Zool. 117. tab. A. I.

> THE bittern is a very retired bird, concealing itfelf in the midft of reeds and rufhes in marfhy

CLASS II. B I T T E R N.

marshy places. It is with great difficulty provoked to flight, and when on wing has fo dull and flagging a pace, as to acquire among the *Greeks* the title of on 0 = 0 or the lazy. It has two kinds of notes; the one croaking, when it is diffurbed: the other bellowing, which it commences in the fpring and ends in autumn. Mr. *Willughby* fays, that in the latter feason it foars into the air with a fpiral ascent to a great height, making at the fame time a fingular noise. From the first observation, we believe this to be the species of heron that *Virgil* alludes to among the birds that forbode a tempest,

In ficco ludunt fulicæ, notafque paludes Deferit, atque altam fupra volat Ardea nubem **+**.

For the antients mention three kinds \ddagger ; the *Leucon*, or white heron; the *Pellos*, fuppofed to be the common fort; and the *Afterias*, or bittern; which feems to have acquired that name from this circumftance of its afpiring flight, as it were attempting, at certain feafons, the very flars; though at other times its motion was fo dull, as to merit the epithet of *lazy*.

Some commentators have fuppofed this to have been the *Taurus* of *Pliny*; but as he has expressly declared that to be a fmall bird, remarkable for

* Arift. hift. an. 1056.
† Georg. I. 363.
‡ Arift. hift. an. 1006. Plin. lib.. x. c. 60.

Ff4

imitating

DESCRIP.

BITTERN. CLASS II.

imitating the lowing of oxen, we must deny the explanation; and wait for the difcovery of the Roman naturalift's animal from fome of the literati of Arles, in which neighbourhood Pliny fays the bird was found *. In fize it is inferior to the heron : the bill is weaker, and only four inches long: the upper mandible a little arched; the edges of the lower jagged : the rictus or gape is fo wide, that the eyes feem placed in the bill : the irides are next the pupil yellow; above the yellow incline to hazel: the ears are large and open. The crown of the head is black; the feathers on the hind part form a fort of fhort pendent creft : at each corner of the mouth is a black fpot: the plumage of this bird is of very pale dull yellow, fpotted, barred, or ftriped with black : the baftard wing, the greater coverts of the wings, and the quil-feathers are of a bright ferruginous color, regularly marked with black bars : the lower belly is of a whitifh yellow : the tail is very fhort, and confifts of only ten feathers. The feathers on the breaft are very long, and hang loofe: the legs are of a pale green. All the claws are long and flender: the inner fide of the middle claw finely ferrated to hold its prey the better; its hind claw is remarkably long, and being a fuppofed prefervative for the teeth, is fometimes fet in filver and used as a tooth-pick. Befides this common species, Mr. Edwards mentions a

* Lib. x. c. 42.

fmall





The WHITE HERON.

Maz II

CLASS II. WHITE HERON.

fmall one of the fize of a lapwing, fhot near Shrewbury. He adds no more than that the crown of the head was black : as this answers the description of a kind frequent in Switzerland and Aufria*, we imagine it to be a ftrayed bird from those parts.

It builds its neft with the leaves of water plants on fome dry clump among the reeds, and lays five or fix eggs, of a cinereous green color. This bird and the heron are very apt to ftrike at the fowler's eyes, when only maimed. The food of the bittern is chiefly frogs; not that it rejects fifh, for fmall trouts have been met with in their ftomachs. In the reign of Henry VIII. it was held in much efteem at our tables; and valued at one fhilling. Its flefh has much the flavour of a hare; and nothing of the fishiness of that of the heron.

Le Heron blanc. Belon av. 191. Turner. Wil. orn. 279. Raii fyn. av. 99.

Ardea candida, le Heron 175. WHITE. blanc. Briffon av. V. 428. Ardea alba. Ge/ner av. 213. Groffer weiffer Rager. Kram. 34.6. Scopoli, No. 126. Ardea alba. Lin. syft. 239. Faun. Suec. sp. 166. Br. Zool. 117.

HIS bird has not fallen within our obfervation; therefore we must give Mr. Willughby's

* Kramer Elench. anim. Austria, 348.

account

427

account of it. The length to the end of the feet is fifty-three inches and a half, to that of the tail only forty; the breadth fixty inches; the weight forty ounces.

The bill is yellowifh; the naked fkin between that and the eyes green; the edges of the eye-lids, and the irides, are of a pale yellow; the legs are black; the inner edge of the middle claw ferrated : the whole plumage is of a fnowy whitenefs. This bird is very common in many parts of *Europe*; *Turner* fays, that in his time this fpecies bred (though rarely) in the fame places with the common fort: but we believe it to be feldom found with us at prefent, any more than the fmall fpecies of crefted white heron mentioned by *Leland*, under the name of *Egritte*, in one of the bills of fare in the magnificent feafts of our anceftors *.

* Leland's collectanea, Vol. 6. L'Aigrette. Briffon av. V. 431.

BILL





CLASS II.

CURLEW.

BILL long, flender, incurvated. NOSTRILS linear, placed near the bafe. TONGUE fhort, fharp pointed. TOES connected as far as the first joint by a ftrong membrane.

Le Corlieu. Belon av. 204. Arquata, five numenius. Gefner av. 221. Arcafe Torquato. Aldr. av. III. 169. Wil. orn. 294. Raii fyn. av. 103. Le Courly. Briffon av. V. 311. Goiffer, Brach-fcknepf. Kram. 350. Frifch, II. 229. Scolopax arquata. Lin. fyft. 242. Faun. Suec. fp. 168. Danis Heel-fpove. Regn. Spaaer. Regn. Spove. Brunnich, 158. Br. Zool. 118.

THESE birds frequent our fea coafts and marshes in the winter time in large flocks, walking on the open fands; feeding on shells, frogs, crabs, and other marine infects : in summer they retire to the mountanous and unfrequented parts of the country, where they pair and breed. Their eggs are of a pale olive color, marked with irregular but distinct spots of pale brown. Their fless is very rank and fishy, notwithstanding an old *English* proverb in its favour.

Curlews differ much in weight and fize; fome weighing thirty-feven ounces, others not twentytwo: the length of the largeft to the tip of the tail

176. Cur-LEW.

Descrip.

XXIX. CURLEW.

WHIMBREL. CLASS II.

tail twenty-five inches; the breadth three feet five inches; the bill is feven inches long: the head, neck, and coverts of the wings are of a pale brown; the middle of each feather black; the breaft and belly white, marked with narrow oblong black lines: the back is white, fpotted with a few black ftrokes: the quil-feathers are black, but the inner webs fpotted with white: the tail white, tinged with red and beautifully barred with black; the legs are long, ftrong, and of a bluifh grey color: the bottoms of the toes flat and broad, to enable it to walk on the foft mud, in fearch of food.

177. WHIM-BREL. Phæopus altera, vel arquata minor. Gefner av. 499.
Tarangolo, Girardello. Aldr. av. III. 180.
Wil. orn. 294.
Raii fyn. av. 103.
Edw. av. 307.
Scolopax Phæopus. Lin. fyf. 243. Scopoli, No. 132.
Windfpole, Spof. Faun. Suec. fp. 169. Kleiner Goiffer. Kram. 350.
Kleine Art Brachvogel or Regenvogel. Frijch, II. 225.
Le petit Courly, ou le Courlieu. Numenius minor. Briffon av. V. 317. tab. 27.
Danis Mellum-Spove. Norveg. Smaae Spue. Br. 159.

Br. Zool. 119.

THE whimbrel is much lefs frequent on our fhores than the curlew; but its haunts, food, and general appearance are much the fame. It is obferved to vifit the neighbourhood of Spalding (where it is called the Curlew knot) in vaft flocks Pl. LXIV.

WHIMBREL.

1



flocks in *April*, but continues there no longer than *May*; nor is it feen there any other time of year: it feems at that feafon to be on its paffage to its breeding place, which I fufpect to be among the Highlands of *Scotland*.

The fpecific difference is the fize; this never exceeding the weight of twelve ounces. The bill is two inches three quarters long; dufky above, red below: the feathers on the head and neck are brown tinged with red, marked in the middle with an oblong black fpot: the cheeks of a paler color: the upper part of the back, the coverts of the wings, the scapulars, and the farthest quil-feathers, are of the fame color with the neck, but the black fpots fpread out transversely on each web: the quil-feathers dusky; their shafts white; and their exterior webs marked with large femicircular white fpots. The breaft, belly, and lower part of the back are white: the coverts of the tail, and the tail itfelf, are of a very pale whitish brown, croffed with black bars. The legs and feet are of a dull green, and formed like those of the curlew.

I received one from *Invercauld*, fhot on the *Grampian Hills*, whole length was fixteen inches; the bill two: the head round, black on the top, divided length-ways by a white line: chin white: cheeks, neck, breaft, and upper part of the belly whitifh brown, marked with ftreaks of black pointing down, with narrow ftreaks on the neck; broad on the belly: lower belly and vent white: back and

DESCRIP.

and coverts of the wings dufky: the fides of each feather fpotted with reddifh white: lower part of the back white: rump white barred with black: tail barred with dufky and white: quil-feathers black, with large white fpots on the inner webs; the fecondaries on both webs: legs black.



10



WOODCOCK. CLASS II.

BILL, long, flender, weak and ftrait. NOSTRILS linear, lodged in a furrow. TONGUE pointed, flender. TOES divided, or very flightly connected, back toe very fmall.

La Beccasse. Belon av. 272. Rufticola, seu Perdix ruffica major (Groffer schnepsf). Gesner av. 501. Aldr. av. III. 182. Wil. orn. 289. Raii Syn. av. 104. La Beccasse. Brisson av. V. 292. Beccaccia, Acceggia. Zinan. IOI. Schniffa. Scopoli, No. 134.

Wald fchnepf. Kram. 351. 178. WOOD-Frisch, II. 226. foem. 227. Scolopax rufticola. Lin. Syft. 243. Morkulla. Faun. Suec. fp. 170. Norvegis Blom-Rokke, Rutte, quibusdam Krog-quist. Danis Holt Sneppe. Brunnich, 164. Br. Zool. 119. Fauna Scotica. No. 142.

THESE birds during fummer are inhabitants of the Alps*, of Norway, Sweden, Polifs Pruffia, the march of Brandenburg +, and the northein parts of Europe: they all retire from those countries the beginning of winter, as foon as the frofts commence; which force them into milder climates, where the ground is open, and adapted to their manner of feeding. The time of their

> * Wil. orn. 290. 1 Frisch, II. 226.

> > appear-

XXX. SNIPE

COCK.

WOODCOCK. CLASS II.

appearance and disappearance in Sweden; coincides most exactly with that of their arrival in, and their retreat from Great Britain*. They live on worms and infects, which they fearch for with their long bills in foft ground and moift woods. Woodcocks generally arrive here in flocks, taking advantage of the night, or a mift: they foon feparate; but before they return to their native haunts, pair. They feed and fly by night; beginning their flight in the evening, and return the fame way, or through the fame glades to their day retreat. They leave England the latter end of February, or beginning of March; not but they have been known to continue here accidentally. In Cafe-wood, about two miles from Tunbridge, a few breed almost annually: the young having been fhot there the beginning of August, and were as healthy and vigorous as they are with us in the winter, but not fo well tafted : a female with egg was fhot in that neighbourhood in April; the egg

* M. de Geer's and Dr. Wallerius's letters to myfelf. M. de Geer expresses himself thus; La Becasse (Scolopax rusticola) part d'ici vers l'automne, Je ne scais pas au juste dans quel mois. On la trouve ici asse en abondance dans l'eté. Elle a coutume au soleil couchant de faire sa volée en cercle ou toujours en rond en l'air revenant toujours dans le meme endroit a plusieurs reprises, et c'est alors qu'on peut la tirer a coup de fusil. En biver ou ne voit aucune, elle partent alors toutes.

M. Wallerius gave me this account of them. Scolopaces rufticolæ penes nos nidificant. Sed autumnali tempore abeunt, ac vernali redeunt.

434

CLASS II. WOODCOCK.

was the fize of that of a pigeon. They are remarkably tame during incubation; a perfon who difcovered one on its neft, has often flood over, and even flroaked it: notwithftanding which it hatched the young; and in due time difappeared with them.

These birds appear in Scotland first on the eastern coasts, and make their progress from East to West. They do not arrive in Breadalbane, a central part of the kingdom till the beginning or middle of November: and the coasts of Nether Lorn, or of Rossinite, till December or January: are very rare in the more remote Hebrides, or in the Orknies. A few stragglers now and then arrive there. They are equally fcarce in Cathness. I do not recollect that any have been discovered to have bred in North Britain.

Their autumnal and vernal appearances on the coaft of *Suffolk* have been most accurately marked by Sir *John Cullum*, Bar^t. who favoured me with the following curious account.

From fome old and experienced fportfmen, who live on the coaft, I collected the following particulars. They come over fparingly in the first week of October, the greater numbers not arriving till the months of November and December, and always after fun-fet. It is the wind and not the moon that determines the time of their arrival: and it is probable that this should be the cafe, as they come hither in quest of food, which fails then in the Vol. II. Gg places places they leave. If the wind has favoured their flight, their flay on the coaft, where they drop, is very fhort, if any : but if they have been forced to ftruggle with an adverse gale (fuch as a ship can hardly make way with) they take a day's reft, to recover their fatigue : and fo greatly has their ftrength been exhaufted, that they have been taken by hand in Southwald ftreets. They arrive not gregarious, but feparate and difperfed. When the Red wing appears on the coaft in autumn, it is certain the Woodcocks are at hand; when they Royfton Crow, they are come. Between the twelfth and twenty-fifth of March they flock towards the coast to be ready for their departure: the first law of nature bringing them to us, in autumn; the fecond carrying them from us in fpring. If the wind be propitious, they are gone immediately; but if contrary, they are detained in the neighboring woods, or among the ling and furze on the coaft. It is in this crifis that the fportfman finds extraordinary diversion : the whole country around echoes with the discharge of guns; even feventeen brace have been killed by one perfon in a day : but if they are kept any time on the dry heaths, they become fo lean, that they are a prey hardly worth purfuing, at left eating. The inftant a fair wind fprings up, they feize the opportunity, and where the fportsman has feen hundreds one day, he will not find a fingle bird the next. As this extraordinary diversion depends on the winds, it muft

CLASS II. WOODCOCK.

must necessarily be precarious; and it accordingly fometimes happens, that the fportsmen on the coast, for some years together know not precisely the time of the *Woodcocks* departure. They have the fame harbingers (the *Red wings*) in spring, as in autumn.

In the fame manner we know they quit France, Germany and Italy; making the northern and cold fituations their general fummer rendezvous. They visit Burgundy the latter end of October, but continue there only four or five weeks; it being a dry country they are forced away for want of fustenance by the first frosts. In the winter they are found in vaft plenty as far fouth as Smyrna and Aleppo *, and in the fame feafon in Barbary+, where the Africans call them, the a/s of the partridge: and we have been told, that fome have appeared as far fouth as *Ægypt*, which are the remotest migrations we can trace them to on that fide the eaftern world; on the other fide, they are found very common in Japan t. The birds that refort into the countries of the Levant, probably come from the defarts of Siberia or Tartary §, or the cold mountains of Armenia.

Our species of woodcock is unknown in North

* Ruffel's hift. Aleppo. 64.

+ Shaw's travels, 253.

I Kæmpfer's hift. Japan. I. 129.

§ Bell's travels, I. 198.

Gg2

Americe ;

MIGRA-TIONS.

437.

WOODCOCK. CLASS II.

America; but a kind is found there that has the general appearance of it; but is fcarce half the fize, and wants the bars on the breaft and belly.

DESCRIP.

The weight of the woodcock is ufually about twelve ounces: the length near fourteen inches: the breadth twenty-fix: the bill is three inches long, dufky towards the end, reddifh at the bafe: tongue flender, long, fharp, and hard at the point: the eyes large, and placed near the top of the head, that they may not be injured when the bird thrufts its bill into the ground: from the bill to the eyes is a black line: the forehead is a reddifh afh-color: the crown of the head, the hind part of the neck, the back, the coverts of the wings, and the fcapulars are prettily barred with a ferruginous red, black and grey; but on the head the black predominates: the quil-feathers are dufky, indented with red marks.

The chin is of a pale yellow : the whole underfide of the body is of a dirty white, marked with numerous transverse lines of a dusky color. The tail confists of twelve feathers, dusky, or black on the one web, and marked with red on the other : the tips above are associated, below white; which, when shooting on the ground was in vogue, was the fign the fowler discovered the birds by. The legs and toes are livid; the latter divided almost to their very origin, having only a very small web between the middle and interior toes; as are those of the two species of fnipes found in *England*.

Godwit

438

Godwit, Yarwhelp, or Yar-wip. Wil. orn. 290. Limofa grisea major. La 179. GODgrande. WIT. Raii fyn. av. 105. Barge grife. Briffon av. V. 272. Tab. 24. fig. 2. Scolopax ægocephala. Lin. Syst. 246. Br. Zool. 120. Tab.

THIS fpecies weighs twelve ounces and a half; the length is fixteen inches; the breadth twenty-feven; the bill is four inches long, turns up a little, black at the end, the reft a pale purple: from the bill to the eye is a broad white ftroke: the feathers of the head, neck, and back, are of a light reddifh brown, marked in the middle with a dusky spot: the belly and vent feathers white: the tail regularly barred with black and white.

The fix first quil-feathers are black; their interior edges of a reddifh brown : the legs in fome are dufky, in others of a greyifh blue; which perhaps may be owing to different ages: the exterior toe is connected as far as the first joint of the middle toe, with a ftrong ferrated membrane. The male is diftinguished from the female by fome black lines on the breaft and throat; which in the female are wanting.

These birds are taken in the fens, in the same feafon, and in the fame manner with the ruffs and reeves, and when fattened are efteemed a great delicacy, and fell for half a crown, or five shillings a piece,

DESCRIP.

440

a piece. A ftale of the fame fpecies is placed in the net. They appear in fmall flocks on our coaft in *September*, and continue with us the whole winter; they walk on the open fands like the curlew; and feed on infects.

M. Briffon has figured this bird very accurately, but has given it the fynonym of our greenshanks. Turner fuspects this bird to have been the attagen or attagas of the antients. Aristophanes names it in an addrefs to the birds that inhabit the fens: therefore fome commentators conclude it to be a water-fowl; though in a line or two after he fpeaks of those that frequent the beautiful meadows of Marathon. He then defcribes the bird in very ftriking terms, under the title of the attagas, the bird with painted wings; and in another place he ftyles it the spotted attagas*. This alone would be infufficient to prove what fpecies the poet intended; we must therefore have recourse to Athenaus, who is particular in his description of the attagas, and evinces it to be of the partridge tribe.

He fays it is lefs than that bird; that the back is fpotted with different colors, fome of a pot color, but more red; that by reafon of the fhortnefs of the wings and heavinefs of the body, it is taken

* "Opus te mlecomoinin@

αττανάς.

Ατταγας ετΟ πας ήμιν ποικίλ σ κεκλήσεται.

Av. 249. 762.

eafily

CLASS II. G O D W I T.

eafily by the fowlers. That it rolls in the duft, brings many young, and feeds on feeds.

We are forry to own our fmall acquaintance with the zoology of *Attica*, confidering the various opportunities our countrymen have had of informing themfelves of it. We therefore cannot pronounce, that the *attagas* ftill exifts on the plains of *Marathon*; but we difcover it in *Samos*, an ifland of *Ionia*, a country celebrated by the antients for producing the fineft kinds:

> Inter fapores fertur alitum primus Ionicarum gustus attagenarum,

Is the opinion of Martial^{*}; and Horace⁺, and Pliny⁺, both fpeak of it with applause. Tournefort § has given us the figure of the bird itself, which he found in the marsses of Samos, whose painted and spotted plumage exactly answers the descriptions of Aristophanes and Athenaeus. It is of the partridge genus, and known to the Italians by the name of Francolino. Those who wish to see it in its proper colors, and to be fatisfied how well they agree with the descriptions of the antients, need only confult the 246th plate of the works of our ingenious friend the late Mr. Edwards.

> * Epig. Lib. XIII. Ep. 61. + Epod. II. ‡ Lib. X. c. 48. § Voy. Vol. I. 311. 4to. ed.

Gg4

THIS

REDGODWIT. CLASS. II.

180. CINE-REOUS. HIS fpecies was fhot near Spalding, and the defcription communicated to me by the Rev. Doctor Buckworth.

The bill was two inches and a half long. The head, neck, and back variegated with afh-color and white : the tail flightly barred with cinereous. The throat and breaft white : the laft marked with a few afh-colored fpots. The legs long, flender, and afh-colored.

This was about the fize of my *Green-floanks*: approaches it nearly in colors: but the bill was for much thicker, as to form a fpecific diffinction.

ISI. RED. Scolopax Lapponica. Lin. Syft. Faun. Suec. fp. 174. 246. Br. Zool. add. plates.

DESCRIP.

HE red godwit is fuperior in fize to the common kind : the bill is three inches threequarters long; not quite ftrait, but a little reflected upwards; the lower half black, the upper yellow: the head, neck, breaft, fides, fcapulars, and upper part of the back, are of a bright ferruginous color: the head marked with oblong dufky lines: the neck is plain: the breaft, fides, fcapulars, and back varied with transverse black bars, and

442

CENEREOUS GODWIT.







RED GODWIT.



and the edges of the feathers with a pale cinereous brown : the middle of the belly is white, marked fparingly with fimilar fpots.

The leffer coverts of the wings are of a light brown: the greater tipt with white: the fhafts and lower interior webs of the greater quil-feathers are white: the exterior webs and upper part of the interior black: the upper half of the fecondary feathers are of the fame color; the lower half white: the coverts, and the lower part of the feathers of the tail are white; the upper part black; the white gradually leffening from the outmost feathers on each fide: the legs are black, and four inches long: and the thighs above the knees are naked for the fpace of an inch and three-quarters.

These birds vary in their colors, some that we have seen being very flightly marked with red, or only marbled with it on the breaft: but the reflected form of the bill is ever fufficient to determine the species. This is not a very common species in *England*; we have known it to have been shot near *Hull*; and have once met with it in a poulterer's shop in *London*. Mr. *Edwards* has sigured a bird from *Hudson's Bay*, that seems related to this; but the difference in the colors of the tail, forbids our placing it among the synonyms. And *Linnæus* omitting a description of that part, in his *Fauna Suecica*, obliges us to question whether it be the fame with the above.

La

LESSER GODWIT. CLASS II.

182. LESSER. La Barge. Belon av. 205. The fecond fort of Godwit, the Totanus of Aldrovand; called at Venice, Vetola. Wil. orn. 293. Fedoanoftra fecunda, the Stone Plover Raii fyn. av. 105. Limofa, la Barge. Briffon av. V. 262. Br. Zool. 120.

DESCRIP.

MR. Ray (for we are not acquainted with this fpecies) defcribes it thus. Its weight is nine ounces; the length to the tail feventeen inches; to the toes twenty-one; its breadth twenty-eight: the bill like that of the former: the chin white, tinged with red: the neck afh-colored; the head of a deep afh-color, whitifh about the eye; the back of a uniform brownnefs, not fpotted like that of the preceding: the rump encompaffed with a white ring: the two middle feathers of the tail black: the outmoft, efpecially on the outfide web, white almoft to the tips; in the reft the white part grew lefs and lefs to the middlemoft.

Befides thefe, Mr. *Willugbby* mentions a third fpecies, called in *Cornwal* the *Stone Curlew*; but defcribes it no farther than faying it has a fhorter and flenderer bill than the preceding.

Limofa;

Limola, et glottis. Gesner av. 519, 520.	Scolopax glottis. Lin. fyft. 245. 183. GREEN Glut. Faun. Suec. fp. 171. SHANK.
Piviero. Aldr. av. III. 207.	Pivier Maggiore. Zinan. 102.
Greater Plover of Aldrovand.	
Wil. orn. 298.	Brunnich.
Raii (yn. av. 106.	Br. Zool. 121.
	Tschoket. Scopoli, No. 137.

HESE birds are not fo common as the for-mer: appearing on our coeffe and grounds in the winter time in fmall flocks. The DESCRIP. length to the end of the tail is fourteen inches, to that of the toes twenty; its breadth twenty-five. The bill is two inches and a half long: the upper mandible black, ftrait, and very flender; the lower reflects a little upwards: the head and upper part of the neck are ash-colored, marked with small dufky lines pointing down: over each eye paffes a white line : the coverts of the wings, the fcapulars, and upper part of the back are of a brownish ash-color: the quil-feathers dusky, but the inner webs fpeckled with white: the breaft, belly, thighs, and lower part of the back are white: the tail white, marked with undulated dufky bars: the inner coverts of the wings finely croffed with double and treble rows of a dufky color.

It is a bird of an elegant fhape, and fmall weight in proportion to its dimensions, weighing only fix ounces.

The

The legs are very long and flender, bare above two inches higher than the knees. The exterior toe is united to the middle toe, as far as the fecond joint, by a ftrong membrane which borders their fides to the very end.

These birds are the *Chevaliers aux pieds verds* of the *French*; as the spotted redshanks are the *Chevaliers aux pieds rouges*.

184. RED SHANK. Galfinula erythropus. Gesner Sc. Totanus. Faun. Suec. Sp. arv. 504. 167. Totanus Aldr. av. III. 171. Rothfussler Kram. 353. Redshank, or Pool-fnipe. Kleiner grau-und-weißbunter Sandlœuffer ? Frisch, II. Wil. orn. 299. Raii Syn. av. 107. 240. Totanus, le Chevalier. Briffon Hæmantopus, magnitudine av. V. 188. Tab. 17. fig. 1. inter Vanellum et Galli-Scolopax Calidris. Lin. fyft. naginem minorem media. Ray's itin. 247. 243. Br. Zcol. 124.

HIS fpecies is found on moft of our fhores: in the winter time it conceals itfelf in the gutters; and is generally found fingle, or at moft in pair.

DESCRIP.

It weighs five ounces and a half: the length is twelve inches: the breadth twenty-one: the bill near two inches long, red at the bafe, black towards the point. The head, hind part of the neck, and fcapulars, are of a dufky afh-color, obfcurely fpotted with black: the back is white, fprinkled with CLASS II. CAMBRIDGE.

with black fpots: the tail elegantly barred with black and white: the cheeks, under fide of the neck, and upper part of the breaft are white, ftreaked downward with dufky lines: the belly white: the exterior webs of the quil-feathers are dufky: the legs long, and of a fine bright orange color: the outmost toe connected to the middle toe by a fmall membrane; the inmost by another ftill fmaller.

It breeds in the fens, and marshes; and flies round its neft when disturbed, making a noise like a *lapwing*. It lays four eggs, whitish tinged with olive, marked with irregular spots of black chiefly on the thicker end.

I DISCOVERED this in the collection of the Rev. Mr. Green, flot near Cambridge.

It is larger than the common redfhank. The head, upper part of the neck, and the back are of a cinereous brown: the leffer coverts of the wings brown edged with dull white, and barred with black: the primaries dufky, whitifh on their inner fides: fecondaries barred with dufky and white: under fide of neck and breaft of a dirty white: belly and vent white: tail barred with cinereous and black: legs of an orange red. 185. CAM-BRIDGE.

COMMON SNIPE. CLASS II.

186.SPOTTED Le chevalier rouge. Belon av. The other Totano. Wil. orn. REDSHANK. 207. Aldr. av. III. 171. Le Chevalier rouge. Briffon av. V. 192.

DESCRIP.

448

THIS fpecies we found in the collection of Taylor White, Efq. In fize it is equal to the greenfhank : the head is of a pale afh-color, marked with oblong ftreaks of black : the back dufky, varied with triangular fpots of white : the coverts of the wings afh-colored, fpotted in the fame manmanner : the quil-feathers dufky; breaft, belly, and and thighs white, the firft thinly fpotted with black : the middle feathers of the tail are afh-colored; the fide feathers are whitifh, barred with black : the legs very long, and of a bright red.

E	87.	Com-
		N SN.

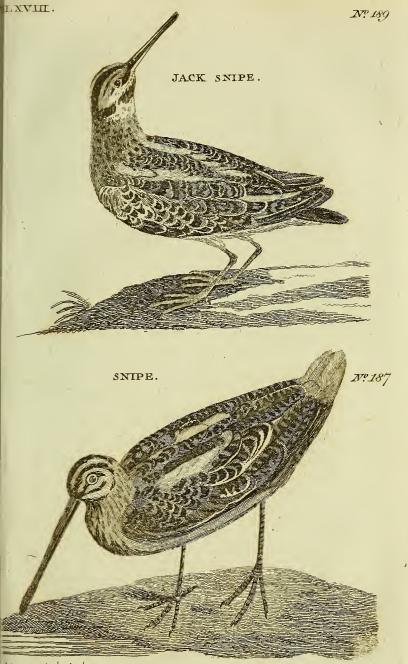
La Becaffine ou Becaffeau. Belon av. 215.
Gallinago, feu rufticola minor. Gefner av. 503.
Aldr. av. III. 184.
The Snipe, or Snite. Wil. orn. 290.
Raii fyn. av. 105.
La Beccaffine. Briffon av. V. 298. Tab. 26. fig. 1.
Pizzarda, Pizzardella. Zinan. 101.
Moofs fchnepf. Kram. 352. Frifch, II. 229. Scolopax gallinago. Lin. fyft. 244. Horfgjok. Faun. Succ. fp. 173.

Horigjok. Faun. Suec. Jp. 173. Capella cœleftis. Klein av. 100.

Islandis Myr Snippe. Norwegis Trold Ruke. Cimbris quibusd. Hoffegioeg. Danis Dobbelt Sneppe, Steen Sneppe. Br. 160. Br. Zool. 121.

Kofitza. Scopoli, No. 138.

IN the winter time fnipes are very frequent in all our marfhy and wet grounds, where they lie concealed



M. Griffith Jel



CLASS II. COMMON SNIPE.

concealed in the rushes, &c. In the fummer they disperse to different parts, and are found in the midst of our highest mountains, as well as our low moors : their neft is made of dried grafs; they lay four eggs of a dirty olive color, marked with dusky spots; their young are so often found in England, that we doubt whether they ever entirely leave this island. When they are diffurbed much, particularly in the breeding feafon, they foar to a vaft height, making a fingular bleating noife; and when they defcend, dart down with vaft rapidity : it is alfo amufing to obferve the cock (while his mate fits on her eggs) poife himfelf on his wings, making fometimes a whiftling and fometimes a drumming noife. Their food is the fame with that of the woodcock; their flight very irregular and fwift, and attended with a thrill fcream. They are most universal birds, found in every quarter of the globe, and in all climates.

This fpecies weighs four ounces; the length, to DESCRIP. the end of the tail, is near twelve inches: the breadth about fourteen: the bill is three inches long, of a dufky color, flat at the end, and often rough like fhagrin above and below. The head is divided lengthways with two black lines, and three of red, one of the last passing over the middle of the head, and one above each eye: between the bill and the eyes is a dufky line: the chin is white: the neck is varied with brown and red.

The fcapulars are beautifully ftriped lengthways with

with black and yellow: the quil-feathers are dufky, but the edge of the firft is white, as are the tips of the fecondary feathers: the quil-feathers next the back are barred with black and pale red: the breaft and belly are white: the coverts of the tail are long, and almost cover it: they are of a reddifh brown color. The tail confists of fourteen feathers; black on their lower part, then croffed with a broad bar of deep orange, another narrow one of black; and the ends white, or pale orange. The vent feathers a dull yellow: the legs pale green: the toes divided to their origin.

188. GREAT SNIPE.

THIS species is rarely found in England. A fine specimen, shot in Lancashire, is preferved in the Museum of Aspton Lever, Esq.

The weight eight ounces. The head divided lengthways by a teftaceous line, bounded on each fide by another of black : above and beneath each 'eye is another : neck and breaft of a yellowifh white, finely marked with femicircular lines of black : belly, with cordated fpots : fides undulated with black.

Back, coverts of wings, and fcapulars teftaceous, fpotted with black and edged with white. Primaries dufky. Tail ruft-colored, barred with black. Legs black?

Gid,

CLASS II. JACK SNIPE.

Gid, Jackfnipe, and Judcock. Wil. orn. 291. Raii fyn. av. 105. La petite Beccaffine. Briffon av. V. 303. tab. 26. fig. 2. Pokerl. Scopoli, No. 139. Pizzardina, Zinan. 101. Scolopax gallinula. Lin. fyf. 244. Danis Roer-Sneppe. Brunnich, 163. Haar-Schnepfe, Pudel-Schnepfe, Kleinfte Schnepfe. Frifch, II. 231. Br. Zool. 121

THE haunts and food of this fpecies are the fame with those of the former; it also feeds on small small finals: it is much less frequent among us, and very difficult to be found, lying so close as to hazard being trod on before it will rife: the flight is never distant, and its motion is more fluggish than that of the larger kind.

Its weight is lefs than two ounces, inferior by half to that of the fnipe; for which reafon the *French* call them *deux pour un*, we the *balf fnipe*. The dimensions bear not the fame proportion; the length of the fnipe being twelve inches; this eight and a half: the bill an inch and a half long: crown of the head black, tinged with rust color: over each eye is a yellow stroke; the neck varied with white, brown, and pale red. The scapular feathers narrow, very long, brown, bordered with yellow. The rump a glossy bluish purple: the Vol. II. H h

189. JACK SNIPE.

DESCRIP.

JACK SNIPE. CLASS II.

belly and vent white; the greater quil-feathers dufky: the tail brown, edged with tawny; confifting of twelve pointed feathers: the legs are of a cinereous green.

BILL

CLASS II. L A P W I N G.

BILL ftraight, flender, not an inch and half long. NOSTRILS fmall. TONGUE flender.

TOES divided; generally the two outmost connected at the bottom by a finall membrane.

Le Vanneau, Dixhuit, Pape-	Raii Syn. av. 110. 1
chieu. Belon av. 209.	Kiwik. Kram. 353. Frisch,
Zweiel. Gesner av. 765.	II. 213.
Pavonzino. Aldr. av. III.	Tringa vanellus. Lin. Syst.
202.	248.
Pavoncella. Olina, 21.	Wipa, Kowipa, Blæcka. Faun.
Lapwing, baftard Plover, or	Suec. Sp. 176.
Pewit. Wil. orn. 307.	Danis Vibe, Kivit. Brunnich,
Vanellus, le Vanneau. Brif-	170.
fon av. V. 94. tab. 8. fig. 1.	Br. Zool. 122. Scopoli, No. 141.

THIS elegant species inhabits most of the heaths and marshy grounds of this island. It lays four eggs, making a slight nest with a few bents. The eggs have an olive cast, and are spotted with black. It is worthy of notice, that among water fowl, congenerous birds lay the same number of eggs; for example, all of this tribe, also of the plo-

* This genus, the Tringa of Linnæus, wanting an Engliß name, we have given it that of the Sandpipers; most of the species being conversant about shores; and their note whistling or piping.

Hh 2

vers,

190. LAP-WING.

XXXI. S A N D-

PIPER*.

L A P W I N G. CLASS II.

vers, lay four a-piece; the puffin genus only one; and the duck tribe, in general, are numerous layers, producing from eight to twenty.

The young as foon as hatched, run like chickens: the parents shew remarkable folicitude for them, flying with great anxiety and clamour near them, firiking at either men or dogs that approach, and often flutter along the ground like a wounded bird, to a confiderable diftance from their neft, to elude their purfuers; and to aid the deceit, become more clamorous when most remote from it: the eggs are held in great efteem for their delicacy; and are fold by the London poulterers for three shillings the dozen. In winter, lapwings join in vast flocks; but at that feafon are very wild : their flesh is very good, their food being infects and worms. During October and November, they are taken in the fens in nets, in the fame manner that Ruffs are, but are not preferved for fattening, being killed as foon as caught.

DESCRIP.

Their weight is about eight ounces: the length thirteen inches and a half: the breadth two feet and a half. The bill is black, and little more than an inch long: the crown of the head of a fhining blacknefs: the creft of the fame color, confifting of about twenty flender unwebbed feathers of unequal lengths, the longest are four inches: the cheeks and fides of the neck are white; but beneath each eye is a black line: the throat and fore part of the neck are black : the plumage on the hind part mixed

454

CLASS II. L A P W I N G.

mixed with white, ash-color and red: the back and fcapulars are of a moft elegant gloffy green; and the latter finely varied with purple : the leffer covert feathers of the wings are of a refplendent black blue and green: the greater quil-feathers black, but the ends of the four first are marked with a white fpot: the upper half of the leffer quilfeathers are black, the lower white : those next the body of the fame colors with the fcapulars: the breaft and belly are white : the vent-feathers and the coverts of the tail orange color: the tail confifts of twelve feathers; the outmost on each fide is white, marked on the upper end of the inner web with a dufky fpot; the upper half of all the others are black, tipt with a dirty white; their lower half of a pure white : the legs are red : the irides hazel.

The female is rather lefs than the male.

Merret, in his Pinax, p. 182. fays, that there is in Cornwal a bird related to this; but lefs than a thrush, having blue feathers, and a long crest.

GREY SANDPIPER. CLASS II.

Le pluvier gris. Belon av. 191. GREY. Vanellus grifeus, le Vanneau gris. Briffon av. v. 100. 262. Pivier montano. Aldr. av. III. tab. 9 fig. 1. Piviero montano. Zinan. 102. 207. Bornholmis Floyte-Tyten, Wil. orn. 309. Dolken, Brunnich, 176. Raii Syn. av. 111. Br Zool. 122. Scopoli, No. Tringa squatarola. Lin. Syft. 145. 252. Faun. Suec. Sp. 186.

DESCRIP.

T weighs feven ounces: the length to the tip of the tail is twelve inches: the breadth twentyfour: the bill black, about an inch long, ftrong and thick: the head, back, and coverts of the wings black, edged with greenifh afh-color, and fome white: cheeks and throat white, marked with oblong dufky fpots: the belly and thighs white: the exterior webs of the quil-feathers black : the lower part of the interior webs of the four firft white: the rump white: the tail marked with tranfverfe bars of black and white: the legs of a dirty green : the back toe very fmall.

These appear in small flocks in the winter time, but are not very common: their flesh is very delicate.

Avis





RUFF

Nº 19



CLASS II.

RUFF.

Avis pugnax.Aldr. av. III.mer.Briffon av. v. 240.192.RUFF.167.tab. 22.Wil. orn. 302.Danis Bruushane.Brunnich,Raii fyn. av. 107.168.Kroßler.Kram. 352.Tringa pugnax.Lin. fyft. 247.Bruthane.Faun. Suec. fp. 175.Le Combattant, ou Paon de140.

HE males, or Ruffs, affume fuch variety of colors in feveral parts of their plumage, that it is fcarce poffible to fee two alike; but the great length of the feathers on the neck, that gives name to them, at once diffinguishes these from all other birds. On the back of their necks is a fingular tuft of feathers fpreading wide on both fides. Thefe, and the former, in fome are black; in others white, yellow, or ferruginous; but this tuft and the ruffs frequently differ in colors in the fame bird. The feathers that bear an uniformity of coloring through each individual of this fex, are the coverts of the wings, which are brown inclining to ash-color: the feathers on the breast, which are often black or dufky : the four exterior feathers of the tail, which are of a cinereous brown; and the four middle, which are barred with black and brown: the bill is black towards the end; red at the bafe. The legs in all, are yellow. In moulting they lofe the character of the long neck-feathers, Hh₄ nor

DESCRIP.

nor do they recover it till after their return to the fens the fpring following. It is then they regain that ornament, and at the fame time a fet of fmall pear shaped yellow pimples break out in great numbers on their face above the bill.

The Stags or male birds of the first year want thefe marks, and have fometimes been miftaken for a new species of Tringa; but they may be eafily known by the colors of the coverts of the wings, and the middle feathers of the tail.

The older the birds are, the more numerous the pimples, and the fuller and longer the ruffs.

The length of the male to the tip of the tail is one foot, the breadth two; of the Reeve ten inches, the breadth nineteen: the weight of the former when just taken is feven ounces and a half; of the latter only four.

The Reeves never change their colors, which are pale brown : the back fpotted with black, flightly edged with white: the tail brown; the middle feathers fpotted with black : the breaft and belly white: the legs of a pale dull yellow.

These birds appear in the fens in the earliest fpring, and difappear about Michaelmas. The Reeves lay four eggs in a tuft of grafs, the first week in May, and fit about a month. The eggs are white, marked with large rufty fpots. Fowlers avoid in general the taking of the females, not only because they are smaller than the males; but that they may be left to breed.

Soon

Soon after their arrival, the males begin to *bill*, that is to collect on fome dry bank near a fplash of water, in expectation of the females, who refort to them.

Each male keeps poffeffion of a fmall piece of ground, which it runs round till the grafs is worn. quite away, and nothing but a naked circle is left. When a female lights, the ruffs immediately fall to fighting. I find a vulgar error, that ruffs muft be fed in the dark leaft they fhould deftroy each other by fighting on admission of light. The truth is, every bird takes its fland in the room as it would in the open fen. If another invades its circle, an attack is made, and a battle enfues. They make use of the fame action in fighting as a cock, place their bills to the ground and fpread their ruffs. I have fet a whole room full a fighting by making them move their flations; and after quitting the place, by peeping through a crevice, feen them refume their circles and grow pacific.

When a fowler difcovers one of those *bills*, he places his net over night, which is of the fame kind as those that are called *clap* or *day nets*, only it is generally fingle, and is about fourteen yards long and four broad.

The fowler reforts to his ftand at day break, at the diftance of one, two, three, or four hundred yards from the nets, according to the time of the feafon; for the later it is, the fhyer the birds grow. He then makes his firft pull, taking fuch birds 460

birds that he finds within reach : after that he places his ftuft birds or ftales to entice those that are continually traverfing the fen. An old fowler told me, he once caught forty-four birds at the first hawl, and in all fix dozen that morning. When the stales are fet, feldom more than two or three are taken at a time. A fowler will take forty or fifty dozens in a feason.

These birds are found in Lincolnshire, the Isle of Ely, and in the east riding of York/hire*; where they are taken in nets, and fattened for the table, with bread and milk, hempfeed, and fometimes boiled wheat; but if expedition is required, fugar is added, which will make them in a fortnight's time a lump of fat: they then fell for two fhillings or half a crown a piece. Judgement is required in taking the proper time for killing them, when they are at the highest pitch of fatness, for if that is neglected, the birds are apt to fall away. The method of killing them is by cutting off their head with a pair of fciffars : the quantity of blood that iffues is very great, confidering the fize of the bird. They are dreffed like the woodcock, with their inteftines; and, when killed at the critical time, fay the Epicures, are reckoned the most delicious of all morfels.

* They visit a place called Martin-Mere in Lancashire, the latter end of March or beginning of April, but do not continue there above three weeks.

Wil. orn. 302. Raii fyn. av. 108. Edw. av. 276. Le Canut. Briffon av. V. 258. Tringa canutus. Lin. fyf. 251. Faun. Suec. fp. 183. Iflandis Sidlingar-Kall. Nor- 193. KNOT. wegis FiærePift. Fiær-Kurv, Fiær-Muus. Bornholmis Rytteren. Brunnich, Tringa maritima. 182. Br. Zool. 123.

THE fpecimens that we had opportunity of examining, differ a little in colors, both from Mr. Willughby's defcription, and from Mr. Edwards's figure : the forehead, chin, and lower part of the neck in ours were brown, inclining to ash color: the back and fcapulars deep brown, edged with afh color: the coverts of the wings with white, the edges of the lower order deeply fo, forming a white bar: the breaft, fides, and belly white; the two first streaked with brown: the coverts of the tail marked with white and dufky fpots alternately : the tail ash colored, the outmost feather on each fide white : the legs were of a bluish grey; and the toes, as a special mark, divided to the very bottom: the weight four ounces and a half.

These birds, when fattened, are preferred by fome to the ruffs themselves. They are taken in great numbers on the coasts of *Lincolnshire*, in nets such as employed in taking ruffs; with two or three DESCRIP.

ASH COLORED SANDPIPER. CLASS II.

three dozens of ftales of wood painted like the birds, placed within: fourteen dozens have been taken at once. Their feafon is from the beginning of *August* to that of *November*. They difappear with the first frosts. *Camden* * fays they derive their name from king *Canute*, *Knute*, or *Knout*, as he is fometimes called; probably because they were a favorite dish with that monarch. We know that he kept the feast of the purification of the *Virgin Mary* with great pomp and magnificence at *Ely*, and this being one of the fen birds, it is not unlikely but he met with it there +. *Sbakesser* in his *Othello*, speaking of *Roderigo* (if Mr. *Theobald*'s reading is just) makes the *Knot* an emblem of a dupe:

" I have rubb'd this young Knot almost to the fenfe; "And he grows angry." Othello.

194. Ash Colored. Tringa cinerea. Brunnich, ornith. 53. Br. Zool. 124. Braun und Weissbunter Sandlœuffer ? Frisch, II. 237.

DESCRIF.

THIS fpecies weighs five ounces: the length is ten inches: the breadth nineteen: the head is of a brownish ash color, spotted with black: the

> * Camden Brit. 971. † Dugdale on embanking, 185.

whole

CLASS II. SPOTTED SANDPIPER.

whole neck afh color, marked with dufky oblong ftreaks: the back and coverts of the wings elegantly varied with concentric femicircles of afh color, black and white: the coverts of the tail barred with black and white: the tail afh colored, edged with white: the breaft and belly of a pure white: the legs of a greenifh black : the toes bordered with a narrow membrane, finely fcolloped.

These birds appear on the shores of *Flint/bire*, in the winter time, in large flocks.

THIS fpecies is in the collection of Mr. *Tunstal*, 195. BROWN. is of the fize of a jack-fnipe. The bill is black: the head, upper part of the neck, and back, are of a pale brown, fpotted with black: coverts of the wings dufky, edged with dirty white: under fide of the neck white, ftreaked with black: the belly white: tail cinereous: legs black.

Bought in the London market.

Spotted Tringa. Edw. av. Tringa macularia. Lin. fuft. 196. Spot-277. 249. TED. Turdus aquaticus, la Grive Br. Zool. 124. d'Eau. Briffon av. V. 255.

THIS bird is common to Europe and America; according to Mr. Edwards's figure, it is lefs than the preceding.

BLACK SANDPIPER. CLASS II.

DESCRIP.

464

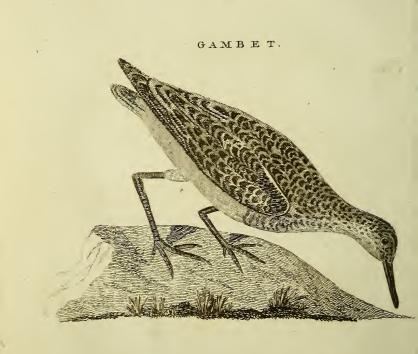
The bill is of the fame colors with that of the red fhank: the head, upper part of the neck, the back and coverts of the wings, are brown, inclining to olive, and marked with triangular black fpots: above each eye is a white line: the greater quil-feathers are wholly black, the leffer tipt with white: the middle feathers of the tail are brown: the fide feathers white, marked with dufky lines: the whole under fide, from neck to tail, is white, marked with dusky fpots: the female has none of thefe fpots, except on the throat: the legs of a dusky flefh color. Mr. *Edwards* imagines thefe to be birds of paffage; the bird he toke his deficiption from was fhot in *Effex*.

197. BLACK. MR. Bolton favored us with a defcription of this fpecies shot in Lincolnshire.

DESCRIP.

It was the fize of a thrufh: the beak fhort, blunt at the point and dusky: the noftrils black: the irides yellow: the head fmall and flatted at top: the color white, moft elegantly fpotted with grey: the neck, fhoulders, and back mottled in the fame manner, but darker, being tinged with brown; in fome lights thefe parts appeared of a perfect black and gloffy: the wings were long: the quil-feathers black, croffed near their bafe with a white line: the throat, breaft, and belly white, with faint brown and black fpots of a longifh





TURNSTONE. CLASS II.

longish form, irregularly dispersed; but on the belly become larger and more round; the tail fhort, entirely white, except the two middle feathers, which are black :. the legs long and flender, and of a reddifh brown color.

Totanus ruber. Briffon, V. 198. GAM-Tringa Gambetta. Lin. Syft. 192. Scopoli, No. 142. Tringa varieguta. Brunnich, 248. Faun. Suec. No. 177. Gambetta. Wil. orn. 300. Raii Syn. av. 117. Aldr. av. No. 181.

THIS species is of the size of the Green-shank : the head, back, and breaft cinereous brown, fpotted with dull yellow : the coverts of the wings, fcapulars, cinereous, edged with yellow: the primaries dusky : the fhaft of the first feather white : belly white: tail dusky, bordered with yellow: legs yellow.

This species has been shot on the coast of Lincolnshire.

Turnstone, or Sea Dottrel. La Coulon-chaud, Arenaria. 199. TURN-Briffon av. V. 132. Wil. orn. 311. STONE. Cat. Carol. I. 72. Tringa Morinellus. Lin. Syft. Morinellus Marinus, Raii 249. fyn. av. 112. Br. Zool. 125.

HIS fpecies is about the fize of a thrush: the bill is an inch in length, a little prominent

on

BET.

TURNSTONE. CLASS II.

466

on the top; is very ftrong; black at the tip, and at the bafe whitifh: the forehead and throat are afh colored: the head, whole neck and coverts of the wings are of a deep brown, edged with a pale reddifh brown: the fcapular feathers are of the fame color, very long, and cover the back: that and the rump are white; the laft marked with a large triangular black fpot: the tail confifts of twelve feathers, their lower half is white, the upper black, and the tips white: the quil-feathers are dufky, but from the third or fourth the bottoms are white, which continually increases, till from about the nineteenth the feathers are entirely of that color: the legs are fhort and of an orange color.

These birds take their name from their method of fearching for food, by turning up small stones with their strong bills to get at the infects that lurk under them. The bird we toke our description from was shot in *Shropshire*. Mr. *Ray* obferved them stying three or four in company on the coasts of *Cornwal* and *Merionethshire*: and Sir *Thomas Brown* of *Norwich* discovered them on the coast of *Norfolk*; communicating the picture of one to Mr. *Ray*, with the name of *Morinellus marinus*, or fea dottrel. Tringa interpres. Lin. fyft. Edw. 141. 200, HEBRI-248. Faun. Suec. No. 178. Arenaria, Le Coulon-chaud. DAL. Turnstone from Hud/on's Bay. Briffon, V. 132.

THIS species is often shot in the north of *Scotland*, and its islands; also in *North America*.

Is of the fize of a thrufh: forehead, throat, and belly white: breaft black: neck furrounded with a black collar; from thence another bounds the fides of the neck, and paffes over the forehead: head and lower part of the neck behind white; the firft ftreaked with dufky lines: back ferruginous, mixed with black: coverts of the tail white, croffed with a black bar: tail black, tipt with white: coverts of the wings cinereous brown; the lower order edged with white: primaries and fecondaries black; the ends of the laft white: tertials ferruginous and black: legs rather fhort, and of a full orange.

VOL. II.

Cinclus.

GREEN SANDPIPER. CLASS II.

201. GREEN.

Cinclus. Belon av. 216.
Gallínæaquaticæ fecunda fpecies de nov. adject. Gefner av. 511.
Giarolo, Gearoncello. Aldr. av. III. 185.
The Tringa of Aldrovand. Wil. orn. 300.
Raii fyn. av. 108.
Tringa ochropus. Lin. fyft. 251.
Weifpunotirto Sandlæuffer. Frifch, II. 239.

Fann. Suec. Sp. 180.

- Le Beccaffeau ou Cul-blanc, Tringa. Briffon av. V. 177. tab. 16. fig. 1.
- Danis Horfe-Gioeg. Islandis Hroffagaukr. Norwegis Skodde Foll, Skod-de-Fugl. Jordgeed. Makkre-Gouk, Rœs Jouke. Brunnich, 183.

Br. Zool. 125.

DESCRIP.

THIS beautiful fpecies is not very common in thefe kingdoms. The head and hind part of the neck are of a brownifh afh color, ftreaked with white; the under part mottled with brown and white: the back, fcapulars, and coverts of the wings are of a dufky green, gloffy and refplendent as filk, and elegantly marked with fmall white fpots: the leffer quil-feathers of the fame colors: the under fides of the wings are black, marked with numerous white lines, pointing obliquely from the edges of the feather to the fhaft, reprefenting the letter V: the rump is white; the tail of the fame color: the firft feather plain, the fecond marked near the end with one black fpot, the third and fourth with two, the fifth with three, and the fixth with four.

Except in pairing time, it is a folitary bird: it is never found near the fea; but frequents rivers, lakes, and other fresh waters. In *France* it is highly

468,

CLASS II. ABERDEEN SANDPIPER.

highly effeemed for its delicate tafte; and is taken with limed twigs placed near its haunts.

Mr. Fleischer favored us with a bird from Denmark, which, in all respects, resembled this, except that the spots were of a pale rust color. Linnaus describes it under the title of Tringa littorea, Faun. Suec. sp. 185. but we believe it does not differ specifically from that above described.

Tringa Icelandica. Lin. fyft. Randbriflanger. Brunnich, 202. RED. inter addenda. No. 180. Tringa ferruginea Iflandis

BIRDS of this fpecies have appeared in great flocks on the coast of *Effex*, on the estate of Col. Schutz.

Crown of the head fpotted with black and ferruginous. The lower fide of the neck, the breaft, and belly of a full ferruginous color : back marked with black and ruft color : coverts of the wings ath color : legs black : bill ftrong, an inch and a half long : the whole length of the bird ten inches.

La Maubeche tachetée. Briffon V. 229?

203. Aberdeen,

THIS was communicated by the late Doctor David Skene of Aberdeen.

Ii2

Bill

COMMON SANDPIPER. CLASS II,

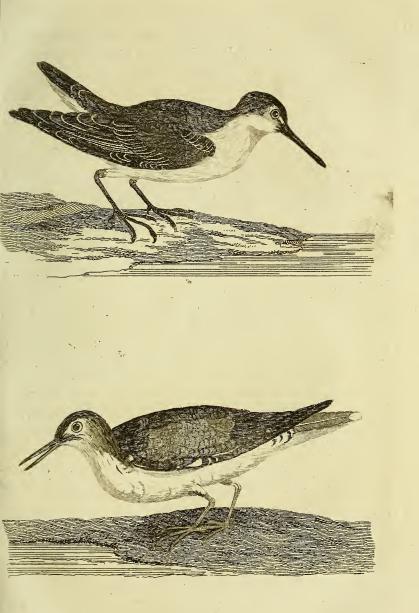
Bill flender and black: head, back, leffer coverts of the wings, and the fcapulars, of a dull ferruginous color, fpotted with black: the greater coverts tipt with white: quil-feathers dufky, edged on the exterior fide with white: breaft reddifh brown, mixed with dufky: belly and vent white: tail cinereous; two middle feathers longer than the reft: legs black; fize of the former.

204. Com-MON. Gallinula hypoleucos (Fyfterlin). Gefner av. 509. Aldr. av. 111. 182. Wil. orn. 301. Raii fyn. av. 108. Sandlaufferl. Kram. 353. Tringa hypoleucos. Lin. fyf. 250. Snappa, Strandfittare. Faun. Suec. fp. 182. Guinetta, la Guignette. Briffon av. V. 183. tab. 16. fig. 1. Norvegis der lille Myrftikkel. Bornbolmis Virlen. Brunnich, 174. Br. Zool. 125. Martin's Scopoli, No. 143.

web

DESCRIP.

THIS fpecies agrees with the former in its manners and haunts; but is more common: its note is louder and more piping than others of this genus. Its weight is about two ounces: the head is brown, ftreaked with downward black lines; the neck an obfcure afh color: the back and coverts of the wings brown, mixed with a gloffy green, elegantly marked with transverse dusky lines: over each eye is a white stroke: the breast and belly are of a pure white: the quil-feathers are brown, the first entirely fo, the nine next marked on the inner



SANDPIPER



web with a white fpot: the middle feathers of the tail brown; edges fpotted with black and pale red: the exterior tipt and barred with white: the legs of a dull pale green.

Wil. orn. 205. Raii syn. av. 109. Tringa alpina. Lin. Syst. 249. Faun. Suec. Sp. 181. La Beccassine d'Angleterre. Briffon av. V. 309.

Danis Domfneppe, Ryle. Brunnich, 167, & 173. Kleinste Schnepfe, or Kleinste Sandlœuffer. Frisch, II. 241. Br. Zool. 126. tab. fig. 2.

205. DUN-LIN.

THIS fpecies is at once diffinguished from the others by the fingularity of its colors. The back, head, and upper part of the neck are ferruginous, marked with large black fpots: the lower part of the neck white, marked with short dusky streaks: the coverts of the wings ash color: the belly white, marked with large black fpots, or with a black crefcent pointing towards the thighs: the tail ash colored, the two middle feathers the darkeft: legs black: toes divided to their origin. In fize it is superior to that of a lark. These birds are found on our fea coafts; but may be reckoned among the more rare kinds. They lay four eggs of a dirty white color, blotched with brown round the thicker end, and marked with a few fmall fpots of the fame color on the fmaller end. I received the eggs from Denmark; but as I have shot these birds in May, and again in August, on the shores of Ii 3 Flint hire, 471

DESCRIP.

PURRE. CLASS II.

Flint/hire, fuppofe they breed with us; but I never difcovered their neft. They are common on the Yorksbire coafts, and effeemed a great delicacy.

206. PURRE. L'Allouette de Mer. Belon Stint, in Suffex the Ox-eye. Raii Syn. av. 110. av. 213. N. Com. Petr. IV. 428. Cinclus five Motacilla Mari-L'Allouette de Mer, Cinclus. tima, Lyfsklicker. Gefner av. 616. Briffon av. V. 211. tab. 19. Giarolo. Aldr. av. III. 188. fig. 1. Tringa cinclus. Lin. fyft. 251. The Stint. Wil. orn. 305. Br. Zool. 126.

DESCRIP.

472

HIS bird weighs about an ounce and a half: length feven inches and a half : extent fourteen inches: the head and hind part of the neck are afh colored, marked with dufky lines : a white ftroke divides the bill and eyes : the chin white : underfide of the neck mottled with brown: the back is of a brownish ash color: the breast and belly white: the coverts of the wings and tail a dark brown, edged with light ash color or white: the greater coverts dufky, tipt with white: the upper part of the quil-feathers dusky, the lower white: the two middle feathers of the tail dusky, the reft of a pale ash color, edged with white: the legs of a dusky green ; the toes divided to their origin. The bill an inch and a half long, flender and black; irides dusky.

Thefe birds come in prodigious flocks on our

fea

CLASS. H. LITTLE SANDPIPER.

fea coafts during the winter: in their flight they perform their evolutions with great regularity; appearing like a white, or a dusky cloud, as they turn their backs or their breafts towards you. They leave our fhores in fpring, and retire to fome unknown place to breed.

They were formerly a well known difh at our tables; known by the name of *Stints*.

THIS is the left of the genus, fcarcely equal-207. LITTLE. ling a hedge fparrow in fize. The head, upper fide of the neck, the back, and coverts of the wings brown, edged with black and pale rufty brown. Breaft and belly white.

The greater coverts dusky, tipt with white: the primaries and fecondaries of the fame colors. The tail dusky. Legs black.

This specimen was communicated to me by the Rev. Mr. Green, of Trinity College, Cambridge; and was shot near that place in September. It is common to North America and Europe.

BILL

GOLDEN PLOVER. CLASS II.

XXXII. PLOVER,

BILL ftrait, no longer than the head. NOSTRILS linear. TONGUE TOES, wants the hind toe.

208. GOLDEN. Le Pluvier Guillemot. Belon Dalekarlis Akerhona, Lappis av. 260. Hutti. Faun. Suec. Sp. 190. Pluvialis. Gefner av. 714. Pluvialis aurea, le Pluvier doré. Pivier. Aldr. av. III. 206. Briffon av. V. 43. Tab. 4. Wil. orn. 308. fig. I. Raii Syn. av. 111. Piviero verde. Zinan. 102. Brachhennl. Kram. 354. Norvegis Akerloe, Cimbris Rechter Brachvogel. Frisch, Brok-Fugl. Brunnich, 187. Br. Zool. 128. II. 217. Charadrius Pluvialis. Lin. Syft. 254.

DESCRIP.

HIS elegant fpecies is often found on our moors and heaths, in the winter time, in fmail flocks. Its weight is nine ounces: its length eleven inches: its breadth twenty-four: the bill is fhort and black: the feathers on the head, back, and coverts of the wings are black, beautifully fpotted on each fide with light yellowifh green: the breaft brown, marked with greenifh oblong ftrokes: the belly white: the middle feathers of the tail barred with black and yellowifh green: the reft with black and brown: the legs black. We have obferved fome variety in thefe birds, but cannot determine whether it is owing to age or fex:

we

LXXII.





CLASS. II. GOLDEN PLOVER.

we have feen fome with black bellies, others with a mixture of black and white; others with bluifh legs, and fome with a finall claw in the place of the hind toe.

They lay four eggs, fharply pointed at the leffer end, of a dirty white color, and irregularly marked, efpecially at the thicker end, with black blotches and fpots. It breeds on feveral of our unfrequented mountains; and is very common on those of the ifle of *Rum*, and others of the loftier *Hebrides*. They make a fhrill whiftling noife : and may be inticed within fhot by a fkilful imitator of the note.

This species, on account of its spots, has been supposed to have been the *Pardalis* of *Aristotle*: but his account of the bird makes no mention of that diffinction: perhaps he thought that the name implied it. The *Romans* seem to have been unacquainted with the plover: for the name never once occurs in any of their writings. We derive it from the *French* PLUVIER, *pource qu'on le prend mieux en* temps pluvieux qu'en nulle autre faison*.

* Belon Oyseaux. 260.

LONG LEGGED PLOVER. CLASS II.

209. LONG LEGGED.

DESCRIP.

Le grand Chevalier d'Italie. Belon Portr. d'Oyfeaux, 53. Aldr. av. III. 176. Gefner av. 546. Himantopus. Wil. crn. 297. Raii fyn. av. 106. Sobb. Scot. 19. Tab. 11. 13. L'Echafie. Briffon av. V. 33. Tab. 3. fig. 1. Charadrius himantopus. Lin. fyft. 255. Scopoli, No. 148. Br. Zool. 128. add. plates.

HIS is the most fingular of the British birds. The legs are of a length, and weakness greatly difproportioned to the body, which is inferior in fize to that of the green plover : this, added to the defect of the back toe, must render its paces aukward and infirm. The naked part of the thigh is three inches and a half long; the legs four and a half: thefe, and the feet are of a blood red: the bill is black, above two inches long. The length from its tip to the end of the tail is thirteen inches : the breadth from tip to tip of the wing twentynine inches : the forehead, and whole under fide of the body are white: the crown of the head, back, and wings black : on the hind part of the neck are a few black spots: the tail is of a greyish white: the wings when clofed extend far beyond it. Thefe birds are extremely rare in thefe islands : Sir Robert Sibbald records a brace that were shot in Scotland: another was fhot a few years ago on Stantun-Harcourt common near Oxford, and we have feen them





DOTTREL. CLASS IL.

them often in the cabinets of the curious at Paris, taken on the French coafts.

Morinellus avis anglica. Gefner av. 615. Wil. orn. 309. Raii Syn. av. 111. Camden. Brit. I. 570. Pluvialis minor, five morinellus, le petit Pluvier, ou le Guignard. Brisson av. V. 54. Tab. 4. fig. 2.

Charadrius morinellus. Lin. Syft. 254. Lappis Lahul: Faun. Suec. Sp. 188. Caii opusc. 96. Cimbris Pomerants Fugl. Norvegis Bold Tiæt. Mindre Akerloe. Brunnich, 185.

Br. Zool. 129.

THE female dottrel, according to Mr. Willugh-by, weighs more than four ounces; the male above half an ounce lefs. The length of the female ten inches; the breadth nineteen and a half: the male not fo large. The bill black, flender, depreffed in the middle, and not an inch long : the forehead, top and back of the head black, the former spotted with white; a broad white stroke that preffes over the eyes, furrounds the whole: the cheeks and throat are white: the neck of a cinereous olive color: the middle of the feathers of the back, and coverts of the wings and tail olive; but their edges of a dull deep yellow : the quilfeathers are brown, with brown shafts; but the exterior fide and the fhaft of the first feather is white. The tail confifts of twelve feathers of a brown olive color, barred near their ends with black,

210. Dot-TREL.

DESCRIP.

black, and tipped with white. The breaft and fides are of a dull orange color; but immediately above that is a line of white, bounded above with a very narrow one of black. The belly (in the male) is black : thighs and vent-feathers white : legs yellowifh green : toes dufky.

FEMALE.

PLACE.

The colors of the female in general are duller: the white over the eye is lefs; and the crown of the head is mottled with brown and white. The white line crofs the breaft is wanting. The belly is mixed with black and white.

These birds are found in Cambridgesbire, Lincoln-(hire, and Derbyshire : on Lincoln-heath, and on the moors of Derbysbire they are migratory, appearing there in fmall flocks of eight or ten only in the latter end of April, and ftay there all May and part of June, during which time they are very fat, and much efteemed for their delicate flavor. In the months of April and September they are taken on the Wiltsbire and Berksbire downs : they are alfo found in the beginning of the former month on the fea fide at Meales in Lancashire, and continue there about three weeks, attending the barly fallows: from thence they remove northward to a place called Leyton Haws, and flay there about a fortnight; but where they breed, or where they refide during winter, we have not been able to discover. They are reckoned very foolish birds, fo that a dull fellow is proverbially called a Dottrel. They were also believed to mimick the action of the

CLASS II. R I N G E D.

the fowler; to ftretch out a wing when he ftretched out an arm, &c. continuing their imitation, regardless of the net that was spreading for them.

To this method of taking them, Michael Drayton alludes in his panegyrical verfes on Coryate's Crudities:

> Most worthy man with thee it is even thus, As men take *Dottrels*, fo hast thou ta'en us; Which as a man his arme or leg doth fet, So this fond bird will likewife counterfeit.

At prefent, fportfmen watch the arrival of the *Dottrels*, and fhoot them; the other method having been long difufed.

Charadrius five hiaticula. Aldr. av. III. 207. Wil. orn. 310. Raii fyn. av. 112. Griefshennl. Kram. 354. Charadrius hiaticula. Lin. fyft. 253. Scopoli, No. 147. Strandpipare, Grylle, Trulls, Lappis Pago. Faun. Suec.

fp. 187.
Pluvialis torquata minor, le 211. RINGEB petit Pluvier a collier. Briffon av. V. 63. Tab. 5. fg. 2.
Bornholmis Proefte-Krave, Sand-Vrifter. Brunnich, 184. Frifch, II. 214.
Sea Lark. Br. Zool. II. 383.

DESCRIP.

I weighs near two ounces. The length is feven inches and a half; the breadth fixteen: the bill is half an inch long; the upper half orange color; the lower black; from it to the eyes is a black

SANDERLING. CLASS II.

black line; the cheeks are of the fame color; the forehead white, bounded by a black band that paffes over from eye to eye; the crown of the head is of a fine light brown; the upper part of the neck is incircled with a white collar; the lower part with a black one; the back and coverts of the wings of a light brown; the breaft and belly white; the tail brown, tipt with a darker shade; the legs yellow.

These birds frequent our shores in the summer, but are not numerous. They lay four eggs of a dull whitish color, sparingly sprinkled with black : at approach of winter they difappear.

212. SAND-Sanderling, or Curwillet. tite Maubeche grife. Briffon av. V. 236. Tab. 20. ERLING. Wil. orn. 303. Raii syn. av. 109. fig. 2. Charadrius Caladris. Lin. Syft. Towillee. Borlafe hift. Cornwal. 247. 255. Calidris grifea minor, la pe-Br. Zool. 129. add. plates.

> TTE have received this fpecies out of Lancashire; but it is found in greater plenty on the Corniff fhores, where they fly in flocks. The fanderling weighs little more than one ounce three quarters. Its length is eight inches; extent fifteen. Its body is of a more flender form than others of the genus. The bill is an inch long, weak and black. The head, and hind part of the neck are alh-

CLASS II. SANDERLING.

afh-colored, marked with oblong black ftreaks; the back and fcapulars are of a brownifh grey, edged with dirty white; the coverts of the wings, and upper parts of the quil-feathers dufky: the whole under fide of the body is white; in fome flightly clouded with brown. The tail confifts of twelve fharp pointed feathers of a deep afh color; the legs are black.

OYSTER CATCHER. CLASS II.

XXXIII. OYSTER CATCHER.

BILL long, compreffed, the end cuneated. NOSTRILS linear. TONGUE, a third the length of the bill. TOES, only three.

213. PIED.

La Pie, Becaffe de mer. Belon av. 203. Hæmatopus. Gefner av. 548. Aldr. av. III. 176. Wil. orn. 297. Raii fyn. av. 105. L'Hutrier, Pie de mer. Briffon av. V. 38. tab. 3. fig. I. The Oyfter Catcher. Cat. Carol. I. 85. Hæmatopus oftralegus. Lin. fyft. 257. Marfpitt, Strandíkjura, Faun. Succ. fp. 192. Pica marina. Caii opusc. 62. N. Com. Petr. IV. 425.

Tirma, or Trilichan. Martin's voy. St. Kilda. 35. Islandis mas Tialldur, fæmina Tilldra. Feroensfibus Kielder. Norwegis Tield v. Kield, Glib, Strand-Skiure. Danis Strand-Skade. Brunnich, 189.

Br. Zool. 127.

SEA Pies are very common on most of our coasts; feeding on marine infects, oysters, limpets, &cc. Their bills, which are compressed fideways, and end obtufely, are very fit instruments to infinuate between the limpet and the rock those schemes the limpet and the rock those schemes the fish. On the coast of France, where the tides recede so far as to leave the beds of oysters bare, these birds feed on them; forcing the schemes the set of the fish. They keep in summer time in pairs, laying their eggs on the bare ground: they

OYSTER - CATCHER.

- *

.

.

CLASS II. OYSTER CATCHER.

they lay four of a whitifh brown hue, thinly fpotted and ftriped with black : when any one approaches their young, they make a loud and fhrill noife. In winter they affemble in vaft flocks, and are very wild.

Weight fixteen ounces; length feventeen inches. Bill three inches, compreffed, obtufe at the end, of a rich orange color: *irides* crimfon: edges of the eye-lids orange; beneath the lower a white fpot. Head, neck, fcapulars, and coverts of the wings a fine black; in fome the neck marked with white: wings dufky, with a broad transverse band of white: the back, breaft, belly, and thighs white: tail fhort, confists of twelve feathers; the lower half white; the end black: legs thick and ftrong; of a dirty flefh color: middle toe connected to the exterior toe as far as the first joint by a ftrong membrane: the claws dufky, fhort and flat. 483

DESCRIP.

BILL

484

RAIL.

CLASS H.

XXXIV. RAIL. BILL flender, a little compressed, and flightly incurvated. NOSTRILS fmall.

TONGUE rough at the end.

TAIL very fhort.

214, WATER. Le Rafle noir. Belon av. 112. Gallina cinerea (afhhunlin). Gefner av. 515. Ralla aquatica. Aldr. av. HI. 179. Water-rail, Bilcock, or Brook Ouzel. Wil. orn. 314. Raii fyn. av. 113. Waffer hennl Kram. 348.

Rallus aquaticus. Lin. fyf. 262. Faun. Suec. fp. 195. Rallus aquaticus. la Raffe

Rallus aquaticus, le Rafle d'Eau. Briffon av. 151. tab. 12. fig. 2. Scopoli, No. 155. Norvegis Vand-Rixe. Feroenfibus Jord-Koene. Brunnich, 193. Br. Zool. 130.

THE water rail is a bird of a long flender body, with fhort concave wings. It delightslefs in flying than running; which it does very fwiftly along the edges of brooks covered with bufhes: as it runs, every now and then flirts up its tail; and in flying hangs down its legs: actions it has in common with the water hen.

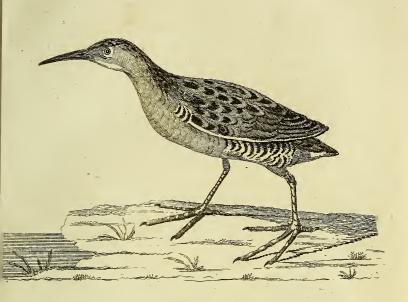
DESCRIP.

Its weight is four ounces and a half. The length to the end of the tail twelve inches: the breadth fixteen. The bill is flender, flightly incurvated, one inch three quarters long: the upper mandible black, edged with red; the lower orange colored:

the.

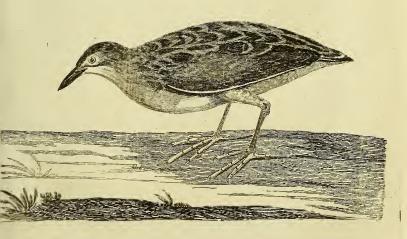
WATER-RAIL.

. LXXV.



CRAKE GALLINULE.

Nº 216.





CLASS II.

the irides red : the head, hind part of the neck, the back, and coverts of the wings and tail are black, edged with an olive brown; the base of the wing is white; the quil-feathers and fecondaries dusky : the throat, breast, and upper part of the belly are afh-colored : the fides under the wings as far as the rump finely varied with black and white bars. The tail is very fhort, confifts of twelve black feathers; the ends of the two middle tipt with ruft-color; the feathers immediately beneath the tail white. The legs are placed far behind, and are of a dusky flesh-color. The toes very long, and divided to their very origin; though the feet are not webbed, it takes the water; will fwim on it with much eafe; but oftener is observed to run along the furface.

This bird is properly *fui generis*, agreeing with no other, fo forms a feparate tribe. M. Briffon and Linneus place it with the land Rail, and Mr. Ray with the water hens, which have their peculiar characters, fo very diffinct from the Rail, as to conftitute another genus, as may be observed in the generical table preceding this class.

Kk2

BILL

SPOTTED GALLINULE. CLASS IT. of the first had an a shirt of

XXXV. GALLI-NULE.

BILL thick at the bafe floping to the point, the upper mandible reaching far up the forehead. callous.

WINGS fhort and concave. BODY compressed. TOES long, divided to the origin.

215. SPOT-TED.

Gallinula ochra (Wynkernell). Gesner. av. 513. fig. 1. Porcellana, Porzana, Grugnetto. Aldr. av. III. 181. Grinetta. Wil. orn. Sp. 8. p. 315. Raii Syn. av. 115. Sp. 7. Rallus aquat. minor, five 262. Maruetta, le petit Rasle d'Eau, ou la Marouette.

Briffon av. V. 155. tab. 13. Couchouan ou Marouette. Argeno. Lithel. 533. tab. 25. Kleines gesprenkeltes Wafferhuhn. Frisch, II. 211. Rallus porzana. Lin. syft.

the buck

Br. Zoo!. 130.

DESCRIP.

THIS fpecies is not very frequent in Great Bri-tain, and is faid to be migratory. Inhabits the fides of fmall ftreams, concealing itfelf among the bushes. Its length is nine inches; its breadth fifteen: its weight four ounces five drachms. The head is brown, fpotted with black; the neck a deep olive, fpotted with white; from the bill beyond the eyes is a broad grey bar: the feathers of the back are black next their fliafts, then olive colored, and edged with white: the fcapulars are olive, finely

CLASS II. CRAKE GALLINULE.

finely marked with two fmall white fpots on each web: the legs of a yellowifh green.

Le Rasle rouge ou de Genet. Belon av, 212. Ortygometra, Crex. Gesner av. 361, 362. Aldr. av. III. 179. Rail, or Daker Hen. Wil. orn. 170. Phil. Tranf. II. 853. Raii Syn. av. 58. Corn-crek. Sib. Scot. 16. Corn-craker. Martin's Weft. Ifles, 71. . Rallus genistarum, le Rasle

de Genet, ou Roi des Cail-

les. Briffon av. V. 159. 216. CRAKE. Tab. 13. fig. 2.

487

- Wachtel-konig. Kram. 349. Rallus Crex. Lin. fyft. 261. Angfnarpa, Korknarr, Seydreifwer. Faun. Suec. fp.
- 194. Danis & Norv. Vagtel-Konge. Aker-Rixe. Skov-Snarre, Norvegis quibusdam Agerhoene. Brunnich, 192. Br. Zool. 131. Roftz. Scopoli, No. 154.

THIS fpecies has been fuppofed by fome to be the fame with the water rail, and that it differs only by a change of color at a certain feafon of the year: this error is owing to inattention to their characters and nature, both which differ entirely. The bill of this fpecies is fhort, ftrong, and thick; formed exactly like that of the water hen, and makes a generical diffinction. It never frequents watery places, but is always found among corn, grafs, broom, or furze. It quits this kingdom before winter; but the water rail endures our sharpest feasons. They agree in their averfion to flight; and the legs, which are remarkably long for the fize of the bird, hang down whilk they

CRAKE GALLINULE CLASS II.

they are on the wing; they truft their fafety to their fwiftnefs of foot, and feldom are fprung a fecond time but with great difficulty. The land rail lays from twelve to twenty eggs, of a dull white color, marked with a few yellow fpots; notwithftanding this, they are not very numerous in this kingdom. Their note is fingular, refembling the word Crex often repeated They are in greateft plenty in Anglesea, where they appear about the twentieth of April, supposed to pass over from Ireland, where they abound : at their first arrival it is common to shoot feven or eight in a morning. They are found in most of the Hebrides, and the Orknies. On their arrival they are very lean, weighing only fix ounces; but before they leave this island, grow fo fat as to weigh above eight.

DESCRIP.

The feathers on the crown of the head, hind part of the neck, and the back, are black, edged with bay color: the coverts of the wings of the fame color; but not fpotted: the tail is fhort, and of a deep bay: the belly white: the legs afh-colored.

488

CLASS II. COMMON GALLINULE.

La Poulette d'eau. Belon av.	C
211. Ein wafferhen. Gefner av.	V
501.	F
Chloropus major nostra. Aldr.	F
av. III. 177. Common Water-hen, or Moor-	1
hen. Wil. orn. 312.	1
Raii syn. av. 112. Gallinula, la Poule d'eau.	7
Brillin age VI 2. Tak 1.	

Gallinella aquatica, Porzanone. Zinan. 109.
Wafferhennl. Kram. 358.
Rothblæffige Kleine Wafferhuhn. Frifch, II. 209.
Fulica chloropus. Lin. fyf. 258.
Brunnich, 191. Scopoli, No. 153.
Br. Zool. 131.

HE male of this species weighs about fifteen ounces. Its length to the end of the tail fourteen inches: the breadth twenty-two. The crown of the head, hind part of the neck, the back, and coverts of the wings are of a fine, but very deep olive green. Under fide of the body cinereous: the chin and belly mottled with white: quil-feathers and tail dufky: exterior fide of the first primary feather, and the ridge of the wings white: vent black: feathers just beneath the tail white : legs dufky green. The colors of the plumage in the female, are much lefs brilliant than that of the male : in fize it is also inferior. Mr. Willugbby in his defcription takes no notice of the beautiful olive gloss of the plumage of these birds; nor that the bill affumes a fuller and brighter red in the courting feafon.

It gets its food on graffy banks, and borders near K k 4. fresh

DESCRIP.

217. COM-

MON.

Eggs.

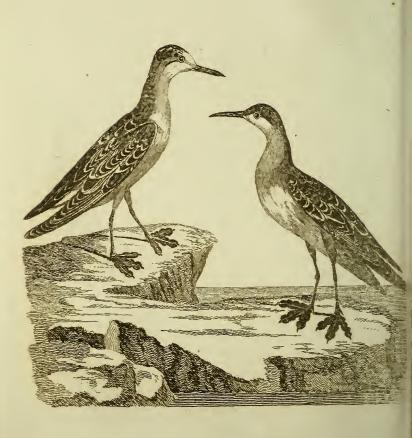
COMMON GALLINULE. CLASS II.

frefh waters, and in the very waters, if they be weedy. It builds upon low trees and fhrubs by the water fide; breeding twice or thrice in the fummer; and when the young are grown up, drives them away to fhift for themfelves. They lay feven eggs of a dirty white color, thinly fpotted with ruft color. It ftrikes with its bill like a hen; and in the fpring has a fhrill call. In flying it hangs down its legs: in running often flirts up its tail, and fhews the white feathers. We may obferve, that the bottoms of its toes are fo very flat and broad (to enable it to fwim) that it feems the bird that connects the cloven-footed aquatics with the next tribe; the fin toed.



PI. LXXVI.

RED AND GREY, SCOLLOP TOED SAND-PIPER.



CLASS H. GREY PHALAROPE,

SECT. II. FIN-FOOTED BIRDS.

BILL ftrait and flender. NOSTRILS minute. BODY and LEGS like the Sandpiper. TOES furnifhed with fcalloped membranes.

XXXVI. PHALA-ROPE.

Grey Coot footed Tringa. Tringa Lobata. Edw. av. 308. Faun. Suec. fp. Phil. Tranf. Vol. 50. Brunnich, 171. Le Phalarope, Briffon av. Br. Zool. 126. VI. 12.

Tringa Lobata. Lin. fyl. 249. 218. GREV. Faun. Suec. fp. 179. Brunnich, 171. Br. Zgol. 126.

HIS is about the fize of the common *Purre*, weighing one ounce. The bill black, not quite an inch long, flatted on the top, and channeled on each fide; and the noftrils are placed in the channels: the eyes are placed remarkably high in the head: the forehead white: the crown of the head covered with a patch of a dufky hue, fpotted with white and a pale reddifh brown; the reft of the head, and whole under part of the neck and body are white: the upper part of the neck of a light grey: the back and rump a deep dove color, marked with dufky fpots: the edges of the fcapulars

DESCRIP.

RED PHALAROPE. CLASS II.

pulars are dull yellow: the coverts dufky; the lower or larger tipt and edged with white: the eight firft quil-feathers dufky; the fhafts white; the lower part of the interior fide white: the fmaller quilfeathers are tipt with white: the wings clofed, reach beyond the tail: the feathers on the back are either wholly grey or black, edged on each fide with a pale red: the tail dufky, edged with afhcolor: the legs are of a lead color: the toes extremely fingular, being edged with fcolloped membranes like the coot: four fcollops on the exterior toe, two on the middle, and the fame on the interior; each finely ferrated on their edges.

This bird was fhot in Yorkshire, and communicated to us by Mr. Edwards.

219. RED.

Mr. Johnfon's finall cloven footed Gull. Wil. orn. 355. Ray's collection of English words, &c. p. 92. Larus fidipes alter noftras. *Raii fyn. av.* 132. *Edw. av.* 143. Tringa hyperborea. *Lin. fyf.* 249.

HIS fpecies was fhot on the banks of a frefh water pool on the ifle of *Stronfa*, May 1769. It is of the fize of the Purre. The bill is an inch long, black, very flender, and ftrait almost to the end which bends downwards : the crown of the head, the hind part of the neck and the coverts of the wings are of a deep lead color; the back and fcapulars

CLASS II. RED PHALAROPE.

fcapulars the fame, ftriped with dirty yellow: the quil-feathers dusky; the fhafts white: crofs the greater coverts is a ftripe of white: the chin and throat white: the under part and fides of the neck bright ferruginous: the breaft dark, cinereous: belly white: coverts of the tail barred with black and white; tail fhort, cinereous: legs and feet black.

Mr. Ray faw this fpecies at Brignal in Yorkshire: Mr. Edwards received the fame kind from North America, being common to the North of Europe and America.

Short

C O O T.

CLASS II.

XXXVII. Short thick BILL, with a callus extending up the forehead.

NOSTRILS narrow and pervious.

TOES furnished with broad scalloped membranes.

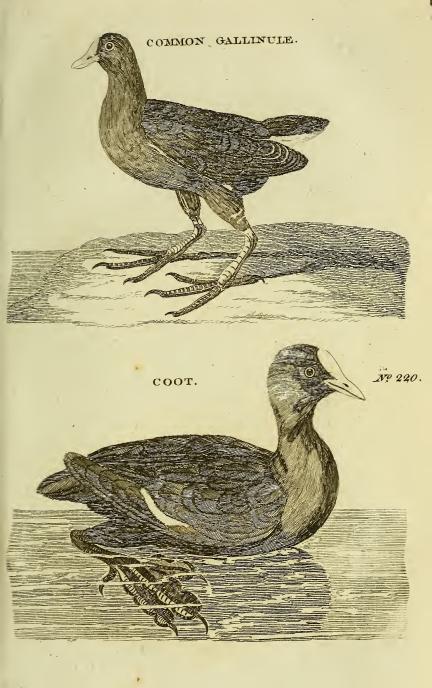
220. Common.

La Poulle d'eau. Belon av. Rohr-hennly Blasfl. Kram. 181. 357. Fulica recentiorum. Gesner Weifblæffige groffe Wafferhuhn. Frisch, II. 208. av. 390. Fulica atra. Lin. Syft. 257. Follega, Follata, Fulca. Aldr. av. III. 39, 42. Blas-klacka. Faun. Suec. fp. Wil. orn. 319. 193. Raii syn. aw. 116. Danis Vand-Hoene, Bles-La Foulque, ou Morrelle. Hoene. Brunnich, 190. Br. Zool. 132. Briffon av. VI. 23. tab. 2. Lifka. Scopoli, No. 149. fig. 1. Folaga, o Polon. Zinan. 108.

DESCRIP.

HESE birds weigh from twenty-four to twenty-eight ounces. Their belly is afh-colored; and on the ridge of each wing is a line of white: every part befides is of a deep black: the legs are of a yellowifh green: above the knee is a yellow fpot.

Coots frequent lakes and ftill rivers: they make their neft among the rufhes, with grafs, reeds, &c. floating on the water, fo as to rife and fall with it. They lay five or fix large eggs, of a dirty whitifh hue, fprinkled over with minute deep ruft color fpots; and we have been credibly informed that they



A

CLASS II. G R E A T COOT.

they will fometimes lay fourteen and more. The young when just hatched are very deformed, and the head mixed with a red coarfe down. In winter they often repair to the fea: we have feen the channel near *Southampton* covered with them: they are often brought to that market, where they are exposed to fale, without their feathers, and feaded like pigs. We once faw at *Spalding*, in *Lincolnfbire*, a coot fhot near that place that was white, except a few of the feathers in the wings, and about the head.

Fulica aterrima. Lin. 258. La grand foulque ou la 221. GREAT, Scopoli, No. 150. Macroule. Briffon av. VI. Greater Coot. Wil. orn. 320. 28. Belon 182.

HIS fpecies differs from the preceding only in its fuperior fize; and the exquifite blacknefs of the plumage.

Discovered in Lancashire and in Scotland.

BILT.

495

TIPPET GREBE.

CLASS II.

BILL ftrong, ftrait, fharp pointed. XXXVIII. GREBE *. TAIL, none.

LEGS flat, thin, and ferrated behind with a double row of notches.

222. TIPPET. Colymbus major. Gesner av. 138. Aldr. av. III. 104. Greater Loon, or Arsfoot. Wil. orn. 339. Greater Dobchick. Edw. av. 360. fig. 2.

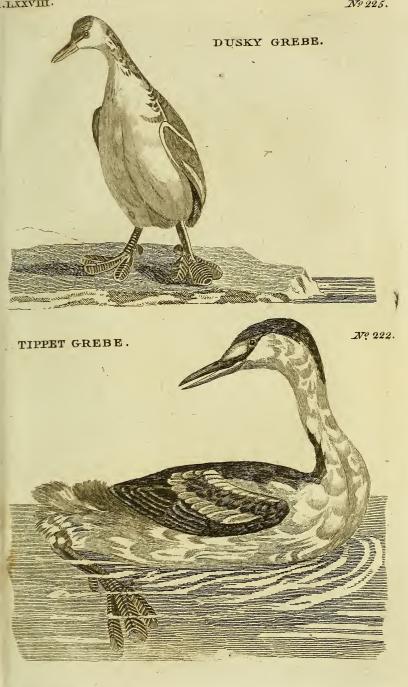
Raii Syn. av. 125. Colymbus, la Grebe. Briffon av. VI. 34. tab. 3. fig. 1. Colymbus urinator Lin. Syft. 223 Scopoli, No. 102. Br. Zool. 133.

The

HIS differs from the great crefted Grebe in being rather lefs, and wanting the creft and The fides of the neck are ftriped downwards ruff. from the head with narrow lines of black and white: in other refpects the colors and marks agree with that bird.

This species has been shot on Rosterne Mere in Cheshire; is rather scarce in England, but is common in the winter time on the lake of Geneva. They appear there in flocks of ten or twelve : and are killed for the fake of their beautiful fkins.

* The Grebes and Divers are placed in the fame genus, i. e. of Colymbi, by Mr. Ray and Linnæus; but the difference of the feet, forbade our judicious friend, M. Briffon, from continuing them together; whofe example we have followed.





CLASS II. GREAT CRESTED GREBE.

The under fide of them being dreft with the feathers on, are made into muffs and tippets; each bird fells for about fourteen shillings.

Grand Plongeon de riviere. Belon av. 178. Ducchel. Gefner av. 138. Aldr. av. III 104. Avis pugnax Sva. Aldr. 169. Greater crested and horned Doucker. Wil. orn. 340. Ash-colored Loon of Dr. Brown, ibid. Raii Syn. ar. 124. Plott's hift. Staff. 229. tab. 22. The Cargoofe. Charleton ex. 107.

Pet. Gaz. I. tab. 43. fig. 12. Br. Zool. 132. Colymbus cristatus. Lin. fyf.

222: Scopoli, No. 99. Faun. Suec. Sp. 151. La Grebe hupée. Briffon av.

VI. 38. tab. 4. et Colymbus cornutus. 45. tab. 5. fig. 1.

Smergo, Fifolo marino. Zinan. 107.

Danis Topped og Halfkraved Dykker, Topped Hav Skiære. Brunnich, 135. Gehoernter Scehahn, Noerike. Frisch, II. 183.

HIS species weighs two pounds and a half. DESCRIP. Its length is twenty-one inches: the breadth thirty : the bill is two inches one-fourth long; red at the base; black at the point: between the bill and the eyes is a ftripe of black naked fkin: the irides are of a fine pale red: the tongue is a thirdpart fhorter than the bill, flender, hard at the end, and a little divided : on the head is a large dufky creft, feparated in the middle. The cheeks and throat are furrounded with a long pendent ruff, of a bright tawny color, edged with black : the chin is white: from the bill to the eye is a black line,

223. GREAT CRESTED. .

497

line, and above that a white one: the hind part of the neck, and the back are of a footy hue: the rump, for it wants a tail, is covered with long foft down.

The covert feathers on the fecond and third joints of the wing, and the under coverts are white : all the other wing feathers, except the fecondaries, are dufky, thofe being white : the breaft and belly are of a moft beautiful filvery white, gloffy as fattin, and equal in elegance to thofe of the *Grebe* of *Geneva*; and are applied to the fame ufes : the plumage under the wings is dufky, blended with tawny : the outfide of the legs, and the bottom of the feet are dufky : the infide of the legs, and the toes of a pale green.

These birds frequent the Meres of Shropshire and Cheshire, where they breed; and in the great East Fen in Lincolnshire, where they are called Gaunts. Their skins are made into tippets, which are fold at as high a price as those that come from Geneva.

This fpecies lays four eggs, white, and of the fize of thole of a pigeon; the neft is formed of the roots of bugbane, ftalks of water lilly, pond weed and water violet, floating independent among the reeds and flags; the water penetrates it, and the bird fits and hatches the eggs in that wet condition; the neft is fometimes blown from among the flags into the middle of the water : in these circumftances, the fable of the Halcyon's neft, its fluctivaga

CLASS II. GREAT CRESTED GREBE.

fluctivaga domus, as Statius expresses it, may in fome measure be vindicated.

Fluctivagam fic fæpe domum, madidofque penates Halcyone deferta gemit; cum pignora fævus Aufter, et algentes rapuit Thetis invida nidos. Thebaid. lib. ix. 360.

It is a careful nurse of its young, being observed to feed them most affiduously, commonly with fmall ells; and when the infant brood are tired, will carry them either on its back or under its wings. This bird preys on fifh, and is almost perpetually diving: it does not fhew much more than the head above water, and is very difficult to be fhot, as it darts down on the appearance of the left danger. It is never feen on land; and though difturbed ever fo often, will not fly farther than the end of the lake. Its fkin is out of feafon about February, lofing then its bright color : and in the breeding time its breaft is almost bare. The flesh of this bird is exceffively rank : but the fat is of great virtue in rheumatic pains, cramps and paralytic contractions.

Eared

EARED GREBE. CLASS II.

224. EARED. Eared dobchick. Edw. av. Norvegis Sav-Orre, Soe-Orre. 96. fg. 2. La Grebe a Oreilles. Briffon av. VI. 54. Colymbus auritus. Lin. fyft. 223. Scopoli, No. 100.

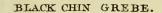
DESCRIP.

THE length of this species to the rump is one foot; the extent twenty-two inches: the bill black, slender and very slightly recurvated: the *i*rides crimfon: the head and neck are black; the throat spotted with white: the whole upper side of a blackish brown, except the ridge of the wing about the first joint, and the secondary feathers, which are white: the breast, belly, and inner coverts of the wings are white: the subaxillary feathers, and some on the side of the rump, furruginous: behind the eyes, on each side, is a tuft of long loose rust colored feathers, hanging backwards: the legs of a dusky green.

Thefe birds inhabit the fens near *Spalding*, where they breed. I have feen both male and female, but could not obferve any external difference. They make their neft not unlike that of the crefted grebe; and lay four or five fmall white eggs.

The

Nº 224.



EARED GREBE,



The black and white Dob-Br. Zool. 133. Colymbus nigricans ? Scopoli, chick. Edw. av. 96. fig. 1. Colymbus minor, la petite No. 101. Grebe. Briffon av. VI. 56.

THE length from the bill to the rump eleven inches: the extent of wings twenty: the bill was little more than an inch long. The crown of the head, and whole upper fide of the body dufky: the inner coverts, the ridge of the wing, and the middle quil-feathers were white; the reft of the wing dufky : a bare fkin of a fine red color joined the bill to the eye: the whole underfide from the breaft to the rump was a filvery white: on the thighs were a few black fpots. In fome birds the whole neck was afh colored : fo probably they might have been young birds, or different in fex. Inhabits the Fens of Lincolnshire.

- Le Castagneux, ou Zoucet. Belon av. 177. Mergulus fluviatilis (Duc-
- chelin, Arfsfus). Gefner av. 141.
- Trapazorola arzauolo, Piombin. Aldr. av. III. 105.

Didapper, Dipper, Dobchick, fmall Doucker, Loon, or Arsfoot. Wil orn. 340.

Raii Syn. av. 125. Colymbus fluviatilis, la Grebe de Riviere, ou le Castagneux. Briffon av. VI. 59. Colymbus auritus. Lin. fyft. 223. Kleiner Seehahn, or Noerike. Frisch, 11. 184. Faun. Suec. Sp. 152. Br. Zool. 134.

THE weight of this fpecies is from fix to feven ounces. The length to the rump ten inches : L12 to

226. LITTLE.

DESCRIP.

225. DUSKY.

50I

DESCRIP.

to the end of the toes thirteen: the breadth fixteen. The head is thick fet with feathers, those on the cheeks, in old birds, are of a bright bay: the top of the head, and whole upper fide of the body, the neck and breaft, are of a deep brown, tinged with red: the greater quil-feathers dufky: the interior webs of the leffer white: the belly is afh colored, mixed with a filvery white, and fome red: the legs of a dirty green.

The wings of this fpecies, as of all the other, are fmall, and the legs placed far behind : fo that they walk with great difficulty, and very feldom fly. They truft their fafety to diving; which they do with great fwiftnefs, and continue long under water. Their food is fish, and water plants. This bird is found in rivers, and other fresh waters. It forms its neft near their banks, in the water; but without any fastening, fo that it rifes and falls as that does. To make its neft it collects an amazing quantity of grafs, water-plants, &c. It lays five or fix white eggs; and always covers them when it quits the neft. It should feem wonderful how they are hatched, as the water rifes through the neft, and keeps them wet; but the natural warmth of the bird bringing on a fermentation in the vegetables, which are full a foot thick, makes a hot bed fit for the purpofe.

NEST.

502

GR.

CLASS II. BLACK CHIN.

GR. with a black chin. Fore part of the neck 227. BLACK ferruginous: hind part mixed with dufky. Belly cinereous and filver intermixed. Rather larger than the laft.

Inhabits Tiree, one of the Hebrides.

SECTION

SECTION III. WEB-FOOTED BIRDS.

XXXIX. AVOSET. BILL long, slender, very thin, depressed, bending upwards.

NOSTRILS narrow, pervious. TONGUE fhort. LEGS very long. FEET palmated. Back toe very fmall.

228. SCOOP-	Recurvirostra. Gesner av.	Avofetta, L'Avocette. Briffon
ING.	231.	av. VI. 538. Tab. 47.
	Avoletta, Beccoltorto, Bec-	fig. 2.
	coroella, Spinzago d'acqua.	Krumbschnabl. Kram. 348.
	Aldr. av. III. 114.	Recurvirostra Avosetta. Lin.
	Wil. orn. 321.	Jyft. 256. Scopoli, No. 129.
	Raii Syn. az. 117.	Skarflacka, Alfit. Faun. Suec.
	The Scooper. Charlton ex.	<i>fp.</i> 191.
	102.	Danis Klyde, Loufugl, Fork-
	The crooked Bill. Dale's hift.	eert Regnspove. Br. 188.
	Harwich, 402.	Br. Zool. 134.
	Plott's hift. Staff. 231.	

A N Avoset that we shot weighed thirteen ounces. Its length to the end of the tail was eighteen inches, to that of the toes twenty-two: the breadth thirty. This bird may at once be distinguished from all others, by the singular form of its bill; which is three inches and a half long, sender, compressed very thin, sexible, and of a substance like whalebone; and contrary to the bills

504





of other birds, is turned up for near half its length. The noftrils are narrow and pervious: the tongue fhort: the head very round: that, and half the hind part of the neck black; but above and beneath each eye is a fmall white fpot : the cheeks, and whole under fide of the body from chin to tail is of a pure white: the back, exterior fcapular feathers, the coverts on the ridge of the wings, and fome of the leffer quil-feathers, are of the fame color; the other coverts, and the exterior fides and ends of the greater quil-feathers, are black : the tail confifts of twelve white feathers: the legs are very long, of a fine pale blue color, and naked far above the knees: the webs dufky, and deeply indented : the back toe extremely fmall.

These birds are frequent in the winter on the fhores of this kingdom: in Gloucestersbire, at the Severn's Mouth; and fometimes on the lakes of Shropshire. We have feen them in confiderable numbers in the breeding feafon near Foffdike Wafb in Lincoln/hire. Like the lapwing when difturbed they flew over our heads, carrying their necks and long legs quite extended, and made a fhrill noife (Twit) twice repeated, during the whole time. The country people, for this reason, call them Yelpers; and fometimes diffinguish them by the name of Picarini. They feed on worms and infects that they fcoop with their bills out of the fand; their fearch after food is frequently to be difcerned L14 on

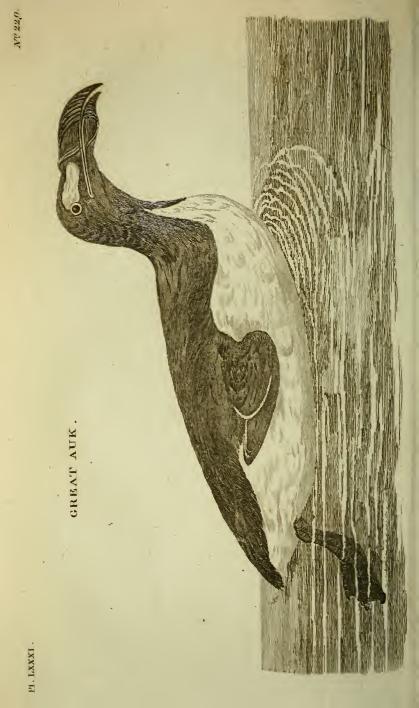
AVOSET.

CLASS II.

BILL

on our fhores by alternate femicircular marks in the fand, which fhew their progrefs. They lay two eggs about the fize of those of a pigeon, white tinged with green, and marked with large black spots.





BILL ftrong, thick, compreffed.
NOSTRILS linear; placed near the edge of the mandible.
TONGUE almost as long as the bill.
TOES, no back toe.

Eforokitfok *. Crantz's Greenl. 229. GREAT. Goirfugel. Clusie exot. 367. Penguin. Wormii, 300. I. 82. Wil. orn. 323. Alca impennis. Lin. Syft. 210. Faun. Suec. Sp. 140. Raii Syn. av. 119. Islandis Gyr-v Geyrfugl. Nor-Edw. av. 147. Martin's voy. St. Kilda. 27. vegis Fiært, Anglemaage, Penguin, Brillefugl. Brun-Avis, Gare dicta. Sib. Scot. nich, 105. III. 22. Alca major, le grand Pingoin. Br. Zool. 136. Briffon av. VI. 85. Tab. 7.

A CCORDING to Mr. Martin, this bird breeds on the ifle of St. Kilda; appearing there the beginning of May, and retiring the middle of June. It lays one egg, which is fix inches long, of a white color; fome are irregularly marked with purplifh lines croffing each other, others blotched with black and ferruginous about the thicker end: if the egg is taken away, it will not lay another

* Or little wing.

that

507

XL. AUK.

that feafon. A late writer * informs us, that it does not vifit that ifland annually, but fometimes keeps away for feveral years together; and adds, that it lays its egg clofe to the fea-mark; being incapable, by reafon of the fhortnefs of its wings, to mount higher.

The length of this bird, to the end of its toes, is three feet; the bill, to the corner of the mouth, four inches and a quarter: part of the upper mandible is covered with fhort, black, velvet like feathers; it is very ftrong, comprefied and marked with feveral furrows that tally both above and below: between the eyes and the bill on each fide is a large white fpot: the reft of the head, the neck, back, tail and wings, are of a gloffy black: the tips of the leffer quil-feathers white: the whole under fide of the body white: the legs black. The wings of this bird are fo fmall, as to be ufelefs for flight: the length, from the tip of the longeft quil-feathers to the firft joint, being only four inches and a quarter.

This bird is obferved by feamen never to wander beyond *foundings*; and according to its appearance they direct their measures, being then affured that land is not very remote. Thus the modern failors pay respect to *auguries*, in the same manner

* Macaulay's hift. St. Kilda. p. 156.

508



LITTLE AUK.



CLASS II. RAZOR BILL.

as Aristophanes tells us those of Greece did above two thousand years ago.

> Προερεί τις αεί των ορνίθων μαντευομένω σερι το πλο, Νυνί μή πλεί, χειμων έσαι, νυνί πλεί, μερδος επεσαι. Aves. 597.

From birds, in failing men inftructions take, Now lye in port; now fail and profit make.

Razor-bill, Auk, Murre. Alca torda. Lin. Syft. 210. 230. RAZOR-Tord, Tordmule. Faun. Suec. Wil. orn. 325. Raii syn. av. 119. Sp. 139. The Falk. Martin's voy. St. Norvegis Klub-Alke, Klympe. Islandis Aulka, Klumbr, Kilda. 33. Klumburnevia. Groenlandis The Marrot. Sib. hift. Fife, Awarfuk. Danis Alke. 4.8. Edw. av. 358. fig. 2. Brunnich, 100. Br. Zool. 136. Scopoli, No. Alca, le Pingoin. Briffon av. VI. 89. Tab. 8. fig. 1. 94.

THESE species weigh twenty-two ounces and Descrip. the breadth twenty-feven. The bill is two inches long, arched, very ftrong and fharp at the edges; the color black: the upper mandible is marked with four transverse grooves; the lower with three; the wideft of which is white, and croffes each mandible. The infide of the mouth is of a fine pale yellow : from the eye to the bill is a line of white : the head, throat, and whole upper fide of the body are black; the wings of the fame color, except

BILL.

509

cept the tips of the leffer quil-feathers, which are white: the tail confifts of twelve black feathers, and is fharp pointed: the whole under fide of the body is white: the legs black.

PLACE.

Thefe birds, in company with the Guillemot, appear in our feas the beginning of February; but do not fettle on their breeding places till they begin to lay, about the beginning of May. They inhabit the ledges of the higheft rocks that impend over the fea, where they form a grotefque appearance; fitting close together, and in rows one above the other. They properly lay but one egg a piece, of an extraordinary fize for the bulk of the bird, being three inches long : it is either white, or of a pale fea green, irregularly fpotted with black : if this egg is deftroyed, both the auk and guillemot will lay another; if that is taken, then a third : they make no neft, depositing their egg on the bare rock : and though fuch multitudes lay contiguous, by a wonderful inftinct each diffinguishes its own. What is also matter of great amazement, they fix their egg on the fmooth rock, with fo exact a balance, as to fecure it from rolling off; yet should it be removed, and then attempted to be replaced by the human hand, it is extremely difficult, if not impossible to find its former equilibrium.

The eggs are food to the inhabitants of the coafts they frequent, which they get with great hazard; being lowered from above by ropes, trufting to the

BLACK BILLED AUK. CLASS II.

the ftrength of their companions, whole footing is often fo unftable that they are forced down the precipice, and perifh together.

Alca minor, le petit pingoin. Alca unifulcata. Brunnich, 231. BLACK Briffon av. VI. 92. Tab. 8. BILLED. 102. Br. Zool. 137. fig. 2. Alca Pica. Lin. Syft. 210.

HIS weighs only eighteen ounces : the length DESCRIP. fifteen inches and a half: the breadth twentyfive inches. The bill is of the fame form with the Auk's, but is entirely black. The cheeks, chin, and throat are white; in all other refpects it agrees with the former fpecies : we can only obferve, that this was fhot in the winter, when the common fort have quitted the coafts.

When this bird was killed, it was observed to have about the neck abundance of lice, refembling those that infect the human kind, only they were fpotted with yellow.

The Alca Balthica of Brunnich, No. 115, a variety in all respects like the common kind, only the under fide of the neck white, is fometimes found on our coafts.

PUFFIN.

CLASS II.

232. PUFFIN. Puphinus anglicus. Gesner Caii opusc. 97. Anas arctica. av. 725. Clusii Exot. Pica marina. Aldr. av. III. 104. Alca arctica. Lin. Ssft. 211. 92. Faun. Suec. Sp. 141. Puffin, Coulterneb, &c. Wil. Islandis & Norveg. Lunde. orn. 325. hujus pulli Lund Toller. Raii fyn. av. 120. Edw. av. 358. fig. 1. Danis Islandsk Papegoye. The Bowger. Martin's voy. Brunnich, 103. St. Kilda. 34. See-Papagey, or See-Taucher. Fratercula, le Macareux. Bri/-Frisch, II. 192. fon av. VI. 81. Tab. 6. Br. Zool. 135. fig. I.

DESCRIP.

BILL.

HIS bird weighs about twelve ounces: its length is twelve inches : the breadth from tip to tip of the wings extended, twenty-one inches : the bill is fhort, broad at the bafe, compresied on the fides, and running up to a ridge, triangular and ending in a fharp point: the bafe of the upper mandible is ftrengthened with a white narrow prominent rim full of very minute holes : the bill is of two colors, the part next the head of a bluifh grey, the lower part red: in the former is one transverse groove or furrow, in the latter three: the fize of the bills of these birds vary: those of Priestbolm Isle are one inch and three quarters long; and the bafe of the upper mandible one inch broad : but in the birds from the Isle of Man these proportions are much lefs.

NOSTRILS.

The noftrils are very long and narrow; commence mence at the above-mentioned rim, terminate at the first groove, and run parallel with the lower edge of the bill.

The *irides* are grey, and the edges of the eye-lids of a fine crimfon: on the upper eye-lid is a fingular callous fubftance, grey, and of a triangular form: on the lower is another of an oblong form: the crown of the head, whole upper part of the body, tail, and covert feathers of the wings are black; but in fome the feathers of the back are tinged with brown: the quil-feathers are of a dufky hue.

The cheeks are white, and fo full of feathers as to make the head appear very large and almost round: the chin of the fame color; bounded on each fide by a broad bed of grey: from the corner of each eye is a fmall feparation of the feathers terminating at the back of the head. The neck is encircled with a broad collar of black: but the whole lower part of the body as far as is under water is white, which is a circumstance in common with most of this genus.

Tail black, composed of fixteen feathers: legs fmall, of an orange color, and placed fo far behind as to disqualify it from standing, except quite erect: resting not only on the foot, but the whole length of the leg: this circumstance attends every one of the genus, but not remarked by any naturalist, except *Wormius*, who has figured the *Penguin*, a bird of this genus, with great propriety: this makes the rife HEAD.

Eyes.

rife of the Puffin from the ground very difficult, and it meets with many falls before it gets on wing; but when that is effected, few birds fly longer or ftronger.

PLACE.

These birds frequent the coasts of feveral parts of Great Britain and Ireland; but no place in greater numbers than Priestholm Isle*, where their flocks may be compared to fwarms of bees for multitude. These are birds of paffage; refort there annually about the fifth or tenth of April, quit the place (almost to a bird) and return twice or thrice before they fettle to burrow and prepare for ovation and incubation. They begin to burrow the first week in May; but fome few fave themselves that trouble, and diflodge the rabbets from their holes, and take poffeffion of them till their return from the ifle. Those which form their own burrows, are at that time fo intent on the work as to fuffer themfelves to be taken by the hand. This task falls chiefly to the share of the males, for on diffection ten out of twelve proved of that fex. The males also affist in incubation; for on diffection feveral males were found fitting.

The first young are hatched the beginning of $\mathcal{J}uly$, the old ones shew vast affection towards them; and seem totally infensible of danger on the breeding feason. If a parent is taken at that time, and suspended by the wings, it will in a fort of despair

* Off the coaft of Anglefea.

treat itfelf most cruelly by biting every part it can reach; and the moment it is loosed, will never offer to escape, but instantly refort to its unfledged young: but this affection ceases at the stated time of migration, which is most punctually about the eleventh of *August*, when they leave fuch young as cannot fly, to the mercy of the *Peregrine Falcon*, who watches the mouths of the house for the appearance of the little deferted puffins which forced by hunger are compelled to leave their burrows. The Rev^d. Mr. *Hugh Davies*, of *Beaumaris*, to whom I am indebted for much of this account, informed me that on the twenty-third of *August*, fo entire was the migration, that neither Puffin, Razor-Bill, Guillemot, or Tern was to be feen there.

I muft add, that they lay only one egg, which differ much in form; fome have one end very acute; others have both extremely obtule; all are white.

Their flefh is exceffive rank, as they feed on fea weeds and fifh, efpecially Sprats: but when pickled and preferved with fpices, are admired by thofe who love high eating. Dr. Caius tells us, that in his days the church allowed them in lent, inflead of fifh: he alfo acquaints us, that they were taken by means of ferrets, as we do rabbits: at prefent they are either dug out, or drawn from their burrows by a hooked flick: they bite extremely hard, and keep fuch faft hold on whatfoever they faften, as not to be eafily difengaged. Their noife, when Vol. II. M m taken taken, is very difagreeable; being like the efforts of a dumb perfon to fpeak.

NOTE OF SEA Fowl.

The notes of all the fea birds are extremely harfh or inharmonious : we have often refted under the rocks attentive to the various founds above our heads, which, mixed with the folemn roar of the waves fwelling into and retiring from the valt caverns beneath, have produced a fine effect. The fharp voice of the fea gulls, the frequent chatter of the guillemots, the loud note of the auks, the fcream of the herons, together with the hoarfe, deep, periodical croak of the corvorants, which ferves as a bafe to the reft; has often furnished us with a concert, which, joined with the wild fcenery that furrounded us, afforded, in a high degree, that fpecies of pleafure which arifes from the novelty, and we may fay gloomy grandeur of the entertainment.

The winter refidence of this genus, and that of the guillemot, is but imperfectly known: it is probable they live at fea, in fome more temperate climate, remote from land; forming those multitudes of birds that navigators observe in many parts of the ocean: they are always found there at certain feasons, retiring only at breeding time: repairing to the northern latitudes; and during that period are found as near the *Pole* as navigators have penetrated.

During winter Razor-bills and Puffins frequent the coast of Andalusia, but do not breed there.

Rotges

- Rotges Martin's Spitzberg. 85. Little black and white Diver. Wil. orn. 343.
- Mergulus Melanoleucos roftro acuto brevi. Raii fyn. av. 125.
- Edw. av. 91.
- Uria minor, le petit Guillemot. Briffon av. VI. 73.

Alca alle. Lin. fyst. 211.

Faun. Šuec. /p. 142.
Islandis Halkioen, Havdirdell. Norvegis Soe Konge, Soeren Jakob, Perdrikker, Perfuper, Boefiær, Borrefiær, Hys Thomas. Feroenfibus Fulkop. Groenlandis Akpaliarfok. Brunnich, 106.
Gunner tab. 6.
Br. Zool. 137.

THE bird our defcription was made from was taken in *Lancafbire*; its bulk was not fuperior to that of a blackbird. The bill convex, fhort, thick, and ftrong; its color black. That of the crown of the head, the hind part of the neck, the back, and the tail black; the wings the fame color; but the tips of the leffer quil-feathers white: the inner coverts of the wings grey: the cheeks, throat, and whole under fide of the body white: the fcapular feathers black and white: the legs and feet covered with dirty greenifh white fcales; the webs black.

Mr. *Edwards* has figured a bird that varies very little from this: and has added another, which he imagines differs only in fex: in that, the head and neck are wholly black; and the inner coverts of the

M m 2

DESCRIP,

wings

517

233. LITTLE.

wings barred with a dirty white. We met with the last in the cabinet of Doctor *David Skene* at *Aberdeen*; it was shot on the coast north of *Slains* in the spring of the year.

BILL

CLASS II. FOOLISH GUILLEMOT.

BILL flender, ftrong, pointed. The upper man-XLI. GUILLEdible flightly bending towards the end. Bafe MOT. covered with foft fhort feathers. NOSTRILS lodged in a hollow near the bafe. TONGUE slender, almost the length of the bill. TOES, no back toe.

Guillem, Guillemot, Skout, Kiddaw, Sea-hen. Wil. orn. 324. Raii syn. av. 120. The Lavy. Martin's voy. St. Kilda, 32. Edw. av. 359. fig. 1. Uria, le Guillemot. Briffon av. VI. 70. Tab. 6. fig. 1. Lommia. N. Com. Petr. IV. 414.

Colymbus Troile. Lin. Syft. 234. FOOLISE 220. Faun. Suec. Sp. 149.

Islandis & Norvegis Lomvie, Langivie, Lomrifvie, Storfugl. Brunnich, 108. Sea-Taube, or Groenlandifcher Taucher. Frisch, II. 185. Br. Zool. 138.

HIS species weighs twenty-four ounces : Descrie. twenty-feven and a half: the bill is three inches long; black, ftrait, and fharp pointed : near the end of the lower mandible is a fmall process; the infide of the mouth yellow : the feathers on the upper part of the bill are fhort, and foft like velvet: from the eye to the hind part of the head is a fmall division of the feathers. The head, neck, back, wings, and tail are of a deep moufe color; the Mm₃

519

LESSER GUILLEMOT. CLASS II.

the tips of the leffer quil-feathers white: the whole under part of the body is of a pure white: the fides under the wings marked with dufky lines. Immediately above the thighs are fome long feathers that curl over them. The legs dufky.

Thefe birds are found in amazing numbers on the high cliffs on feveral of our coafts, and appear at the fame time as the auk. They are very fimple birds; for notwithftanding they are fhot at, and fee their companions killed by them, they will not quit the rock. Like the auk, they lay only one egg, which is very large; fome are of a fine pale blue, others white, fpotted, or most elegantly ftreaked with lines croffing each other in all directions. The Rev. Mr. Low of Birfa affures me, that they continue about the Orknies the whole winter.

235. LESSER. Uria Svarbag. Islandis Stutnefur, Svartbakur. Br. Zoel. 138. Ringuia. Brunnich, No. 110. Scopeli, No. 103.

DESCRIP.

THE weight is nineteen ounces: the length fixteen inches: the breadth twenty-fix. The bill two inches and a half long, fhaped like the Guillemot's, but weaker. The top of the head, the whole upper part of the body, wings and tail are of a darker color than the former : the cheeks, throat,

520

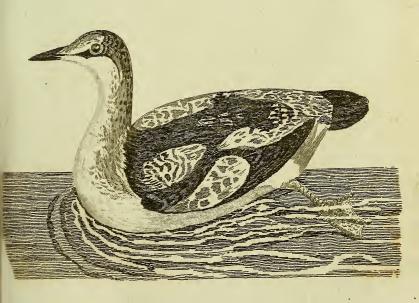
Eja G.





SPOTTED GUILLEMOT.

Nº 236.





CLASS II. BLACK GUILLEMOT.

throat, and all the lower fide of the body are white: from the corner of the eye is a dufky ftroke, pointing to the hind part of the head: the tips of the fecondary feathers white: the legs are black: the tail very fhort, and confifts of twelve feathers.

These birds frequent the *Welcb* coasts in the winter time; but that very rarely: where they breed is unknown to us; having never observed them on the rocks among the congenerous birds. These and the black-billed *Auks* haunt the *Firtb* of *Fortb* during winter in flocks innumerable, in pursuit of fprats. They are called there *Morrots*: they all retire before fpring.

Greenland-dove, or Seaturtle. Wil. orn. 326. Raii fyn. av. 121. Ray's itin. 183, 192. Feifte. Gunner. tab. 4. Turtur maritimus infulæ Bafs. Sib. bift. Fife, 46. The Scraber. Martin's voy. St. Kilda. 32. Cajour, Pynan. N. Com. Petr. IV. 418.

Uria minor nigra, le petit

Guillemot noir. Briffon av. 236. BLACK. VI. 76. Colymbus Grylle. Lin. fyft. 220. Faun. Suec. fp. 148. Iflandis Teifta. Norwegis Teifte. Groenlandis Sarpak. Brunnich, 113. Groenlandifche Taube. Frifch, II. 185. Br. Zool. 138.

THE length of this species is fourteen inches: the breadth twenty-two: the bill is an inch and a half long; strait, slender, and black: the infide of the mouth red: on each wing is a Mm 4 large

BLACK GUILLEMOT. CLASS II.

large bed of white, which in young birds is fpotted: the tips of the leffer quil-feathers, and the inner coverts of the wings, are white: except thefe, the whole plumage is black. In winter it is faid to change to white: and a variety fpotted with black and white* is not uncommon in *Scotland*. The tail confifts of twelve feathers: the legs are red.

Thefe birds are found on the Bass is is scotland; in the isle of St. Kilda; and, as Mr. Ray imagines, in the Farn islands off the coast of Northumberland; we have also feen it on the rocks of Llandidno in Caernarvonshire. Except at breeding time, it keeps always at fea; and is very difficult to be shot, diving at the staff of the pan. The Welcb call this bird Casgan Longwr, or the failor's hatred, from a notion that its appearance forebodes a storm. It visits St. Kilda's in March: makes its nest far under ground; and lays a grey egg; or, as Steller fays, whitish spotted with rust, and speckled with ash color.

* The spotted Greenland Dove of Mr. Edwards, plate 503

BILL





NORTHERN DIVER.

Nº 23

Nº 23

NORTHERN DIVER. CLASS II.

BILL ftrong, ftrait, pointed. Upper mandible DIVER. longest; edges of each bending in. NOSTRILS linear. TONGUE pointed, long, ferrated near the bafe. LEGS thin and flat. TOES, exterior the longest : back toe joined to the interior by a fmall membrane.

TAIL fhort, confifting of twenty feathers.

Clunus's. Wil. orn. 342. Raii Syn. av. 125. Mergus maximus Farrenfis, five Arcticus. Clusi exot. 102. Colymbus maximus stellatus noftras. Sib. bift. Scot. 20. Tab. 15. Le grand Plongeon tachete.

Briffon av. VI. 120. Tab. 237. NOR'TH-ERN. 11 fig. 1. Colymbus glacialis. Lin. Syft. 221. Norvegis Brufen. Groenlandis Tiulik. Brunnich, orn. 134. Groffe Halb-Ente, Meer-Noering. Frisch, II. 185. A. Br. Zool. 139.

HE length of this species is three feet five DESCRIP. inches: its breadth four feet eight: the bill to the corners of the mouth four inches long; black and firongly made. The head and neck are of a deep black : the hind part of the latter is marked with a large femilunar white band: immediately under the throat is another; both marked with black oblong ftrokes pointing down: the lower part of the neck is of a deep black, gloffed with

XLII.

with a rich purple: the whole under fide of the body is white: the fides of the breaft marked with black lines: the back, coverts of the wings, and fcapulars, are black, marked with white fpots: thofe on the fcapulars are very large, and of a fquare fhape; two at the end of each feather.

The tail is very fhort, and almost concealed by the coverts, which are dusky spotted with white: the legs are black. These birds inhabit the northern parts of this island, live chiefly at sea, and feed on fish: we do not know whether they breed with us, as they do in *Norway*; which has many birds in common with *Scotland*. In₂the last it is called *Mur-buachaill*, or the *Herdsman* of the fea, from its being fo much in that element.

\$38. IMBER.

Colymbus immer. Lin. fyft. 222. Gefner's greater Doucker. Wil. orn. 342. Raii fyn. av. 126. No. 8. Fluder. Gefner av. 140. Immer. Brunnich, No. 129.

Ember Goofe. Sibbald Scot. 21. Wallace Orkney, 16. Debes Feroe Ifles, 138. Pontoppidan, II. 80.

Le grand Plongeon. Briffon, VI. 105. Tab. X.

THIS fpecies inhabits the feas about the Orknies; but in fevere winters vifits the fouthern parts of Great Britain. It lives as much at fea as the former; fo that credulity believed that it never quitted the water, and that it hatched its young in a hole

CLASS II. SPECKLED DIVER.

a hole formed by nature under the wing for that end.

It is fuperior in fize to a goofe. The head dusky: the back, coverts of the wings, and tail clouded with lighter and darker fhades of the fame. Primaries and tail black : under fide of the neck fpotted with dufky: the breaft and belly filvery: legs black.

The fkins of the birds of this genus are uncommonly tough; and in the northern countries have been used as leather.

Greatest speckled Diver, or Loon. Wil. orn. 341. Raii Syn. av. 125. Colymbus caudatus stellatus. N. Com. Petr. IV. 424.

Le petit Plongeon. Briffon 239. SPECKav. VI. 108. Tab. 10. fig. 2. Mergus Stellatus, Danis Soe-Hane. Brunnich, 130. Br. Zool. 139.

LED.

THIS fpecies weighs two pounds and a half: its DESCRIF. L length twenty-feven inches: its breadth three feet nine. The bill three inches long, and turns a little upwards; the mandibles, when clofed at the points, do not touch at the fides. The head is of a dufky grey, marked with numerous white fpots : the hind part of the neck an uniform grey : the whole upper part of the body, and greater coverts of the wings dufky, fpeckled with white: the leffer coverts dufky, and plain. The tail confifts of about twenty black feathers; in fome tipt with white.

RED THROATED DIVER. CLASS II.

white. The cheeks and whole under fide of the body of a fine gloffy white : and the feathers, as in all this genus, which refides almost perpetually on the water, are exceffively thick, and close fet : the legs are dufky.

These birds frequent our seas, lakes and rivers in the winter. On the *Thames* they are called *fprat loons*, for they attend that fish during its continuance in the river. They are subject to vary in the disposition and form of their spots and colors: fome having their necks furrounded with a speckled ring: in some the spots are round, in others oblong.

240. RED THROATED. Edw. av. 97. Gunner. Tab. 2. f. 2. Colymbus feptentrionalis. Lin. fyl. 220. Le Plongeon a gorge rouge. Briffon av. VI. 111. Tab. II. fg. 1. Iflandis & Norvegis Loom v. Lumme, Danis Lomm. Brunnich, 132. Er. Zool. 140.

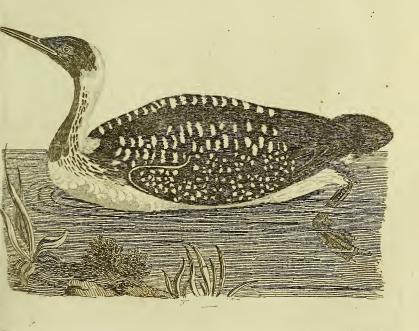
HIS fpecies breeds in the northern parts of Scotland, on the borders of the lakes: but migrates fouthward during winter. It lays two eggs. The fexes do not differ in colors; and are a diftinct kind from the black throated, the Lumme of the Norwegians. Its fhape is more elegant than that of the others. The weight is three pounds: the length, to the tail end, two feet; to that of the toes, two feet four inches: the breadth three feet

DESCRIP.

12

RED THROATED DIVER.

BLACK THROATED DIVER. Nº 241.





CLASS II. BLACK THROATED DIVER.

feet five inches. The head fmall and taper: the bill ftrait, and lefs ftrong: the fize about a fourth lefs than the preceding. The head and chin are of a fine uniform grey: the hind part of the neck marked with dufky and white lines, pointing downwards: the throat is of a dull red: the whole upper part of the body, tail and wings of a deep grey almost dufky; but the coverts of the wings, and the back, are marked with a few white fpots: the under fide of the body white: the legs dufky.

Lumme. Worm. Muf. Brunnich, No. 133. Northern Doucker. Wil. orn. 343. Raii fyn. av. 125. Colymbus arcticus. Lin. fyft. 2. 221. Faun. Suec. No. T Speckled Diver. Edw. 146.

241. BLACK THROATED.

A SPECIES fomewhat larger than the laft. Bill black: front black: hind part of the head and neck cinereous: fides of the neck marked with black and white lines pointing downwards: fore part of a gloffy variable black, purple and green.

Back, fcapulars, and coverts of wings black, marked (the two first with fquare) the last with round spots of white: quil feathers dusky: breast and belly white. Tail short and black: legs partly dusky, partly reddish.

BLACK BACKED GULL. CLASS II.

XLIII. GULL.
BILL ftrong, ftrait, bending near the end; an angular prominency on the lower mandible.
NOSTRILS linear.
TONGUE a little cloven.
BODY light, wings large.
LEG and back toe fmall, naked above knee.

242. BLACK Wil. orn. 344. BACKED. Raii fyn. av. 127. Le Goiland noir. Briffon av. VI. 158. Larus marinus. Lin. fyft. 225. Faun. Suec. fp. 155. Danis Blaae maage, Norvegis Svartbag, Havmaafe. Brunnich, 145. Br. Zool. 140.

DESCRIP.

THE weight of this fpecies is near five pounds: the length twenty-nine inches: the breadth five feet nine. The bill is very ftrong and thick, and almost four inches long; the color a pale yellow; but the lower mandible is marked with a red spot, with a black one in the middle. The irides yellow: the edges of the eye-lids orange color: the head, neck, whole under fide, tail and lower part of the back, are white: the upper part of the back, and wings, are black: the quilfeathers tipt with white: the legs of a pale flesh color.

This kind inhabits our coafts in fmall numbers; and breeds in the higheft cliffs. It feeds not only on fifh: but like the Raven, very greedily devours carrion:

CLASS II. SKUA GULL.

carrion. Its egg is very blunt at each end; of a dufky olive color, quite black at the greater end; and the reft of it thinly marked with dufky fpots.

I have feen on the coaft of Anglefea, a bird that agrees in all refpects with this except in fize, in wanting the black fpot on the bill, and in the color of the legs, which in this are of a bright yellow: the extent of wings is only four feet five: the length only twenty-two inches: the weight one pound and a half. This fpecies, or perhaps variety (for I dare not affert which) rambles far from the fea, and has been fhot at Bulftrode, in Middlefex.

Our Catarasta, I fuppofe the Cornifb Gannet. Wil. orn. 348.
Raii fyn. av. 128.
Cataractes. Sibb. Scot. tab. 14.
Sea Eagle. Sibb. bift. Fife. 46.
Le Stercoraire rayè. Brilfon av. VI. 152.
Pontopp. Norw. II. 96. Skua Hoirei. Clufii Exot. 369, 243. SKUA. 369.
Larus Cataractes. Lin. fyf. 226.
Skua. Brunnich, ornith. 33.
Feroenfibus Skue. Iflandis Skumr. Norwegis Kav-Oern. Brunnich, 125.
Brown and ferruginous Gull. Br. Zool. 140.

THE length of this fingular Gull is two feet: DESCRIF. the extent four feet and a half: the weight three pounds: the bill two inches one fourth long, very much hooked at the end, and very fharp: the upper mandible covered more than half way with with a black cere or fkin as in the hawk kind: the noftrils placed near the bend, and are pervious.

The feathers on the head, neck, back, fcapulars and coverts of the wings are of a deep brown, marked with ruft color, (brighteft in the male). The fhafts of the primaries are white: the end and exterior fide of the firft is deep brown; the ends only of the reft brown: the lower parts on both fides being white; the fecondaries marked in like manner; forming a great bar of white. The breaft, belly and vent ferruginous, tinged with afh color. The tail when fpread is circular, of a deep brown, white at the root; and with fhafts of the fame color.

The legs are covered with great black fcales: the talons black, ftrong and crooked; the interior remarkably fo.

HISTORY.

This bird inhabits Norway, the Ferroe ifles, Shetland, and the noted rock Foula, a little weft of them. It is alfo a native of the South fea. It is the moft formidable Gull, its prey being not only fifh, but what is wonderful in a web-footed bird, all the leffer fort of water fowl, fuch as teal, &c. Mr. Schroter, a Surgeon in the Ferroe ifles, relates that it likewife preys on ducks, poultry, and even young lambs*. It has all the fiercenefs of the eagle in defending its young; when the inhabitants of thofe iflands vifit the neft, it attacks them with

* Hoier in Clus. exot. 369. Brunnich, 35.

great

CLASS II. SKUA GULL.

great force, fo that they hold a knife erect over their heads, on which the *Skua* will transfix itfelf in its fall on the invaders.

The Rev. Mr. Low, minister of Birla, in Orkney, from whom an accurate hiftory of those iflands, and of Shetland may be expected, confirmed to me part of the above. On approaching the quarters of these birds, they attacked him and his company with most violent blows; and intimidated a bold dog of Mr. Low's in fuch a manner, as to drive him for protection to his mafter. The natives are often very rudely treated by them, while they are attending their fheep on the hills; and are obliged to guard their heads by holding up their flicks, on which the birds often kill themfelves. In Foula it is a priveleged bird, becaufe it defends the flocks from the eagle, which it beats and purfues with great fury; fo that even that rapacious bird feldom ventures near its quarters. The natives of Foula on this account lay a fine on any perfon who deftroys one: they deny that it ever injures their flocks or poultry, but imagine it. preys on the dung of the ArEtic, and other larger gulls, which it perfecutes till they mute for fear.

Mr. Ray and Mr. Smith * fuppofe this to be the Cornifb Gannet; but in our account of that bird we fhall fhew that it is a different fpecies. Mr. Macauly + mentions a gull that makes great ha-

* Hift. Kerry, † Hift. St. Kilda. p. 158. Vol. II. N n

voke

53X

BLACK TOED GULL. CLASS II.

voke among the eggs and fea fowl of *St. Kilda*; it is there called *Tuliac*: his defcription fuits that of the *herring Gull*; but we fufpect he confounds thefe two kinds, and has transferred the manners of this fpecies to the latter.

Linnæus involves two species in the article Larus Catarazza; this, and the arzzic bird of Mr. Edwards, birds of very different characters. M. Briffon does not seem perfectly acquainted with this bird; for the synonym of the Skua, given by him to his fifth gull (our brown and white gull) belongs to this species; and his print of the Stercoraire rayé, p. 152. tab 13. tom. VI. to which he has given the synonym of Mr. Edwards's arctic bird, feems to be the very same which we have here described.

244. BLACK TOED. Cepphus. Aldr. av. III. 38. Wil. orn. 351. Raii fyn. av. 129.

 The Cepphus. Phil. Transact. Vol. 52. 135.
 Catharacta Cepphus, Strandhoeg. Brunnich, ornith. 126.

DESCRIP.

THIS fpecies weighs eleven ounces: its length is fifteen inches: its breadth thirty-nine: the bill is one inch and a half long, the upper part covered with a brown cere: the noftrils like those of the former; the end black and crooked. The feathers of the forehead come pretty low on the bill: the head and neck are of a dirty white: the hind LXXXVI.

Nº 244.

WINTER GULL.

BLACK TOED GULL.



1 1

.

.

.

.



ARCTIC GULLS.

Mr. SM

CLASS II. ARCTIC GULL.

hind part of the latter plain, the reft marked with oblong dufky fpots.

The breaft and belly are white, croffed with numerous dufky and yellowifh lines: the feathers on the fides and the vent, are barred transverfely with black and white: the back, fcapulars, coverts of the wings and tail, are black, beautifully edged with white or pale ruft color: the fhafts and tips of the quil-feathers are white: the exterior web, and upper half of the interior web black, but the lower part of the latter white: the tail confifts of twelve black feathers tipt with white; the two middle of which, are near an inch longer than the others: the fhafts are white; and the exterior webs of the outmost feather is fpotted with ruft color. The legs are of a bluish lead color: the lower part of the toes and webs black.

A bird of this kind was taken near Oxford, and communicated to the Royal Society by Dr. Lyfons of Gloucefter.

The Struntjagger, or Dunghunter. Marten's Spitzberg 87. The Arctic Bird. Edw. av. 148. 149.

Larus Parafiticus. Lin. fyft. 245. ARCTIC 226. Swartlasse, Labben, Elof. Faun Suec. fp. 156. Brunnich, 127.

THESE birds are very common in the Hebrides. I faw numbers in Jura, Ilay and Rum, N n 2 where where they breed in the heath; if diffurbed they fly about like the lapwing, but foon alight. They are alfo found in the Orknies, where they appear in May, and retire in August. It is alfo found on the coast of Torkshire, where it is known by the name of Feaser. All writers that mention it agree, that it has the property of pursuing the lefter gulls fo long, that they mute for fear, and that it catches up and devours their excrement before they drop into the water; from which the name. Linnæus wittily calls it the Parasite, alluding to its fordid life.

DESCRIP.

MALE.

The length of this fpecies is twenty-one inches: the bill is dufky, about an inch and a half long, pretty much hooked at the end, but the ftrait part is covered with a fort of cere. The noftrils are narrow, and placed near the end, like the former. In the *male*, the crown of the head is black:' the back, wings, and tail dufky; but the lower part of the inner webs of the quil-feathers white: the hind part of the neck, and whole underfide of the body white: the tail confifts of twelve feathers, the two middlemoft near four inches longer than the others: the legs black, fmall, and fcaly.

FEMALE.

The *female* is entirely brown; but of a much paler color below than above: the feathers in the middle of the tail only two inches longer than the others. The fpecimen from which Mr. *Edwards*, toke the figure of his female *Artic* bird, had loft thofe





CLASS II. HERRING GULL.

those long feathers, fo he has omitted them in the print.

Linnæus has separated this from its mate, his Larus parasiticus, and made it a fynonym to his L. Cataractes, a bird as different from this as any other of the whole genus.

- Burgermeister Martin's Spitzberg. 84. Herring Gull. Wil. orn. 345. Larus cinereus maximus. Raii Jyn av 127. Le Goiland gris. Briffon av. VI. 162.
- Larus fuscus. Lin. Syst. 125. Faun. Suec. Sp. 154. Danis Silde-Maage. Iflandis Veydebjalla. Brunnich, 142. Groffe Staff Moeur. Frifch, II. 218. Br. Zool. 141.

246. HER-RING.

DESCRIF,

THIS gull weighs upwards of thirty ounces: the length twenty-three inches; its breadth fiftytwo. The bill yellow, and the lower mandible marked with an orange colored fpot: the irides fraw color: the edges of the eye-lids red: the head, neck, and tail white: the back, and coverts of the wings ash colored: the upper part of the five first quil-feathers are black, marked with a white fpot near their end: the legs of a pale flefh color. Thefe birds breed on the ledges of rocks that hang over the fea: they make a large neft of dead grafs, and lay three eggs of a dirty white, fpotted with black. The young are ash colored, spotted with brown; they do not come to their proper color the first year: this is common to other gulls; which has greatly multiplied

Nn3

multiplied the fpecies among authors, who are inattentive to thefe particulars. This gull is a great devourer of fifh, efpecially of that from which it takes its name: it is a conftant attendent on the nets, and fo bold as to feize its prey before the fifhermens faces.

(A.) 247. Wagel.

Great grey Gull, the Cornifh Wagel. Wil. orn. 349. Raii fyn. av. 130. Le Goiland variè, ou le Grifard. Briflon av. VI. 167. tab. 15. Larus Nævius. Lin. fyf. 225. Danis Graae-Maage. Iflandis Kablabrinkar. Brunnich, 150. Brown and White Gull. Br. Zool. II. 422.

DESCRIP.

THESE birds vary much in their fize; one we examined weighed three pounds feven ounces: the length was two feet two inches: the breadth five feet fix: others again did not weigh two pounds and a half: the irides are dufky: the bill black, and near three inches long. The whole plumage of the head and body, above and below, is a mixture of white, afh color, and brown: the laft color occupies the middle of each feather; and in fome birds is pale, in others dark : the quil-feathers black: the lower part of the tail is mottled with black and white; towards the end is a brown black bar, and the tips are white: the legs are of a dirty white.

Some have fuppofed this to be the young of the preceding

preceding fpecies, which (as well as the reft of the gull tribe) fcarce ever attains its true colors till after the first year: but it must be observed, that the first colors of the irides, of the quil-feathers, and of the tail, are in all birds permanent; thefe, as we have remarked, differ in each of these gulls fo greatly, as ever to preferve unerring notes of diftinction.

This fpecies is likewife called by fome the Dung Hunter; for the fame reason as the last is styled fo.

Winter Mew, or Coddy Moddy. Wil. orn. 350. Raii Syn. av. 130.

Gavia Hyberna, le Mouette 248. WINd'hiver. Briffon av. VI. 180. Br. Zool. 142.

TER.

DESCRIP.

THIS weighs from fourteen to feventeen ounces: the length eighteen inches; the breadth three feet nine. The irides are hazel: the bill two inches long, but the flendereft of any gull: it is black at the tip, whitish towards the base. The crown of the head, and hind part, and fides of the neck, are white, marked with oblong dufky fpots; the forehead, throat, middle of the breaft, belly, and rump, are white; the back and scapulars are of a pale grey; the last spotted with brown; the coverts of the wings are of a pale brown, edged with Nn4

COMMON GULL: CLASS II.

with white; the first quil-feather is black; the fucceeding are tipt with white: the tail is white, croffed near the end with a black bar; the legs of a dirty bluish white.

This kind frequents, during winter, the moift meadows in the inland parts of *England*, remote from the fea. The gelatinous fubftance, known by the name of *Star Shot*, or *Star Gelly*, owes its origin to this bird, or fome of the kind; being nothing but the half digefted remains of earth-worms, on which thefe birds feed, and often difcharge from their ftomachs*.

Linnaus, p. 224. makes this fpecies fynonymous with the *Larus tridaEtylus* or *Tarrock*; but as we have had opportunity of examining feveral of each fpecies, and find in all those ftrong diffinctions remarked in our defcriptions, we must decline affenting to the opinion of that eminent naturalift.

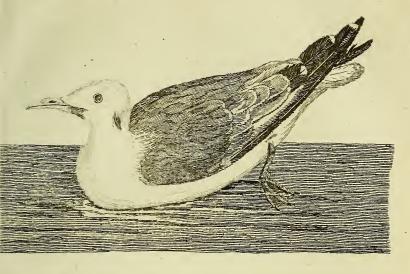
249. Com-MON. Galedor, Crocala, Galetra. Aldr. av. III: 34. Common Sea Mall. Wil. orn. 345. Common Sea Mall, or Mew. Raii fyn. av. 127. La Mouette cendrée. Briffon av. VI. 175. tab. 16. fig. 1. Gabbiano minore. Zinan. 115. Larus canus. Lin. fyft. 224. Br. Zocl. 142. Scopoli, No. 104.

HIS is the most numerous of the genus. It breeds on the ledges of the cliffs that im-

Vide Morton's Nat. Hift, Northampt. p. 353.

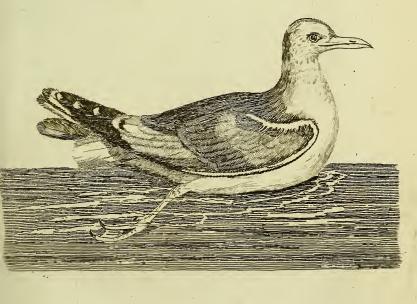
pend

KIT TIWAKE



COMMON GULL.

Nº 249.





CLASS II. KITTIWAKE.

pend over the fea: in winter they are found in vaft flocks on all our fhores. They differ a little in fize; one we examined weighed twelve ounces and a half: its length was feventeen inches: its breadth thirty-fix: the bill yellow: the head, neck, tail, and whole under fide of the body, a pure white: the back, and coverts of the wings, a pale grey: near the end of the greater quil-feathers was a black fpot: the legs a dull white, tinged with green.

Larus Riffa. Lin. fyft. 224. Ritfa Iflandis, incolis Chriftianfoe, Lille Solvet, Rotteren. Brunnich, No. 140. 250. KITTI-Kittiwake. Sibbald's bift. WAKE. Scotl. 20.

THE length of this fpecies is fourteen inches: the extent three feet two. When arrived at full age, the head, neck, belly, and tail are of a fnowy whitenefs; behind each ear is fometimes a dufky fpot: the back and wings grey: the exterior edge of the first quil-feather, and tips of the four or five next, are black: the bill yellow, tinged with green; infide of the mouth orange: legs dufky, with only a knob instead of the back toe.

It inhabits the romantic cliffs of Flamboroughbead (where it is called Petrel) the Bass Isle, the vast rocks near the Castle of Slains, in the county of Aberdeen, and Priestbolm Isle.

The young of these birds are a favorite difh in 539

DESCRIP,

TARROCK. CLASS II.

in North Britain, being ferved up roafted, a little before dinner, in order to provoke the appetite; but, from their rank tafte and fmell, feem much more likely to produce a contrary effect.

251. TAR-ROCK.

- La Mouette cendrée. Briffon Larus tridactylus. Lin. fyft. av. 169. Gavia cinerea alia. Aldr. av. Faun. Suec. 157. fp. III. 35. Wil. orn. 346. Raii fyn. av. 128. Raiz Suec. 157. fp. La Mouette cendrée tachetée. Briffon av. VI. 185. tab. 17. fg. 2. Br. Zool. 142.

DESCRIP.

HE length is fourteen inches; the breadth three feet: the weight only feven ounces. The bill is black, fhort, thick, and ftrong; the head large: the color of that, the throat, neck, and whole under fide are white: near each ear, and under the throat, is a black fpot: on the hind part of the neck is a black crefcent, the horns pointing to the throat.

The back and fcapulars are of a bluifh grey: the leffer coverts of the wings dufky, edged with grey; the larger next to them of the fame color; the reft grey: the exterior fides, and ends of the four firft quil-feathers are black: the tips of the two next black; all the reft wholly white: the ten middle feathers of the tail white, tipt with black; the two outmoft quite white: the legs of a dufky afh color.

In

CLASS II. B LACK HEAD GULL.

In lieu of the back toe, it has only a small protuberance.

This species breeds on Priestholme Isle, also among the former in Scotland. I must retract my opinion of its being the young of that species.

249. Larus cinereus tertius. Aldr. av. III. 35. Pewit, or Black Cap, Sea	 Puit. Fuller's Brit. Worthies. 318. La Mouette rieufe a pattes rouges. Briffon av. VI. 196. Gabbiano cinerizio col roftro, e col li piedi roffi. Zinan. 115. Larus ridibundus. Lin. fyft. 225. Br. Zool. 143. 	252. Blac Head.

THESE birds breed in vaft numbers in the I islands of certain pools in the county of Stafford; and, as Dr. Fuller tells us, in another on the Effex shores; also in the Fens of Lincolnshire. They are birds of paffage; refort there in the fpring; and after the breeding feafon difperfe to the fea coafts : they make their neft on the ground, with rufhes, dead grafs, and the like; and lay three eggs of a dirty olive color, marked with black. The young were formerly highly efteemed, and numbers were annually taken and fattened for the table. Plott gives a marvellous account of their attachment to the lord of the foil they inhabit; infomuch, that -

1K

on his death, they never fail to fhift their quarters for a certain time.

Whitelock, in his annals, mentions a piece of ground near Portfmouth, which produced to the owner forty pounds a year by the fale of Pewits, or this fpecies of gull. Thefe are the See-gulles that in old times were admitted to the noblemens tables*.

DESCRIP.

The notes of these gulls diftinguish them from any others; being like a hoarse laugh. Their weight is about ten ounces: their length fifteen inches; their breadth thirty-seven: their irides are of a bright hazel: the edges of the eye-lids of a fine scarlet; and on each, above and below, is a spot of white feathers. Their bills and legs are of a fanguine red: the heads and throats black or dusky: the neck, and all the under side of the body, and the tail, a pure white: back and wings as colored: tip, and exterior edge of the first quil-feather black; the rest of that feather white; the next to that tipt with black, and marked with the fame on the inner web.

A VARIETY, La Grande Mouette blanche. Wil. orn. 348. Raii Jyn. av. Belon. 170. Larus canus. Scopoli, No. 104.

> HIS was taken in a trap near my houfe, January 25th, 1772, and feemed only a varie-

> > * Vide Appendix.

CLASS II. BROWN GULL.

ty of the former. It differed in having the edges of the eye-lids covered with white foft feathers. The forepart of the head white; the fpace round the eyes dufky: from the corner of each eye is a broad dufky bar, furrounding the hind part of the head; behind that is another reaching from ear to ear: the ends, interior and exterior edges of the three firft quil-feathers black; the ends and interior fides only of the two next black, but the fhafts and middle part white; the tips of the two next white; beneath a black bar: the reft, as well as the fecondaries, afh color.

In all other refpects it refembled the common pewit gull. The fat was of a deep orange color.

The brown Tern. Wil. orn. Sterna nigra. Lin. fyft. 227. 253. BROWN. 352. Faun. Suec. fp. 159. Sterna fusca. Raii fyn. av. Br. Zool. 143. 131.

MR. Ray has left us the following obfcure account of this bird; communicated to him by Mr. Johnfon, a York/hire gentleman. "The whole "under fide is white; the upper brown: the "wings partly brown, partly ash color: the head "black: the tail not forked: these birds fly in "companies."

DESCRIP.

From

From the defcription, we fufpect this bird to be the young of the greater Tern, that had not yet attained its proper colors, nor the long feathers of the tail, which it does not acquire till mature age.

BILL



GREAT & LESSER TERNS.

Nº 254

CLASS II. GREAT TERN.

BILL ftrait, flender, pointed. NOSTRILS linear. TONGUE flender and fharp. WINGS very long. TAIL forked. TOES, a fmall back toe.

ring) Gefner av. 586. Alar. av. III. 35. The Sea Swallow. Wil. orn. 352. Raii fyn. av. 131. Sterna major, la grande Hirondelle de mer. Briffon av. VI. 203. tab. 19. fig. 1. Sterna hirundo. Lin. fyft. 227. Tarna. Faun. Succ. fp. 159.

Sterna (Stirn, Spyrer, Schnir-

The Kirmew. Marten's Spitz- 254. GREAT. berg. 92. Iflandis Kria. Norwegis Tenne, Tende, Tendelobe, Sand-Tolle, Sand-Tærrne. Danis Tærne. Bornbolmis Kirre, Krop-Kirre. Brunnich, 151. Grauer fifcher. Kram. 345. Schwartzplattige Schwalben Moewe. Frifch, II. 219. Br. Zool. 144. Makauka. Scopoli, No. 3.

HIS kind weighs four ounces, one-quarter: the length is fourteen inches; the breadth thirty: the bill and feet are of a fine crimfon; the former tipt with black, ftrait, flender, and fharppointed: the crown, and hind part of the head, black: the throat, and whole under fide of the

* A name these birds are known by in the North of England; and which we substitute instead of the old compound one of Sea Swallow; which was given them on account of their forked tails. XLIV. TERN*.

DESCRIP.

body,

body, white: the upper part, and the coverts of the wings, a fine pale grey: the tail confifts of twelve feathers; the exterior edges of the three outmoft are grey, the reft white: the exterior, on each fide, is two inches longer than the others: in flying, the bird frequently clofes them together, fo as to make them appear one flender feather.

Thefe birds frequent the fea fhores, banks of lakes and rivers: they feed on fmall fifh, and water infects; hovering over the water, and fuddenly darting into it, catch up their prey. They breed among fmall tufts of rufhes; and lay three or four eggs, of a dull olive color, fpotted with black. All the birds of this genus are very clamorous.

255. LESSER. Larus pifcator (Fifcherlin, Fel.) Ge/ner av. 587. fg. 583. Aldr. av. III. 35. Leffer Sea Swallow. Wil. orn. 353. Raii fjr. av. 131. La petite Hirondelle de mer. Briffon av. VI. 206. tab. 19. fig. 2. Larus Minuta. Lin. fy/t. 228. Hætting Tærne. Brannich, 152. Br. Zool. 144.

Descrip.

THE weight is only two ounces five grains: the length eight inches and a half; the breadth nineteen and a half. The bill is yellow, tipt with black : the forehead and cheeks white : from the eyes to the bill is a black line : the top of the head, and hind part black : the breaft, and under fide of the body cloathed with feathers fo clofely fet together.

- 6.14

CLASS II. BLACK TERN.

ther, and of fuch an exquisite rich gloss, and fo fine a white, that no fatin can be compared to it: the back and wings of a pale grey: the tail short, less forked than that of the former, and white: the legs yellow: the irides dusky.

These two species are very delicate, and seem unable to bear the inclemency of the weather on our shores * during winter: for we observe they quit their breeding places at the approach of it; and do not return till spring.

The manners, haunts, and food of this are the fame with those of the former; but these are far less numerous.

L'Epouvantail. Briffon av. 256. BLACK. Larus niger (Meyvogelin) Gef-VI. 211. tab. 20. fig. 1. ner av. 588. fig. 589. Aldr. av. III. 35. The Scare Crow. Wil. orn. Sterna fillipes. Lin. Syst. 228. Siælandis Glitter, Brunnich, 353. 153. Our black cloven-footed Gull. Kleinote Moewe. Frisch, II. Idem. 354. 220. Raii fyn. av. 131. Idem. 132. Br. Zool. 145. No. 6.

THIS is of a middle fize, between the first and DESCRIP. fecond species. The usual length is ten inches; the breadth twenty-four; the weight two ounces and a half. The head, neck, breast, and

* North Wales.

Vol. II.

00

belly,

547.

belly, as far as the vent, are black; beyond is white: the male has a white fpot under its chin: the back and wings are of a deep afh color: the tail is fhort and forked; the exterior feather on each fide is white; the others afh colored: the legs and feet of a dufky red. Mr. *Ray* calls this a clovenfooted gull; as the webs are deprefied in the middle, and form a crefcent. Thefe birds frequent frefh waters; breed on their banks, and lay three fmall eggs of a deep olive color, much fpotted with black.

They are found during fpring and fummer in vaft numbers in the Fens of *Lincoln/hire*; make an inceffant noife, and feed as well on flies as water infects and fmall fifh.

Birds of this species are seen very remote from land. *Kalm* faw flocks of hundreds in the *Atlantic* ocean, midway between *England* and *America*; and a later voyager affured me he faw one 240 leagues from the *Lizard*, in the same ocean.

BILT.

- "

.

•

STORMY PETREL.



FULMAR.

ZN: 257

BILL strait, hooked at the end, NOSTRILS cylindric, tubular. LEGS naked above the knees. BACK TOE none: inftead, a fharp SPUR pointing downwards,

Wil. orn. 395.	Lin. Syst. 213.	257. FUL
Fulmar. Martin's voy. St.	The Mallemucke. Martin's	MARP
Kilda. 30. Descr. west.		
Ifles. 283.	Hav-Heft. Gunner, tab. 1.	
Fulmer. Macauly's bift. St.	Procellaria glacialis. Brunnich	
Kilda. 145.	ornith. 118.	
Haffheft. Clusie exot. 368.	Norvegis Hav-Heft, Malle-	
Haffhest. Clusii exot. 368. Procellaria cinerea, le Pe-	moke V. Mallemuke. Brun-	
	nich, 118.	
143. tab. 12. fig. 2.	Br. Zool. 145,	
Pl. enl. 50.	17	

THIS species inhabits the isle of St. Kilda; makes its appearance there in November, and continues the whole year, except September and October; it lays a large, white, and yery brittle egg; and the young are hatched the middle of June. No bird is of fuch use to the islanders as this: the Fulmar fupplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their diftempers. The Fulmar is alfo a certain prognofficator of the change of the wind; if it comes Q 0 2 to

XLV. PETREL. to land, no weft wind is expected for fome time; and the contrary when it returns and keeps the fea.

The whole genus of Petrels have a peculiar faculty of fpouting from their bills, to a confiderable diftance, a large quantity of pure oil; which they do by way of defence, into the face of any that attempts to take them: fo that they are, for the fake of this panacea, feized by furprize; as this oil is fubfervient to the above-mentioned medical uses. Martin tells us, it has been used in London and Edinburgh with fuccefs, in Rheumatic cafes. The fize of this bird is rather fuperior to that of the common gull: the bill very ftrong, much hooked at the end, and of a yellow color. The noftrils are composed of two large tubes, lodged in one fheath : the head, neck, whole under fide of the body, and tail, are white; the back, and coverts of the wings afh colored : the quil-feathers dusky : the legs yellowish. In lieu of a back toe, it has only a fort of spur, or sharp strait nail. These birds feed on the blubber or fat of whales, &c. which, being foon convertible into oil, fupplies them conftantly with means of defence, as well as provision for their young, which they caft up into their mouths. They are likewife faid to feed on forrel, which they use to qualify the unctious diet they live on.

Frederick Martens, who had opportunity of feeing vast numbers of these birds at Spitzbergen, observes, that they are very bold, and refort after the whale fishers

DESCRIP.

fifhers in great flocks, and that when a whale is taken, will, in fpite of all endeavours, light on it and pick out large lumps of fat, even when the animal is alive. That the whales are often difcovered at fea by the multitudes of *Mallemuckes* flying; and that when one of the former are wounded, prodigious multitudes immediately follow its bloody track. He adds, that it is a most gluttonous bird, eating till it is forced to difgorge its food.

Avis Diomedea, Artenna. Aldr. av. III. 36. Manks Puffin. Wil. orn. 333. Raii fyn. av. 134. Shear water. Idem. 133. Wil. orn. 334. Patines de oviedo. Raii fyn. av. 191. Edw. av. 359.

.2.

213.
Puffinus, le Puffin. Briffon av. VI. 131. tab. 12. fig.
1. is a variety of it.
Feroenfibus Skrabe. Norvegis Skraap, Pullus. Feroenfibus Liere. Brunnich, 119.
Manks Petrel. Br. Zool. 146.

THE length of this fpecies is fifteen inches; the breadth thirty-one: the weight feventeen ounces: the bill is an inch and three-quarters long; noftrils tubular, but not very prominent: the head, and whole upper fide of the body, wings, tail, and thighs, are of a footy blacknefs; the under fide from chin to tail, and inner coverts of the wings, white: the legs weak, and compreffed fideways; dufky behind, whitifh before.

These birds are found in the Calf of Man: and

Procellaria Puffinus. Lin. fyft. 258. SHEAR-213. WATER.

Descrif.

ATER CLASS II.

as Mr. Ray fuppofes in the Scilly-ifles: they refort to the former in February; take a fhort poffeffion of the rabbet burrows, and then difappear till April: they lay one egg, white and blunt at each end; and the young are fit to be taken the beginning of August; when great numbers are killed by the perfon who farms the ifle: they are falted and barelled; and when they are boiled, are eaten with potatoes. During the day they keep at fea, fifhing; and towards evening return to their young; whom they feed, by difcharging the contents of their ftomachs into their mouths; which by that time is turned into oil: by reafon of the backward fituation of their legs they fit quite erect. They quit the isle the latter end of August, or beginning of September; and, from accounts lately received fromnavigators, we have reason to imagine, that like the form-finch, they are dispersed over the whole Atlantic ocean.

This fpecies inhabits alfo the Orkney ifles, where it makes its neft in holes on the earth near the fhelves of the rocks and headlands; it is called there the Lyre; and is much valued there, both on account of its being a food, and for its feathers. The inhabitants take and falt them in August for winter provisions, when they boil them with cabbage. They also take the old ones in March; but they are then poor, and not fo well tasted as the young: they appear first in those islands in February.

The

CLASS II. STORMY PETREL.

The Storm-finck. Clusie exot. 368. Wil. orn. 395. Small Petrel. Edw. av. 90. Borlase's Cornaval. 247. tab. 29. The Gourder. Smith's hift. Kerry. 185. Affilag. Martin's voy. St. Kilda. 34. Sib. hift. Fife. 48. Procellaria, le Petrel. Briffon

av. VI. 140. tab. 13. fig. 1. 259. STORMY Procellaria pelagica. Lin. fyft. 212. Scopoli, No. 95.

Stromwaders vogel. Faun. Suec. Sp. 143.

Norwegis Soren Peder. St. Peders Fugl, Vesten-vinds Are Sonden-vinds Fugl, Uveyr's Fugl: nonnullis, Hare. Feroenfibus Strunkvit. Brun. 117. Little Petrel. Br. Zool. 146.

HIS bird is about the bulk of the house fwallow: the length fix inches; the extent of wings thirteen. The whole bird is black, except the coverts of the tail and vent-feathers, which are white: the bill is hooked at the end: the noftrils tubular : the legs flender, and long. It has the fame faculty of fpouting oil from its bill as the other species : and Mr. Brunnich tells us, that the inhabitants of the Ferroe ifles make this bird ferve the purpofes of a candle, by drawing a wick through the mouth and rump, which being lighted, the flame is fed by the fat and oil of the body. Except in breeding time it is always at fea; and is feen all over the vaft Atlantic ocean, at the greatest diftance from land; often following the veffels in great flocks, to pick up any thing that falls from on board : for trial fake chopped ftraw has been flung

DESCRIP.

STORMY PETREL. CLASS II.

flung over, which they would ftand on with expanded wings; but were never obferved to fettle on, or fwim in the water: it prefages bad weather, and cautions the feamen of the approach of a tempeft, by collecting under the ftern of the fhips: it braves the utmost fury of the ftorm, fometimes fkimming with incredible velocity along the hollows of the waves, fometimes on the fummits: *Clufius* makes it the *Camilla* of the fea.

Vel mare per medium fluctu fuspensa tumenti Ferret iter, celeres nec tingeret æquore plantas. VIRGIL.

She fwept the feas, and as fhe fkim'd along, Her flying feet unbath'd on billows hung. DRYDEN.

Thefe birds are the Cypfelli of Pliny, which he places among the Apodes of Ariftotle; not becaufe they wanted feet, but were Kauómoda*, or had bad, or ufelefs ones; an attribute he gives to thefe fpecies, on a fuppolition they were almost always on the wing. Hardouin, a critick quite unskilled in natural history, imagines them to be martins, the Cypfelli of Aristotle +: but a little attention to the text of each of those antient naturalist, is sufficient to evince that they are very different birds; the latter very accurately describes the characters of that species of swallow: while Pliny expresses the

> * Arist. 17. † P. 1067.

very manner of life of our Petrel.

" Nidificant

CLASS 11. STORMY PETREL.

"Nidificant in fcopulis, hæ funt quæ toto mari cernuntur: nec unquam tam longo naves, tamque continuo curfu recedunt a terra, ut non circumvolitent cas Apodes." Lib. x. c. 39.

In August 1772, I found them on the rocks called Macdonald's Table, off the north end of the Isle of Skie; fo conjecture they breed there. They lurked under the loofe ftones, but betrayed themfelves by their twittering noife.

GOOSANDER. CLASS II.

XLVI. BILL flender, furnished at the end with a crooked MERGAN-SER. nail. Edges of each mandible fharply ferrated. NOSTRILS near the middle of the mandible. Small, fub-ovated.

TONGUE slender.

FEET, exterior toe longer than the middle.

260. Goos-

ner av. 134. Merganfer (Merrach) 135. Aldr. av. III. 113. Goofander. Wil. orn. 335. Dun diver, or Sparling-fowl. *ibid.* Raii fyn. av. 134. Merganfer, l'Harle. Briffon av. VI. 231. Tab. 22. Meer-rache. Kram. 343.

Mergus cirrhatus (fam.) Gef-

See-Rache. Fri/ch, II. 190, 191.
Mergus merganfer. Lin. fyft. 208.
Wrakfogel, Kjorkfogel, Ard, Skraka. Faun. Suec. fp. 135.
Pekfok. Crantz's Greenl. I. 80.
Islandis Skior, And. Danis Skallefluger. Brunnich, 92, & 93.
Br. Zcol. 147.

HESE birds frequent our rivers, and other fresh waters, especially in hard winters; they are great divers, and live on fish. They are never seen in the southern parts of *Great Britain* during summer; when they retire far north to breed; for in that season they have been shot in the *Hebrides*. They are uncommonly rank, and fcarcely eatable.

DESCRIP.

The male weighs four pounds: its length is two feet four inches; the breadth three feet two.

M. & F. GOOSANDER.



CLASS II. GOOSANDER.

The bill is three inches long, narrow, and finely toothed, or ferrated: the color of that, and the irides, is red.

The head is large, and the feathers on the hind part long and loofe : the color black, finely gloffed with green : the upper part of the neck the fame : the lower part, and under fide of the body of a fine pale yellow : the upper part of the back, and inner fcapulars are black : the lower part of the back, and the tail are afh colored : the tail confifts of eighteen feathers : the greater quilfeathers are black, the leffer white, fome of which are edged with black : the coverts at the fetting on of the wing are black ; the reft white : the legs of a deep orange color.

The *dun Diver*, or female, is lefs than the male : DUN DIVER. the head, and upper part of the neck are ferruginous; the throat white: the feathers on the hind part are long, and form a pendent creft: the back, the coverts of the wings, and the tail are of a deep afh color: the greater quil feathers are black, the leffer white: the breaft, and middle of the belly are white, tinged with yellow.

We believe that *Belon** defcribes this fex under the title of *Bieure oyfeau*, and afferts, that it builds its neft on rocks and in trees like the Corvorant.

* Belon av. 163.

MALE.

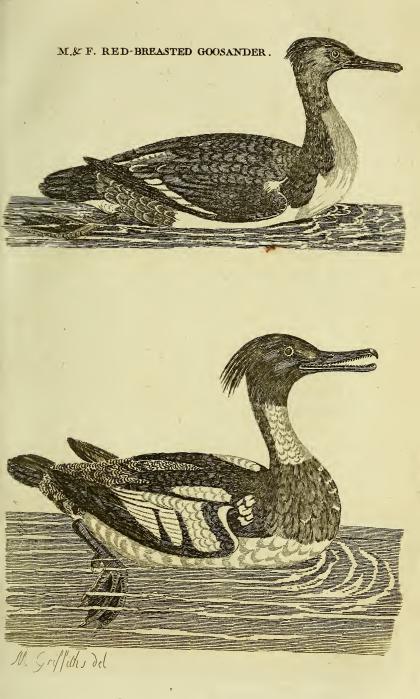
RED BREASTED MERGANSER. CLASS II.

261. RED BREASTED.

Braun kopfiger Tilger, Anas Longirostra. Gefner av. Taucher. Kram. 343. 133. Aldr. av. III. 113. The Serula. Wil. orn. 336. Mergus ferrator. Lin. Syft. Raii Syn. av. 135. 208. Leffer toothed Diver. Mor-Pracka. Faun. Suec. Sp. 136. ton's Northampt. 429 ... Danis Fifk-And. Brunnich, L' Harle hupé. Briffon av. 96. VI. 237. Br. Zool. 147.

DESCRIP.

THIS species weighs two pounds: the length is one foot nine inches; the breadth two feet feven : the bill is three inches long; the lower mandible red; the upper dufky: the irides a purplish red : head and throat a fine changeable black and green : on the first a long pendent crest of the fame color : upper part of the neck, of the breaft, and the whole belly white : lower part of the breaft ferruginous, spotted with black : upper part of the back black: near the fetting on of the wings fome white feathers, edged and tipt with black : the exterior fcapulars black; the interior white: lower part of the back, the coverts of the tail, and feathers on the fides under the wings and over the thighs grey, elegantly marked with ziczag lines of black : coverts on the ridge of the wings dufky; then fucceeds a broad bar of white: the greater coverts half black, half white : the fecondaries next the quil feathers marked in the fame manner; the reft white, edged on one fide with black : the quil feathers





CLASS II.

feathers dusky. Tail short and brown : legs orange colored.

The head and upper part of the neck of the female of a deep ruft color : the creft fhort : throat white : fore part of the neck and breaft marbled with deep ash color: belly white: great quil-feathers dufky: lower half of the nearest fecondaries black; the upper white; the reft dufky: back, fcapulars, and tail ash colored. The upper half of the first fecondary feathers white; the lower half black : the others dufky.

These birds breed in the northern parts of Great Britain; we have feen them and their young on Locb Mari in the county of Ross, and in the isle of Ilay.

La Piette. Belon av. 171. Mergus rhenanus. Gefner av. 131. Aldr av. III. 111. White Nun. Wil. orn. 337. Lough Diver. 338. Raii Syn. av. 135. Mergus albellus. Lin. Syft. 209. Faun. Suec. Sp. 137.

Le petitharle hupèou le Piette. 262. SMEW. Briffon av. VI. 243. Tab. 24. fig. 1. & 2. Kram. 344. Kreutz-Ente (Crofs-Duck) Frisch, II. 172. Cimbris Hviid Side. Brunnich, 97. Br. Zool. 148. Scopoli, No. 89.

TTS weight is thirty-four ounces: the length L eighteen inches; the breadth twenty-fix. The bill is near two inches long, and of a lead color: the

DESCRIP.

RED HEADED SMEW. CLASS II.

the head is adorned with a long creft, white above, black beneath: from a little beyond the eye to the bill, is a large oval black fpot, gloffed with green; the head, neck, and whole under fide of the body are of a pure white; on the lower part of the neck are two femilunar black lines pointing forward: the inner fcapulars, the back, the coverts on the ridge of the wing, and the greater quil-feathers are black; the middle rows of coverts are white; the next black, tipt with white; the leffer quil feathers the fame; the fcapulars next the wings white: the tail deep afh color: the legs a bluifh grey.

The female, or *lough diver*, is lefs than the male. The marks in the wings are the fame in both fexes: the back, the fcapulars, and the tail are dufky: the head, and hind part of the neck ferruginous: chin, and fore part of the neck white: the breaft clouded with grey: the belly white; the legs dufky.

263. RED HEADED. The Weefel Coot. Ald. av. I I. p. 84. Tab. 88. I Mergus minutus. Lin. fyft. 209.

Faun. Suec. fp. 138. L'Harle etoilé. Briffon av. VI. 252. Br. Zool. 148.

is

DESCRIP.

THIS bird weighs fifteen ounces: the length is one foot four inches; the breadth one foot eleven inches: the bill is of a lead color: the head

560

CLASS II, REDHEADED SMEW.

is flightly crefted, and of a ruft color: from beyond the eyes to the bill is an oval black fpot: the cheeks and throat are white: the hind part of the neck is of a deep grey; the fore part clouded with a lighter: the belly white: the back and tail are of a dufky afh color: the legs of a pale afh color: the wings have exactly the fame marks and colors with the fmew; and as the fpaces between the eyes and bill are marked with a fimilar fpot in both, if authors did not agree to make the *lough diver* the female of that bird, we fhould fuppofe this to be it.

BILL

WILD SWAN. CLASS II.

XLVII. DUCK. BILL strong, flat, or depressed, and commonly furnished at the end with a nail. Edges divided into sharp *lamella*.

NOSTRILS fmall and oval.

TONGUE broad, edges near the bafe fringed. FEET; middle toe the longeft.

264. WILD SWAN. Gefner av. 373.Schwane. Kram. 338.Wild Swan, Elk, or Hooper.Mil. orn. 356.Wil. orn. 356.194.Raii fyn. av. 136.Swan. Faun. Suec. fp. 107.Edw. av. 150.Danis Vild Svane. CimbrisLe Cygne fauvage. BrilfonSnabel-Svane. Brunnich,av. VI. 292. Tab. 28.94.Labod. Scopoli, No. 66.Br. Zool. 149. add. plates.

THE wild fwan frequents our coafts in hard winters in large flocks, but as far as we can inform ourfelves does not breed in *Great Britain*. *Martin* * acquaints us, that fwans come in OEtober in great numbers to Lingey, one of the Western Isles; and continue there till March, when they retire more northward to breed. A few continue in Mainland, one of the Orknies, and breed in the little isles of the fresh water lochs; but the multitude retires at approach of spring. On that account, swans are there the country man's almanack : on

* Defer. Weft. Ifles, 71,

their

CLASS II.

their quitting the ifland, they prefage good weather; on their arrival, they announce bad. Thefe, as well as most other water fowl, prefer for the purpose of incubation those places that are left frequented by mankind: accordingly we find that the lakes and forests of the distant *Lapland* are filled during fummer with myriads of water fowl, and there swans, geese, the duck tribe, goosanders, divers, &c. pass that feason; but in autumn return to us, and to other more hospitable shores *.

This fpecies is lefs than the tame fwan: length five feet to the end of the feet; to that of the tail four feet ten inches: extent of wing feven feet three inches: weight from thirteen to fixteen pounds. The lower part of the bill is black; the bafe of it, and the fpace between that and the eyes, is covered with a naked yellow fkin; the eyelids are bare and yellow: the whole plumage in old birds is of a pure white; the down is very foft and thick: the legs black. The cry of this kind is very loud, and may be heard at a great diffance, from which it is fometimes called the Hooper.

* Flora Lapponica, 273. Ocuvres de M. de Maupertuis. Tom. III. p. 141, 175. According to the observation of that illustrious writer, the Lapland lakes are filled with the larvæ of the Knat (culex pipiens. Lin. fyf. 602.) or fome other insect, that deposites its eggs in the water; which being an agreeable food to water fowl, is another cause of their refort to those deferts. DESCRIP.

VOL. II.

Le

TAMESWAN. CLASS II.

265. TAME SWAN. Le Cygne. Belon av. 151. Gefner av. 371. Cygno, Cilano. Aldr. av. III. 1. Wil. orn. 355. Raii fyn. av. 136. Edw. av. 150. Plott's hift. Staff. 228.

Le Cygne. Briffon av. VI. 288. Anas Cygnus manfuetus. Lin. fyft. 194. Swan. Faun. Suec. fp. 107. Schwan. Frifch, II. 152. Danis Tam Svane. Brunnich, 44. Br. Zool. 149. add. plates.

DESCRIP.

HIS is the largest of the British birds. It is diftinguished externally from the wild swan; first, by its fize, being much larger : fecondly, by the bill, which in this is red, and the tip and fides black, and the skin between the eyes and bill is of the fame color. Over the bafe of the upper mandible projects a black callous knob: the whole plumage in old birds is white; in young ones afh colored till the fecond year : the legs dufky : but Dr. Plott mentions a variety found on the Trent near Rugely, with red legs. The fwan lays feven or eight eggs, and is near two months in hatching: it feeds on water plants, infects and fhells. No bird perhaps makes fo inelegant a figure out of the water, or has the command of fuch beautiful attitudes in that element as the fwan : almost every poet has taken notice of it, but none with that justice of description, and in so picturesque a manner, as our Milton.

CLASS II. TAME SWAN.

The fwan with arched neck Between her white wings mantling, proudly rows Her flate with oary feet. Par. Loft, B. VII.

But we cannot help thinking that he had here an eye to that beautiful paffage in *Silius Italicus* on the fame fubject, though the *Englifb* poet has greatly improved on it.

Haud fecus Eridani ftagnis, ripâve Cayftri Innatat albus olor, pronoque immobile corpus Dat fluvio, et pedibus tacitas eremigat undas. Lib, XIV.

In former times it was ferved up at every great feaft, when the elegance of the table was meafured by the fize and quantity of the good cheer. Cygnets are to this day fattened at *Norwich* about *Chriftmas*, and are fold for a guinea a piece.

Swans were formerly held in fuch great effecm in England, that by an act of Edward IV. c. 6, " no one that poffeffed a freehold of lefs clear yearly value than five marks, was permitted to keep any, other than the fon of our fovereign lord the king." And by the eleventh of Henry VII. c. 17. the, punifhment for taking their eggs was imprifonment for a year and a day, and a fine at the king's will. Though at prefent they are not fo highly valued as a delicacy, yet great numbers are preferved for their beauty; we fee multitudes on the Thames and Trent, but no where greater numbers than on the falt water inlet of the fea, near Abbotfbury in Dorfetfbire.

Thefe

These birds were by the ancients confectated to Apollo and the Muses;

----- ενθα κυανος μελωδος Μουσας θεραπευει. Eurip. Iphig. in Taur. lin. 1104.

And *Callimachus*, in his hymn upon the island of *Delos*, is still more particular:

Κυκνοι δε Seou μελπούλες αοιδοι
 Μηςυιον πακτωλου εκυκλωσαντο λιποντες
 Εδδομακις πεςι Δηλον. επηεισαν δε λοχειη
 Μουσαων ορνιδες, αοιδοταται πετεηνων.
 Ενθεν ο παις τοσσαςδε λυςη ενεδησατο χοςδας
 Υςτεςον, οσσακι κυκνοι επ ωδινεσσιν αεισαν :
 Ογδοον με ετ αεισαν, ο δ'εκθορεν.

— When from *Pactolus*' golden banks *Apollo*'s tuneful fongfters, fnowy fwans Steering their flight, feven times their circling courfe Wheel round the ifland, caroling mean time Soft melody, the favourites of the Nine, Thus ufhering to birth with dulcet founds The God of harmony, and hence fev'n ftrings Hereafter to his golden lyre he gave, For ere the eighth foft concert was begun He fprung to birth. *Dod's Callimachus*, p. 115.

Upon this idea of their being peculiarly confectated to Apollo and the Muses, (the deities of harmony) feems to have been ingrafted, the notion the antients had of fwans being endowed with a musical voice. Tho' this might be one reason for the fable; yet, to us there appears another still stronger, which

CLASS II. TAME SWAN.

which arofe from the *Pythagorean* doctrine of the transmigration of the foul into the bodies of animals; from the belief, that the body of the fwan was allotted for the mansion of departed poets. Thus *Plato* makes his prophet fay, $i\partial \varepsilon_{V} \mu \varepsilon_{V} \gamma \alpha_{Q} + \nu_{V} \gamma \omega_{V}$ $\varepsilon \gamma \pi \tau n \nu \pi \sigma \tau \varepsilon O_{P} \varphi \varepsilon \omega_{S} \gamma \varepsilon \nu \rho \mu \varepsilon \nu n \nu \pi \nu \pi \sigma \tau \varepsilon$ I faw the foul of *Orpheus* prefer the life of a fwan."

After the antients had thus furnished these birds with such agreeable inmates, it is not to be doubted but they would attribute to them the same powers of harmony, that poets possessed, previous to their transmigration: but the vulgar not distinguishing between the sweetness of numbers, and that of voice, ignorantly believed that to be real, which philosophers and poets only meant metaphorically.

In time a fwan became a common trope for a Bard; *Horace* calls *Pindar Dircæum Cygnum*, and in one ode even fuppofes himfelf changed into a fwan; *Virgil* fpeaks of his poetical brethren in the fame manner,

Vare, tuum nomen

Cantantes sublime ferent ad fydera cygni. Eclog. IX.

when he fpeaks of them figuratively, he afcribes to them melody, or the power of mufick; but when he talks of them as birds, he lays afide fiction, and like a true naturalift gives them their real note,

Dant fonitum rauci per stagna loquacia cygni. Æneid. Lib. X. I.

* De Republ. Lib. X. fub fine. Pp 3 Thus Thus he, as well as *Pliny**, in fact, gave no credit to the mufick of fwans. *Ariftotle* fpeaks of it only by hearfay +, but, when once an error is ftarted, it is not furprizing that it is adopted, efpecially by poets, geniufes of all others of the moft unbounded imaginations. For this reafon poets were faid to animate fwans, from the notion that they flew higher than any other birds, and *Hefiod* diftinguishes them by the epithet of *murrou aspointotan*‡, "the lofty flying fwans"; Thus *Horace*, whilf he humbly compares himfelf to a bee, contenting itfelf with the creeping thyme, fends his *Dirc.eum Cygnum* into the clouds

Multa Dircæum levat aura cygnum, Tendit, Antoni, quoties in altos Nubium tractus. Ode. II. Lib. 4.

but when he finds himfelf ftruck with a true poetical fpirit, he at once assumes the form of this favourite bird,

Non ufitata nec tenui feror Penna, biformis per liquidum æthera Vates: — et album mutor in alitem. Ode. XX. Lib. 2.

And doubtless he was on the wing in his first ode,

Sublimi feriam fydera vertice.

* Lib. X. c. 33. † Hift. an. 1045. ‡ Scut. Herc. l. 316.

Besides

CLASS II. TAMESWAN.

Befides these opinions, the antients held another ftill more fingular, imagining that the swan foretold its own end: to explain this we must confider the twofold character of the poet, *Vates* and *Poeta*, which the fable of the transmigration continue to the bird, or they might be supposed to derive that faculty from *Apollo* * their patron deity, the god of prophecy and divination.

As to their being fuppofed to fing more fweetly at the approach of death, the caufe is beautifully explained by *Plato*, who attributes that unufual melody, to the fame fort of *Ecftafy* that good men are fometimes faid to enjoy at that awful hour, forefeeing the joys that are preparing for them on putting off mortality, Maxilikai TE EIGI, Hai TROGIDATES TA EV Ads ayada, adsoi TE, Hai TEPTOVTAI ENEIDNY THY HIEPAN diapepovTus n, EV TW TGOTDEV XGOVW \ddagger . "They become prophetic, and forefeeing the happinefs which they fhall enjoy in another flate, are in greater ecftafy than they have before experienced".

This notion, tho' accounted for by *Plato*, feems to have been a popular one long before his time, for *Æfchylus* alludes to it in his *Agamemnon*; *Clytemnestra* fpeaking of *Cassandra*, fays,

> — η δε τοι, κυκνε δίκην, Τον υτατον μελ-μασα θανασιμου γοον, Κειται.

----- She like the fwan Expiring, dies in melody.

* Platonis Phædo. Ed. Cantab. 1683. p. 124. † Ibid.

Grey

GREY LAG GOOSE. CLASS II.

266. GREY Grey Lag, the Fen-Goofe of Raii fyn. av. 136. LAG. Lifter. Ph. Tranf. abr. II. Gofs (the tame). Scopoli, No. 852. 69.

DESCRIP.

HIS is our largeft fpecies; the heavieft weigh ten pounds: the length is two feet nine; the extent five feet.

The bill is large and elevated; of a flefh color, tinged with yellow: the nail white: the head and neck cinercous, mixed with ochraceous yellow: the the hind part of the neck very pale; and at the bafe of a yellowifh brown.

Breaft and belly whitifh, clouded with grey or afh color: back grey: leffer coverts of the wings almoft white; the middle row, deep cinereous flightly edged with white: the primaries grey, tipt with black, and edged with white: fecondaries entirely black; grey only at their bafe: the fcapulars of a deep afh color, edged with white.

The coverts of the tail, and the vent feathers of a pure white: the middle feathers of the tail dufky, tipt with white; the exterior feathers almost wholly white. The legs of a flesh color.

HISTORY.

This fpecies refides in the fens the whole year: breeds there, and hatches about eight or nine young which are often taken, eafily made tame, and effected most excellent meat, fuperior to the

do-

570

CLASS II. GREY LAG GOOSE.

domeftic goofe. The old geefe which are fhot, are plucked and fold in the market as fine tame ones; and readily bought, the purchafer being deceived by the fize, but their flefh is coarfe. Towards winter they collect in great flocks, but in all feafons live and feed in the fens.

The Grey Lag is the origin of the domestic goofe; it is the only species that the Britons could take young, and familiarize: the other two never breed here, and migrate during summer. The mallard comes within the same description, and is the species to which we owe our tame breed of ducks: both preferve some of the marks of their wild state; the goose the whiteness of the coverts of the tail and vent-feathers; the drake its curled feathers. The goose in other colors sports less in the tame kind than the other.

Tame geefe are of vast longevity. Mr. Willugh- TAME GOOSE by gives an example of one that attained eighty years.

Tame geefe are keep in vaft multitudes in the fens of *Lincolnfbire*; a fingle perfon will keep a thousand old geefe, each of which will rear feven; fo that towards the end of the feason he will become master of eight thousand. I beg leave to repeat here part of the history of their œconomy from my tour in *Scotland*, in order to complete my account.

During the breeding feafon thefe birds are lodged in the fame houfes with the inhabitants, and even

GREY LAG GOOSE. CLASS II.

even in their very bed-chambers: in every apartment are three rows of coarfe wicker pens, placed one above another; each bird has its feparate lodge divided from the other, which it keeps poffeffion of during the time of fitting. A perfon, called a *Gozzard*, i. e. *Goofe-herd*, attends the flock, and twice a day drives the whole to water; then brings them back to their habitations, helping thofe that live in the upper flories to their nefts, without ever mifplacing a fingle bird.

FEATHERS.

The geefe are plucked five times in the year: the firft plucking is at Lady-Day, for feathers and quils, and the fame is renewed, for feathers only, four times more between that and Michgelmas. The old geefe fubmit quietly to the operation, but the young ones are very noify and unruly. I once faw this performed, and obferved, that goflins of fix weeks old were not fpared; for their tails were plucked, as I was told, to habituate them early to what they were to come to. If the feafon proves cold, numbers of the geefe die by this barbarous cuftom. At the time, about ten pluckers are employed, each with a coarfe apron up to his chin.

Vaft numbers of geefe are driven annually to London to fupply the markets, among them all the fuperannuated geefe and ganders (called here Cagmags) which, by a long courfe of plucking, prove uncommonly tough and dry.

The feathers are a confiderable article of commerce; merce; those from *Somerfetsbire* are esteemed the best; and those from *Ireland* the worst.

It will not here be foreign to the fubject to give fome account of the feathers that other birds and other countries fupply our *Island* with, which was communicated to us by an intelligent perfon in the feather trade.

Eider down is imported from *Denmark*, the ducks that fupply it being inhabitants of *Hudfon's-Bay*, *Greenland*, *Iceland* and *Norway*; our own iflands weft of *Scotland* breed numbers of thefe birds, and might turn out a profitable branch of trade to the poor inhabitants. *Hudfon's-Bay* alfo furnifhes a very fine feather, fuppofed to be of the goofe kind.

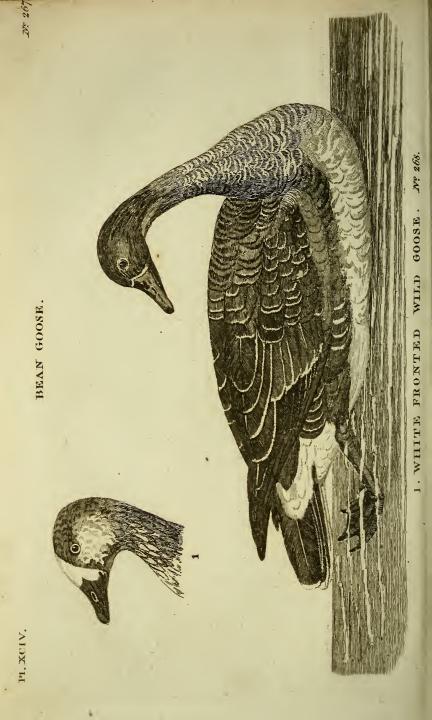
The down of the fwan is brought from Dantzick. The fame place alfo fends us great quantity of the feathers of the cock and hen. The London poulterers fell a great quantity of the feathers of those birds, and of ducks and turkies; those of ducks being a weaker feather, are inferior to those of the goose; turkey's feathers are the worst of any.

The beft method of curing feathers is to lay them in a room in an exposure to the fun, and when dried to put them in bags, and beat them well with poles to get the dirt off.

We have often been furprized that no experiments had been made on the feathers of the Auk tribe, as fuch numbers refort to our rocks annually, ally, and promife, from the appearance of their plumage, to furnish a warm and foft feather; but we have lately been informed, that fome unfuccefsful trials have been made at Glafgow: a gentleman who had made a voyage to the western isles, and brought fome of the feathers home with a laudable defign of promoting the trade of our own country, attempted to render them fit for use, first by baking, then by boiling them; but their ftench was fo offenfive, that the Glafgow people could not be prevaled on to leave off their correspondence with Dantzick. The difagreeable fmell of these feathers must be owing to the quantity of oil that all water fowls use from the glandules of their rump to preferve and fmooth their feathers; and as fea birds must expend more of this unction than other water fowl, being almost perpetually on that element, and as their food is entirely fifh, that oil muft receive a great rankness, and communicate it to the plumage, fo as to render it abfolutely unfit for ule.

L'Oye





- L'Oye privée, L'Oye Sauvage. Belon av 156. 158. Gefner av. 142. 158. Aldr av. III. 42. 67. Phil. Tr. 11. 852.
- Tame Goose, common wild Goofe. Wil. orn. 358. Sp. 1, 2.
- Raii syn. av. 136. sp. 3, 4. L'Oye domestique, L'Oye
- Sauvage. Brifon av. VI. 262, 265, Oca domestica, Salvatica,
 - Baletta. Zinan. 104.

Gus dikaya. Rufs. N. Com. Petr. IV. 418. Wild ganfs, Einheimifche ganfs. Kram. 338. Frifch, II. 155, 157. Anas anfer mansuetus-ferus. Lin. Syft. 197. Gas-will gas. Faun. Suec. /p. 114. Crantz's Greenl. I. 80. Danis Tam Gaas. Brunnich. 55.

Br. Zool. 150.

THE length of this species is two feet seven inches: the extent four set seven: the weight fix pounds and a half. The bill which is the chief specific diffinction between this and the former is small, much compressed near the end, whitifh and fometimes pale red in the middle; and black at the bafe and nail: head and neck are cinereous brown, tinged with ferruginous :, breaft and belly dirty white, clouded with cinereous: fides and scapulars dark ash color, edged with white: the back of a plain ash color: coverts of the tail white: leffer coverts of the wings light grey, nearly white; the middle deeper tipt with white: primaries and fecondaries grey, tipt with black: feet and legs faffron color: claws black.

This species arrives in Lincolnshire in autumn, HISTORY.

DESCRIP.

575

267. BEAN-

GOOSE.

and

and is called there the *bean goofe*, from the likenefs of the nail of the bill to a horfe bean. They always light on corn fields, and feed much on the green wheat.

They never breed in the fens; but all difappear in May. They retreat to the fequeftred wilds of the north of Europe: in their migration they fly a great height, cackling as they go. They preferve a great regularity in their motions, fometimes forming a ftrait line, at others affume the fhape of a wedge, which facilitates their progrefs; for they cut the air the readier in that form than if they flew pellmell.

263. WHITE FRONTED.

The laughing Goofe. Edw. av. 153. I Anas erythropus (fam.). I Lin. fyft. 197. Fiællgas, Faun. Suec. fp. 116. L'Oye fauvage du nord.

Briffon av. VI. 269. Polnifche Ganfs. Kram. 339. Danis Vild Gaas. Brunnich, 53. Br. Zool. 150.

DESCRIP.

THE weight of this kind is about five pounds and a half: the length two feet four: the extent four feet fix: the bill elevated, of a pale yellow color, with a white nail. The forehead white: head and neck of the fame color with those of the former: the coverts of the wing; the primaries and fecondaries darker: in the tail the ash color predominates: it is like the two preceding, furrounded rounded with a white ring. The breaft and belly of a dirty white, marked with great fpots of black : the legs yellow: the nails whitifh.

These visit the fens and other parts of England HISTORY. during winter, in fmall flocks: they keep always in marshy places, and never frequent the corn lands. They difappear in the earlieft fpring, and none are feen after the middle of March. Linnaus makes this goofe the female of the Bernacle; but we think his opinion not well founded.

Doctor Lifter adds two other species to the lift of English geefe; one he calls the great Black Goofe or Whilk; the other the fmall Spanish Goose, which he fays is of the fame color with the common goofe; but is no larger than the Brent; but each fpecies has hitherto eluded our most diligent enquiry.

I must conclude this fubject with observing that the goofe was one of the forbidden foods of the Britons in the time of Cafar.

L'Oye nonnette ou Cravant.	La Bernache. Briffon av. VI.	269. BER-
Belon av. 158.	300.	NACLE.
Brenta, vel Bernicla. Gesner	Anas Erythropus (mas), Lin.	
av. 109. 110.	Syft. 197.	
Aldr. av. III. 73. Phil. Tr.	Fiællgas. Faun. Suec. Sp. 116.	
	Schottische Gans. Frisch, II.	
Bernacle, or Clakis. Wil. orn.	189.	
	Anser brendinus. Caii opusc.	
Sibb. hift. Scot. 21.	87.	
Gerard's Herbal. 1587.	Crantz's Greenl. I. 80.	
	Br. Zool. 150.	

HIS bird weighs about five pounds; the DESCRIP. L length is two feet one inch; the breadth four

577

feet

feet five inches; the bill is black, and only one inch three-eights long; the head is finall; the forehead and cheeks white; from the bill to the eyes is a black line; the hind part of the head, the whole neck, and upper part of the breaft and back are of a deep black; the whole underfide of the body, and coverts of the tail are white; the back, fcapulars and coverts of the wings, are beautifully barred with grey, black, and white; the tail is black, the legs of the fame color, and fmall.

Thefe birds appear in vaft flocks during winter, on the north weft coafts of this kingdom : are very fly and wild; but on being taken, grow as familiar as our tame geefe in a few days; in *Febru*ary they quit our flores, and retire as far as *Lapland*, *Greenland* and even *Spitzbergen* to breed *.

They live to a great age: the Rev, Doctor Buckworth of Spalding had one which was kept in the family above two and thirty years; but was blind during the two laft: what its age was when first taken was unknown.

These are the birds that about two hundred years ago were believed to be generated out of wood, or rather a species of shell that is often found sticking to the bottoms of ships, or fragments of them; and were called *Tree-geese*+. These were also

* Aman Acad. VI. 585. Barent's voy. 19.

 \dagger The fhell here meant is the lepas anatifera. Lin. fyft. 668. Argenville Conch. tab. 7. the animal that inhabits it is furnished with a feathered beard; which, in a credulous age, was believed to be part of the young bird.

thought

CLASS II. BRENT GOOSE.

thought by fome writers to have been the Chenalopeces of Pliny : they fhould have faid Chenerotes ; for those were the birds that naturalist faid were found in Britain; but as he has fcarce left us any defcription of them; it is difficult to fay which fpecies he intended. I fhould imagine it to be the following; the Brent-goole, which is far inferior in fize to the wild goofe, and very delicate food *: in both respects fuiting his account of the Cheneros.

Les Canes de Mer. Belon av. 166. Aldr. av. III. 73. Wil. orn. 360. Raii Syn. av. 137. Bernacle. Nat. hift. Ireland. 192. Brenta, le Cravant. Briffon av. VI. 304. tab. 31. Anas Bernicla. Lin. Syft. 198. Belgis Rotgans, Calmarienfibus 270. BRENT. Prutgas. Faun. Suec. Sp. 115. Cimbris Ray-v Rad-Gaas. Norvegis Raat-v. Raatne-Gaas. item Goul-v. Gagl. Brnnnich, 52. Baum-Gans. Frisch, II. 156. Br. Zool. 151. Branta Bernicla. Scopoli, No. 84.

HIS is inferior in fize to the former: the bill DESCRIP. is one inch and an half long; the color of that, the head, neck, and upper part of the breaft is black; on each fide the flendereft part of the neck is a white fpot; the lower part of the breaft, the scapulars, and coverts of the wings are ash colored, clouded with a deeper shade; the feathers

* Anferini generis funt Chenalopeces : et quibus lautiores epulas non novit Britannia Chenerctes, fere ansere minores. Lib. x. c. 22.

VOL. II.



above

BRENT GOOSE. CLASS II.

above and below the tail are white; the tail and quil-feathers black; the legs black.

These birds frequent our coasts in the winter: in Ireland they are called Bernacles, and appear in great quantities in August, and leave it in March. They feed on a fort of long grafs growing in the water; preferring the root and fome part above it, which they dive for, bite off and leave the upper part to drive on fhore. They abound near Londonderry, Belfast, and Wexford; and are taken in flight time in nets placed a-crofs the rivers; and are much efteemed for their delicacy. The Rat or Roadgoofe, of Mr. Willughby*, agrees in fo many respects with this kind, that we fuspect it only to be a young bird not come to full feathers: the only difference confifting in the feathers next the bill, and on the throat and breaft being brown. We have the greater reafon to imagine it to be fo as Mr. Brunnich informs us that the Danifb and Norvegian names for this bird are Radgaas and Raatgaas, which agree with those given it by Mr. Willugbby. Mr. Willugbby, Mr. Ray, and M. Briffon very pro_ perly defcribe the Bernacle and Brent as different fpecies, but Linnaus makes thefe fynonymous, and defcribes the true Bernacle as the female of the white fronted wild goofe. Vide Faun. Suec. 116.

Page 361.

Wormius's





Anas molliffima. Lin. Syft. 271. EIDER. Wormius's Eider, or foft feathered Duck, the Cuthbert 198. Ada, Eider, Gudunge, Æra. Duck. Wil. orn. 362. Faun. Suec. Sp. 117. Raii Syn. av. 141. Great black and white Duck. Pontop. bift. Norway. II. 70. Hor. hift. Icel. 65. Debes Feroe Edw. av. 98. Eider anas. Sib. Scot. 21. 137. Egede's bift. Greenland. 92. The Colk. Martin's description of the western isles. 25. Anser lanuginosus, l'Oye a Mittek. Crantz's Greenl. I. 81. Edder. Brunnich, 57. 66. Monogr. tab. 1. 2. duvet. Briffon av. VI. 294. tab. 29. et 30. Duntur Goofe. Sib. Scot. 21.

HIS useful species is found in the western is of Scotland, particularly on Oransa, Barra, Rona, and Heisker, and on the Farn isles; but in greater numbers in Norway, Iceland, and Greenland: from whence a vaft quantity of the down, known by the name of Eider or Edder, which thefe birds furnish, is annually imported: its remarkably light, elactic, and warm qualities, make it highly efteemed as a ftuffing for coverlets, by fuch whom age or infirmities render unable to fupport the weight of common blankets. This down is produced from the breaft of the bird in the breeding feafon. It lays its eggs among the ftones or plants, near the fhore: and prepares a foft bed for them, by plucking the down from its own breaft; the natives watch the opportunity, and take away both eggs and neft: the duck lays again, and repeats the plucking of its breaft; if she is robbed Qq2 after

581

after that, fhe will ftill lay; but the drakes muft fupply the down, as her ftock is now exhausted; but if her eggs are taken a third time, she wholly deferts the place.

When I vifited the Farn ifles*, I found the ducks fitting, and toke fome of the nefts, the bafe of which were formed of fea plants, and covered with the down. After feparating it carefully from the plants, it weighed only three quarters of an ounce, yet was fo elaftic as to fill a larger fpace than the crown of the greateft hat. Thefe birds are not numerous on the ifles; and it was obferved that the drakes kept on thofe moft remote from the fitting places. The ducks continue on their nefts till you come almost close to them, and when they rife are very flow fliers. The number of eggsin each neft were from three to five, warmly bedded in the down; of a pale olive color, and very large, gloffy and fmooth.

DESCRIP.

582

This kind is double the fize of the common duck: its bill is black; the feathers of the forehead and cheeks advance far into the bafe, fo as to form two very fharp angles: the forehead is of a full velvet black: from the bill to the hind part of the head is a broad black bar, paffing acrofs the eyes on each fide: on the hind part of the neck, just beneath the ends of these bars, is a broad pea-green mark, that looks like a ftain :

* July 15th. 1769.

the



M.&F. VELVET DUCK.

Nº 272

VELVET DUCK. CLASS II.

the crown of the head, the cheeks, the neck, back, fcapulars and coverts of the wings are white; the lower part of the breaft, the belly, tail, and quil feathers are black; the legs are green.

The female is of a reddifh brown, barred tranf- FEMALE. verfely with black; but the head and upper part of the neck are marked with dufky ftreaks pointing downward; the primary feathers are black; the greater or laft row of coverts of the wings, and the leffer row of guil feathers tipt with white : the tail is dufky; the belly of a deep brown, marked obfcurely with black. One I weighed was three pounds and a half.

Anas nigra, roftro nigro rubro et luteo. Aldr. av. III. 97. The black Duck. Wil. orn. 363. Raii Syn. av. 141. Dale's hift. Harwich, 405. Turpan. N. Com. Petr. IV. 420. La grande Macreuse. Briffon av. VI. 423. Anas fusca. Lin. Syft. 190.

Faun. Suec. Jp. 109. Gunner. Tab. V. Incolis Christiansoe Sværte. Norvegis Soe-Orre, Hav-Orre v. Sav-Orre, quibufdam Sorte. Brunnich, 48. Nordische schwartze Ente. Frisch, II. 165. Supl. Br. Zool. 152. Scopoli, No. 68.

HE male of this fpecies is larger than the tame duck. The bill is broad and fhort, yellow on the fides, black in the middle, and the hook red: the head, and part of the neck is black tinged with green : behind each ear is a white fpot;

Qq3

272. VELVET.

DESCRIP.

583

SCOTER. CLASS II.

fpot; and in each wing is a white feather; all the reft of the plumage is of a fine black, and of the foft and delicate appearance of velvet: the legs and feet are red; the webs black. The female is entirely of a deep brown color; the marks behind each ear and on the wings excepted: the bill is of the fame colors with that of the male; but wants the protuberance at the bafe of it, which *Linnæus* gives the male *.

273. SCOTER. Black Diver, or Scoter. Wil. orn. 366. Raii fyn. av. 141. La Macreufe. Briffon av. VI. 420. Tab. 38. fig. 2. Anas nigra. Lin. fyf. 196. Faun Suec. fp. 110. Br. Zool. 153. Dale's hift. Harwich, 405.

DESCRIP.

HIS fpecies weighs two pounds nine ounces : the length is twenty-two inches; the breadth thirty-four: the middle of the bill is of a fine yellow, the reft is black : both male and female want the hook at the end; but on the bafe of the bill of the former is a large knob, divided by a fiffure in the middle. The tail confifts of fixteen fharp pointed feathers, of which the middle are the longeft. The color of the whole plumage is black, that of the head and neck gloffed over with purple: the legs are black.

* Faun. Suec. last edit. 39.

This

CLASS II. TUFTED DUCK.

This bird is allowed in the *Romifb church* to be eaten in *Lent*, and is the *macreufe* of the *French*. It is a great diver, faid to live almost constantly at fea, and to be taken in nets placed under water.

Un petit Plongeon espece de Canard. Belon av. 175. Strauss endt. Gesner av. 107. Querquedula Cristata. Aldr. av. III. 91. Wil. orn. 365. Raii syn. av. 142. Le petit Morillon. Brisson av. VI. 411. Tab. 27. fig. 1. Kram. 341. 274. TUFTED Anas fuligula. Lin. fyft. 207. Wigge. Faun. Suec. fp. 132. Norvegis Trol-And. Brunnich, 90. Reiger-Ente, Strauß - Ente. Frisch, II. 171. Br. Zool. 153. Scopoli, No. 78.

HIS fcarcely weighs two pounds: the length is fifteen inches and a half: the bill is broad, of a bluifh grey, the hook black: the *irides* of a fine yellow. The head is adorned with a thick, but fhort pendent creft. The belly, and under coverts of the wings are of a pure white : the quil feathers dufky on their exterior fides and ends; part of their interior webs white; the fecondaries white tipt with black. The reft of the plumage is black, varied about the head with purple: the tail is very fhort, and confifts of fourteen feathers: the legs of a bluifh grey; the webs black. The female wants the creft.

When young, this fex is of a deep brown; and the fides of the head next the bill of a pale yel-

Qq4

DESCRIF.

low:

SCAUP DUCK. CLASS II.

low: but it preferves the other marks of the old duck. In this flate it has been defcribed in the Ornith. boreal. 91, under the title of anas latiroftra.

275. SCAUP.

586

Bollenten. Gefner av. 120.fon av. VI. 416.Scaup Duck. Wil. orn. 365.Danis Polik Edelmand. Brun-
nich, 50, 51.Anas marila Lin. fyft. 196.Schwartze wilde Ente. Frifch,
II. 193.Le petit Morillon rayè. Brif-Br. Zool. 153. add. plates.

DESCRIP. THIS we defcribed from fome fluft fkins very well preferved *. It feemed lefs than the common duck. The bill was broad, flat, and of a greyifh blue color : the head and neck black gloffed with green : the breaft black : the back, the coverts of the wings, and the fcapulars finely marked with numerous narrow transverfe bars of black and grey : the greater quil feathers are dufky : the leffer white, tipt with black : the belly is white : the tail and feathers, both above and below, are black ; the thighs barred with dufky and white ftrokes : the legs dufky.

> Mr. *Willughby* acquaints us, that these birds take their name from feeding on *fcaup*, or broken shell sist. they differ infinitely in colors; fo

> * When this happens, we have recourfe to Mr. *Willugbby* for the weight and meafurements, whenever he hath noted them.

that

CLASS II. GOLDEN EYE.

that in a flock of forty or fifty there are not two alike.

Clangula. Gefner av. 119. Aldr. av. III. 94. Wil. orn. 363. Raii fyn. av. 142. Le Garrot. Briffon av. VI. 416. Tab. 37. fg. 2. Schwartzkopfige Enten-Taucher. Frifch, II. 183, 184. Eifs Ente. Kram. 341. Anas clangula. Lin. fyft. 201. Knippa, Dopping. Faun. Suec. 276. GOLDEN fp. 122. EYE. Norvegis Ring-Oye, Hviin-And v. Quiin-And, Lund-And. Incolis Christiansfoe, Bruus-Kop v. Blanke-Kniv.

Br. 70, 71. Br. Zool. 154. add. plates. Scopoli, No. 71.

THIS fpecies weighs two pounds: the length is nineteen inches; the breadth thirty-one. The bill is black, fhort, and broad at the bafe: the head is large, of a deep black gloffed with green: at each corner of the mouth is a large white fpot; for which reafon the *Italians* call it *Quatt'occbii*, or four eyes: the *irides* are of a bright yellow: the upper part of the neck is of the fame color with that of the head: the breaft and whole under fide of the body are white.

The fcapulars black and white: the back, tail, and the coverts on the ridge of the wings, black: the fourteen first quil feathers, and the four last are black; the feven middlemost white, as are the coverts immediately above them: the legs of an orange color, Descrip. Male.

The

587

MORILLON. CLASS II.

FEMALE.

The head of the female * is of a deep brown, tinged with red: the neck grey: breaft and belly white: coverts and fcapulars dufky and afh colored: middle quil feathers white; the others, together with the tail, black: the legs dufky. Thefe birds frequent frefh water, as well as the fea; being found on the *Sbropfbire* meres during winter.

277. MORIL- Le Morillon. Eelon, 165. Wil. 201. Scopoli, No. 72. LON. orn. 368. Raii fyn. av. 144. Grey headed Duck. Br. Zool. Anas glaucion? Lin. fyf. Ed. 2d. II. 471.

> THIS fpecies is rather lefs than the laft. The bill of a yellowifh brown: the *irides* gold color: the head of a dufky ruft color: round the upper part of the neck is a collar of white; beneath that a broader of grey. The back and coverts dufky, with a few white lines: the greater coverts dufky, with a few great fpots of white: the primaries black: the fecondaries white. Breaft and belly white: tail dufky: the fides above the thighs black: the legs yellow.

> This was bought in the London market. I am doubtfull of the fex. Confult Briffon, VI. 406. tab. XXXVI.

* The fmaller red headed Duck. Wil. orn. 369. Raii fyn. av. 143.

Mr.

CLASS II. SHIELDRAKE.

Mr. Cockfield, of Stratford in Effex, favored me with an account of two birds of this fpecies, fhot near the fame time. Both agreed in colors; but one weighed twenty-fix ounces, the other only nineteen.

La Tadorne. Belon av. 172. Anas maritima. Gefner av. 803, 804. Vulpanfer Tadorne. Aldr. av. III. 71, 97. Shieldrake, or burrough Duck. Wil. orn. 363. Raii fyn. av. 140. Anas tadorna. Lin. fyft. 195. Jugas. Faun. Suec. fp. 113. La Tadorne. Briffon av. VI. 344. tab. 33. fig. 2. Pl. enl. 53. Bergander Turneri. Chenalopex Plinii.

Danis Brand-Gaas, Grav-Gaas. Norwegis Ring-Gaas, Fager-Gaas, Ur Gaas, Rodbelte. Fercenfibus Hav-Simmer. Iflandis Avekong. Br. 47. Kracht-Ente Frich II 166. 278. Shieldrake.

Descrir.

THE male of this elegant fpecies weighs two pounds ten ounces: the length is two feet; the breadth three and a half. The bill is of a bright red, and at the bafe fwells into a knob, which is most confpicuous in the fpring: the head and upper part of the neck is of a fine blackifh green; the lower part of the neck white: the breaft, and upper part of the back is furrounded with a broad band of bright orange bay: the coverts of the wings, and the middle of the back are white; the nearest fcapulars black, the others white; the greater quil feathers are black; the exterior webs

Kracht-Ente. Frisch, II. 166. Br. Zool. 154.

SHIELDRAKE. CLASS II.

webs of the next are a fine green, and those of the three fucceeding orange; the coverts of the tail are white; the tail itself of the fame color, and except the two outmost feathers tipt with black; the belly white, divided lengthways by a black line; the legs of a pale flesh color.

590

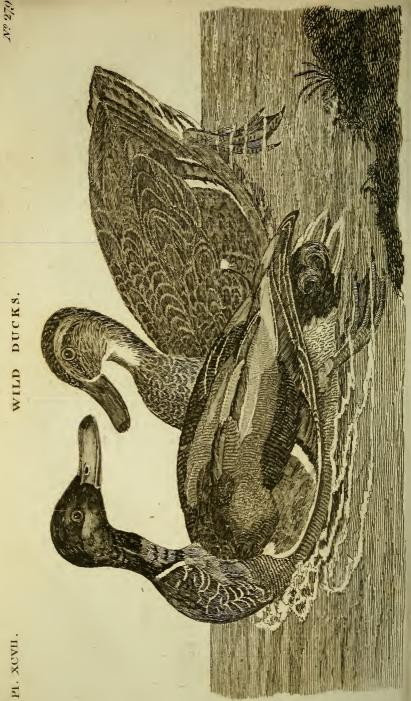
Thefe birds inhabit the fea coafts, and breed in rabbet holes. When a perfon attempts to take their young, the old birds fhew great addrefs in diverting his attention from the brood; they will fly along the ground as if wounded, till the former are got into a place of fecurity, and then return and collect them together. From this inftinctive cunning, *Turner*, with good reafon, imagines them to be the *chenalopex**, or *fox-goofe* of the antients: the natives of the *Orknies* to this day call them the *flygoofe*, from an attribute of that quadruped. They lay fifteen or fixteen eggs, white, and of a roundifh fhape. In winter they collect in great flocks, Their flefh is very rank and bad.

* Plinii, Lib. X. c. 22.

Les







CLASS II.

Les Canards et les Canes. Belon av. 160. Anas fera torquata minor. Anas domestica. Gesner av. 113, 96. Aldr. av. III. 83, 85. Common wild Duck and Mallard. Common tame Duck. Wil. orn. 371, 380. Raii syn. av. 145, 150. Le Canard domestique, le Canard fauvage. Briffon av. VI. 308, 318. Einheimifche ent. Stock ent. Kram. 341.

Anitra, Anitra falvatica, Cifone. Zinan. 105, 106.

Anas boschas. Anas domes-

- tica. Lin. fyft. 205. Gras-and, Blanacke. Faux. Sacc. fp. 131.
- Fera, Norvegis Blaachals v. Græs-And, aliis Stok-And. Danis Vild-And. Brunnich, 87.
- Domettica, Danis Tam-And. ibid. 88.
- Wilde Ente. Frisch, II. 158. fæmina. 159. Br. Zool. 155. Ratza. Scopoli, No. 77.

THE mallard usually weighs two pounds and DESCRIP. an half: the length is twenty-three inches; the breadth thirty-five: the bill is of a yellowish green : the head and neck are of a deep and fhining green : more than half round the lower part of the neck is an incomplete circle of white : the upper part of the breaft is of a purplifh red; and the beginning of the back of the fame color : the breaft and belly of a pale grey, marked with transverse speckled lines of a dusky hue.

The fcapulars white, elegantly barred with brown: the fpot on the wing is of a rich purple: the tail confifts of twenty-four feathers. What diftinguishes the male of this species from all others are the four middle feathers, which are black and ftrongly 279. MAL-LARD.

MALLARD. CLASS II.

ftrongly curled upwards; but the females want this mark. Their plumage is of a pale reddifh brown, fpotted with black. The legs are of a faffron color.

The common tame species of ducks take their origin from thefe, and may be traced to it by unerring characters. The drakes, howfoever they vary in colors, always retain the curled feathers of the tail: and both fexes the form of the bill of the wild kind. Nature fports in the colors of all domeftic animals; and for a wife and ufeful end; that mankind may the more readily diftinguish and clame their respective property. Wild ducks pair in the fpring, and breed in all marfhy grounds, and lay from ten to fixteen eggs. They abound in Lincolnshire, the great magazine of wild fowl in this kingdom; where prodigious numbers are taken annually in the decoys.

DECOYS.

A decoy is generally made where there is a large pond furrounded with wood, and beyond that a marshy and uncultivated country: if the piece of water is not thus furrounded, it will be attended with the noife and other accidents, which may be expected to fright the wild fowl from a quiet haunt, where they mean to fleep (during the daytime) in fecurity.

If these noises or disturbances are wilful, it hath been held, that an action will lye against the difturber.

As foon as the evening fets in, the decoy rifes

(as

(as they term it) and the wild fowl feed during the night. If the evening is ftill, the noife of their wings, during their flight, is heard at a very great diftance, and is a pleafing, though rather melancholy found. This *rifing* of the decoy in the evening, is in *Somerfetfbire* called *rodding*.

The decoy ducks are fed with hempfeed, which is flung over the fkreens in fmall quantities, to bring them forwards into the pipes, and to allure the wild fowl to follow, as this feed is fo light as to float.

There are feveral pipes (as they are called) which lead up a narrow ditch, that clofes at laft with a funnel net. Over thefe pipes (which grow narrower from the first entrance) is a continued arch of netting, fuspended on hoops. It is neceffary to have a pipe or ditch for almost every wind that can blow, as upon this circumstance it depends which pipe the wild fowl will take to; and the decoy-man always keeps on the leeward fide of the ducks, to prevent his effluvia reaching their fagacious noftrils. All along each pipe, at certain intervals, are placed fkreens made of reeds, which are fo fituated, that it is impossible the wild fowl should fee the decoy-man, before they have paffed on towards the end of the pipe, where the purfe-net. is placed. The inducement to the wild fowl to go up one of these pipes is, because the decoyducks, trained to this, lead the way, either after hearing the whiftle of the decoy-man, or enticed by

by the hempfeed; the latter will dive under water, whilft the wild fowl fly on, and are taken in the purfe.

It often happens, however, that the wild fowl are in fuch a flate of fleepiness and dozing, that they will not follow the decoy-ducks. Ufe is then generally made of a dog, who is taught his leffon : he paffes backwards and forwards between the reed skreens (in which are little holes, both for the decoy-man to fee, and for the little dog to pass through) this attracts the eye of the wild fowl, who not chufing to be interrupted, advance towards this fmall and contemptible animal, that they may drive him away. The dog, all this time, by direction of the decoy-man, plays among the fkreens of reeds, nearer and nearer to the purfe-net; till at last, perhaps, the decoy-man appears behind a fkreen, and the wild fowl not daring to pass by him in return, nor being able to escape upwards on account of the net-covering, rush on into the purfe-net. Sometimes the dog will not attract their attention, if a red handkerchief, or fomething very fingular, is not put about him.

The general feafon for catching fowl in decoys, is from the latter end of October till February; the taking of them earlier is prohibited by an act 10. George II. c. 32. which forbids it from June 1, to October 1, under the penalty of five fhillings for each bird deftroyed within that fpace.

The Lincolnshire decoys are commonly set at a certain

certain annual rent, from five pounds to twenty pounds a year: and we have heard of one in Somersetshire that pays thirty. The former contribute principally to fupply the markets of London. Amazing numbers of ducks, wigeons, and teal are taken: by an account fent us of the number caught, a few winters past, in one season, and in only ten decoys, in the neighborhood of Wainfleet, it appeared to amount to thirty-one thousand two hundred, in which is included feveral other fpecies of ducks; it is also to be observed, that in the above particular, wigeon and teal are reckoned but as one, and confequently fell but at half the price of the ducks. This quantity makes them fo cheap on the fpot, that we have been affured feveral decoy-men would be glad to contract for years to deliver their ducks at Boston for ten-pence the couple. The account of the numbers here mentioned, relates only to those that were fent to the Capital.

It was cuftomary formerly to have in the fens an annual *driving* of the young ducks before they took wing. Numbers of people affembled, who beat a vaft tract, and forced the birds into a net placed at the fpot where the fport was to terminate. A hundred and fifty dozens have been taken at once: but this practice being fuppofed to be detrimental, has been abolifhed by act of parlement. 280. SHOVEL- Anas latirostra (ein Breit-Anas clypeata. Lin. Syst. 200. fchnabel.) Gesner av. 120. ER. Faun. Suec. Sp. 119. Kertlutock *. Krantz's Greenl. Aldr. av. III. 94. Wil. orn. 370. I. 80. Danis Krop-And, Norvegis Stok-And. Cimbris Leffel-Raii Syn. av. 143. Phafianus marinus. Charlton And. Brunnich, 67. 68. ex. 105. Blue-wing Shoveler (fam.) Schield-Ente, Loeffel-Ente. Frisch, II. 161, 162. fæm. Cat. Carol. I. 96. Le Souchet. Brilfon av. VI. 329. Tab. 32 fig. 1. Schauffl-ente,Loffl-ente.Kram. 163. Br. Zool. 155. Scopoli, No. 70. 342.

DESCRIP.

598

THIS weighs twenty-two ounces: its length twenty-one inches. The bill is black, three inches long, fpreads near the end to a great breadth, is furnished with a small hook, and the edges of each mandible are pectinated, or supplied with thin laminæ, that lock into each other when the mouth is closed. The irides are of a bright yellow: the head and upper part of the neck of a blackish green: the lower part of the neck, the breast, and the scapulars are white: the back brown: the coverts of the wings of a fine sky blue; those next the quil feathers tipt with white: the greater quil feathers are dusky; the exterior webs of those in the middle, are of a glossy green. The tail constifts of fourteen feathers; the outmost are white;

* i. e. Broad bill.

thofe

CLASS II. RED BREASTED SHOVELER.

those in the middle black, edged with white: the belly is of a bay color: the vent feathers black: the legs red. The female has the fame marks in the wings as the male, but the colors are less bright: the rest of the plumage resembles that of the common wild duck.

W E are indebted to Mr. *Bolton* for the defcription of this bird, who informed us that it was fometimes taken in the decoys in *Lincolnfpire*.

It is the fize of a common duck. The bill large, broad, ferrated at the fides, and entirely of a brownifh yellow color: the head large: eyes fmall: irides yellow: the breaft and throat of a reddifh brown, the latter paler, but both quite free from any fpots. The back is brown, growing paler towards the fides. The tips and pinions of the wings grey: the quil-feathers brown; the reft of a greyifh brown: the *fpeculum* or fpot purple, edged with white: in the female, the fpot is blue, and all the other colors are fainter. The tail is fhort and white: the vent feathers of a bright brown, fpotted with darker: the legs flort and flender: the feet fmall, of a reddifh brown color.

DESCRIP.

Rrz

Anas

PINTAIL DUCK. CLASS II.

282. PIN-TAIL. Anas caudacuta (ein fpitzfchwantz) Gesner av. 121.

Aldr. av. III. 97. Sea Pheafant, or Cracker.

Wil. orn. 376. Le Canard a longue queue. Briffon av. VI. 369. tab. 34. Schwalbenfcheif. Kram. 340. Raii Syn. av. 147.

Anas acuta. Lin. fyft. 202. Aler, Ahlvogel. Faun. Suec.

fp. 126.

Fafan-Ente. Frisch, II. 160. Brunnich in append.

Aglek. Crantz's Greenl. I. 80. Br. Zool. 156. Scopoli, No. 73.

cy,

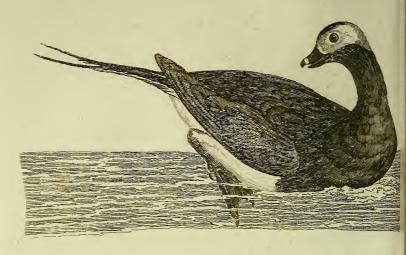
DESCRIP.

HE form of this fpecies is flender, and the neck long: its weight twenty-four ounces: its length twenty-eight inches; its breadth one yard two inches. The bill is black in the middle, blue on the fides: the head is ferruginous, tinged behind the ears with purple; from beneath the ears commences a white line, which runs fome way down the neck; this line is bounded by black: the hind part of the neck, the back, and fides are elegantly marked with white and dufky waved lines: the fore part of the neck, and belly are white.

The fcapulars ftriped with black and white: the coverts of the wings afh colored; the loweft tipt with dull orange: the middle quil-feathers barred on their outmost webs with green, black and white: the exterior feathers of the tail are afh colored: the two middle black, and three inches longer than the others: the feet of a lead color. The female is of a light brown color, fpotted with black. Mr. *Hartlib*, in the appendix to his *Lega*-



LONG TAILED DUCK . .



WHITE THROATED DUCK.

CLASS II. LONG TAILED DUCK.

cy, tells us that these birds are found in great abundance in *Connaught* in *Ireland*, in the month of *February* only; and that they are much effected for their delicacy.

Wil. orn. 364.
Raii fyn. av. 145.
Long tailed Duck. Edw. av. 280.
Le Canard a longue queue d'Iflande. Briffon av. VI. 379.
Anas glacialis. Lin. fyft. 203.

Norvegis Ungle, Angeltafke v. Troefoerer. Feroenfibus Oedel. Iflandis Ha-Ella v. Ha-Old. Incolis Chriftianfoe Gadiffen, Klaefhahn Dykker. Brunnich, 75, 76. Br. Zool. 156. Scopoli, No. 74.

HIS is inferior in fize to the former. The bill is fhort, black at the tip and bafe, orange colored in the middle; the cheeks are of a pale brown: the hind part of the head, and the neck both before and behind are white; the fides of the upper part of the neck are marked with a large dufky bar, pointing downwards; the breaft and back are of a deep chocolate color; the fcapulars are white, long, narrow, and fharp pointed. The coverts of the wings, and greater quil feathers dufky; the leffer of a reddifh brown : the belly white : the four middle feathers of the tail are black; and two of them near four inches longer than the others, which are white: the legs dufky. Thefe birds breed in the most northern parts of the world, and only vifit our coafts in the fevereft winters.

283. LONG TAILED.

DESCRIP.

La

POCHARD. CLASS II.

284. POCHARD. La Cane a teste rousse. Belon

av. 173. Anas fera fusca, vel media (ein wilte grauwe ente, Rotent.) Gesner av. 116. Aldr. av. III. 93. Poker, Pochard, or red headed Wigeon. Wil. orn. 367. Raii Syn. av. 143.

Anas ferina. Lin. Syst. 203. Faun. Suec. Sp. 127.

- Penelope, le Millouin. Briffon
- av. VI. 384. tab. 35. fig. 1. Danis Brun - Nakke. Norve-

gis Rod-Nakke. Brunnich. 80.

Br. Zool. 156.

TTS weight is about one pound twelve ounces: DESCRIP. L its length nineteen inches; its breadth two feet and a half. The bill is of a deep lead color: the head and neck are of a bright bay color : the breaft and part of the back where it joins the neck, are black : the coverts of the wings, the fcapulars, back and fides under the wings are of a pale grey, elegantly marked with narrow lines of black : the quil feathers dusky: the belly ash colored and brown: the tail confifts of twelve fhort feathers, of a deep grey color: the legs lead colored: the irides of a bright yellow, tinged with red.

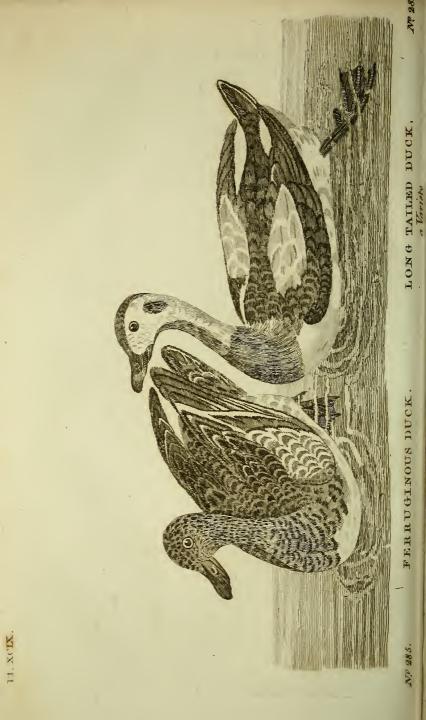
FEMALE.

The head of the female is of a pale reddifh brown: the breaft is rather of a deeper color: the coverts of the wings a plain afh color: the back marked like that of the male : the belly afh colored. These birds frequent fresh water as well as the fea; and being very delicate eating, are much fought for in the London markets, where they are known by the name of Dun birds.

600

Anas





WIGEON.

Anas rufa roftro pedibufque cinereis. Faun. Suec. Sp. 47.

285. Ferru-GINOUS.

DESCRIP.

THE defcription of this species was fent to us by Mr. Bolton. The weight was twenty ounces: the bill is long and flatted, rounded a little at the bafe, ferrated along the edges of each mandible, and furnished with a nail at the end of the upper. The color a pale blue. The head, neck, and whole upper part of the bird is of an agreeable reddish brown: the throat, breast and belly of the fame color, but paler : the legs of a pale blue; but the webs of the feet black.

This species, he informed us, was killed in Lincolnshire. We do not find it mentioned by any writer, except Linnæus, who toke his defcription from Rudbeck's paintings; and adds, that it is found, though rarely, in the Swedish rivers.

Anas fistularis (ein Pfeifente) Gesner av. 121. Penelope. Aldr. av. III. 92. Wigeon, or Whewer. Wil. orn. 375. Raii Syn. av. 146. Anas penelops. Lin. Syst. 202. Wriand. Faun. Suec. Sp. 124.

Anas fiftularis, le Canard fif- 286. WIGEON fleur. Briffon av. VI. 391. tab. 35. fig. 2. Eissent mit weisser platten. Kram. 342. Danis Bles-And. Brunnich, 72. Br. Zool. 157. add. plates.

HE wigeon weighs near twenty-three oun- Descrip. ces : the length is twenty inches; the breadth Rr4 two

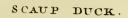
BIMACULATED DUCK. CLASS II.

two feet three. The bill is lead colored; the end of it black; the head, and upper part of the neck is of a bright light bay; the forehead paler, in fome almost white : the plumage of the back, and fides under the wings are elegantly marked with narrow, black and white undulated lines: the breaft is of a purplifh hue, which fometimes though rarely is marked with round black fpots : the belly white: the vent feathers black. In fome birds the coverts of the wings are almost wholly white; in others of a pale brown, edged with white: the greater quil feathers are dufky; the outmost webs of the middle feathers of a fine green, the tips black; the laft are elegantly ftriped with black and white. The two middle feathers of the tail are longer than the others, black and fharp pointed; the reft ash colored: the legs dusky. The head of the female is of a rufty brown, fpotted with black; the back is of a deep brown, edged with a paler : the tips of the leffer quil feathers white: the belly white.

FEMALE.

287. BIMA-CULATED. HE length is twenty inches; extent twentyfive and a half. Bill a deep lead color: nail black.

Crown, brown changeable with green, ending in a ftreak of brown at the hind part of the head, with a finall creft. Between the bill and the eye, and



P1. C.

BIMACULATED DUCK.

Nº 287.

.

- 304) A. Q. P. -

*

.

.

CLASS II. G A D W A L L.

and behind each ear, a ferruginous fpot. The first round: the last oblong and large. Throat of a fine deep purple. The rest of the head of a bright green, continued in streaks down the neck. Breast a light ferruginous brown, spotted with black: hind part of the neck, and back, dark brown waved with black.

Coverts of the wings afh colored : lower coverts ftreaked with ruft color: fcapulars cinereous: quil feathers brownifh cinereous. Secondaries of a fine green, ending in a fhade of black, and edged with white.

Coverts of the tail a deep changeable green. Twelve feathers in the tail: two middlemoft black; the others brown edged with white. Belly dufky, finely granulated. Legs fmall, and yellow. Webs dufky.

Taken in a decoy near Communicated to me by in 1771. Poore, Efq.

Anas strepera (ein Leiner).	Anas strepera. Lin. fyst. 200.	288. GAD-
	Faun. Suec. fp. 121.	WALL.
	Cimbris Knarre-Gaas. Brun-	
374.	Br. Zool. 157.	
Raii syn. av. 145.	Grave mittel-ente. Frisch,	
339. tab. 33. fig. 1.		

HIS fpecies is rather inferior in fize to the DESCRIP. wigeon. The bill is two inches long, black, and

and flat; the head, and upper part of the neck, are of a reddifh brown, fpotted with black; the lower part, the breaft, the upper part of the back, and the fcapulars, are beautifully marked with black and white lines; the belly is of a dirty white; the rump above and below is black; the tail afh colored, edged with white; the coverts on the ridge of the wing are of a pale reddifh brown; those beneath are of purplish red, the lowest of a deep black: the greater quil-feathers are dufky: the inner web of three of the leffer quil-feathers are white; which forms a confpicuous fpot; the legs are orange colored. The breaft of the female is of a reddifh brown, fpotted with black : the back of the fame color; and though it has the fame marks on the wings, they are far inferior in brightnefs to those of the male.

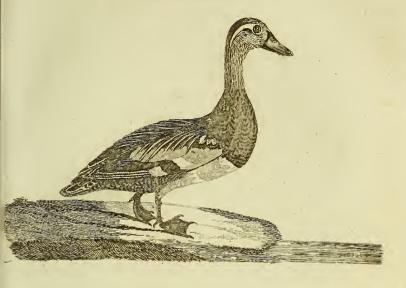
Krickantl. Kram. 343. 289. GARGA- La Sarcelle. Belon av. 175. Anas Querquedula. Lin. fyft. NEY. Querquedula varia. Ge/ner av. 107. 203. Scavolo, Cercevolo, Garga-Faun. Suec. Sp. 128. nello. Aldr. av. III. 89, 90. Kriech-Ente. Frisch, II. 176. Norvegis Krek-And. Quibufd. Wil. orn. 377. Saur-And. Brunnich, 81. Querquedula prima Aldr. Raii syn. av. 148*. Br. Zool. 158. Scopoli, No. La Sarceile. Briffon av. VI. 75. 427. tab. 39.

DESCRIP.

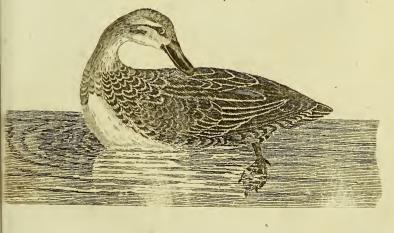
THE length of this fpecies is feventeen inches; the extent twenty-eight. The bill is of

* Mr. Ray, in his fyn. av. 147. defcribes a duck under the name of Phafeas; in Yorkfbire it is called the widgeon: he fays,

GARGANEY.



FEMALE GARGANEY.



P1. CI.



CLASS II. GARGANEY.

of a deep lead color; the crown of the head is dufky, marked with oblong ftreaks; on the chin is a large black fpot; from the corner of each eye is a long white line, that points to the back of the neck: the cheeks, the upper part of the neck, are of a pale purple, marked with minute oblong lines of white, pointing downwards; the breaft is of a light brown, marked with femicircular bars of black: the belly is white; the lower part and vent varied with fpecks, the bars of a dufky hue; the coverts of the wings are grey; but the loweft are tipt with white; the first quil-feathers are afh colored : the exterior webs of those in the middle green; the fcapulars are long and narrow, and elegantly striped with white, ash color, and black; the tail dufky: the legs lead color.

The female has an obfcure white mark over the eye; the reft of the plumage is of a brownish ash color, not unlike the hen teal, but the wing wants the green fpot, which fufficiently diffinguishes thefe birds.

In many places these birds are called the Summer Teal.

fays, the head and neck are brown, fpotted with triangular black marks: the body, wings, and tail dufky, edged with a paler color : in the wings is a double line of white ; belly white : bill and legs blue. We fufpect it to be a young bird of this fpecies, but wait for further information before we can determine it,

FEMALE.

Querquedula.

T E A L. CLASS II.

290. TEAL.

Querquedula. Gesner av. 106. Garganei. Aldr. av. III. 90. Wil. orn. 377. Raii Syn. av. 147. La petite Sarcelle. Briffon av. VI. 436. tab. 40. fig. 1. Rothantl, Pfeiffantl. Kram. 343. Spiegel-Entlein. Frisch, II. 174.

Anas Crecca. Lin. Syft. 204. Arta, Kræcka. Faun. Suec. Sp. 129.

Cimbris Atteling-And. Norvegis Heftelort-And. Danis Communiter Krik - And. Brunnich, 82, 83.

Br. Zool. 158. add. plates.

THE Teal weighs about twelve ounces: the DESCRIP. length is fourteen inches; the breadth twenty-three: the weight of a drake twelve ounces; of a duck nine: the bill black: the head, and upper part of the neck are of a deep bay : from the bill to the hind part of the head is a broad bar of gloffy changeable green, bounded on the lower fide by a narrow white line : the lower part of the neck, the beginning of the back, and the fides under the wings, are elegantly marked with waved lines of black and white.

> The breaft and belly are of a dirty white; the first beautifully spotted with black : the vent black : the tail fharp pointed, and dufky: the coverts of the wings brown : the greater quil-feathers dufky ; the exterior webs of the leffer marked with a gloffy green fpot; above that another of black, and the tips white: the irides whitish; the legs dusky. The female is of a brownish ash color, spotted with

CLASS II. T E A L.

with black, and has a green fpot on the wing like the male.

By the defcription Mr. Willugbby has left of the Summer Teal, p. 378. we fufpect that it differs not in the fpecies from the common kind, only in fex. Linnæus hath placed it among the birds of his country*; but leaves a blank in the place of its refidence; and hath evidently copied Mr. Willugbby's imperfect defcription of it: and to confirm our fufpicion that he has followed the error of our countryman; we obferved that a bird fent us from the Baltic fea, under the title of anas circia, the Summer Teal of Linnæus, was no other than the female of our teal.

* Fauna Suecica, Sp. 130.

SUMMER TEAL.

CORVORANT.

CLASS II.

XLVIII. BILL ftrong, ftrait; end either hooked or floping. CORVO-NOSTRILS, either totally wanting, or fmall, and RANT*. placed in a longitudinal furrow. FACE naked. GULLET naked, capable of great diftenfion. TOES, all four webbed. Mergus Plinii lib. x. c. 33. N. Com. Petr. 1V. 423. 291. Corvo-Le Cormorant. Belon av. 161. Le Cormoran. Briljon av. RANT. VI. 511. tab. 45. Corvus aquaticus, Carbo a-The

quaticus. 136. Male. Phalacrocorax. Ge/ner Norwegis Skarv, Strand-Ravn. av. Danis Aalekrage. Islandis 683. 350. Aldr. av. III. 108. Skarfur. Brunnich, 120, The Cormorant. Wil. orn. 121. Scharb, or See-Rabe. Frifch, 329. Raii Jyn. av. 122. II. 187. Br. Zcol. 159. Scopoli, No. Pelecanus Carbo. Lin. Syst. 216. 98.

DESCRIP.

HAVE weighed a bird of this fpecies that exceeded feven pounds: the length three feet four: the extent four feet two: the bill dufky, five inches long, deftitute of noftrils; the bafe of the lower mandible is covered with a naked yellowifh fkin, that extends under the chin, and forms a fort of pouch: a loofe fkin of the fame color

* The learned Dr. Kay, or Caius, derives the word Corvorant, from Corvus vorans, from whence corruptly our word Cormorant. Caii opufc. 99.

reaches

CLASS II. CORVORANT.

reaches from the upper mandible round the eyes, and angles of the mouth: the head and neck are of a footy blacknefs; but under the chin of the male the feathers are white; and the head in that fex is adorned with a fhort loofe pendent creft; in fome the creft and hind part of the head are ftreaked with white. The coverts of the wings, the fcapulars, and the back, are of a deep green, edged with black, and gloffed with blue : the quilfeathers and tail dufky: the laft confifts of fourteen feathers: the breaft and belly black: in the midft of the last is often a bed of white: on the thighs of the male is a tuft of white feathers: the legs are fhort, ftrong, and black; the middle claw ferrated on the infide: the irides are of a light ash color.

These birds occupy the highest parts of the cliffs that impend over the sea: they make their nests of sticks, sea tang, grafs, &c. and lay fix or seven white eggs of an oblong form. In winter they disperse along the shores, and visit the fresh waters, where they make great havoke among the fish. They are remarkably voracious, having a most fudden digestion, promoted by the infinite quantity of small worms that fill their intestines. The corvorant has the rankest and most difagreeable smell of any bird, even when alive. Its form is difagreeable; its voice hoars and croaking, and its qualities base. No wonder then that Milton should make Satan personate this bird, to furvey undelighted

Nest. Eggs,

undelighted the beauties of Paradife: and fit devifing death on the tree of life *.

Thefe birds have been trained to fifh like falcons to fowl. Whitelock tells us, that he had a caft of them manned like hawks, and which would come to hand. He took much pleafure in them, and relates, that the beft he had was one prefented him by Mr. Wood, Master of the Corvorants to CHARLES I. It is well known that the Chinese make great use of these birds, or a congenerous fort, in fishing; "and that not for amusement, but profit +.

292. SHAG.

av. III. 109. The Shag, called in the North of England the Crane. Wil. orn. 330. Corvus aquaticus minor. Graculus palmipes dictus.

Corvus aquaticus minor. Aldr.

Raii fyn. av. 123.

Le petit Cormoran. Briffon av. VI. 516. Pelecanus graculus. Lin. fyft.

217. Phalacrocorax criftatus. Nor-

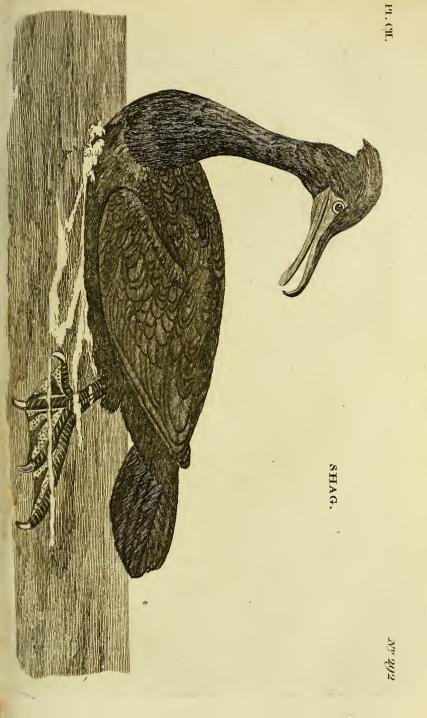
vegis Top Skarv. Brunnich ornith. 123. Br. Zool. 159.

DESCRIP.

HE fhag is much inferior in fize to the corvorant : the length is twenty-feven inches; the breadth three feet fix: the weight three pounds three quarters. The bill is four inches long, and more flender than that of the preceding: the head is adorned with a creft two inches long, pointing

> * Paradife Loft, Book IV. 1. 194, &c. + Duhalde I. 316.

> > back-





backward : the whole plumage of the upper part of this bird is of a fine and very fhining green, the edges of the feathers a purplish black; but the lower part of the back, the head, and neck, wholly green : the belly is dufky : the tail confifts of only twelve feathers, of a dufky hue, tinged with green; the legs are black, and like those of the corvorant. During my voyage among the Hebrides, I faw feveral birds of this fpecies fhot : they agreed in all respects, but in being destitute of a creft; whether they were females, a variety, or diftinct species, must be left to future naturalifts to determine.

Both these kinds agree in their manners, and breed in the fame places: and, what is very ftrange in webbed footed birds, will perch and build in trees: both fwim with their head quite erect, and are very difficult to be fhot; for, like the Grebes and Divers, as foon as they fee the flash of the gun, pop under water, and never rife but at a confiderable diftance.

We are indebted for this bird to the late Mr. William Morris of Holybead, with whom we had a conftant correspondence for feveral years, receiving from that worthy man and intelligent naturalift, regular and faithful accounts of the various animals frequenting that vaft promontory.

Anfer

GANNET. CLASS II.

293. GAN-NET. Anker Baffanus five Scoticus. Gefner av. 163. Aldr. av. 68. Sula. Hoieri Cluf. ex. 367. Hector Boeth. 6. Soland Goofe. Wil. orn. 328. Raii fyn. av. 122. Itin. 191. 269. 279. Sibb. bift. Scot. 20. tab. 9. Sibb. bift. Fife. 45. 47. Jaen van Gent. Martin's Spitzberg. 97.

Solan Goofe. Martin's voy. St. Kilda. 27.
Defeript. Weft. Ifles. 281.
Macauly's hift. St. Kilda. 133.
Sula Baffana, le Fou de Baffan. Brilfon av. VI. 503. tab. 44.
Pelecanus Baffanus. Lin. fyft. 217.
Norwegis Sule, Hav-Sul. Brannich, 124.
Br. Zool. 160.

DESCRIP.

THIS species weighs feven pounds : the length is three feet one inch; the breadth fix feet two inches. The bill is fix inches long, ftrait almost to the point, where it inclines down; and the fides are irregularly jagged, that it may hold its prey with more fecurity: about an inch from the base of the upper mandible is a sharp procels pointing forward; it has no noftrils; but in their place a long furrow, that reaches almost to the end of the bill: the whole is of a dirty white, tinged with ash color. The tongue is very small, and placed low in the mouth: a naked fkin of a fine blue furrounds the eyes, which are of a pale yellow, and are full of vivacity : this bird is remarkable for the quickness of its fight: Martin tells us that Solan is derived from an Irifb word expressive of that quality.

612

From

I. CIII

Iwards Pina t

GANNE T

Nº29.3.



From the corner of the mouth is a narrow flip of black bare fkin, that extends to the hind part of the head : beneath the chin is another, that like the pouch of the Pelecan, is dilatable, and of fize fufficient to contain five or fix entire herrings; which, in the breeding feafon, it carries at once to its mate or young.

The neck is very long: the body flat, and very full of feathers: the crown of the head, and a fmall fpace on the hind part of the neck is buff colored : the reft of the plumage is white : the baftard wing and greater quil-feather excepted, which are black; the legs and toes are black; but the fore part of both are marked with a ftripe of fine pea green. The tail confifts of twelve sharp pointed feathers, the middle of which is the longest.

The young birds, during the first year, differ greatly in color from the old ones; being of a dusky hue, speckled with numerous triangular white fpots; and at that time refemble in colors the speckled Diver. Each bird, if left undifturbed, would only lay one egg in the year; but if that be taken away, they will lay another; if that is alfo taken, then a third; but never more that feason. A wife provision of nature, to prevent the extinction of the fpecies by accidents, and to fupply food for the inhabitants of the places where they breed; their egg is white, and rather lefs than that of the common goofe: the neft is large, and formed of any thing the bird finds floating on the Sf_2 water,

YOUNG.

EGG.

NEST.

613

water, fuch as grafs, fea plants, fhavings, &c. Thefe birds frequent the Isle of Ailfa, in the Firth of Clyde; the rocks adjacent to St. Kilda, the Stack of Souliskery, near the Orkneys; the Skelig Isles, off the coafts of Kerry, Ireland *, and the Bass Isle, in the Firth of Edinburgh: the multitudes that inhabit these places are prodigious. Dr. Harvey's elegant account of the latter, will ferve to give fome idea of the numbers of thefe, and of the other birds that annually migrate to that little fpot.

" There is a small island, called by the Scotch, " Bafs Island, not more than a mile in circumfe-" rence; the furface is almost wholly covered du-" ring the months of May and June with nefts, eggs, " and young birds; (o that it is fearcely possible to " walk without treading on them: and the flocks of " birds in flight are so prodigious, as to darken the " air like clouds; and their noise is such, that you can-" not, without difficulty, hear your next neighbour's " voice. If you look down upon the Sea, from the " top of the precipice, you will see it on every side " covered with infinite numbers of birds of different " kinds, swimming and bunting for their prey: if in " failing round the island you furvey the hanging cliffs, " you may see in every cragg or fissure of the broken

* This information we owe to that worthy prelate, the late Dr. Pocock, Bishop of Meath; who had visited the Skeligs. Mr. Smith, in his hiftories of Cork and Kerry, confounds this bird with the Gull defcribed by Mr. Willughby; from whom he has evidently borrowed the whole defcription.

" rocks.

" rocks, innumerable birds of various forts and fizes, "more than the ftars of heaven when viewed in a "ferene night: if from afar you fee the diftant flocks, either flying to or from the ifland, you would "imagine them to be a vaft fwarm of bees *."

Nor do the rocks of *St. Kilda* feem to be lefs frequented by thefe birds; for *Martin* affures us, that the inhabitants of that fmall ifland confume annually no lefs than 22,600 young birds of this fpecies, befides an amazing quantity of their eggs; thefe being their principal fupport throughout the year; they preferve both eggs and fowls in fmall pyramidal ftone buildings, covering them with turf afhes, to preferve them from moifture. This is a dear bought food, earned at the hazard of their lives, either by climbing the moft difficult and

* Est insula parva, Scoti Basse nominant, haud amplius mille passum circuitu amplitudo ejus clauditur. Hujus insulæ supersicies, mensibus Maio & Junio nidis ovis pullisque propemodum tota instrata est, adeo ut vix, præ eorum copia pedem liberè ponere liceat : tantaque super-volantium turba, ut nubium instar, solem cælumque auferant : tantusque vociferantium clangor & strepitus, ut propè alloquentes vix audias. Si subjectum mare inde, tanquam ex edita turri & altissimo præcipitio despexeris, idem quoquo versum, infinitis diversorum generum avibus natantibus prædæque inhiantibus, opertum videas. Si circumnavigando imminentem clivum suspicere libuerit; videas in fingulis prærupti loci crepidinibus & recessibus, avium cujuslibet generis & magnitudinis, ordines innumerabiles, plures sane quam noste, sereno cœlo, stellæ conspiciuntur. Si advolantes avolantesque eminus adspexeris, apum profecto ingens examen credas. De generat. Animal. Ex ercit. 11.

narrow

narrow paths, where (to appearance) they can barely cling, and that too, at an amazing height over the raging fea: or elfe being lowered down from above, they collect their annual provision, thus hanging in midway air; placing their whole dependance on the uncertain footing of one perfon who holds the rope, by which they are fuspended at the top of the precipice. The young birds are a favorite difh with the North Britons in general: during the feafon they are conftantly brought from the Bass Isle to Edinburgh, fold at 20 d. a piece, are roafted, and ferved up a little before dinner as a whet.

The Gannets are birds of paffage. Their first appearance in those islands is in March; their continuance there till August or September, according as the inhabitants take or leave their first egg; but in general, the time of breeding, and that of their departure, feems to coincide with the arrival of the herring, and the migration of that fifh (which is their principal food) out of those feas. It is probable that these birds attend the herring and pilchard during their whole circuit round the British islands; the appearance of the former being always effeemed by the fishermen as a fure prefage of the approach of the latter. It migrates in queft of food as far fouth as the mouth of the Tagus, being frequently feen off Lifbon during the month of December, plunging for Sardina, fish refembling, if not the fame with our Pilchard.

I have in the month of August observed in Cathness their northern migrations : I have feen them paffing the whole day in flocks, from five to fifteen in each : in calm weather they fly high; in ftorms they fly low and near the fhore; but never crofs over the land, even when a bay with promontories intervenes, but follow, at an equal diftance, the courfe of the bay, and regularly double every cape. I have feen many of the parties make a fort of halt for the fake of fishing: they foared to a vast height, then darting headlong into the fea, made the water foam and fpring up with the violence of their descent; after which they pursued their route. I enquired whether they ever were observed to return fouthward in the fpring, but was answered in the negative; fo it appears that they annually encircle the whole ifland.

They are well known on most of our coasts but not by the name of the Soland-Goose. In Cornwal and in Ireland they are called Gannets; by the Welfh Gan. The excellent Mr. Ray supposed the Cornish Gannet to be a species of large Gull; a very excuseable mistake, for during his fix months refidence in Cornwal, he never had an opportunity of seeing that bird, except flying; and in the air it has the appearance of a gull. On that supposition he gave our Skua, p. 417. the title of Catarasta, a name borrowed from Aristotle*, and which admirably expresses the rapid descent of this bird on

> * Page 1045. S f 4

its

its prey. Mr. Moyle first detected this mistake*; and the Rev. Doctor William Borlase, by prefenting us with a fine specimen of this bird, confirms the opinion of Mr. Moyle; at the same time he favored us with so accurate an account of some part of the natural history of this bird, that we shall use the liberty he indulged us with, of adding it to this defcription.

" The Gannet comes on the coafts of Cornwal " in the latter end of fummer, or beginning of au-" tumn; hovering over the shoals of pilchards that " come down to us through St. George's Channel " from the northern feas. The Gannet feldom " comes near the land, but is conftant to its prey, " a fure fign to the fifhermen that the pilchards are " on the coafts; and when the pilchards retire, ge-" nerally about the end of November, the Gannets " are feen no more. The bird now fent was killed " at Chandour, near Mount/bay, Sept. 30, 1762, af-" ter a long ftruggle with a water fpaniel, affifted " by the boatmen; for it was ftrong and pugna-" cious. The perfon who took it observed that it " had a transparent membrane under the eye-lid, " with which it covered at pleafure the whole eye, " without obfcuring the fight or fhutting the eye-" lid; a gracious provision for the fecurity of the " eyes of fo weighty a creature, whofe method of " taking its prey is by darting headlong on it

* Moyle's Works, I. 424.

« from

" from a height of a hundred and fifty feet or more into the water. About four years ago, one of thefe birds flying over *Penzance*, (a thing that rarely happens) and feeing fome pilchards lying on a fir-plank, in a cellar ufed for curing fifh, darted itfelf down with fuch violence, that it ftruck its bill quite through the board (about an inch and a quarter thick) and broke its neck."

These birds are fometimes taken at fea by a deception of the like kind. The fishermen fasten a pilchard to a board, and leave it floating; which inviting bait decoys the unwary *Gannet* to its own destruction.

In the *Cataracta* of *Juba** may be found many characters of this bird: he fays, that the bill is toothed: that its eyes are fiery; and that its color is white: and in the very name is expressed its furious defcent on its prey. The reft of his accounts favors of fable.

We are uncertain whether the *Gannet* breeds in any other parts of *Europe* befides our own iflands; except (as Mr. *Ray* fufpects, the *Sula*, defcribed in *Clufius's Exotics*, which breeds in the *Ferroe Ifles*) be the fame bird. In *America* there are two fpecies of birds of this genus, that bear a great refemblance to it in their general form and their manner of preying. Mr. *Catefby* has given the figure of the head of one, which he calls the *Greater*

* Plinii, lib. x. c. 44.

Booby; his defcription fuits that of the young Gannet; but the angle on the lower mandible made us formerly fuspect that it was not the fame bird; but from fome late informations we have been favored with, we find it is common to both countries, and during fummer frequents North America. Like the Penguin, it informs navigators of the approach of foundings, who on fight of it drop the plummet. Linnæus claffes our bird with the Pelecan; in the tenth edition of his fystem, he confounds it with the bird defcribed by Sir Hans Sloane, hift. Jam. vol. I. p. 31. preface, whofe colors differ from the Gannet in each stage of life: but in his laft edition he very properly feparates them. We continue it in the fame clafs, under the generical name of Corvorants, as more familiar to the English ear than that of Pelecan.

620

APPENDIX.







Birds now extinct in GREAT BRITAIN, or fuch as wander here accidentally.

LANDBIRDS.

I. ROUGH LEG'D FALCON.

HIS fpecies is a native of *Denmark*, but was fhot in and is preferved in the *Le*verian Mufeum.

Its length is two feet two inches: that of the wing, when clofed, eighteen inches: the bill dufky; the cere yellow: the head, neck, and breaft of a yellowifh white, marked in fome parts with oblong brown ftrokes: the belly of a deep brown: thighs and legs of a pale yellow, marked with brown: the fcapulars blotched with brown and yellowifh white: coverts of the wings brown, edged with ruft: ends of the primaries deep brown; the lower parts white: the extreme half of the tail brown, tipt with dirty white: that next to the body white. Legs covered with feathers as low as the feet: the feet yellow.

II. ROLLER.

II. ROLLER.

Roller. Wil. crn. 131. Garrulus argentoratenfis. Raii fyn. av. 41. Galgulus, le Rollier. Briffon av. II. 64. tab. 5. Coracias Garrula. Lin. fyft. 159. Spransk Kraka, Blakraka, Allekraka. Faun. Suec. fp. 94. Edw. 109. The Shagarag. Shaw's Trawels. 252. Ellekrage. Brunnich, 35. Birk-Heker; Blaue-Racke. Frifch, I. 57.

OF these birds we have heard of only two being feen at large in our island; one was shot near Helston-bridge, Cornwal, and an account of it transmitted to us by the Reverend Doctor William Borlase. They are frequent in most parts of Europe, and we have received them from Denmark.

FEMALE.

In fize it is equal to a jay. The bill is black, ftrait, and hooked at the point; the bafe befet with briftles: the fpace about the eyes is bare and naked: behind each ear is alfo another bare fpot, or protuberance: the head, neck, breaft, and belly are of a light bluifh green: the back, and feathers of the wings next to it, are of a reddifh brown: the coverts on the ridge of the wings are of a rich blue; beneath them of a pale green: the upper part and tips of the quil-feathers are dufky; the lower parts of a fine deep blue; the rump is of the fame color: the tail confifts of twelve feathers, of which the outmoft on each fide are confiderably longer

624



The Roller

Fullow punx

. 4pp?"II.

Mazell Fecit







longer than the reft; are of a light blue, and tipt with black, beneath that a fpot of deep blue; as is the cafe with fuch part of the quil-feathers that are black above: the other feathers of the tail are of a dull green: the legs fhort, and of a dirty vellow.

It is remarkable for making a chattering noife, from which it is by fome called *Garrulus*.

III. NUTCRACKER.

Caryocatactes. Wil. orn. 132, Raii fyn. av. 42. Nucifraga, le Caste-noix. Briffon av. II. 59. tab. 5. Corvus Caryocatactes. Lin. fyft. 157.

• _

Notwecka, Notkraka. Faux. Suec. fp. 19. Tannen-Heher (Pine-Jay) Frifch, 1. 56. Edw. 240. Danis Noddekrige. Norwegis Not-kraake. Brunnich, 34.

THE specimen we toke our description from, is the only one we ever heard was shot in these kingdoms; is was killed near Mostyn, Flintshire, October 5, 1753.

It was fomewhat lefs than the jackdaw: the bill ftrait, ftrong, and black: the color of the whole head and neck, breaft and body, was a rufty brown: the crown of the head and the rump were plain: the other parts marked with triangular white fpots: the wings black: the coverts fpotted in

DESCRIP.

in the fame manner as the body: the tail rounded at the end, black tipt with white: the vent-feathers white: the legs dufky.

This bird is also found in most parts of *Europe*. We received a specimen from *Denmark*, by means of Mr. *Brunnich*, author of the *Ornithologia Borealis*, a gentleman to whose friendship we owe a numerous collection of the curiosities of his country.

It feeds on nuts, from whence the name.

IV. The ORIOLE.

Oriolus Galbula. Lin. fyft. The Witwal. Wil. orn. 198. 160. Faun. Suec. No. 95. Scopoli, No. 45. Kramer, 360. Oriolus. Gefner av. 713. Aldr. av. I. 418.

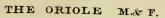
HISTORY.

THIS beautiful bird is common in feveral parts of *Europe*; where it inhabits the woods, and hangs its neft very artificially between the flender branches on the fummits of antient oaks. Its note is loud, and refembles its name. I have heard of only one being flot in *Great Britain*, and that in *South Wales*.

DESCRIP.

It is of the fize of a thrush: the head and whole body of the male is of a rich yellow: the bill red;

from

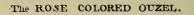


App. IV.









Duetto

N. William

Maz

G. Edwards pinait .

App:

from that to the eye a black line : the wings black. marked with a bar of vellow : the ends of the feathers of the fame color: the two middle feathers of the tail black; the reft black, with the ends of a fine yellow : the legs dufky.

The body of the female is of a dull green: the wings dusky : the tail of a dirty green : the ends of the exterior feathers whitifh.

V. The ROSE COLORED OUSEL.

Merula rosea. Raii Syn. av. Briffon av. II. 250. 67. Aldr. av. II. 283. Turdus rofeus. Lin. Syst. 294. Wil. orn. 194. Faun. Suec. 12. 219. Le Merle Couleur de Rofe. Edru. 20.

MR. Edwards difcovered this beautiful bird twice in our island, near London, at Norwood, and another time in Norfolk. The figure of this and the preceding, were copied, by permiffion, from his beautiful and accurate defigns, which we gratefully acknowledge, as well as every other affistance from our worthy friend; whose pencil has done as much honor to our country, as the integrity of his heart, and communicative difpofition, has procured him efteem from a numerous and respectable acquaintance.

The fize of this bird appears by the print to be DESCRIP. VOL. II. Tt equal

equal to that of a ftare. The bill at the point is black, at the bafe a dirty flefh color: the head is adorned with a creft hanging backwards. The head, creft, neck, wings, and tail are black, gloffed with a changeable blue, purple and green: the breaft, belly, back, and leffer coverts of the wings, are of a rofe color, mixed with a few fpots of black: the legs of a dirty orange color.

This bird is found in *Lapland*, *Italy*, and *Syria*. About *Aleppo* it is called the *locuft bird*, poffibly from its food; and appears there only in fummer*. In *Italy* it is ftyled the fea-ftare; and as *Aldrovandus* fays, frequents heaps of dung \pm . And Mr. *Ekmarck* \pm informs us, that it refides in *Lapland*, never paffing beyond the limits of that frozen region. We have mentioned very oppofite climes, but believe it to be a fcarce bird in all, at left in *Europe*.

> * Ruffel's bift. Alep. 70. Tavernier, 146. + Aldr. av. II. 283. ‡ Migr. av. Amæn. acad. IV. 594.

> > WATER.





WATER FOWL.

VI. The C R A N E.

Le Grue. Belon av. 187. Grus. Gefner av. 528. A Crane. Turner. Gru, Grua. Aldr. av. III. 132. Wil. orn. 274. Raii fyn. av. 95. La Grue. Briffon av. V. 374. tab. 33. Kranich. Kram. 345. Kranich. Frisch, II. 194. Ardea Grus. Lin. syst. 234. Trana. Faun. Suec. sp. 161. Danis Trane. Brunnich. Br. Zool. 118,

HIS species was placed, in the folio edition of the Zoology, among the British birds, on the authority of Mr. Ray; who informs us, that in his time, they were found during the winter in large flocks in Lincolnshire and Cambridgeshire : but on the strictest enquiry we learn, that at prefent the inhabitants of those counties are scarcely acquainted with them; we therefore conclude, that thefe birds have forfaken our island. A fingle bird was killed near Cambridge about three years ago, and is the only inftance I ever knew of the crane being feen in this island in our time. They were formerly in high efteem at our tables, for the delicacy of their flefh; for they feed only on grain, herbs, or infects; fo have nothing of the ranknefs of the pifcivorous birds of this genus.

DESCRIP.

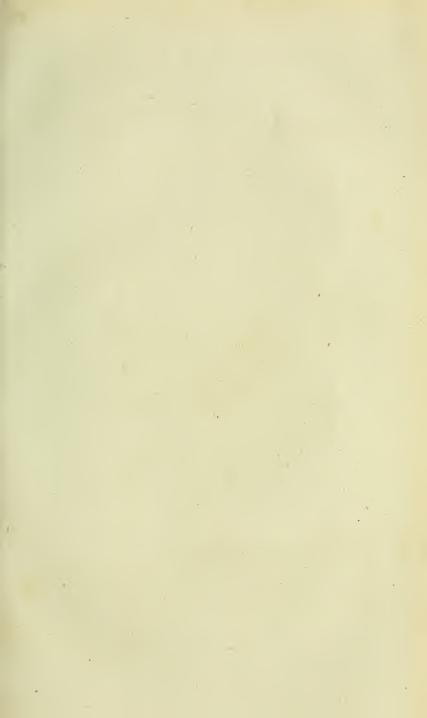
6:30

Its weight is about ten pounds; the length fix feet; the bill of a darkifh green, four inches long; and a little deprefied on the top of the upper mandible: the top of the head covered with black briftles; the back of the head bald and red, beneath which is an afh colored fpot: from the eyes, of each fide, is a broad white line the whole length of the neck: the fore part as far as the breaft is black: the quil-feathers are black: the tail afh colored, tipt with black : all the reft of the plumage is afh colored. The legs are black.

No author, except *Gefner*, takes notice of a large tuft of feathers that fpring out of one pinion on each wing: they are unwebbed, and finely curled at the ends, which the birds have power to erect or deprefs; when depreffed they hang over and cover the tail. *Gefner* tells us, that thefe feathers ufed in his time to be fet in gold, and worn as ornaments in caps. Though this fpecies feems to have forfaken thefe iflands at prefent, yet it was formerly a native, as we find in *Willughby*, p. 52. that there was a penalty of twenty-pence for deftroying an egg of this bird; and *Turner* relates, that he has very often feen their young in our marfhes. *Marfigli** fays, that the crane lays two eggs like thofe of a goofe, but of a bluifh color.

* Hift. Danub. V. p. 8.

VII. The





A P P E N D I X.

VII. The EGRET.

Leffer White Heron. Wil. Dwarf Heron. Barbot, 29. orn. 280. L'Aigrette. Briffon av. V. Ardea Garzetta, Lin. fyft. 237. Kleiner Weisser Rager. Kram. Ardea Alba minor. Raii fyn. 345. av. 99.

WE once received out of Anglefea, the feathers of a bird shot there, which we suspect to be the Egret; this is the only instance perhaps of its being found in our country. That formerly this bird was very frequent here, appears by some of the old bills of fare: in the famous feast of Archbishop Nevill, we find no lefs than a thousand Afterides*, Egrets or Egrittes, as it is differently specified the effect of the effect of the effect of a court of the old bills of fare in the system of the perhaps the effect of the effect of the effect of a court of the old bills of the effect of the effect of the old bills of fare in the system of the effect of the old bills of fare in the four of the effect of the old bills of the effect of the effect of the effect of the old bills of fare in the system of the effect of the old bills of fare in the four of the effect of the old bills of the four of the effect of the effect of the old bills of the four of the effect of the effect of the old bills of the four of the old bills of the effect of the old bills of the four of the effect of the effect of the old bills of the four of the effect of the effect of the effect of the old bills of the four of the effect of the effect of the effect of the old bills of the four of the effect of the ef

The *Egret* is a most elegant bird; it weighs about one pound; the length is twenty-four inches, to the end of the legs thirty-two: the bill is flender and black: the space about the eyes naked and

* God-win de Præful. Angl. com. Leland's Collect.

Tt3

green:

DESCRIF.

green: the irides of a pale yellow: the head adornèd with a beautiful creft, compofed of fome fhort, and of two long feathers, hanging backward; thefe are upwards of four inches in length: the whole plumage is of a refplendent whitenefs: the feathers on the breaft, and the fcapulars, are very delicate, long, flender, and unwebbed, hanging in the lighteft and loofeft manner: the legs are of a dark green almost black: the fcapulars and the creft were formerly much efteemed as ornaments for caps and head-pieces; fo that *aigrette* and *egret* came to fignify any ornament to a cap, though originally the word was derived from *aigre*, a caufe de l² aigreur de fa voix *.

We never met with this bird or the crane in *England*, but formed our defcriptions from fpecimens in the elegant cabinet of Doctor *Maudult* in *Paris*.

* Beton av. 195.

VIII. The

•



VIII. The LITTLE BITTERN.

Ardeola (le Blongios) Briffon av. V. 497. tab. 40. fig. 1.

Ardea vertice dorfoque nigris, collo antice et alarum tectricibus lutefcentibus. (Stauden Ragerl, Kleine Moofs-kuh.) Kram. 348. Boonk or long Neck. Shaw's Travels, 255.

Ardça Minuta. Lin. fyft. 240. Kleiner Rohrdommel. Frifch, II. 206. 207. Edw. av. 275.

THIS fpecies was that as it perched on one of the trees in the Quarry or public walks in Shrewfbury, on the banks of the Severn; it is frequent in many other parts of Europe, but the only one we ever heard of in England.

The length to the tip of the tail was fifteen inches, to the end of the toe twenty. The bill to the corners of the mouth two inches and a half long, dufky at the point; the fides yellow; the edge jagged: the bulk of the body not larger than that of a *fieldfare*.

The top of the head, the back, and tail were black, gloffed with an obfcure green: the neck is very long, the forepart of which, the breaft and thighs, were of a buff color: the belly and vent-feathers white: the hind-part of the neck bare of feathers, but covered with those growing on the fide

Tt4

DESCRIP.

of

of it: on the fetting on of the wing is a large chefnut fpot: the leffer coverts of a yellowifh buff; the larger coverts whitifh: the web of that next the back half buff and half black: the quil-feathers black: the legs and toes dufky; and what is fingular in a bird of this genus, the feathers grow down to the knees: the infide of the middle claw is ferrated.

For this defcription, and the drawing, we are indebted to Mr. *Plymley*.

IX. The SPOON-BILL.

Pelecanus feu Platea. Gefner av. 666. Albardeola. Aldr. av. III. 160. Spoon-bill. Wil. orn. 288. Loffel-gans. Scopoli, No. 115.

A FLOCK of thefe birds migrated into the marshes near Yarmouth, in Norfolk, in April, 1774. These birds inhabit the continent of Europe. In Mr. Ray's time, they bred annually in a wood at Sevenbuys, not remote from Leyden: but the wood is now destroyed; and these birds, with seven that formerly frequented the country, are at prefent become very rare.

Mr.

634

App. IX.

SPOONBILL.





APPENDIX.

Mr. Joseph Sparshall of Yarmouth favored me with the following very accurate description :

The length from the end of the beak to the extremity of the middle toe forty inches : breadth of the wings, extended, fifty-two inches: bill, length of the upper mandible feven inches; of the lower fix three-fourths ditto : breadth of the fpoon, near the point, two inches; ditto of the nether mandible one inch feven-eighths: breadth of both, in the narroweft part, near the middle, three-fourths of an inch: a bright orange colored fpot, about the breadth of a fixpence, just above the point of the upper mandible, which is a little hooked, or bent downward at its extremity. At the angles of the bill, on each cheek, a fpot of a bright orange color: the fkin between the fides of the lower mandible, and extending about three inches downward on the throat or neck, covered with very fine down, almost imperceptible, which, with the fkin on that part, are of a very bright orange color: irides of the eyes a bright flame color, very lively and vivid : the whole bill (except the above fpot) of a fine fhining black : its upper furface elegantly waved with dotted protuberances : a depreffed line extending from the noftrils (which are three-eights of an inch long, and fituate half an inch below the upper part of the bill) is continued round it about one eighth of an inch from its edge: its fubftance has fomething of the appearance of whale bone, thin, light, and elaftic. Infide

of

of the mouth a dark afh color, almoft black: the tongue (remarkably fingular) being very fhort, heart fhaped, and when drawn back, ferving as a valve to clofe the entrance of the throat, which it feems to do effectually; when pulled forward has the appearance of a triangular button: the ears, or auditory apertures large, and placed an inch behind the angles of the mouth. Plumage of the whole body, wings, and tail white: on the backpart of the head a beautiful creft of white feathers, hanging pendent behind the neck; their length about five inches; which, in the living fubject, gives it a very beautiful appearance.

Weight of the fowl, three days after killed, was three pounds and a half.

The legs black, their length fix inches, and thighs the fame; the latter naked about half their length; toes connected by a fmall web, extending to the first joint on each.

No. I.

ADDITIONS TO THE HISTORY OF THE HORSE.

THE representative of this species is a na- HORSE. L tive of Yemine, in Arabia Falix; the property of Lord Grosvenour, taken from a picture in poffeffion of his Lordship, painted by Mr. Stubbs, an artift not lefs happy in reprefenting animals in their ftiller moments, than when agitated by their furious paffions; his matchlefs paintings of horfes will be lafting monuments of the one, and that of the lion and panther of the other.

This horfe, by its long refidence among us, may be faid to be naturalized, therefore we hope to be excufed for introducing it here, notwithftanding its foreign defcent. From its great beauty it may be prefumed that it derives its lineage from Monaki Shaduki, of the pure race of horses, purer than milk *.

* Vide the Arabian certificate, in a following note, for the meaning of this phrase. Arabia

A P P E N D I X.

Arabia produces these noble animals in the highest perfection; first, because they take their origin from the wild unmixed breeds that formerly were found in the deferts *, which had as little degenerated from their primæval form and powers as the lion, tiger, or any other creature which still remains in a state of nature unchanged by the discipline of man, or harvested provision.

The Arabs place their chief delight in this animal; it is to them + as dear as their family, and is indeed part of it: men, women, children, mares, and foals all lie in one common tent, and they lodge promifcuoufly without fear of injury.

This

* Leo Africanus, who wrote in the time of Leo X. fays, that in his days great numbers of wild horfes were found in the Numidian and Arabian Deferts, which were broke for ufe. He adds, that the trial of their fwiftnefs was made againft the Lant, or the Oftrich; and if they could overtake either of thofe animals, were valued at a hundred camels. Hift. Africa, 339.

+ As a proof of this, receive the following lamentation of an Arab, obliged, thro' poverty, to part with his mare : My eyes, fays he, to the animal, my foul, must I be fo unfortunate as to have fold there to fo many masters, and not to keep the emyfelf? I am poor, my ANTELOPE. You know well enough, my honey, I have brought thee up as my child; I never beat nor chid thee; I made as much of thee as ever I could for my life. God preferve thee my dearest; thou art pretty; thou art lovely; God defend thee from the looks of the envious. To understand the first part of this speech, it must be observed, that it is usual for many

This conftant intercourse produces a familiarity that could not otherwife be effected; and creates a tractability in the horfes that could arife only from a regular good ufage; little acts of kindnefs, and a foothing language, which they are accuftomed to from their mafters: they are quite unacquainted with the fpur; the left touch with the ftirrup fets these airy coursers in motion; they fet off with a fleetness that furpasses that of the Oftrich*, yet they are fo well trained as to ftop in their most rapid speed by the slighest check of the rider : there are fometimes inftances of their being mounted without either bridle or faddle, when they flew fuch compliance to their rider's will, as to be directed in their courfe by the meer motion of a fwitch +.

Paret in obsequium lentæ moderamine virgæ, Verbera sunt præcepta sugæ, sunt verbera sræna ‡.

Several things concur to maintain this perfection in the horfes of *Arabia*, fuch as the great care the *Arabs* take in preferving the breed genuine, by permitting none but stallions of the first form to have

many Arabs, of the poorer rank, to join in the purchase of a horse, the original owner generally retaining one share. This, as well as most of the other particulars relating to the Arabian horse, are taken from M. D'Arvieux's curious account of Arabia, p. 167, London, 1732.

- † Tavernier's Travels, I. 63.
 - 1 Nemefion Cyneg. 267.

1

accels

^{*} For an account of its speed, vide Adanson's voy. 85.

accels to the mares: this is never done but in the prefence of a witnels, the fecretary of the *Emir*, or fome public officer; he afferts the fact, records the name of the horfe, mare, and whole pedigree of each, and these attestations * are carefully preferved, for on these depend the future price of the foal.

The

" was

* The reader is here prefented with an original attestation, fome of which M. D'Arvieux fays have been preferved for above 500 years in the public records.

Taken before ABDORRAMAN, KADI of ACCA.

The Occafion of this prefent Writing or Inftrument is that at AccA in the Houfe of Badi legal eftablish'd Judge, appear'd in Court Thomas Usgate the English Conful and with him Sheikh Morad Ebn al Hajj Abdollah, Sheikh of the County of Safad, and the faid Conful defir'd from the aforefaid Sheikh proof of the Race of the Grey Horfe which he bought of him, and He affirm'd to be Monaki Shaduhi*, but he was not fatisfied with this but defir'd the Teffimony of the Arabs, who bred the Horfe and knew how he came to Sheikh Morad; whereupon there appear'd certain Arabs of Repute whofe names are undermention'd, who teffified and declar'd that the Grey Horfe which the Conful formerly bought of Sheikh Morad, is Monaki Shaduhi of the pure Race of Horfes, purer than Milk †, and that the Beginning of the Affair

* These are the Names of the two Breeds of Arab Horses, which are reckoned pure and true, and those which are of both these Breeds by Father and Mother, are the most noble and free from Bastardy.

+ A Proverbial Expression.

640

The Arabs, whole riches are their horfes, take all imaginable care of them; they have it not in their power to give them grafs in their hot climate, except in the fpring; their conftant food is barley, and that given only in the night, being never fuffered to eat during the day.

In the day-time they are kept faddled at the door of the tent, ready for any excursion their mafters may make; the Arabs being fond of the chace. and live by the plundering of travellers. The horfes are never hurt by any fervile employ, never injured by heavy burthens, or by long journies, enjoy a pure dry air, due exercife, great temperance, and great care.

was, that Sheikh Saleh, Sheikh of Alsabal, bought him of the Arabs of the Tribe of al Mohammadat, and Sheikh Saleh fold. him to Sheikh Morad Ebn al Hajj Abdollah, Sheikh of Safad, and Sheikh Morad fold him to the Conful aforefaid, when thefe Matters appear'd to us, and the Contents were known, the faid Gentleman desir'd a Certificate thereof, and Testimony of the Witneffes, whereupon we wrote him this Certificate, for him to keep as a Proof thereof. Dated Friday 28 of i. e. 29 January, the latter Rabi in the Year 1135.

1722.

Witneffes,

Sheikh Jumat al Falibau of the Arabs of al Mohammadat. Ali Ebn Taleh al Kaabi. Ibrahim his Brother. Mohammed al Adhra Skeikh Alfarifat. Khamis al Kaabi.

Every

Every horfe in *Arabia* (except thofe which by way of contempt are called *Guidich*, or pack horfes) has a degree of good qualities fuperior to thofe of any other places; but it is not to be fuppofed, but that there are certain parts of that country, which have attained a higher perfection in the art of management than the others.

Thus we find by fome late information *, that *Yemine* in *Arabia Fælix*, is at prefent in great repute for its breed; for the jockies of that part have acquired fuch a fuperior name, as to be able to fell their three year old horfes for two or three hundred guineas a-piece, and when they can be prevailed on to part with a favorite *ftallion*, they will not take lefs for it than fifteen hundred guineas. It is from this country that the great men in *India* are fupplied with horfes, for *India* itfelf is poffeffed of a very bad kind; thefe noble animals being much neglected there, from the conftant ufe of the *Buffalo*, not only in tillage, but even in riding.

It may be allowed here to give fome account of the horfes of other countries, which derive their origin, or at left receive their improvement from the *Arabian* kind, for wherefoever the *Saracens* fpread their victorious arms, they, at the fame time, introduced their generous race of horfes.

Those of *Persia* are light, fwist, and very like those of. Arabia, but formed very narrow before:

* Wall on horfes, 74.

they

they are fed with chopped straw, mixed with barley, and instead of foiling, are fed with new eared or green barley for about fourteen or twenty days*.

Ætbiopia has with fome writers the credit of having originally furnished Arabia with its fine race of horfes; but we believe the reverfe, and that they were introduced into that empire by the Arabian princes, whose lineage to this day fills that throne. The horfes of that country are spirited and ftrong, and generally of a black color: they are never used in long journies, but only in battle or in the race, for all service work is done by mules: the Æthiopians never shoe them, for which reason, on passing through story places, they dismount, and ride on mules, and lead their horfes +; so from this we may collect, that this nation is not less attached to these animals than the Arabs.

Ægypt has two breeds of horfes, one its own, the other Arabian; the laft are most efteemed, and are bought up at a great price, in order to be fent to Constantinople; but fuch is the discouragement, arising from the tyranny of the government, that the owners often wilfully lame a promising horse \ddagger , left the Beys should like it and force it from them.

Barbary owes its fine horfes to the fame ftock, but in general they are far inferior in point of value; and for the fame reafon as is given in the laft arti-

* Tavernier's Travels, I. 145.

+ Ludolph. hift. Æthiop. 53.

t Univ. modern hift. quotted from Maillet and Pocock, Vol. II. U u cle, Sec.

cle, the great infecurity of property under the *Turkifb* government. The breed was once very famous: M. D'Arvieux* fays, that when he was there in 1668, he met with a mare that he thought worthy of the ftud of his grand Monarque, when in the height of his glory; but Doctor Shaw informs us, that at prefent the cafe is entirely altered +.

Notwithstanding Spain has been celebrated of old for the fwiftness of its horses, yet it must have received great improvement from those brought over by their conquerors, the Saracens. According to Oppian \ddagger , the Spanis breed had no other merit than that of fleetnese, but at present we know that they have several other fine qualities.

To fum up the account of this generous animal, we may obferve, that every country that boafts of a fine race of horfes, is indebted to *Arabia*, their primæval feat. No wonder then, that the poetic genius of the author of the book of *Job*, who not only lived on the very fpot, but even at time when the animal creation ftill enjoyed much of its original perfection, fhould be able to compofe that fublime defcription which has always been the admiration of every perfon of genuine tafte §.

- * D'Arvieux, 173.
- + Shaw's Travels, 238.
- 1 Cyneg. lib. I. V. 284.
- § Job. ch. XXXIX. v. 19. to 25.

No.

No. II.

OF THE TAKING OF WOLVES, &c.

Ex Autographo penes Dec. et Capit. Exon.

From Bp. LYTTELTON's Collections.

MOHAN. comes Moreton omnibus hominibus et amicis suis Francis et Anglicis presentibus et futuris falutem sciatis nos conces.fe reddidiffe et hac cartamea confirmaffe comit, baron militibus et omnibus libere tenentibus clericis et laicis in Devenescire libertates suas foreste quas habuerunt tempore Henrici Reg. proavi mei tenendas et habendas illis et heredibus fuis de me et heredibus meis et nominatim quod habeant arcus et pharetras, et sagittas in terris suis deferendas extra regardum foreste mee, et quod canes sui vel hominum fuorum, non fint espaltati extra regardum foreste, et quod habeant canes suos et alias libertates, ficut melius et liberius illas habuerunt tempore ejuíd. Henrici Regis et Reifellos fuos, et quod capiant Capreolum, Vulpem, Cattum, Lupum, Leporem, Lutram, ubicunque illam inveniunt ex-Uu₂ tra

tra regardum foreste mee. Et ideo vobis firmiter precipio, quod nullus eis, de hiis vel aliis libertatibus fuis molestiam inferat vel gravamen. Hiis testibus Will. Marescall. Will. comite Saresbur. Will. com. de Vernon. Stepb. Ridell cancellario meo, Will. de Wenn. Hamone de Valoin, Rogero de Novoburgo, Ingelram de Pincoll. Rob. de Moritomari, Waltero Maltravers. Rad. Morin. Walt. de Cantelu. Gilberti Morin et multis aliis.

Seal appendant, an armed man on horfeback, and on the reverfe, a finall impreffion from an antique head — the legend broken.

No. III.

OF THE CHOICE OF HIS MAJESTY'S HAWKS.

→O all those to whome this present Writinge fhall come I Sr. Anthony Pell Knight Maifter Faulkner Surveyor and Keeper of his Majefties Hawkes fend greetinge, Whereas I am credibly informed that divers perfons who doe ufuallie bringe Haukes to fell doe commonlye convey them from fhipbord and cuftome howfe before fuch tyme as I or my fervants or deputies have any fight or choife of them for his Majefties ufe whereby his Highnefs is not nor hath not lately beene furnished with the number of Hawkes as is most meete, Wherefore theis are in his Majesties name to will charge and commaund you and every of you that shall at any tyme hereafter bringe any Hawkes to fell, That neither you nor any of you nor any others for you or by your appointment doe remove or convey awaye any of your Hawkes whatfoever from fhipbord or the cuftome houfe untill fuch tyme as the bearer hereof my welbeloved friend William Spence Gent. have his first choife Uu₂ for

648

for his Majefties fervice, And that you and every one of you do quietly permitt and fuffer the faid Wm. Spence the bearer hereof to take his choife and make tryal of fuch of your Hawkes as he shall thinke meete with a gorge or two of meat before fuch tyme as his Majesties price be paide beeinge as hereafter followeth, viz for a Faulcon twenty fix shillings and eight pence, for a Taffell gentle thirteene shillings and four pence, for a Lanner twenty fix shillings and eight pence, for a Lannarett thirteene shillings and foure pence, for a Goshawke twentie shillings, for a Tassell of a Gosshawke thirteene shillings and foure pence, for a Gerfaulkon thirtie shillings, for a Jerkin thirteen shillings and fourepence, hereof fayle you not as you will anfwere the contrary at your perills. Dated the fix and twentieth day Januarie Anno Domini 1621.

This warrant to endure untill the first daye of *August* next comeinge,

610

No. IV.

OF THE SMALL BIRDS OF FLIGHT,

By the Honble. DAINES BARRINGTON.

TN the fuburbs of London (and particularly about Shoreditch) are feveral weavers and other tradefmen, who, during the months of October and March, get their livelihood by an ingenious, and we may fay, a fcientific method of bird-catching, which is totally unknown in other parts of Great Britain.

The reason of this trade being confined to fo fmall a compais, arifes from there being no confiderable fale for finging birds except in the metropolis: as the apparatus for this purpose is alfo heavy, and at the fame time must be carried on a man's back, it prevents the bird-catchers going to above three or four miles distance.

This method of bird-catching must have been long practifed, as it is brought to a most systematical perfection, and is attended with a very confiderable expence.

The nets are a most ingenious piece of mechanifm, are generally twelve yards and a half long, and and two yards and a half wide; and no one on bare infpection would imagine that a bird (who is fo fo very quick in all its motions) could be catched by the nets flapping over each other, till he becomes eye witnefs of the pullers feldom failing *.

The wild birds fly (as the bird-catchers term it) chiefly during the month of OEtober, and part of September and November; as the flight in March is much lefs confiderable than that of Michaelmafs. It is to be noted alfo, that the feveral fpecies of birds of flight do not make their appearance precifely at the fame time, during the months of September, OEtober and November. The Pippet +, for example, begins to fly about Michaelmafs, and then the Woodlark, Linnet, Goldfinch, Chaffinch, Greenfinch, and other birds of flight fucceed; all of which are not eafily to be caught, or in any numbers, at any other time, and more particularly the Pippet and the Woodlark.

These birds, during the *Michaelmass* and *March* flights, are chiefly on the wing from day break to noon, though there is afterwards a small *flight* from two till night; but this however is fo incon-

* These nets are known in most parts of *England* by the name of *day-nets* or *clap-nets*; but all we have seen are far inferior in their mechanism to those used near *London*.

+ A fmall species of Lark, but which is inferior to other birds of that Genus in point of song.

fiderable,

fiderable, that the bird-catchers always take up their nets at noon.

It may well deferve the attention of the naturalift whence thefe periodical flights of certain birds can arife. As the ground however is ploughed during the months of *OEtober* and *March* for fowing the winter and lent corn, it fhould feem that they are thus fupplied with a great profusion both of feeds and infects, which they cannot fo eafily procure at any other feason.

It may not be improper to mention another circumftance, to be observed during their flitting, viz. that they fly always against the wind; hence, there is great contention amongst the bird-catchers who shall gain that point, if (for example) it is westerly, the bird catcher who lays his nets most to the east, is fure almost of catching every thing, provided his call-birds are good: a gentle wind to the fouth-west generally produces the best sport.

The bird-catcher, who is a fubftantial man, and hath a proper apparatus for this purpofe, generally carries with him five or fix *linnets* (of which more are caught than any finging bird) two goldfinches, two greenfinches, one woodlark, one redpoll, a yellowbammer, titlark, and aberdavine, and perhaps a bullfinch; thefe are placed at fmall diftances from the nets in little cages. He hath, befides, what are called *flur-birds*, which are placed within in the nets, are raifed upon the flur *, and gently let down at the time the wild bird approaches them. These generally confist of the *linnet*, the goldfincb, and the greenfincb, which are fecured to the flur by what is called a brace +; a contrivance that fecures the birds without doing any injury to their plumage.

It having been found that there is a fuperiority between bird and bird, from the one being more in fong than the other; the bird-catchers contrive that their call birds fhould moult before the ufual time. They, therefore, in *June* or *July*, put them into a clofe box, under two or three folds of blankets, and leave their dung in the cage to raife a greater heat; in which ftate they continue, being perhaps examined but once a week to have fresh water. As for food, the air is fo putrid, that they eat little during the whole ftate of confinement, which last about a month. The birds frequently die under the operation \ddagger ; and hence the value of a *ftopped bird* rifes greatly.

When

* A moveable perch to which the bird is tied, and which the bird-catcher can raife at pleafure, by means of a long ftring faftened to it.

+ A fort of bandage, formed of a flender filken flring that is fastened round the bird's body, and under the wings, in fo artful a manner as to hinder the bird from being hurt, let flutter ever fo much in the raifing.

t We have been lately informed by an experienced birdcatcher, When the bird hath thus prematurally moulted, he is *in fong*, whilft the wild birds are *out of fong*, and his note is louder and more piercing than that of a wild one; but it is not only in his note he receives an alteration, the plumage is equally improved. The black and yellow in the wings of the *goldfincb*, for example, become deeper and more vivid, together with a moft beautiful glofs, which is not to be feen in the wild bird. The bill, which in the latter is likewife black at the end, in the *ftopped bird* becomes white and more taper, as do its legs: in fhort, there is as much difference between a wild and a *ftopped bird*, as there is between a horfe which is kept in body cloaths, or at grafs.

When the bird-catcher hath laid his nets, he difpofes of his *callbirds* at proper intervals. It must be owned, that there is a most malicious joy in these *call-birds* to bring the wild ones into the fame state of captivity; which may likewise be observed with regard to the decoy ducks.

Their fight and hearing infinitely excels that of the bird catcher. The inftant that the * wild birds are perceived, notice is given by one to the reft of

catcher, that he purfues a cooler regimen in *ftopping* his birds, and that he therefore feldom lofes one: but we fufpect that there is not the fame certainty of making them moult.

* It may be also observed, that the moment they see a hawk, they communicate the alarm to each other by a plaintive note; nor will they then *jerk* or call though the wild birds are near,

thę

the call-birds, (as it is by the first hound that hits on the fcent, to the reft of the pack) after which, follows the fame fort of tumultuous (ecftacy and joy. The call-birds, while the bird is at a diftance, do not fing as a bird does in a chamber; they invite the wild ones by what the bird-catchers call fort jerks, which when the birds are good, may be heard at a great diftance. The afcendency by this call or invitation is fo great, that the wild bird is ftopped in its courfe of flight, and if not already acquainted with the nets*, lights boldly within twenty yards of perhaps three or four bird-catchers, on a fpot which otherwife it would not have taken the left notice of. Nay, it frequently happens, that if half a flock only are caught, the remaining half will immediately afterwards light in the nets, and fhare the fame fate; and fhould only one bird efcape, that bird will fuffer itfelf to be pulled at till it is caught, fuch a fafcinating power have the call-hirds.

While we are on this fubject of the *jerking* of birds, we cannot omit mentioning, that the birdcatchers frequently lay confiderable wagers whofe *call-bird* can *jerk* the longeft, as that determines the fuperiority. They place them oppofite to each other, by an inch of candle, and the bird who

* A bird, acquainted with the nets, is by the bird-catchers termed a *fharper*, which they endeavour to drive away, as they can have no fport whilk it continues near them.

654

jerks

jerks the ofteness, before the candle is burnt out, wins the wager. We have been informed, that there have been instances of a bird's giving a hundred and seventy jerks in a quarter of an hour; and we have known a linnet, in such a trial, perfevere in its emulation till it swooned from the perch: thus, as Pliny says of the nightingale, vista morte finit face vitam, spiritu prius deficiente quám cantu*.

It may be here observed, that birds when near each other, and in fight, feldom *jerk* or fing. They either fight, or use fhort and wheedling calls; the *jerking* of these *call-birds*, therefore, face to face, is a most extraordinary instance of contention for fuperiority in fong.

It may be alfo worthy of obfervation, that the female of no fpecies of birds ever fings: with birds, it is the reverfe of what occurs in human kind: among the feathered tribe, all the cares of life fall to the lot of the tender fex: theirs is the fatigue of incubation; and the principal fhare in nurfing the helplefs brood: to alleviate thefe fatigues, and to fupport her under them, nature hath given to the male the fong, with all the little blandifhments and foothing arts; thefe he fondly exerts (even after courtfhip) on fome fpray contiguous to the neft, during the time his mate is performing her parental duties. But that fhe fhould be filent, is alfo a-

* Lib. x. c. 29.

5 2

nother

656

nother wife provision of nature, for her fong would difcover her nest; as would a gaudiness of plumage, which, for the fame reason, seems to have been denied her.

To thefe we may add a few particulars that fell within our notice during our enquiries among the bird-catchers, fuch as, that they immediately kill the hens of every fpecies of birds they take, being incapable of finging, as also being inferior in plumage; the *pippets* likewife are indifcriminately deftroyed, as the cock does not fing well: they fell the dead birds for three-pence or four-pence a dozen.

Thefe fmall birds are fo good, that we are furprized the luxury of the age neglects fo delicate an acquifition to the table. The modern *Italians* are fond of fmall birds, which they eat under the common name of *Beccaficos*: and the dear rate a *Roman Tragedian* paid for one difh of finging birds* is well known.

Another particular we learned, in conversation with a *London* bird-catcher, was the vaft price that is fometimes given for a fingle fong bird, which

* Maximè tamen infignis est in hac memoria, Clodii Æsopi tragici histrionis patina sexcentis H. S. taxata; in quo posuit aves cantu aliquo, aut humano sermone, vocales. Plin. lib. x. c. 51. The price of this expensive dish was about 68431 10s. according to Arbuthnot's Tables. This seems to have been a wanton caprice, rather than a tribute to epicurism. T. P. had not learned to whiftle tunes. The greateft fum we heard of, was five guineas for a *chaffinch*, that had a particular and uncommon note, under which it was intended to train others: and we alfo heard of five pounds ten fhillings being given for a *call-bird linnet*.

A third fingular circumstance, which confirms an observation of *Linnæus*, is, that the male *chaffinches* fly by themselves, and in the *flight* precede the females; but this is not peculiar to the *chaffinches*. When the *titlarks* are caught in the beginning of the feason, it frequently happens, that forty are taken and not one female among them : and probably the fame would be observed with regard to other birds (as has been done with relation to the *wheat-ear*) if they were attended to.

An experienced and intelligent bird-catcher informed us, that fuch birds as breed twice a year, generally have in their first brood a majority of males, and in their fecond, of females, which may in part account for the above observation.

We must not omit mention of the *balfinch*, though it does not properly come under the title of a finging bird, or a bird of *flight*, as it does not often move farther than from hedge to hedge; yet, as the bird fells well on account of its learning to whiftle tunes, and formetimes flies over the fields where the nets are laid; the bird-catchers have often a *call-bird* to enfnare it, though most of them can imitate the call with their mouths. It is remarkable markable with regard to this bird, that the female answers the purpole of a *call-bird* as well as the male, which is not experienced in any other bird taken by the *London* bird-catchers.

It may perhaps furprize, that under this article of *finging birds*, we have not mentioned the *nightingale*, which is not a bird of *flight*, in the fenfe the bird-catchers ufe this term. The *nightingale*, like the *robin*, *wren*, and many other finging birds, only moves from hedge to hedge, and does not take the periodical *flights* in Ostober and March. The perfons who catch thefe birds, make ufe of fmall trap-nets, without call-birds, and are confidered as inferior in dignity to other bird-catchers, who will not rank with them.

The nightingale being the first of finging birds, we shall here infert a few particulars relating to it, that were transmitted to us fince the description of that bird was printed.

Its arrival is expected, by the trappers in the neighborhood of *London*, the first week in *April*; at the beginning none but cocks are taken, but in a few days the hens make their appearance, generally by themsfelves, though sometimes a few males come along with them.

The latter are diftinguished from the females not only by their superior fize, but by a great swelling of their vent, which commences on the first arrival of the hens.

They

658

APPENDIX.

They do not build till the middle of *May*, and generally chufe a quickfet to make their neft in.

If the nightingale is kept in a cage, it often begins to fing about the latter end of *November*, and continues its fong more or lefs till *June*.

A young *Canary bird*, *linnet*, *fkylark*, or *robin* (who have never heard any other bird) are faid beft to learn the note of a *nightingale*.

They are caught in a net-trap; the bottom of which is furrounded with an iron ring; the net itfelf is rather larger than a cabbage net.

When the trappers hear or fee them, they ftrew fome fresh mould under the place, and bait the trap with a meal-worm from the baker's shop.

Ten or a dozen nightingales have been thus caught in a day.

No. V.

EXPERIMENTS AND OBSERVATI-ONS ON THE SINGING OF BIRDS, BY THE HON. DAINES BARRING-TON. IN A LETTER TO MATHEW MATY, M.D. SEC. R. S. 1773.

From the PHILOSOPHICAL TRANSACTIONS, Vol. LXIII.

DEAR SIR,

A S the experiments and obfervations I mean to lay before the Royal Society relate to the finging of birds, which is a fubject that hath never before been fcientifically treated of *, it may not be improper to prefix an explanation of fome uncommon terms, which I fhall be obliged to ufe, as well as others which I have been under a neceffity of coining.

* Kircher, indeed, in his Mufurgia, hath given us fome few paffages in the fong of the nightingale, as well as the call of a quail and cuckow, which he hath engraved in mufical characters. Thefe inftances, however, only prove that fome birds have in their fong, notes which correspond with the intervals of our common fcale of the mufical octave.

To

To chirp, is the first found which a young bird utters, as a cry for food, and is different in all neftlings, if accurately attended to; fo that the hearer may diffinguish of what species the birds are, though the neft may hang out of his sight and reach.

This cry is, as might be expected, very weak and querulous; it is dropped entirely as the bird grows ftronger, nor is afterwards intermixed with its fong, the *chirp* of a nightingale (for example) being hoarfe and difagreeable.

To this definition of the *chirp*, I must add, that it confists of a fingle found, repeated at very short intervals, and that it is common to nestlings of both fexes.

The *call* of a bird, is that found which it is able to make, when about a month old; it is, in moft inftances (which I happen to recollect) a repetition of one and the fame note, is retained by the bird as long as it lives, and is common, generally, to both the cock and hen *.

The next ftage in the notes of a bird is termed, by the bird-catchers, *recording*, which word is

* For want of terms to diftinguish the notes of birds, Bellon applies the verb *chantent*, or fing, to the goose and crane, as well as the nightingale. "Plusieurs oiseaux *chantent* la nuit, comme est l'oye, la grue, & le rossignol." Bellon's Hist. of Birds, p. 50.

X X 2

probably

probably derived from a mufical inftrument, formerly ufed in *England*, called a recorder *.

This attempt in the neftling to fing, may be compared to the imperfect endeavour in a child to babble. I have known inftances of birds beginning to *record* when they were not a month old.

This first estay does not feem to have the least rudiments of the future fong; but as the bird grows older and stronger, one may begin to perceive what the nestling is aiming at.

Whilft the fcholar is thus endeavouring to form his fong, when he is once fure of a paffage, he commonly raifes his tone, which he drops again when he is not equal to what he is attempting; juft as a finger raifes his voice, when he not only recollects certain parts of a tune with precifion, but knows that he can execute them.

What the neftling is not thus thoroughly mafter of, he hurries over, lowering his tone, as if he did not with to be heard, and could not yet fatisfy himfelf.

I have never happened to meet with a paffage in any writer, which feems to relate to this flage of

* It feems to have been a species of flute, and was probably used to teach young birds to pipe tunes.

Lord *Bacon* defcribes this inftrument to have been frait, to have had a leffer and greater bore, both above and below, to have required very little breath from the blower, and to have had what he calls a *fipple*, or flopper. See his fecond Century of Experiments.

finging

finging in a bird, except, perhaps, in the following lines of *Statius*:

"Queftus, inexpertumque carmen, "Quod tacità ftatuere brumà."

Stat. Sylv. L. IV. Ecl. 5.

A young bird commonly continues to record for ten or eleven months, when he is able to execute every part of his fong, which afterwards continues fixed, and is fcarcely ever altered *.

When the bird is thus become perfect in his leffon, he is faid to *fing bis fong round*, or in all its varieties of paffages, which he connects together, and executes without a paule.

I would therefore define a bird's *fong* to be a fucceffion of three or more different notes, which are continued without interruption during the fame interval with a mufical bar of four crotchets in an adagio movement, or whilft a pendulum fwings four feconds.

By the first requisite in this definition, I mean to

* The bird called a T_{wite} * by the bird-catchers commonly flies in company with linnets, yet thefe two fpecies of birds never learn each other's notes, which always continue totally different.

* Br. Zool. Vol. II. p. 315. 8vo. prefent edition, I. p. 293.

exclude the call of a cuckow, or *clucking* of a hen *, as they confift of only two notes; whilft the fhort burfts of finging birds, contending with each other (called *jerks* by the bird-catchers) are equally diffinguished from what I term *fong*, by their not continuing for four feconds.

As the notes of a cuckow and hen, therefore, though they exceed what I have defined the *call* of a bird to be, do not amount to its *fong*, I will, for this reafon, take the liberty of terming fuch a fucceffion of two notes as we hear in thefe birds, the *varied call*.

Having thus fettled the meaning of certain words, which I shall be obliged to make use of, I shall now proceed to state fome general principles with regard to the singing of birds, which seem to result from the experiments I have been making for several years, and under a great variety of circumstances.

Notes in birds are no more innate, than language is in man, and depend entirely upon the mafter under which they are bred, as far as their organs will enable them to imitate the founds which they have frequent opportunities of hearing.

Most of the experiments I have made on this fubject have been tried with cock linnets, which were fledged and nearly able to leave their nest, on

* The common hen, when the lays, repeats the fame note very often, and concludes with the fixth above, which the holds for a longer time.

account

account not only of this bird's docility, and great powers of imitation, but becaufe the cock is eafily diftinguished from the hen at that early period, by the fuperior whiteness in the wing *.

In many other forts of finging birds the male is not at the age of three weeks fo certainly known from the female; and if the pupil turns out to be a hen,

> ----- " ibi omnis " Effuíus labor."

The Greek poets made a fongiter of the $\tau \varepsilon \tau h \xi$, whatever animal that may be, and it is remarkable that they observed the female was incapable of finging as well as hen birds:

> Ειτ' εισιν οι τετλιγες εκ ευδαιμονες, Ων ταις γυναιζιν ε δ'οτιεν φωνης ενι; Comicorum Græcorum Sententiæ, p. 452. Ed. Steph.

I have indeed known an inftance or two of a hen's making out fomething like the fong of her fpecies; but thefe are as rare as the common hen's being heard to crow.

I rather fufpect alfo, that those parrots, magpies, &c. which either do not speak at all, or very little, are hens of those kinds.

* The white reaches almost to the shaft of the quill feathers, and in the hen does not exceed more than half of that space: it is also of a brighter hue.

Xx4

I have

I have educated neftling linnets under the three beft finging larks, the *fkylark*, *woodlark*, and *titlark*, every one of which, in flead of the linnet's fong, adhered entirely to that of their refpective inftructors.

When the note of the *titlark-linnet* * was thoroughly *fixed*, I hung the bird in a room with two common linnets, for a quarter of a year, which were full in fong; the *titlark-linnet*, however, did not borrow any paffages from the linnet's fong, but adhered fledfaftly to that of the titlark.

I had fome curiofity to find out whether an *European* neftling would equally learn the note of an *African* bird: I therefore educated a young linnet under a *vengolina* +, which imitated its *African* mafter fo exactly, without any mixture of the linnet fong, that it was impossible to diffinguish the one from the other.

* I thus call a bird which fings notes he would not have learned in a wild flate; thus by a *fkylark-linnet*, I mean a linnet with the fkylark fong; a *nightingale-robin*, a *robin* with the nightingale fong, &c.

† This bird feems not to have been defcribed by any of the ornithologists; it is of the *finch* tribe, and about the fame fize with our aberdavine (or fishin). The colors are grey and white, and the cock hath a bright yellow fpot upon the rump. It is a very familiar bird, and fings better than any of those which are not *European*, except the *American mocking bird*. An instance hath lately happened, in an aviary at *Hamssed*, of a vergelina's breeding with a *Canary* bird.

This

APPENDIX.

This vengolina-linnet was abfolutely perfect, without ever uttering a fingle note by which it could have been known to be a linnet. In fome of my other experiments, however, the neftling linnet retained the *call* of its own fpecies, or what the bird-catchers term the linnet's *chuckle*, from fome refemblance to that word when pronounced.

I have before stated, that all my nestling linnets were three weeks old, when taken from the nest; and by that time they frequently learn their own call from the parent birds, which I have mentioned to confist of only a fingle note.

To be certain, therefore, that a neftling will not have even the *call* of its fpecies, it fhould be taken from the neft when only a day or two old; becaufe, though neftlings cannot fee till the feventh day, yet they can hear from the inftant they are hatched, and probably, from that circumftance, attend to founds, more than they do afterwards, efpecially as the call of the parents announces the arrival of their food.

I must own, that I am not equal myself, nor can I procure any perfon to take the trouble of breeding up a bird of this age, as the odds against its being reared are almost infinite. The warmth indeed of incubation may be, in fome measure, fupplied by cotton and fires; but these delicate animals require, in this state, being fed almost perpetually, whils the nourishment they receive should not not only be prepared with great attention, but given in very finall portions at a time.

Though I must admit, therefore, that I have never reared myself a bird of fo tender an age, yet I have happened to see both a linnet and a goldfinch which were taken from their nests when only two or three days old.

The first of these belonged to Mr. Matthews, an apothecary at Kensington, which, from a want of other sounds to imitate, almost articulated the words pretty boy, as well as some other short sentences: I heard the bird myself repeat the words pretty boy; and Mr. Matthews assured me, that he had neither the note or call of any bird whatsoever.

This talking linnet died laft year, before which, many people went from *London* to hear him fpeak.

The goldfinch I have before mentioned, was reared in the town of *Knighton* in *Radnorfhire*, which I happened to hear, as I was walking by the houfe where it was kept.

I thought indeed that a *wren* was finging; and I went into the house to inquire after it, as that little bird feldom lives long in a cage.

The people of the houfe, however, told me, that they had no bird but a goldfinch, which they conceived to fing its own natural note, as they called it; upon which I ftaid a confiderable time in the room, whilft its notes were merely those of a wren, without the least mixture of goldfinch.

668

Qn

APPENDIX.

On further inquiries, I found that the bird had been taken from the neft when only a day or two old, that it was hung in a window which was opposite to a small garden, whence the neftling had undoubtedly acquired the notes of the wren, without having had any opportunity of learning even the *call* of the goldfinch.

These facts, which I have stated, feem to prove very decifively, that birds have not any innate ideas of the notes which are supposed to be peculiar to each species. But it will possibly be asked, why, in a wild state, they adhere so steadily to the same song, in so much, that it is well known, before the bird is heard, what notes you are to expect from him.

This, however, arifes entirely from the neftling's attending only to the inftruction of the parent bird, whilft it difregards the notes of all others, which may perhaps be finging round him.

Young *Canary* birds are frequently reared in a room where there are many other forts; and yet I have been informed, that they only learn the fong of the parent cock.

Every one knows, that the common house-fparrow, when in a wild ftate, never does any thing but chirp: this, however, does not arise from want of powers in this bird to imitate others; but because he only attends to the parental note.

But, to prove this decifively, I took a comaton sparrow from the nest when it was fledged, and and educated him under a linnet: the bird, however, by accident, heard a goldfinch alfo, and his fong was, therefore, a mixture of the linnet and goldfinch.

I have tried feveral experiments, in order to obferve, from what circumftances birds fix upon any particular note when taken from the parents; but cannot fettle this with any fort of precifion, any more than at what period of their *recording* they determine upon the fong to which they will adhere.

I educated a young *robin* under a very fine nightingale; which, however, began already to be out of fong, and was perfectly mute in lefs than a fortnight.

This robin afterwards fung three parts in four *nightingale*; and the reft of his fong was what the bird-catchers call *rubbifb*, or no particular note whatfoever.

I hung this robin nearer to the nightingale than to any other bird; from which first experiment I conceived, that the scholar would imitate the mafter which was at the least distance from him.

From feveral other experiments, however, which I have fince tried, I find it to be very uncertain what notes the neftlings will most attend to, and often their fong is a mixture; as in the inflance which I before flated of the fparrow.

I must own also, that I conceived, from the experiment of educating the *robin* under a nightingale, that the fcholar would fix upon the note which APPENDIX.

which it first heard when taken from the nest; I imagined likewise, that, if the nightingale had been fully in fong, the instruction for a fortnight would have been fufficient.

I have, however, fince tried the following experiment, which convinces me, fo much depends upon circumftances, and perhaps caprice in the fcholar, that no general inference, or rule, can be laid down with regard to either of thefe fuppolitions.

I educated a neftling robin under a woodlarklinnet, which was full in fong, and hung very near to him for a month together: after which, the robin was removed to another houfe, where he could only hear a fkylark-linnet. The confequence was, that the neftling did not fing a note of woodlark (though I afterwards hung him again juft above the woodlark-linnet) but adhered entirely to the fong of the fkylark-linnet.

Having thus flated the refult of feveral experiments, which were chiefly intended to determine, whether birds had any innate ideas of the notes, or fong, which is fuppofed to be peculiar to each fpecies, I fhall now make fome general obfervations on their finging; though perhaps the fubject may appear to many a very minute one.

Every poet, indeed, fpeaks with raptures of the harmony of the groves; yet those even, who have good musical ears, feem to pay little attention to it, but as a pleasing noise.

I am alfo convinced (though it may feem rather paradoxical paradoxical), that the inhabitants of *London* diffinguifh more accurately, and know more on this head, than of all the other parts of the ifland taken together.

This feems to arife from two caufes.

The first is, that we have not more musical ideas which are innate, than we have of language; and therefore those even, who have the happines to have organs which are capable of receiving a gratification from this fixth fense (as it hath been called by some) require, however, the best instruction.

The orcheftra of the opera, which is confined to the metropolis, hath diffufed a good ftile of playing over the other bands of the capital, which is, by degrees, communicated to the fidler and balladfinger in the ftreets; the organs in every church, as well as those of the Savoyards, contribute likewife to this improvement of mulical faculties in the Londoners.

If the finging of the ploughman in the country is therefore compared with that of the London blackguard, the fuperiority is infinitely on the fide of the latter; and the fame may be observed in comparing the voice of a country girl and London house-maid, as it is very uncommon to hear the former fing tolerably in tune.

I do not mean by this, to affert that the inhabitants of the country are not born with as good mufical organs; but only, that they have not the fame opportunities of learning from others, who play in tune themfelves.

The

The other reason for the inhabitants of *London* judging better in relation to the fong of birds, arifes from their hearing each bird fing diftinctly, either in their own or their neighbours fhops; as also from a bird continuing much longer in fong whilst in a cage, than when at liberty; the cause of which I shall endeavour hereafter to explain.

They who live in the country, on the other hand, do not hear birds fing in their woods for above two months in the year, when the confusion of notes prevents their attending to the fong of any particular bird; nor does he continue long enough in a place, for the hearer to recollect his notes with accuracy.

Befides this, birds in the fpring fing very loud indeed; but they only give flort jerks, and fcarcely ever the whole compass of their fong.

For these reasons, I have never happened to meet with any perfon, who had not refided in *London*, whose judgment or opinion on this subject I could the least rely upon; and a stronger proof of this cannot be given, than that most people, who keep *Canary* birds do not know that they sing chiefly either the titlark, or nightingale notes *.

Nothing,

* I once faw two of thefe birds which came from the Canary Iflands; neither of which had any fong at all; and I have been informed, that a fhip brought a great many of them not long fince, which fung as little.

Most of those Canary birds, which are imported from the Tyrol,

Nothing, however, can be more marked than the note of a nightingale called its *jug*, which most of the *Canary* birds brought from the *Tyrol* commonly have, as well as feveral nightingale *ftrokes*, or particular paffages in the fong of that bird.

I mention this fuperior knowledge in the inhabitants of the capital, becaufe I am convinced, that, if others are confulted in relation to the finging of birds, they will only miflead, inftead of giving any material or ufeful information *.

Birds in a wild ftate do not commonly fing above ten weeks in the year; which is then alfo confined to the cocks of a few fpecies; I conceive, that this laft circumftance arifes from the fuperior ftrength of the mufcles of the larynx.

Tyrol, have been educated by parents, the progenitor of which was inftructed by a nightingale; our *Englifb Canary* birds have commonly more of the titlark note.

The traffick in thefe birds makes a fmall article of commerce, as four Tyroleze generally bring over to England fixteen hundred every year; and though they carry them on their backs one thousand miles, as well as pay 20 l. duty for fuch a number, yet, upon the whole, it answers to fell these birds at 5 s. a piece.

The chief place for breeding *Canary* birds is *Infpruck* and its environs, from whence they are fent to *Conftantinople*, as well as every part of *Europe*.

* As it will not answer to catch birds with clap-nets any where but in the neighbourhood of *London*, most of the birds which may be heard in a country town are nestlings, and confequently cannot fing the supposed natural fong in any perfection.

Î pro-

I procured a cock nightingale, a cock and hen blackbird, a cock and hen rook, a cock linnet, as alfo a cock and hen chaffinch, which that very eminent anatomift, Mr. *Hunter*, F. R. S. was fo obliging as to diffect for me, and begged, that he would particularly attend to the ftate of the organs in the different birds, which might be fuppofed to contribute to finging.

Mr. Hunter found the muscles of the larynx to be ftronger in the nightingale than in any other bird of the fame fize; and in all those inftances (where he diffected both cock and hen) that the fame muscles were ftronger in the cock.

I fent the cock and hen rook, in order to fee whether there would be the fame difference in the cock and hen of a fpecies which did not fing at all. Mr. *Hunter*, however, told me, that he had not attended fo much to their comparative organs of voice, as in the other kinds; but that, to the beft of his recollection, there was no difference at all.

Strength, however, in thefe mufcles, feems not to be the only requifite; the birds muft have alfo great plenty of food, which feems to be proved fufficiently by birds in a cage finging the greateft part of the year *, when the wild ones do not (as

* Fifh alfo which are fupplied with a constant fucceffion of palatable food, continue in feason throughout the greatest part of the year; trouts, therefore, when confined in a flew Vol. II. Yy and (as I observed before) continue in fong above ten weeks.

The food of finging birds confifts of plants, infects, or feeds, and of the two first of these there is infinitely the greatest profusion in the spring.

As for feeds, which are to be met with only in the autumn, I think they cannot well find any great quantities of them in a country fo cultivated as *England* is; for the feeds in meadows are deftroyed by mowing; in paftures, by the bite of the cattle; and in arable, by the plough, when most of them are buried too deep for the bird to reach them *.

I know well that the finging of the cock-bird in the fpring is attributed by many + to the motive only of pleafing its mate during incubation.

They, however, who fuppofe this, fhould recollect, that much the greater part of birds do not fing at all: why fhould their mate therefore be deprived of this folace and amufement?

The bird in a cage, which, perhaps, fings nine or ten months in a year, cannot do fo from this inducement; and, on the contrary, it arifes chiefly from contending with another bird, or indeed against almost any fort of continued noise.

and fed with minnows, are almost at all feasons of a good flavour, and are red when dreffed.

* The plough indeed may turn up fome few feeds, which may fill be in an eatable flate.

+ See, amongst others, M. de Buffon, in his lately-published Ornithology.

Superiority

APPENDIX.

Superiority in fong gives to birds a moft amazing afcendency over each other; as is well known to the bird-catchers by the fafcinating power of their call-birds, which they contrive fhould moult prematurely for this purpofe.

But, to fhew decifively that the finging of a bird in the fpring does not arife from any attention to its mate, a very experienced catcher of nightingales hath informed me, that fome of these birds have *jerked* the inftant they were caught. He hath also brought to me a nightingale, which had been but a few hours in a cage, and which burft forth in a roar of fong.

At the fame time this bird is fo fulky on its firft confinement, that he must be crammed for feven or eight days, as he will otherwife not feed himself; it is also neceffary to tye his wings, to prevent his killing himself against the top or fides of the cage.

I believe there is no inftance of any bird's finging which exceeds our black bird in fize; and poffibly this may arife from the difficulty of its concealing itfelf, if it called the attention of its enemies, not only by bulk, but by the proportionable loudnefs of its notes *.

I fhould rather conceive, it is for the fame reafon that no henbird fings, becaufe this talent would be ftill more dangerous during incubation; which

* For the fame reason, most large birds are wilder than the fmaller ones.

Y y 2

may

may poffibly allo account for the inferiority in point of plumage.

I shall now confider how far the finging of birds refembles our known mufical intervals, which are never marked more minutely than to half notes; because, though we can form every gradation from half-note to half-note, by drawing the finger gently over the string of a violin, or covering by degrees the hole of a flute; yet we cannot produce such a minute interval at command, when a quarter-note for example might be required.

Ligon, indeed, in his hiftory of Barbadoes, hath the following paffage: "The next bird is of the "colour of the fieldfare; but the head is too large "for the body; and for that reafon fhe is called "a counfellor. She performs that with her voice, "which no inftrument can play, or voice can fing; "and that is quarter-notes, her fong being com-"pofed of them, and every one a note higher than "another."

Ligon appears, from other parts of his work, to have been mufical; but I fhould doubt much whether he was quite fure of these quarter intervals, fo as to speak of them with precision.

Some paffages of the fong in a few kinds of birds correspond with the intervals of our mulical scale (of which the cuckow is a striking and known instance): much the greater part, however, of such fong is not capable of mulical notations.

This arifes from three caufes : the first is, that the

APPENDIX.

the rapidity is often fo great, and it is alfo fo uncertain when they may ftop, that we cannot reduce the paffages to form a mußcal bar, in any time whatfoever.

The fecond is, that the pitch of most birds is confiderably higher * than the most shrill notes of those instruments, which contain even the greatest compass.

I have before faid, that our ideas of a voice, or inftrument, being perfectly in tune or not, arife from comparing it with the mufical intervals to which we are most accustomed.

As the upper and lower parts of every inftrument, however, are but feldom ufed, we are not fo well acquainted with the intervals in the higheft and loweft octaves, as we are with those which are more central; and for this reason the harpfichordtuners find it more difficult to tune these extreme parts.

As a bird's pitch, therefore, is higher than that of an inftrument, we are confequently at a ftill

*Dr. *Wallis* is miftaken in part of what he fuppofes to be the caufe of fhrillness in the voice, "Nam ut tubus, fic tra-"chea longior, & firictior, fonum efficit magis acutum." Grammar, p. 3.

The narrower the pipe is, the more tharp the pitch as he rightly obferves; but the length of the tube hath just the contrary effect, becaufe players on the flute always infert a longer middle-piece, when they want to make the inftrument more flat.

Yy 3

greater

greater lofs when we attempt to mark their notes in mufical characters, which we can fo readily apply to fuch as we can diffinguifh with precifion.

The third, however, and unfurmountable difficulty is, that the intervals used by birds are commonly to minute, that we cannot judge at all of them from the more grofs intervals into which we divide our mufical octave.

It should therefore be recollected, by those who have contended that the *Greeks* and *Romans* were acquainted with fuch more minute intervals of the octave, that they must infift the ancients had organs of fensation, with which their degenerate posterity are totally unprovided.

Though we cannot attain the more delicate and imperceptible intervals in the fong of birds^{*}, yet many of them are capable of whiftling tunes with our more groß intervals, as is well known by the common inftances of piping bullfinches⁺, and *Canary* birds.

This, however, arifes from mere imitation of what they hear when taken early from the neft; for if the inftrument from which they learn it is

* There have been inflances indeed of perfons who could whiftle the notes of birds, but thefe are two rare to be argued from.

+ These bullfinches also form a small article of commerce, and are chiefly brought from the neighbourhood of Cologne.

out

out of tune, they as readily pipe the false, as the true notes of the composition.

The next point of comparison to be made between our mulic and that of birds is, whether they always fing in the fame pitch.

This, however, I will not prefume to anfwer with any precifion, for the reafon I have before fuggefted; I fhall, however, without referve, give the beft conjectures I can form on this head.

If a dozen finging birds of different kinds are heard in the fame room, there is not any difagreeable diffonance (which is not properly refolved), either to my own ear, or to that of others, whofe judgment on fuch a point I can more rely.

At the fame time, as each bird is finging a different fong, it is extraordinary that what we call harmony fhould not be perpetually violated, as we experience, in what is commonly called a *Dutch* concert, when feveral tunes are played together.

The first requisite to make such founds agreeable to the ear is, that all the birds should fing in the fame key, which I am induced to believe that they do, from the following reasons.

I have long attended to the finging of birds, but if I cannot have recourfe to an inftrument very foon, I cannot carry the pitch of their notes in my memory, even for a very flort time.

I therefore defired a very experienced harpfichordtuner (who told me he could recollect any particular note which he happened to hear for feveral hours),

Y y 4

to

to mark down when he returned home what he had obferved on this head.

I had lately received an account from him of the following notes in different birds.

F. natural in woodlarks.

A. natural in common cocks.

C. natural in Bantam cocks.

B. flat in a very large cock.

C. falling to A. commonly in the cuckow.

A. in thrushes.

D. in fome owls.

B. flat in fome others.

These observations furnish five notes, viz. A. B. flat, C. D. and F. to which I can add a fixth, (viz. G.) from my own observations on a nightingale which lived three years in a cage. I can also confirm these remarks of the harpfichord-tuner by having frequently heard from the same bird C. and F.

As one fhould speak of the pitch of these notes with some precision, the B. flat of the spinnet I tried them by, was perfectly in tune with the great bell of *St. Paul's*.

The following notes, therefore, having been obferved in different birds, viz. A. B. flat, C. D. F. and G. the E. is only wanting to complete the fcale; the fix other notes, however, afford fufficient data for making fome conjectures, at leaft, with regard to the key in which birds may be fuppoled to fing, as thele intervals can only be found

in

682

in the key of F. with a fharp third, or that of G. with a flat third.

I must own, I should rather suppose it to be the latter, and for the following reasons.

Lucretius fays (and perhaps the conjecture is not only ingenious but well founded) that the first mufical notes were learned from birds:

" At liquidas avium voces imitarier ore

" Ante fuit multo, quam lævia carmina cantu

" Concelebrare homines poffent, cantuque juvare."

Now, of all the mufical tones which can be diffinguished in birds, those of the cuckow have been most attended to, which form a flat third, not only by the observations of the harpsichord tuner I have before mentioned, but likewise by those of *Kircher*, in his *Musurgia*.

I know well that there have been fome late compofitions, which introduce the cuckow notes in a fharp third; thefe compofers, however, did not trouble themfelves with accuracy in imitating thefe notes, and it anfwered their purpofe fufficiently, if there was a general refemblance.

Another proof of our mufical intervals being originally borrowed from the fong of birds, arifes from most compositions being in a flat third, where mufic is fimple, and confists merely of melody.

The oldest tune I happen to have heard is a W elfb

97° e

Welfb one, called Morva Rbydland *, which is compofed in a flat third; and if the mufic of the Turks and Chinefe is examined in Du Halde and Dr. Shaw, half of the airs are also in the minor third.

The mufic of two centuries ago is likewife often in a flat third, though ninety-nine compositions out of a hundred are now in the fharp third.

The reaton, however, of this alteration feems to be very clear: the flat third is plaintive, and confequently adapted to fimple movements, fuch as may be expected in countries where mufic hath not been long cultivated.

There is on the other hand a most striking brilliancy in the sharp third, which is therefore proper for the amazing improvements in execution, which both singers and players have arrived at within the last fifty years.

When *Corelli's* mufic was first published, our ablest violinists conceived that it was too difficult to be performed; it is now, however, the first composition which is attempted by a scholar. Every year also now produces greater and greater prodigies upon other instruments, in point of execution.

I have before obferved, that by attending to a nightingale, as well as a *robin* which was educated

* Or Rhydland Marsh, where the Welsh received a great defeat; Rhydland is in Flintshire. We find also, by the Orphens Britannicus, that even so late as the time of Purcel, two parts in three of his compositions are in the flat third.

under

under him, I always found that the notes reducible to our intervals of the octave were precifely the fame; which is another proof that birds fing always in the fame key.

In this circumftance, they differ much from the human finger; becaufe they who are not able to fing from the notes, often begin a fong either above or below the compafs of their voice, which they are not therefore able to go through with. As birds, however, form the fame paffages with the fame notes, at all times, this miftake of the pitch can never happen in them.

Few fingers again can continue their own part, whill the fame paffages are fung by another in a different key; or if other paffages are played, though they may agree both in harmony and time.

As birds however adhere fo ftedfaftly to the fame precife notes in the fame paffages, though they never trouble themfelves about what is called *time* or harmony in mufic; it follows that a composition may be formed for two piping bulfinches, in two parts, fo as to conflitute true harmony, though either of the birds may happen to begin, or ftop, when they pleafe.

I have therefore procured fuch an ingenious composition, by a very able musician*, which I fend herewith; and it need fearcely be observed,

* Mr. Zeidler, who plays the violincello at Covent Garden theatre.

that

that there cannot possibly be much variety in the part of the fecond bulfinch. See *Tab. XI.* in the *Philosophical Transations, Vol.* LXIII.

Though feveral birds have great mufical powers, yet they feem to have no delicacy of fenfations, as the human finger hath; and therefore the very beft of them cannot be taught to exceed the infipidity of the upper part of the flute ftop of an organ *, which hath not the modern improvement of a *fwell*.

They are easily imposed upon by that most imperfect of all instruments, a *bird-call*, which they often mislake for the notes of their own species.

I have before obferved, that perhaps no bird may be faid to fing which is larger than a black bird, though many of them are taught to fpeak: the fmaller birds, however, have this power of imitation; though perhaps the larger ones have not organs which may enable them, on the other hand, to fing.

We have the following inftances of birds being taught to fpeak, in the time of the Greeks and

* Lord Bacon mentions, that in the inftrument called a regall (which was a fpecies of portable organ) there was a nightingale ftop, in which water was made use of to produce the ftronger imitation of this bird's tone. See Cent. II. exper. 172. Though this inftrument, as well as its nightingale stop, is now difused, I have procured an organ pipe to be immersed partly in water, which, when blown into, hath produced a tone very similar to that of birds.

Romans

Romans, upon which we never try the fame experiment. Moschus addreffes nightingales and swallows which were thus instructed:

> Αδουιδες, τασαι τε χελιδουες, άς του είερπεν, Ας λαλειν εδιδασκε.

Moschi Idyl. III.

Pliny mentions both a cock, thrush, and nightingales, which articulated *:

"Habebant & Cæfares juvenes turdum †, item "luscinias Græco atque Latino fermone dociles, "præterea meditantes in diem, & affidue nova lo-"quentes longiore etiam contextu."

Statius also takes notice of fome birds fpeaking, which we never attempt to teach in this manner:

⁴⁴ Huc doctæ ftipentur aves, queis nobile fandi
⁴⁴ Jus natura dedit, plangat Phœbeius ales,
⁴⁴ Auditaíque memor penitus demittere voces
⁴⁵ Sturnus, & Aonio verfæ certamine picæ;
⁴⁶ Quique refert jungens iterata vocabula perdix,
⁴⁷ Et quæ Biftonio queritur foror orba cubili ‡." Stat. Sylv. lib. ii. ecl. 4. As

* Lib. X. c. 21 & 42. † Ibid. The other turdus belonged to the Empress Agrippina. ‡ Amongst the five birds mentioned in these lines of Statius, there are four which are never taught to speak at prefent, viz. the cock, the nightingale, the common, and the red legged partridge. As we find, from these citations, that so many different forts of birds have learned to speak, and

as

As I fuppofe, however, that *perdix* fignifies this last bird, and not the common partridge (as it is always translated), it is proper I should here give my reasons why I diffent from others, as also why I conceive that *furnus*, in this passage, is not a *farling*, but the common partridge.

None of the ancients have defcribed the plumage of the *perdix*; but *Ariftotle*, *Owid*, and *Pliny*, inform us of what materials the neft of this bird is composed, as well as where it is placed.

Aristotle fays, that the neft is fortified with wood*; and in another chapter +, with thorns and wood; neither of which are used by the common partridge, which often builds in a country where they cannot be procured.

On the contrary, *M. de Buffon* informs us, that the red legged partridge, " fe tiennent fur les montagnes qui produifent beaucoup de bruyeres, & de broffailles \ddagger .

Ovid, therefore, speaking of the perdix, fays,

" _____ ponitque in fepibus ova §,"

where the common partridge is feldom known to build.

Pliny again informs us, " perdices spina & frutice sic mu-

* Επηλυγαζομεναι υλην. Lib. V. c. 1. Which Stepbens renders making a covering of wood.

† Lib. IX. c. 8. The common partridge, however, makes its neft with hay and ftraw.

‡ Orn. T. II. p. 433.

§ Ovid. Met. Lib. VIII. 1. 258. I shall also refer to 1. 237, of the fame book :

"Garrula ramosa profpexit ab ilice perdix :"

as it is well known that the common partridge never perches upon a tree, " niunt as I have fhewn that a fparrow may be taught to fing the linnet's note, I fcarcely know what fpecies

" niunt receptaculum, ut contra feras abunde valentur * ", as also in the 52d chapter of his tenth book, that the *perdix* lays white eggs, which is not true of the common partridge.

But there are not wanting other proofs of the conjecture I have here made.

Aristotle speaking of this same bird, says, Των μεν περδικων, οι κακκαδιζεσιν, οι δε πριεσι +.

Now, the word, nannaGigesi is clearly formed from the call of the bird alluded to, which does not at all refemble that of the common partridge.

Thus also the author of the Elegy on the Nightingale, who is supposed by some to be *Ovid*, hath the following line:

" Caccabat hinc perdix, hinc gratitat improbus anfer."

fo that the call of the bird must have had fomething very particular, and have answered nearly, to the words nannabilet and caccabat.

I find, indeed, that *M. de Buffon* contends \ddagger that the $\pi \epsilon \rho \partial \xi$ of *Ariftotle* does not mean the common partridge, but the bartavel, with regard to which, I fhall not enter into any difcuffion, but only obferve, that most of his references are inaccurate, and that he entirely mistakes the materials of which the nest is composed, according to *Ariftotle's* fixth book, and first chapter.

But the ftrongest proof that *perdix* fignifies the red legged partridge is, that the *Italians* to this day call this bird *pernice*, and the common fort *starna*.

This also now brings me to the proofs, of *fturnus* in this passage of *Statius* fignifying the *common partridge*, and not the

* Lib. x. c. 23. † Lib. IV. c. 9. ‡ Orn. T. II. p. 422 § See Olina. farling, cies to fix upon, that may be confidered as in capable of fuch imitations; for it is very clear, from feveral experiments before flated, that the utmost endeavours will not be wanting in the bird, if he is endowed with the proper organs.

It can therefore only be fettled by educating a bird, under proper circumftances, whether he is thus qualified or not; for if one was only to determine this point by conjecture, one fhould fuppofe that a fparrow would not imitate the fong of the linnet, nor that a nightingale or partridge could be taught to fpeak.

And here it may not be improper to explain what I mean by birds learning to imitate the notes of others, or the human fpeech.

ftarling, which I muft admit are not fo ftrong as with regard to the import of the word *perdix*. If my arguments are not therefore fo convincing on this head, the number of birds taught to fpeak by the *Romans*, and not by us, muft be reduced to three, as the ftarling is frequently learned to talk in the prefent times.

As I cannot argue from the defcription of the habits of the *furnus*, or the materials of its neft, as in the former inftance, I muft reft my conjecture (fuch as it is) on the two birds, almost following each other in these lines of *Statius*; on the common partridge being called *farna* to this day by the *Italians*, and upon the *Romans* having had otherwise no name for our partridge (which is a very common bird in *Italy*), if *furnus* is fupposed to fignify only a *farling*.

If the birds differ little in fhape or fize (particularly of the beak *) the imitation is commonly fo ftrong, that

" Mirê

* It feems very obvious why the form and fize of the beak may be material; but I have alfo obferved, that the colour of a bird's bill changes, when in or out of fong; and I am informed, that a cock feldom crows much, but when his comb is red.

When moft of the finch tribe are coming into fong, there is fuch a gradual change in the colour of their bill; thus, those of the chaffinch and linnet are then of a very deep blue, which fades away again, when the bird ceases to be in fong, "This particular should be attended to by the ornithologist, in his description; because, otherwise, he supposes the colour of the bill to be permanent, which is by no means so.

This alteration, however, rather feems to be the fymptom than the caufe of a bird's coming into fong, or otherwife, and I have never attended to this circumfance in the foft billed birds fufficiently, to fay whether it holds alfo with regard to them.

A very intelligent bird-catcher, however, was able to prognofticate, for three winters together, when a nightingale, which I kept fo long, was coming into fong (though there was no charge in the colour of the bill), by the dung's being intermixed with large bloody spots, which before was only of a dead white.

This fame bird-catcher was also very fuccefsful in his prefcriptions for fick birds, with regard to the ingredients of which he was indeed very mysterious.

He faid, that as he could not feel their pulfe, the circumftances which he chiefly attended to were their weight, as well as both the confiftence and colour of their dung.

He always frankly faid what he expected from his preferip-Vol. II. Z z tions, " Mirè fagaces falleret hospites

" Diferimen obscurum." Horat.

for, in fuch inftances, the paffages are not only the fame, but the tone.

Such was the event of the experiment I have before mentioned of the linnet educated under a vengolina.

In my experiment, however, of teaching the fparrow the notes of the linnet, though the fcholar imitated the paffages of its mafter, yet the tone of the fparrow had by no means the mellownefs of the original.

The imitation might therefore be, in fome measure, compared to the finging of an opera fong by a black-guard, when, though the notes may be precifely the fame, yet the manner and tone would differ very much.

Thus also the linnet, which I heard repeat the words *pretty boy*, did not articulate like a *parrot*, though, at the fame time, the words might be clearly diffinguished.

The education I have therefore been fpeaking of will not give new organs of voice to a bird, and the inftrument itfelf will not vary, though

tions, and that if fuch and fuch changes did not foon take place, the cafe was defperate. He frequently alfo refufed to prefcribe, if the bird felt too light in the hand, or he thought that there was not fufficient time to bring about an alteration, in the dung.

the

the notes or paffages may be altered almost at pleasure.

I tried once an experiment, which might indeed have poffibly made fome alteration in the tone of a bird, from what it might have been when the animal was at its full growth, by procuring an operator who caponifed a young blackbird of about fix weeks old; as it died, however, foon afterwards, and I have never repeated the experiment, I can only conjecture with regard to what might have been the confequences of it.

Both * *Pliny* and the *London* poulterers agree that a capon does not crow, which I fhould conceive to arife from the muscles of the larynx never acquiring the proper degree of ftrength, which feems to be requisite to the finging of a bird, from Mr. *Hunter*'s diffections.

But it will perhaps be afked, why this operation fhould not improve the notes of a neftling, as much as it is fuppofed to contribute to the greater perfection of the human voice.

To this I answer, that castration by no means infures any such confequence; for the voices of much the greater part of *Italian* eunuchs are so indifferent, that they have no means of procuring a livelihood but by copying music, and this is one of the reasons why so few compositions are

* Lib. X. c. 21.

Z Z 2

published

APPENDIX.

published in *Italy*, as it would starve this refuse of fociety.

But it may be faid, that there hath been a *Farinelli* and a *Manzoli*, whofe voices were fo diffinguishedly superior.

To this I again answer, that the catalogue of fuch names would be a very fhort one; and that we attribute those effects to castration, which should rather be ascribed to the education of these fingers.

Caftration commonly leaves the human voice at the fame pitch as when the operation is performed; but the eunuch, from that time, is educated with a view only to his future appearance on the opera ftage; he therefore manages his voice to greater advantage, than those who have not fo early and conftant inftruction.

Confidering the fize of many finging birds, it is rather amazing at what a diftance their notes may be heard.

I think I may venture to fay, that a nightingale may be very clearly diffinguished at more than half a mile*, if the evening is calm. I have also observed the breath of a *robin* (which exerted itself) fo condensed in a frosty morning, as to be very visible.

* Monf. de Buffon fays, that the quadruped which he terms the *buarine*, may be heard at the diffance of a league. Ornith. Tom. I. A P P E N D I X.

To make the comparison, however, with accuracy, between the loudness of a bird's and the human voice, a person should be fent to the spot from whence the bird is heard; I should rather conceive that, upon such trial, the nightingale would be diffinguished further than the man.

It must have struck every one, that, in passing under a house where the windows are shut, the finging of a bird is easily heard, when, at the same time, a conversation cannot be so, though an animated one.

Most people, who have not attended to the notes of birds, suppose that those of every species sing exactly the same notes and passages, which is by no means true, though it is admitted that there is a general refemblance.

Thus the London bird-catchers prefer the fong of the Kentish goldfinches, but Essex chaffinches; and when they fell the bird to those who can thus diftinguish, inform the buyer that it hath such a note, which is very well understood between them *.

* Thefe are the names which they give to fome of the nightingale's notes: Sweet, Sweet jug, Jug fweet, Water bubble, Pipe rattle, Bell pipe, Scroty, Skeg, Skeg, Skeg, Swat fwat fwaty, Whitlow whitlow whitlow, from fome diffant affinity to fuch words.

Some

Some of the nightingale fanciers also prefer a Surry bird to those of Middlesex *.

These differences in the song of birds of the same species cannot perhaps be compared to any thing more apposite, than the varieties of provincial dialects.

The nightingale feems to have been fixed upon, almost univerfally, as the most capital of finging birds, which fuperiority it certainly may boldly challenge: one reason, however, of this bird's being more attended to than others is, that it fings in the night +.

* Mr. Henfbaw informs us, that nightingales in Denmark are not heard till May, and that their notes are not fo fweet or various as with us. Dr. Birch's Hiftory of the Royal Society, Vol. III. p. 189. Whilft Mr. Fletcher (who was minifter from Q. Elizabeth to Rufia) fays, that the nightingales in that part of the world have a finer note than ours. See Fletcher's Life, in the Biographia Britannica.

I never could believe what is commonly afferted, that the *Czar Peter* was at a confiderable expense to introduce finging birds near *Peter/burgh*; becaufe it appears, by the *Fauna Suecica*, that they have in those latitudes most of the fame birds with those of *England*.

+ The woodlark and reedfparrow fing likewife in the night; and from hence, in the neighbourhood of *Shrewf-bury*, the latter hath obtained the name of the willow-nightingale. Nightingales, however, and thefe two other birds, fing alfo in the day, but are not then diffinguished in the general concert.

The

Hence Shakespeare fays,

" The nightingale, if fhe fhould fing by day, "When every goofe is cackling, would be thought "No better a mufician than the wren."

The fong of this bird hath been defcribed, and expatiated upon, by feveral writers, particularly *Pliny* and *Strada*.

As I muft own, however, that I cannot affix any precife ideas to either of these celebrated descriptions, and as I once kept a very fine bird of this fort for three years, with very particular attention to its fong; I shall endeavour to do it the best justice I am capable of.

In the first place, its tone is infinitely more mellow than that of any other bird, though, at the fame time, by a proper exertion of its mufical powers, it can be exceffively brilliant.

When this bird *fang its fong round*, in its whole compass, I have observed fixteen different beginnings and closes, at the fame time that the intermediate notes were commonly varied in their fuccession with fuch judgment, as to produce a most pleasing variety.

The bird which approaches nearest to the excellence of the nightingale, in this respect, is the sky lark; but then the tone is infinitely inferior in point of mellowness: most other singing birds have not above four or sive changes.

The next point of fuperiority in a nightingale

ZZĄ

is .

is its continuance of fong, without a paufe, which I have obferved fometimes not to be lefs than twenty feconds. Whenever refpiration, however, became neceffary, it was taken with as much judgment as by an opera finger.

The fkylark again, in this particular, is only fecond to the nightingale *.

* I shall here infert a table, by which the comparative inerit of the *Britifb* finging birds may be examined, the idea of which I have borrowed from *Monf. de Piles*, in his *Cours de Peinture par Principes*. I shall not be furprized, however, if, as he fuggests, many may difagree with me about particular birds, as he supposes they will do with him, concerning the merits of painters

As I have five columns inftead of the four which *M. de Piles* ufes, I make 20 the point of abfolute perfection, inftead of 16, which is his flandard.

-	Mellow- nefs of tone.	Spright- ly notes.	Plaintive notes.	Com- país,	Execu- tion.
Nightingale Skylark Titlark Goldfinch Chaffinch Hedge-fparrow Aberdavine (or Sifkin) Redpoll Thrufh Blackbird Robin Wren Black-cap, or the Norfolk	19 4 18 12 12 4 4 4 6 2 0 4 4 6 0 0	14 19 4 12 16 19 12 4 0 4 4 4 4 4 16 12 4	19 4 17 12 12 4 4 4 6 0 0 4 0 12 0 0	19 18 12 12 16 12 8 4 4 4 4 4 4 2 12 12 4 2	19 18 8 12 18 12 8 6 4 4 4 4 4 4 2 12 4 2
Mock nightingale *	14	12	12	14	14

* Brit. Zool. p. 262.

And

And here I must again repeat, that what I defcribe is from a caged nightingale, because those which we hear in the spring are so rank, that they feldom fing any thing but short and loud jerks, which consequently cannot be compared to the notes of a caged bird, as the instrument is over-strained.

I must also here observe, that my nightingale was a very capital bird; for some of them are so vastly inferior, that the bird-fanciers will not keep them, branding them with the name of *French*men*.

I have made no mention of the bulfinch in this table, which is commonly confidered as a finging bird; becaufe its wild note, without inftructions, is a most jarring and difagreeable noife.

I have likewife omitted * the redftart (which is called by the French Roffignol de Muraille), as I am not fufficiently acquainted with its fong, though it is admired by many; I fhould rather conceive, however, with Zinanni, that there is no very extraordinary merit in the notes.

The London bird-catchers also fell fometimes the yellow hammer, twite and brambling + as finging birds; but none of thefe will come within my definition of what may be deemed fo.

* One fhould fuppofe from this, that the nightingale-catcher had heard much of the French mufic; which is poffibly the cafe, as fome of them live in Spittal-fields.

* Il culo ranzo é un ucello, (per quanto dicono) molto canoro, ma io tale non lo fiimo. Delle uova é del nidi, p. 53.

+ They call this bird a kate.

But it is not only in tone and variety that the nightingale excells; the bird alfo fings (if I may fo exprefs myfelf) with fuperior judgement and tafte.

I have therefore commonly observed, that my nightingale began foftly like the ancient orators; referving its breath to fwell certain notes, which by this means had a most astonishing effect, and which eludes all verbal description.

I have indeed taken down certain paffages which may be reduced to our mufical intervals; but though by thefe means one may [form an idea of fome of the notes ufed, yet it is impoffible to give their comparative durations in point of mufical time, upon which the whole effect muft depend.

I once procured a very capital player on the flute to execute the notes which *Kircher* hath engraved in his *Mufurgia*, as being ufed by the nightingale; when, from want of not being able to fettle their refpective lengths, it was impossible to observe any traces almost of the nightingale's fong.

It may not be improper here to confider, whether the nightingale may not have a very formidable competitor in the *American* mocking-bird*; though almost all travellers agree, that the concert in the

* Turdus Americanus minor canorus. Ray's Syn. It is called by the Indians, Contlatolli; which is faid to fignify four hundred tongues. See alfo Catefly.

European

European woods is fuperior to that of the other parts of the globe *.

As birds are now annually imported in great numbers from Afia, Africa, and America, I have frequently attended to their notes, both fingly and in concert, which are certainly not to be compared to those of Europe.

Thomson, the poet, (whole observations in natural history are much to be depended upon) makes this superiority in the European birds to be a fort of compensation for their great inferiority in point of gaudy plumage. Our goldfinch, however, joins to a very brilliant and pleasing fong, a most beautiful variety of colours in its feathers +, as well as a most elegant shape.

It must be admitted, that foreign birds, when brought to *Europe*, are often heard to a great difadvantage; as many of them, from their great tamenefs, have certainly been brought up by hand, the confequence of which I have already stated from feveral experiments. The fost-billed birds also cannot be well brought over, as the *fuccedaneum* for

* See Rochefort's Hift. des Antilles, T. I. p. 366.—Ph. Tr. Abr. Vol. III. p. 563.—2nd Catefby.

+ I cannot but think, that there would be a demand for these birds in *China*, as the inhabitants are very sedentary, and bird cages are commonly represented as hanging in their rooms. I have been informed, by a *Tyroleze*, that his best market for *Canary* birds was *Constantinople*.

infects

infects (their common food) is fresh meat, and particularly the hearts of animals.

I have happened, however, to hear the American mocking-bird in great perfection at Meff. Vogle's and Scott's, in Love-Lane, Eastcheap.

This bird is believed to be ftill living, and hath been in *England* thefe fix years. During the fpace of a minute, he imitated the woodlark, chaffinch, blackbird, thrush, and sparrow. I was told also, that he would bark like a dog; so that the bird feems to have no choice in his imitations, though his pipe comes nearest to our nightingale of any bird I have yet met with.

With regard to the original notes, however, of this bird, we are ftill at a lofs; as this can only be known by those who are accurately acquainted with the fong of the other *American* birds.

Kalm indeed informs us, that the natural fong is excellent *; but this traveller feems not to have been long enough in *America* to have diffinguished what were the genuine notes: with us, mimics do not often fucceed but in imitations.

I have little doubt, however, but that this bird would be fully equal to the fong of the nightingale in its whole compass; but then, from the attention which the *mocker* pays to any other fort of difagreeable noifes, these capital notes would be always debased by a bad mixture.

* Vol. I. p. 219.

We

APPENDIX.

We have one mocking bird in *England*, which is the fkylark; as, contrary to a general obfervation I have before made, this bird will eatch the note of any other which hangs near it; even after the fkylark note is *fixed*. For this reafon, the bird-fanciers often place the fkylark next one which hath not been long caught, in order, as they term it, to keep the caged fkylark *boneft*.

The queftion, indeed, may be afked, why the wild fkylark, with thefe powers of imitation, ever adheres to the parental notes; but it muft be recollected, that a bird when at liberty is for ever fhifting its place, and confequently does not hear the fame notes eternally repeated, as when it hangs in a cage near another. In a wild ftate therefore the fkylark adheres to the parental notes; becaufe the parent cock attends the young ones, and is heard by them for fo confiderable a time, during which, they pay no regard to the fong of any other bird.

I am aware alfo, that it may be afked, how birds originally came by the notes which are peculiar to each fpecies. My anfwer, however, to this is, that the origin of the notes of birds, together with its gradual progrefs, is as difficult to be traced, as that of the different languages in nations.

The lofs of the parent-cock at the critical time for inftruction hath undoubtedly produced those varieties, which I have before obferved are in the fong of each fpecies; becaufe then the neftling hath either attended to the fong of fome other birds;

or

or perhaps invented fome new notes of its own, which are afterwards perpetuated from generation to generation, till fimilar accidents produce other alterations. The organs of fome birds alfo are probably fo defective, that they cannot imitate properly the parental notes, as fome men can never articulate as they fhould do. Such defects in the parent bird muft again occafion varieties, becaufe thefe defects will be continued to their defcendants, who (as I before have proved) will only attend to the parental fong. Some of thefe defcendants alfo may have imperfect organs, which will again multiply varieties in the fong.

The truth is, as I have already observed, that fcarcely any two birds of the fame species have exactly the fame notes, if any are accurately attended to, though there is a general refemblance.

Thus most people see no difference between one sheep and another, when a large flock is before them. The shepherd, however, knows each of them, and can swear to them, if they are lost; as can the *Lincolnfbire* gosherd to each goosfe.

As I now draw towards a conclusion of both my experiments and obfervations on the finging of birds; it may be poffibly afked, what use refults either from the trouble or expence which they have cost me; both of which I admit to have been confiderable.

I will readily own, that no very important advantages can be derived from them; and yet I shall

not

70:

not decline fuggesting what little profit they may possibly be of, though at best they should rather be considered as what Lord Bacon terms, experiments of light, than of fruit.

In the first place, there is no better method of investigating the human faculties, than by a comparison with those of animals; provided we make it without a most ungrateful wish of lowering ourfelves, in that distinguished situation in which we are placed.

Thus we are referred to the ant for an example of induftry and forefight, becaufe it provides a magazine of food for the winter, when this animal is in a ftate of torpidity during that feafon; nor are we lefs willing to fuppole the fong of birds to be fuperior to our own mufical powers.

The notes of many birds are certainly very pleafing, but by no means ftand in competition either with the human voice or our worft mufical inftruments; nor only from want of the ftriking effects of harmony in many excellent compositions; but because, even when compared to our simple melody, expression is wanting *, without which mufic is so languid and inanimate.

But to return to the uses (fuch as they are) which may arise from attending to the fong of birds, or from the experiments which I have given an account of.

* The nightingale, indeed, is perhaps an exception to this general observation.

The first of these is too much neglected by the naturalist; for, if the bird is not caught, the only means often by which either the fex or the species can be determined is the song. For example, if *Monf. Adanfon* had informed us whether the *European* swallows, which he conceived were to be seen during the winter at *Senegal*, had the same notes with those of *Europe*, it would have been going one step further in proof of the facts which he and others fo much rely upon.

These experiments, however, may be faid to be useful to all those who happen to be pleased with finging birds; because it is clear, that, by educating a bird under several forts, we may often make such a mixture, as to improve the notes which they would have learned in a wild state.

It refults alfo from the experiment of the linnet being educated under the Vengolina, that we may introduce the notes of Afia, Africa, and America, into our own woods; becaufe, if that linnet had been fet at liberty *, the neftlings of the next feafon would have adhered to the Vengolina fong, who would again transmit it to their defcendants.

* I know well, that it is commonly fuppofed, if you fet a caged bird at liberty, it will neither be able to feed itfelf, nor otherwife live long, on account of its being perfecuted by the wild ones. There is no foundation, however, for this notion; and I take it to arife from its affording an excufe for continuing to keep thefe birds in confinement.

But

But we may not only improve the notes of birds by a happy mixture, or introduce those which were never before heard in *Great Britain*; we may also improve the instrument with which the passages are executed.

If, for example, any one is particularly fond of what is called the fong of the *Canary* bird, it would answer well to any fuch person, if a nestling linnet was brought up under a *Canary* bird, because the notes would be the same, but the instrument which executes them would be improved.

We learn alfo, from thefe experiments, that nothing is to be expected from a neftling brought up by hand, if he does not receive the proper inftruction from the parent cock : much trouble and fome coft is therefore thrown away by many perfons in endeavouring to rear neftling nightingales, which, when they are brought up and fed at a very confiderable expence, have no fong which is worth attending to.

If a woodlark, or fkylark, was educated, however, under a nightingale, it follows that this charge (which amounts to a fhilling per week *) might be in a great measure faved, as well as the trouble of chopping fresh meat every day.

* Olina fpeaks of a pafte which is used in Italy for nightin, gales; but I cannot find that it ever answers with us; perhaps, they bring their nightingales up by hand, and fo accustom them from their earlieft infancy to fuch food.

Aaa

A night-

A nightingale, again, when kept in a cage, does not live often more than a year or two; nor does he fing more than three or four months; whereas the fcholar pitched upon may not only be more vivacious, but will continue in fong nine months out of the twelve.

I fear, however, that I have already dwelt too much upon these very minute and trifling advantages which may result from my experiments and observations; I shall therefore no longer defer subficibing myself,

Dear Sir,

Your most faithful,

Humble Servant,

Daines Barrington.

No.

Vol.2. P. 686.



Williams Sc.







APPENDIX.

No. VI.

OF THE MIGRATION OF BRITISH BIRDS.

Quam multæ glomerantur aves! ubi frigidus annus Trans pontum fugat, et terris immittit apricis.

VIRGIL.

HE migration of birds, is a fubject of for curious a nature, that every one who attempts to write the natural hiftory of animals, ought to look upon it as an effential part of his inquiries, and at the fame time fhould endeavour to affign the caufe why fome birds prefer certain places for their fummer, others for their winter refidence.

To be qualified for this tafk, it is neceffary that the inquirer should confine himself to one certain tract the whole year; he should be diligent in observing the arrival, and the disappearance of birds; he fhould commit every obfervation to paper, and compare them with the remarks of correspondents, on the fame fubject, that lie on every fide of him. He fhould attend likewife to the weather; and to the plenty or failure of fruits and berries ;

APPENDIX.

berries; as on thefe accidents many curious remarks may be founded. He fhould cultivate an acquaintance with the gentlemen of the navy, and other fea-faring people; he fhould confult their journals, to difcover what birds light on their fhips, at what feafons, in what latitudes, and in what weather, and from what points; and thus trace them in their very courfe.

A comparative view of the writings of those who should embrace this part of natural history, would throw great light on the subject. But it is to be lamented, that none, except two northern naturalists, Mr. Klein and Mr. Ekmarck, have profeffedly treated on this point. The southern parts of Europe, which may be supposed to receive, during winter, many of our land birds, have as yet produced no faunist to affist the inquiries of the naturalists, which must account for the imperfect knowledge we have of the retreat of many of our birds.

We must not omit, however, our acknowledgements to two eminent pens that have treated this fubject as far as it related to rural œconomy; and, in fuch a manner, as does honour to their respective countries; we mean Mr. *Alex. Mal. Berger* and Mr. *Stillingfleet*: whom we should not mention a second time*, but to confess the aid we here receive from their faithful attention to the subject in question.

710

* Vide Preface.

We wish that any thing we could fay, would induce others of our countrymen to follow their example: they need not fear that the matter is exhausted, for every county will furnish new observations; each of which, when compared, will ferve to ftrengthen and confirm the other. Such an amufement is worthy of every one, beneath none; but would become no order of men better than our clergy, as they are (or ought to be) the beft qualified, and the most stationary part of the community; and, as this is a mixed fpecies of ftudy (when confidered as phyfico-theology) it is therefore particularly pertinent to their profession. A most ingenious friend, whom modesty prevents from putting his name to a work that renders obfervations of this kind of the utmost facility, has pointed out the way, and methodized every remark that can occur; the farmer, the fportfman, and the philosopher, will be led to the choice of materials proper to be inferted in that useful companion, the Naturalist's Journal*.

From the observations of our friends, from those made by ourselves, and from the lights afforded us by preceding writers, we shall, in the brief relation we can pretend to give, proceed in a generical order, and as far as possible, trace each species of bird to its retreat.

* Printed for W. Sandby, Fleet-Street, London, 1767. Price One Shilling and Six-pence.

A few

A few words will explain the caufe of their difappearance in thefe northern regions ; a defect of food at certain feafons, or the want of a fecure afylum from the perfecution of man during the time of courtfhip, incubation and nutrition.

HAWKS.

Eagles, and all the ignoble fpecies of this genus breed in *Great Britain*; of the *Falcons*, we only know that which is called the *Peregrine*, which builds its neft annually in the rocks of *Llandidno*, *Caernarvonshire*; and the *Gentil*, and the *Goshawk* which breed in *Scotland*.

Ówls.

We are affured that every fpecies breeds in England, except the little Owl, and fhort eared Owl. The laft breeds in Scotland, and the Orkney ifles, but migrates into England at the fame feafon as the Woodcocks do. Hawks and owls are birds of prey, and having at all times in this ifland means of living, are not obliged to quit their quarters.

SHRIKES.

The *Flufber*, or *red back Sbrike*, and the great *Sbrike*, breeds with us; we have not heard of the other, fo fulpect that it migrates.

CROWS. Of this genus, the Hooded Crow migrates regularly with the Woodcock. It inhabits North Britain the whole year: a few are faid annually to breed on Dartmoor, in Devonshire. It breeds also in Sweden and Austria, in some of the Swedish provinces it only shifts its quarters, in others it refides fides throughout the year. I am at a lofs for the fummer retreat of those which visit us in such numbers in winter, and quit our country in the fpring. And for the reafon why a bird, whofe food is fuch that it may be found at all feafons in this country, should leave us.

Difappears early in autumn; the retreat of this and the following bird is quite unknown to us.

Is a bird that leaves us in the winter. If its diet WRYNECK." be ants alone, as feveral affert, the caufe of its migration is very evident. This bird difappears before winter, and revifits us in the fpring a little earlier than the Cuckoo.

Continue with us the whole year; their food be- WOODFECKing the larve of infects, which lodge themfelves at all times in the bark of trees.

Continues here through all feafons.

Refides in this country the whole year.

Comes to England but by accident: we once indeed heard of a pair that attempted to make their neft in a meadow at Selborne, Hampshire, but were frighted away by the curiofity of people. It breeds in Germany.

Never leaves the country. Aaa4 CREEPER.

The

NUTHATCH.

KING-FISHER.

ERS.

HOOPOE.

CUCKOO.

À P P E N D I X.

GROUS

714

The whole tribe, except the *Quail*, lives here all the year round: that bird either leaves us, or elfe retires towards the fea-coafts *.

BUSTARD. Inhabits our downs and their neighborhood all the year.

PIGEONS:

Some few of the *Ring-doves* breed here; but the multitude that appears in the winter, is fo difproportioned to what continue here the whole year, as to make it certain that the greateft part quit the country in the fpring. It is moft probable they go to *Sueden* to breed, and return from thence in autumn; as Mr. *Ekmark* informs us they entirely quit that country before winter +. Multitudes of the common *Wild Pigeons* alfo make the northern retreat, and vifit us in winter; not but numbers breed in the high cliffs in all parts of this ifland. We fufpect that the *Turtle* leaves us in the winter, at left changes its place, removing to the fouthern counties.

STARE.

Breeds here; poffibly feveral remove to other countries for that purpole, fince the produce of those that continue here, feems unequal to the clouds of them that appear in winter. It is not unlikely that many migrate into Sueden, where Mr. Berger observes they return in fpring.

> * Vide p. 277. of this work. † Amæn: Acad. IV. 592.

The

The Fieldfare and the Redwing breed and pass THRUSHES. their fummers in Norway, and other cold countries; their food is berries, which abounding in our kingdoms, tempts them here in the winter. Thefe two and the Royfton crow, are the only land birds that regularly and conftantly migrate into England, and do not breed here. The Hawfinch and Crofsbill come here at fuch uncertain times, as not to deferve the name of birds of paffage; and, on that account, rather merit a place in the appendix than in the body of the work.

The Chatterer appears annually about Edinburgh CHATTERin flocks during winter; and feeds on the berries of the mountain ash. In South Britain it is an accidental visitant.

Pine Großeak breeds in the forefts of the Highlands

The Großbeak and Crossbill come here but fel- GROSBEAKS. dom; they breed in Austria. I fuspect that the

of Scotland.

All the genus inhabits this kingdom throughout BUNTINGS. the year, except the greater Brambling, which is forced here from the north in very fevere feafons.

All continue in fome parts of these kingdoms, except the Si/kin, which is an irregular vifitant. faid to come from Russa. The Linnets shift their quarters, breeding in one part of this island, and remove

ER.

FINCHES.

A P P E N D I X.

remove with their young to others. All finches feed on the feeds of plants.

Larks, Flycatchers, Wagtails, and Warelers. All of thefe feed on infects and worms; yet only part of them quit thefe kingdoms; though the reafon of migration is the fame to all. The Nightingale, Black-cap, Fly-catcher, Willow-wren, Wheatear, and White-throat, leave us before winter, while the fmall and delicate Golden-crefted Wren braves our feverest frosts. We imagine that the migrants of this genus continue longest in Great Britain in the fouthern counties, the winter in those parts being later than in those of the north; Mr. Stillingfleet having observed feveral Wheat-ears in the isle of Purbeck the 18th of November last. As these birds are incapable of very distant flights, we fulfpect that Spain, or the fouth of France, is their winter afylum.

TITMICE.

Never quit this country; they feed on infects and their *larvæ*.

SWALLOWS, AND GOAT-SUCKER.

Every species disappears at approach of winter.

WATER FOWL.

OF the vaft variety of water fowl that frequent Great Britain, it is amazing to reflect how few are known known to breed here: the caufe that principally urges them to leave this country, feems to be not merely the want of food, but the defire of a fecure retreat. Our country is too populous for birds fo fhy and timid as the bulk of thefe are: when great part of our island was a mere waste, a tract of woods and fen; doubtlefs many fpecies of birds (which at this time migrate) remained in fecurity throughout the year. Egrets, a species of Heron, now fcarce known in this ifland, were in former times in prodigious plenty; and the Crane, that has totally forfaken this country, bred familiarly in our marshes: their place of incubation, as well as of all other cloven footed water fowl (the Heron excepted) being on the ground, and exposed to every one: as rural æconomy increafed in this country, these animals were more and more difturbed; at length, by a feries of alarms, they were neceffitated to feek, during the fummer, fome lonely fafe habitation.

On the contrary, those that build or lay in the almost inaccessible rocks that impend over the *British* feas, breed there still in vast numbers, having little to fear from the approach of mankind: the only disturbance they meet with in general, being from the desperate attempts of some few to get their eggs,

CLOVEN

APPENDIX.

CLOVEN FOOTED WATER FOWL.

HERONS. THE White Heron is an uncommon bird, and vifits us at uncertain feafons; the common kind and the Bittern never leave us.

- CURLEWS. The Carlew breeds fometimes on our mountains; but, confidering the vaft flights that appear in winter, we imagine the greater part retire to other countries : the Whimbrel breeds in the Grampian Hills, in the neighbourhood of Invercauld.
 - SNIPES. The *Woodcock* breeds in the moift woods of *Sweden*, and other cold countries. Some *Snipes* breed here, but we believe the greateft part retire elfewhere; as do every other fpecies of this genus.

SANDFIFERS. The Lapwing continues here the whole year; the Ruff breeds here, but retires in winter; the Redfhank and Sandpiper breed in this country, and refide here. All the others abfent themfelves during fummer.

PLOVERS AND OYSTER-CATCHER. The long legged Plover and Sanderling visit us only in winter; the Dottrel appears in fpring and in autumn, yet what is very fingular we do not find it breeds in South Britain. The oyster-catcher lives

718

lives with us the whole year. The Norfolk Plover and Sea Lark breed in England. The Green Plover breeds on the mountains of the North of England, and on the Grampian Hills.

We must here remark, that every species of the genera of Curlews, Woodcocks, Sandpipers and Plovers*, that forfake us in the spring, retire to Sweden, Poland, Prussia, Norway, and Lapland to breed; as soon as the young can fly, they return to us again; because the frosts which set in early in those countries totally deprive them of the means of subsisting; as the dryness and hardness of the ground, in general, during our summer, prevent them from penetrating the earth with their bills, in fearch of worms, which are the natural food of these birds.

Every fpecies of thefe two genera continue with us the whole year; the Land Rail excepted, which

* Mr. Ekmarck fpeaks thus of the retreat of the whole tribe of cloven footed water fowl out of his country (Sweden) at the approach of winter; and Mr. Klein gives much the fame account of those of Poland and Prussia.

Grallæ (tanquam conjuratæ) unanimiter in fugam fe conjiciunt, ne earum unicam quidem inter nos habitantem invenire poffumus. Amæn. Acad. IV. 588.

Scolopaces et Glareolæ incredibilibus multitudinibus verno tempore in Polonia et Borussia nidulantur; appropinquante autumno turmatim evolant. Klein de av. errat. 187. RAILS AND GALLI-NULESA

is

is not feen here in winter. It likewife continues in *Ireland* only during the fummer months, when they are very numerous, as Mr. *Smith* tells us in the hiftory of *Waterford*, p. 336. Great numbers appear in *Anglefea* the latter end of *May*; it is fuppofed that they pafs over from *Ireland*, the pafage between the two iflands being but fmall. As we have inftances of thefe birds lighting on fhips in the *Channel* and the *Bay* of *Bifcay*, we conjecture their winter quarters to be in *Spain*.

FINNED FOOTED WATER BIRDS.

PHALARO- VISIT us but feldom; their breeding place PES. is Lapland*, and other arctic regions.

Inhabits Great Britain the whole year.

GREBES. The great crefted Grebe, the black and white Grebe, and little Grebe breed with us, and never migrate; the others vifit us accidentally, and breed in Lapland.

WEB-FOOTED BIRDS.

AVOSET.

COOT.

BREED near Fossdike in Lincolnshire; but quit their quarters, in winter. They are then shot in

* Amæn. Acad. IV. 590.

different

different parts of the kingdom, which they vifit I believe not regularly but accidentally.

The great Auk or Pinguin fometimes breeds in AUKS AND St. Kilda. The Auk, the Guillemot and Puffin inhabit most of the maritime cliffs of Great Britain, in amazing numbers, during fummer. The black Guillemot breeds in the Bass Isle, and in St. Kilda, and fometimes in Llandidno rocks. We are at a lofs for the breeding place of the other fpecies; neither can we be very certain of the winter refidence of any of them, excepting of the leffer Guillemot and black-billed Auk, which, during winter, visit in valt flocks the Frith of Forth.

These chiefly breed in the lakes of Sweden and Lapland, and fome in countries nearer the Pole*; but some of the red throated Divers, the northern and the imber, may breed in the north of Scotland and its ifles.

I am uncertain where the black toed Gull breeds. The Skua is confined to the Shetland Ifles, the Rock Foula, and perhaps St. Kilda. The Arttic breeds in the Orknies and in the Hebrides. The reft of the tribe breed difperfedly on all the cliffs of Great Britain. The black beaded on our fens and lakes.

* Faun. Suec. No. 150. Grantz, Greenl. I. 82. 83.

GUILLE-MOTS.

DIVERS.

GULLS.

Every

722

TERNS. Every species breeds here; but leaves us in the winter.

PETRELS.

The Fulmar breeds in the ifle of St. Kilda, and continues there the whole year, except September and part of October; the Shearwater visits the Isle of Man in April, breeds there, and leaving it in August or the beginning of September, difperfes over all parts of the Atlantic Ocean. The Stormfinch is feen at all diftances from land on the fame vaft watery tract, nor is ever found near fhore except by fome very rare accident, unlefs in the breeding feafon. We found it on some little rocky isles, off the north of Skie. It also breeds in St. Kilda. We also suspect that it neftles on the Blasquet isles off Kerry, and that it is the Gourder of Mr. Smith *.

MERGAN-SERS.

This whole genus is mentioned among the birds that fill the Lapland lakes during fummer. I have feen the young of the Red-breasted in the north of Scotland : a few of these, and perhaps of the Goolanders may breed there.

DUCKS.

Of the numerous species that form this genus, we know of few that breed here. The Swan and Goose, the Skield Duck, the Eider Duck, a few Shovelers, Garganies, and Teals, and a very small portion of the wild Ducks.

* Smith's bift. Kerry, 186,

The

The reft contribute to form that usizing multitude of water fowl, that annually : so ir from most parts of Europe to the woods and lakes of Lapland and other artic regions*, there to perform the functions of incubation and nutrition in full fecurity. They and their young quit their retreat in September, and difperse themselves over Europe. With us they make their appearance the beginning of Ostober; circulate first round our shores, and when compelled by fevere froft, betake themfelves to our lakes and rivers. Of the web-footed fowl there are fome of hardier constitutions than others; these endure the ordinary winters of the more northern countries, but when the cold reigns there with more than common rigor, repair for fhelter to thefe kingdoms: this regulates the appearance of fome of the Diver kind, as also of the wild Swans,

* Barentz found the Bernacles with their nefts in great nums bers in Nova Zembla. Collect. voy. Dutch East-India Company, 8vo. 1703. p. 19. Clustus in his Exot. 368. alfo obferves, that the Dutch difcovered them on the rocks of that country and in Waygate Straits. They, as well as the other species of wild Geese, go very far north to breed, as appears from the histories of Greenland and Spitzbergen, by Egede and Grantz. These birds seem to make Iceland a refting place, as Horrebow obferves, few continue there to breed, but only visit that island in the spring, and after a short stay, retire still further north.

The Swallow tailed Shield Duck breeds in the Icy Sea, and is forced fouthward only in the very hard winters. Aman. Acad. IV. 585.

VOL. II.

the

A P P E N D I X.

the Swallow tailed Shield Duck, and the different forts of Goofanders which then visit our coaffs.

CORVO-RANTS. The Corvorant and Shag breed on moft of our high rocks: the Gannet in fome of the Scotch ifles, and on the coaft of Kerry: the two first continue on our fhores the whole year. The Gannet difperfes itself all round the feas of Great-Britain, in purfuit of the Herring and Pilchard, and even as far as the Tagus to prey on the Sardina.

But of the numerous fpecies of fowl here enumerated, it may be obferved how very few entruft themfelves to us in the breeding feafon; and what a diftant flight they make to perform the first great dictate of nature.

There feems to be fearcely any but what we have traced to *Lapland*, a country of lakes, rivers, fwamps and alps *, covered with thick and gloomy forefts, that afford fhelter during fummer to thefe fowls, which in winter difperfe over the greateft part of *Europe*. In those *artic* regions, by reafon of the thicknefs of the woods, the ground remains moift and penetrable to the *Woodcocks*, and other flender billed fowl: and for the web-footed birds +, the waters afford *larvæ* innumerable of the torment-

* Flora Lapponica Lectori et Proleg.

+ A difciple of Linnæus, fpeaks thus of their food, Lapponia, ubi victum ex larvis et pupis culicum, altrix paravit numinis tormenting *Knat*. The days there are long; and the beautiful meteorous nights indulge them with every opportunity of collecting fo minute a food: whilft mankind is very fparingly fcattered over that vaft northern wafte.

Why then fhould Linnæus, the great explorer of these rude deserts, be amazed at the myriads of water fowl that migrated with him out of Lapland? Which exceeded in multitudes the army of Xerxes; covering, for eight whole days and nights, the furface of the river Calix*. His partial observation as a botanist, would confine their food to the vegetable kingdom, almost denied to the Lapland waters; inattentive to a more plenteous table of insect food, which the all bountiful Creator had spread for them in the wilderness +.

numinis munificentia. Amæn. acad. IV. 1. 5. M. de Maupertuis makes the fame obfervation, Ce ruisseau nous conduisit a un lac si rempli de petits grains jaunatres de la grosfeur du Mil que toute son eau en etoit teinte. Je pris ces grains pour la Chrysalide de quelque infecte, &c. Oeuvres de M. de Maupertuis, 111. 116.

* Flora Lapponica, 273. Amæn. acad. IV. 570.

† It may be remarked, that the lakes of mountanous rocky countri s in general are defitute of plants: few or none are feen on those of Savitzerland; and Linnæus makes the fame observation in respect to those of Lapland; having, during his whole tour, discovered only a fingle specimen of a lemna trifulca, or ivy leaved duck's meat. Flora Lap. No. 470. a few of the fcirpus lacustris, No. 18. or bullrush; the alopecurus geniculatus, No. 38. or flote foxtail grass; and the ranunculus aquatilis, No. 234. which are all he enumerates in his Prolegomena to that excellent performance.

No.

No. VII.

EXTRACTS FROM OLD ENGLISH WRITERS RELATING TO OUR ANIMALS.

MENTION having been fo frequently made, in this work, of the old *Englifb* feafts, and the fpecies of animals that formed the good cheer; we transcribe from *Leland* an account of that given at the *intronazation* of *George Nevell*, archbishop of York, in the reign of *Edward* IV. and of the goodly provision made for the fame.

1 5 5 5	
In wheat, 300 quarters.	In bittors, 204.
In ale, - 300 tunne.	Heronshawes, - 400.
Wyne, - 100 tunne.	Fessauntes, 200.
Of ypocrasse - 1 pype.	Partriges, 500.
In oxen, 104.	Wodcockes, - 400.
Wylde Bulles, 6.	Curlewes, 100.
Muttons, 1000.	Egrittes, 1000.
Veales, 304.	Stagges, buck and roes,
Porkes, 304.	500 and mo.
Swannes, 400.	Pasties of venison colde,
Geele, 2000.	4000.
Capons, 1000.	Parted dyshes of gellies,
Pugges	
Pygges, 2000.	1000. Disupe dufter of cellier
Plovers, 400.	Playne dyshes of gellies,
Quales, - 100 dozen.	3000.
Of the foules called	Coldetartes baked, 4000.
rees, 200 dozen.	Colde custardes baked,
In peacockes, - 104.	3000.
Mallardes and teales,	Hot pasties of venison,
4000.	1500.
In cranes, 204.	Hot custardes, 2000.
In kyddes, - 204.	Pykes and breames, 608.
In chyckens, - 2000.	Porpofes and feals, 12.
Pigeons, 4000.	Spices, sugared delicates,
Conyes, 4000.	and wafers plentie.
	Besides
	DUII003

APPENDIX.

Befides the birds in the above lift, there are mentioned, in the particular of the courfes*, *Redfhanks*, *Styntes*, *Larks* and *Martynettes roft*; if the laft were the fame with the martin fwallow, our anceftors were as general devourers of fmall birds as the *Italians* are at prefent, to whom none come amifs.

We must observe, that in the order of the courses it appears, that only the greatest delicacies were ferved up, as we may suppose, to the table where the nobility, gentlemen, and gentlewomen of *worship* were feated; and those feemed to have been dreffed with almost as much art and disguise as at prefent. They had likewise their defert, or, as the term was, *futteltie*; which was in form of dolphins or other animals; and sometimes recourse was had to the kalendar to embelliss the table, and St. *Paul*, St. *Thomas*, St. *Dunstan*, and a whole multitude of *angels*, *prophetes* and *patriarkes* +, were introduced as *futtelties* to honor the day.

As no mention is made among the diffues that composed two of the courses, of the geese, the pygges, the veales, and other more substantial food, those must have been allotted to the *franklins* and *bead yeomen* in the *lower ball*: and those most fingular provisions, the porposes and feales, inde-

* Leland's collectanea, vi. 2.

+ Idem, 23.

Bbb3

licate

licate as they may feem at prefent, in old times were admitted to the best tables: the former, at left, as we learn from doctor *Caius**, who mentions it not only as a common food, but even describes its fauce,

A transcript from that curious publication, The Regulations of the Houshold of the fifth Earl of NOR-THUMBERLAND, begun in 1512, will be effeemed a very proper appendage to a work of this nature. It will shew not only the birds then in high vogue at the great tables of those days, but also how capricious a thing is taste, several then of high price being at prefent banished from our tables; and others again of uncommon rankness much valued by our ancestors.

Thus Wegions (I give the fpelling of the time) See-pyes, Sholardes, Kyrlewes, Ternes, Cranys, Hearon-fewys, Bytters, See-gulles and Styntes, were among the delicacies for principal feafts, or his Lordship's own mees.

Those excellent birds the *Teylles* were not to be bought except no other could be got.

Fesauntes, Bytters, Hearon-fewys and Kyrlewes were valued at the fame price, twelve pence each.

The other birds admitted to his Lordship's table were Bustardes, Mallardes, Woodcokes, Wypes, Quayles, Snypes, Pertryges, Redeshankes, Reys, Pacokes, Knottes, Dottrells, Larkys and small byrdes.

* Caii opusc. 113.

The great byrdes, for the Lord's *mees*, for the Chambreleyn and Stewardes *mees* may be, as the ingenious editor conjectures, Fieldfares, Thrushes and the like *.

The effimation each fpecies was held in may be known by the following table, to which I have added the modern name, and the reference to it in this work.

	Page.	. Price.
Cranys, the Crane,	534,	16d.
Hearon-Sewys, the Heron,	355,	12d.
Mallards,	500,	2 d.
Teylles, Teal,	513,	Id.
Woodcock,	365,	Id. or $Id. \frac{1}{2}$.
Wypes, Lapwings,	381,	Id.
Sea-gulls, Black-headed Gull,	456,	Id. or $Id.\frac{1}{2}$.
Styntes, Purrs,	397,	6d. a dozen.
Quails,	234,	2 d.
Snipes,	378,	3d. a dozen.
Partridges,	233,	2 d.
Red-shanks,	376,	Id,
Bytters, Bitterns,	358,	12d.
Pheafants,	238,	12d,
Reys, Land Rails +,	410,	2 d.

* P. 104. 424.

+ I imagine the *Reys* to be the Land Rail, not the *Reeve* the female of the *Ruff*, for that bird feems not to be in vogue in those days. Old *Drayton* does not even mention it in his long catalogue of birds, but fets a high value upon The *Rayle* which feldom comes but upon rich men's fpits *.

* Polyolbion. Canto XXV,

Bbb4

Sholardes,

	Page.	Price.
Sholardes, Shovelers,	504,	6d.
Kyrlewes, Curlews,	362,	12d.
Peacocks,	236,	12d.
Sea Pies,	405.	
Wigeons,	509,	Id.
Knots,	387,	1d.
Dotrels,	401,	Id.
Buftards,	241.	
Terns,	459, 4d.	a dozen.
Great birds,	1	Ditto.
Small birds,	12 d.	a dozen.
Larks,	12d. for two	o dozens.

No.

APPENDIX,

No. VIII.

A SYSTEMATIC ARRANGEMENT OF THE BIRDS OF GREAT BRITAIN, WITH THE NAMES IN THE ANTIENT BRITISH.

GENUS I.

FALCON.

GOLDEN Eagle,
 Black Eagle,
 Sea Eagle,
 Cinereous,
 Ofprey,
 Gyrfalcon,
 Peregrine Falcon,
 Grey,

- *9. Gentil,
- 10. Lanner,
- 11. Goshawk,
- 12. Kite,
- 13. Buzzard,
- 14. Spotted,

Eryr melyn. Eryr tinwyn. Mor-Eryr. Eryr cynffonwyn. Pyfg Eryr: Gwalch y weilgi. Hebog chwyldro. Hebog tramor, Cammin. Hebog, Gwalch. Hebog mirain. Hebog gwlanog. Hebog Marthin. Barcud. Bod teircaill. Bod mannog. 15. Honey Honey Buzzard,
 Moor Buzzard,
 Hen-Harrier,
 Ringtail,
 Keftrel,
 Hobby,
 Sparrow Hawk,

22. Merlin,

Bod y mel. Bód y gwerni. Barcud glâs. Bod tinwyn. Cudyll côch. Hebog yr Hedydd. Gwepia. Corwalch, Llymyften.

II.

L.

O W

* I. Eagle,

2. Long eared,

3. Short eared,

4. White,

5. Tawny,

6. Brown,

7. Little,

Y Ddylluan fawr. Dylluan gorniog. Dylluan gluftiog. Dylluan wen. Dylluan frech. Aderyn y Cyrph. Coeg Ddylluan.

III.

SHRI

1. Great,

2. Red backed,

2. Wood chat,

Cigydd mawr. Cigydd cefn-goch. Cigydd glâs.

E.

K

IV.

IV.

C R O W.

Cigfran. I. Raven, Brân dyddyn. 2. Carrion, Ydfran. 3. Rook, Bran yr Jwerddon. 4. Hooded, 5. Magpie, Piogen. 6. Jay, Screch y Coed. 7. Red legged, Brân big gôch. Cogfran. 8. Jackdaw,

V. CUCKOO. 1. Cuckoo, Cog.

WRYNECK.

VI.

1. Wryneck,

Gwas y gôg, Gwddfdro.

VII.

WOODPECKER.

1. Green,

Cnocell y coed, Delor y derw. 2. Great 733

- 2. Great spotted, Delor fraith.
- * 3. Middle.

4. Lest spotted, Delor fraith beiaf.

VIII.

KINGFISHER.

1. Kingfisher, Glâs y dorlan.

IX.

NUTHATCH.

1. Nuthatch, Delor y enau.

Χ.

HOOPOE.

Y Goppog. 1. Hoopoe,

XI.

CREEPER. 1. Creeper, Y Grepianog.

XII.

XII.

GROUS.

- 1. Wood, 2. Black,
- 3. Red,
- 1
- 4. Ptarmigan, 5. Partridge,
- 6. Quail,

Ceiliog coed. Ceiliog dû. Ceiliog Mynydd, Jâr fynydd. Coriar yr Alban. Coriar, Petrifen. Sofliar, Rhinc.

XIII.

BUSTARD.

- 1. Great,
- * 2. Leffer, 3. Thick-kneed,

Yr araf ehedydd. Araf ehedydd Lleiaf. Y Glin-braff.

XIV.

PIGEON.

- I. Common,
- 2. Ring,
- 3. Turtle,

Colommen. Yfguthan. Colommen fair, Turtur.

XV.

736

APPENDIX.

XV.

STARE.

I. Stare,

Drydwen, Drydwy.

XVI.

THRUSH.

1. Miffel,

2. Fieldfare,

3. Throftle,

4. Redwing,

5. Blackbird,

6. Ring-ouzel,

7. Water-ouzel,

Trefglen, Pen y Llwyn. Cafeg y ddrycein. Aderyn bronfraith. Soccen yr eira, Y drefclen gôch. Mwyalch, Aderyn dû. Mwyalchen y graig. Mwyalchen y dwfr.

XVII.

CHATTERER.

1. Waxen, Sidan-gynffon.

XVIII.

GROSBEAK."

1. Haw, Gylfinbraff.

- * 2. Pine.
 - 3. Crofs-billed,
 - 4. Bulfinch,
 - 5. Green,

Gylfingroes. Y Chwybanydd, Rhawn goch. Y Gegid, Llinos werdd.

XIX.

BUNTING.

- 1. Common,
- 2. Yellow,
- 3. Reed,
- 4. Tawny,
- 5. Snow,
- 6. Mountain,

Brâs y ddruttan, Brâs yr yd. Llinos felen. Golfan y cyrs. Golfan rhudd. Golfān yr eira. Yr Olfan leiaf.

XX.

FINCH.

- 1. Gold,
- 2. Chaff,
- 3. Brambling,
- 4. Sparrow,

Gwas y Sierri. Afgell arian, Winc. Bronrhuddyn y mynydd. Aderyn y to, Golfan. 5. Tree

5. Tree Sparrow, Golfan y mynydd. 6. Sifkin, Y Ddreiniog. Llinos. 7. Linnet, 8. Red-headed Linnet, Llinos bengoch. 9. Lefsred-headed Linnet, Llinos bengoch leiaf. 10. Twite, Llinos fynydd.

XXL.

FLY-CATCHER.

I. Spotted, 2. Pied,

Y Gwybedog. Clochder y mynydd.

XXII.

L A R K.

I. Sky, 2. Wood, 3. Tit, 4. Field, 5. Red, 6. Crefted, Hedydd, Uchedydd. Hedydd y coed. Cor Hedydd. Hedydd y cae. Hedydd rhudd. Hedydd coppog.

XXIII.

WAGTAIL.

I. White,

Brith y fyches, Tinfigl y gwys. 2. Yel-

2. Yellow. Brith y fyches felen. Brith y fyches lwyd. 3. Grey,

XXIV.

WARBLERS.

- 1. Nightingale,
- 2. Redstart,
- 3. Redbreaft,
- 4. Blackcap, 5. Pettychaps,
- 6. Hedge,
- 7. Yellow,
- * 8. Scotch. 9. Golden-crefted,
 - 10. Wren,
 - 11. Sedge,
 - 12. Grafshopper,
 - 13. Wheatear,

 - 15. Stonechatter,
 - 16. Whitethroat,

CON INCEN

*17. Dartford.

Eos. Rhonell goch. Yr Hobi goch. Brongoch. Penddu'r brwyn. - Y Ffigylog. Llwyd y gwrych. Dryw'r helyg, Sywidw.

Yfwigw, Sywigw. Dryw. Hedydd yr helyg. Gwich hedydd, Tinwyn y cerrig. 14. Whinchat, JUYZ Clochder yr eithin. Clochder y cerrig. Y gwddfgwyn.

VOL. II.

XXV.

APPENDIX,

XXV.

TITMOUSE.

- 1. Great,
- 2. Blue,
- 3. Cole,
- 4. Marsh,
- 5. Longtailed,
- 6. Bearded,

Y Benloyn fwyaf. Y Lleian. Y Benloyn lygliw. Penloyn y cyrs. Y Benloyn gynffonhir. Y Barfog.

XXVI.

SWALLOW.

1. Chimney,

- 2. Martin,
- 3. Sand,
- 4. Swift,

Gwennol, Gwenfol. Marthin Penbwl. Gennol y E¹ennydd. Marthin dû.

XXVII.

GOATSUCKER.

1. Nocturnal,

Aderyn y droell, Rhodwr.

XXVIII,

XXVIII.

HERON.

- 1. Common, 2. Bittern,
- 3. White,

Cryr glâs. Aderyn y bwnn, Bwmp y Gors. Cryr gwyn.

XXIX.

CURLEW.

1. Curlew, 2. Whimbrel, Gylfinhir. Coeg ylfinhir.

E.

XXX.

T

C c 2

P

S N

1. Woodcock,

- 2. Godwit,
- * 3. Cinereous,
 - 4. Red,
 - 5. Leffer,
 - 6. Greenshank,
 - 7. Redshank,
- * 8. Cambridge,
 - 9. Spotted,

Cyffylog. Rhoftog. Rhoftog llwyd. Rhoftog rhûdd. Cwttyn dû. Coefwerdd. Coefgoch.

Coefgoch mannog. 10. Common, -

748

10. Common, * 11. Great, 12. Jack,

Yfnittan, y Fyniar. Yfnid. Giach.

XXXI.

	• - 4 Y - 1	The second second
	SANDP	IPER.
I.	Lapwing,	Cornchwigl.
2.	Grey,	Cwttyn llwyd.
3.	Ruff,	Yr Ymladdgar.
4.	Knot,	Y Cnut.
5.	Afh colored,	Y Pibydd glâs.
6.	Brown,	Y Pibydd rhudd.
7.	Spotted,	Y Pibydd mannog.
8.	Black,	Y Pibydd dû mannog.
9.	Gambet,	
.0	Turnstone,	Huttan y môr.
11.	Hebridal,	
12.	Green,	Y Pibydd gwyrdd.
13.	Red,	Y Pibydd coch.
14.	Aberdeen,	and a little of
15.	Common,	Pibydd y traeth.
б.	Dunlin,	Pibydd rhuddgoch.
17.	Purre,	Llygad yr ych.
18.	Little,	Y Pibydd lleiaf.
		initial is

XXXII.

PLOVER.

1. Golden

*

I I I *

> Cwttyn yr aur. 2. Long

52 1

	Long legged,	Cwttyn hîrgoeş,
3.	Dottrel,	Huttan.
4.	Ringed,	Môr Hedydd.
5.	Sanderling,	Llwyd y tywod.

XXXIII.

OYSTER CATCHER. 1 a fin batt Pied, Piogen y môr.

XXXIV.

R A I L.

I. Water, Cwtiar.

7

3

XXXV.

GALLINULE.

1. Spotted,

2. Common,

Dwfriar fannog. 2. Crake. Rhegen yr yd. Dwfriar. N N 2 0 V

~

Configuration T

XXXVI.

PHALAROPE.

1. Grey, 🦪 🖉 Pibydd llwyd llydandroed. Čc3 2. Red,

2. Red, Pibydd côch llydandroed.

XXXVII.

с о о т.

1. Common, 2. Great. Jâr ddwfr foel. Jâr ddwfr foel fwyaf.

XXXVIII.

GREBE.

1. Tippet,

2. Great crested,

3. Eared,

4. Dusky,

5. Little,

6. Blackchin,

Gwyach. Tindroed. Gwyach gorniog. Gwyach gluftiog. Gwyach leiaf. Harri gwlych dy bîg. Gwyach gwddfrhûdd.

XXXIX.

A V O S E T,

1. Scooping,

Pîg mynawd.

XŁ.

A U K.

1. Great,

Carfil mawr. 2. Razor

 Razor-bill,
 Black-billed,
 Puffin,
 Little,
 Carfil, Gwalch y penwaig.
 Carfil gylfinddu.
 Pwffingen.
 Carfil bâch.

XLI.

GUILLEMOT.

- 1. Foolifh,
- 2. Leffer,
- 3. Black,

Gwilym. Chwilog. Gwilym dû.

XLII.

DIVER.

- 1. Northern,
- * 2. Imber,
 - 3. Speckled,
 - 4. Red-throated,
 - 5. Black-throated,

Trochydd mawr. Trochydd. Trochydd bâck. Trochydd gwddfgoch, Trochydd gwddfdu,

XLIII.

G

U

L

- 1. Black-backed,
- 2. Skua,

Gwylan gefn-ddu, Gwylan frech, C c 4 3. Black

L.

3. Black-toed,

4. Arctic,

5. Herring,

6. Wagel,

7. Winter,

8. Common,

9. Kittiwake.

10. Tarrock,

11. Black-head,

12. Brown,

Yr Wylan yfgafn. Gwylan y Gogledd. Gwylan benwaig. Gwylan rûdd a gwyn. Gwylan y gweunydd. Gwylan lwyd, Huccan.

Gwylan gernyw. Yr wylan benddu. Yr wylan fechan.

mile

XLIV.

Τ

ER

N.

1. Great,

2. Leffer, 3. Black, Y fôr-wennol fwyaf.Y fôr-wennol leiaf.Y fôr-wennol leiaf.

XLV.

PETREL.

- 1. Fulmar,
- 2. Shear-water,
- 3. Stormy;

Gwylan y graig. Pwffingen Fanaw. Cas gan Longwr.

XLVI.

A P P E N D I X.

XLVI.

MERGANSER.

Goofander,
 Red-breafted,
 Smew,
 Red-headed,

Hwyad ddanheddog. Trochydd danheddog. Lleian wen. Lleian ben-goch.

XLVII.

C

Κ.

)

TT

Wild Swan,
 Tame Swan,
 Grey Lag,
 Bean Goofe,
 White fronted,
 Bernacle,
 Brent,
 Eider,
 Velver,
 Scoter,
 Tufted,
 Scaup,
 Golden eye,
 Morillon,
 Shieldrake,

Alarch gwyllt, Alarch. Gwydd. Elcyfen. Gwydd wyllt. Gwyran. Gwyran fanyw. Hwyad fwythblu: Hwyad felfedog: X fôr-Hwyad ddû. Hwyad goppog. Llygad arian. Llygad aur. Hwyad benllwyd. Hwyad yr eithin, Hwyad fruith. 16. Mallard, 747

16. Mallard, Cors Hwyad, Garan Hwyad, Hydnwy. Hwyad lydanbig. 17. Shoveler, 18. Red breafted Shoveler, Hwyad fron-goch lydanbig; Hwyad gynffonfain. 19. Pintail, 20. Long tailed, Hwyad gynffon gwennol. Hwyad bengoch. 21. Pochard, 22. Ferruginous, Hwyad frech: Chwiw. 23. Wigeon, *24. Bimaculated, 25. Gadwall, Y gors Hwyad lwyd. Hwyad addfain. 26. Garganey, 27. Teal, Cor Hwyad, Crach

XLVIII.

Hwyad.

(0 0	R	v	O R	A	N	т.
2.	Corve Shag, Gann			Y	Iùlfran, Fulfra Fan, Ga	in leia	
£	Р	Р	E	N	D	I	X.
* I.	Roug	gh legg	ged Fa	lcon,	, di	12	

2. Roller, Y Rholydd, 3. Nutcracker,

- 3. Nutcracker,
- * 4. Oriole,
 - 5. Rofe colored Ouzel,
 - 6. Crane,
 - 7. Egret,
 - 8. Little Bittern,
- * 9. Spoon-bill,

Aderyn y cnau. Y Fwyalchen felan. Y Fwyalchen gôch.. Garan. Cryr coppog lleiaf. Aderyn y bwnn lleiaf. Y Llydan-big.

** The birds marked * are not in the octavo edition, 1768.

No. IX.

CATALOGUE OF THE EUROPEAN QUADRUPEDS, BIRDS, AND REPTILES, Extra-Britannic.

CINCE the great use of Mr. RAY's Sylloge fir-D pium Europæarum extra Britannias* has been fo fully approved by the travelling Botanift, it is thought a fimilar enumeration of the fpecies of certain classes of the animal kingdom would be equally agreeable and ferviceable to the travelling Zoologist. It comprehends the Extra-Britannic quadrupeds, birds, and reptiles of Europe, formed from the works of the general naturalifts, from the Fauna of different countries, and from my own observations. The arrangement of the subjects are according to the excellent method of our countryman Mr. RAY, a little altered, or reformed. As there are not at this inftant English names for most of the articles, we have been obliged to fubftitute those used by Linnæus and other foreign writers; but to gratify the English reader's curiofity, who may with for fuller accounts of the quadrupeds in his own language, we refer him in the fecond column to our own synopsis of Quadrupeds; and in respect to the birds, to the English edition of Mr. WILLUGHBY'S Ornithology.

* Stirpium Europæarum extra Britannias nascentium Sylloge, 1694.

CLASS

CLASS I. QUADRUPEDIA.

Stewart Brits of B

the second secon

QUADRUPEDS.

			Ľin.	Syn. no	ft. Place.
		al 11		No.	1 - Jul - L
İ	Bos	Urus	99	4	Lithuania
	1. 1. 1. 1.	Bubalis	ibid.	5	Italy '.
)
11	Ovis	Strepficeros	98	8	B. Hungary
		Laticauda			Calmuck country
TIT	Capra	Rupicapra	95	10	Alps, Pyrenees
4.4.4	anpro	Ibex	ibid.		Alps
		Ammon		-	-
			97		Corfica, Sardinia
		Tartarica	ibid.	30	Ukraine
IV	Cervus	Alces	92	35	N. of the Baltic
		Tarandus	93		ibid.
			93	.30	
V	Sus	Aper Sylvestris	102	54	Germany, France,
					&c.
		П			
VI	Canis	Lupus	58	111	Almost all the con-
					tinent
		Lagopus	59	113	Lapland ·
VII	Felis	Lynx	62	135	Many parts of Eu-
					rope

VIII

		Lin.	Syn. noft. No.	Place.
VIII Urfus	Arctos	69	138	Many parts of Eu- rope
	Maritimus Luícus, et	70. 71	139	Nova Zembla
	Muftela Gulo	67	140	N. of the Baltic
IX Viverra	Genetta	65	171	Spain
	Zibellina	68	156	Lapland
-	Perouafca	р	. 233 Not	te, Poland
X Lutra	Mustela Lutreol	a 66	174	Sweden
XI Castor	Fiber	78	190	N. of Europe
	Mofchatus	79	192	Ruffia
XII Hyftrix	Cristata	76	193	Italy .
XIII Marmotta	2 Mus Marmotta	a 81	197	
	Cricetus	82	200	Germany
	Souflik		201	S. of Ruffia
	Lemmus	80	202	Lapland
	Citellus	80	203	S. of Europe
	Zemni		204	Poland
XIV Sciurus	Volans	88		Poland
	Glis	87		S. of Europe
	Mus quercinus	84	218	ibid.
XV Jerboa	Mus Jaculus	85	223	Calmucks country
XVI Mus	Gregarius	84	234	Germany, Sweden
	III.		¢	
XVII Trichecha	s Rofmarus	49	263	Within the polar circle
- •	IV.			1 200
XVIII Vespertil	io Serotina		288	France
	Pipiftrilla		289	ibid.
15 I V V	Barbastella		290	
			286	<i>ibid.</i> CLASS
int.				CLUDE

-752

5

CLASS II. AVES.

1 - LOI

BIRDS.

I. A C C I P I T R E S.

RAPACIOUS.

				7	Vil. o	rn. Place.
I Vultur	Vultur	Br	iſ.I.	453	66	6 Alps, Italy
	Percnopterus	R	iii syn.	10	64 67	Spain, Mi-
						norca
II Falco	Turananhalua	7.				March
11 raico	Leucocephalus	Li		124		North †
	Melanæetos	ib	id.		6	I
	Morphno conge	ner Ra	aii syn.	7	6	3
	Rufticolus	- Li	n.	125		Sweden
	St. Martini	B	riff. I.	443		France
	Islandicus	Br	runnich	No.		Iceland
4	Vefpertinus	Li	n.	129	n	Ingria
	Minutus			131		Malta
	Subfurcatus		S 326	No. 5		
	Caftaneus	ner.		6		Austria
	Ferrugineus	Vramer.	328	- 7		
	Cinereus		329	-12		

III Strix * Scandiaca Subaurita

....

Lin. 132 Kr. 323 No. 3 North Austria

† Countries the other fide the Baltic.

] ** Nyclea

	l	Vil.	orn.	Place.	•
* * Nyctea	Lin.	132		North	
Sylveftris	Scop. No	.13		Carniola	1
Funerea	Lin.	133		North	
IV Lanius Infaustus	· Lin. 1	38	197	North?	5

Major Gesneri 581 Briff. II. 146 88 Germany

.

II. PICÆ.

PICE'S.

				Wil. orn.	Place.
V	Corious	Caryocatactes	Lin.	157 132	Germany N.
		Pyrrhocorax	-	158	Alps
VI	Coracias	Garrulus	<u></u>	159 131	Europe
					passim ‡.
VII	Oriolus	Galbula	<u>\</u>	160 198	ibid.
VIII	Cuculus	Glandarius		169	Spain
IX	Picus	Martius	-	173 135	Europe
					passim.
		Tridactylus		177	Norway
X	Merops	Apiaster		182 147	Ita. S. of Eu.
		Icterocephala	Brif.IV	. 537 148	ibid.
XI	Certhia	Muraria		184	Italy

t Those with this word refer to all the continent, except the extreme north, Lapland, &c.

III. GAL-

GALLINACEOUS.

	•	Wil.	orn. Place.
XII Tetrao * Nemefianus Sa	o. No. 171		Carniola
Betulinus	No. 172		ibid.
Lagopus B	ru. No. 199		Norway
Bonafia La	in. 257	:	175 Europe
			passim
** Rufus -	- 276	:	167 S. of Eu.
Francolinus -	- 275		174 ibid.
Alchata -			o. 5 Pyrenees
Græca (Perdix) 1	Briff. I. 241	1	169 S. of Eu.
Montana	224		
Tridactyla Sh	aw's tra. 253		Spain
XIII Otis Tetrax Li	<i>n</i> . 264		79 France,
			Italy
	~ ~	-	-
IV. P A S	S E	R	ES.
IV. PAS SMALL			E S.
		DS	S.
SMALL	BIR	D S Wil. d	S. orn. Place.
	BIR	D S Wil. d	S. orn. Place. Carniola,
SMALL XIV Sturnus Collaris S.	B I R	D S Wil. d	S. orn. Place. Carniola, Spain
SMALL	B I R	D S Wil. d	S. orn. Place. Carniola, Spain 3 Europe
S M A L L XIV Sturnus Collaris S XV Turdus Arundinaceus	B I R	D S Wil. d	S. <i>prn. Place.</i> Carniola, Spain 3 Europe <i>paffim</i>
S M A L L XIV Sturnus Collaris So XV Turdus Arundinaceus Rofeus	B I R co. No. 19 Lin. 29 29	D \$ Wil. a 2 5 14 4 15	S. orn. Place. Carniola, Spain 3 Europe
S M A L L XIV Sturnus Collaris S. XV Turdus Arundinaceus Rofens Saxatilis	B I R co. No. 19 Lin. 29 29 29	D S Wil. 4 2 5 14 4 19 4 19	5. brn. Place. Carniola, Spain 3 Europe pa[fim 94 Italy 97
S M A L L XIV Sturnus Collaris So XV Turdus Arundinaceus Rofeus	B I R co. No. 19 Lin. 29 29 29	D S Wil. 4 2 5 14 4 19 4 19	5. <i>Place.</i> Carniola, Spain 3 Europe <i>paffim</i> 94 Italy 97 91 Italy,
S M A L L XIV Sturnus Collaris Su XV Turdus Arundinaceus Rofeus Saxatilis Cyanus	B I R co. No. 19 Lin. 29 29 29 29	D S Wil. 4 2 5 14 4 19 4 19	S. Dorn. Place. Carniola, Spain 3 Europe pa/fim 94 Italy 97 91 Italy, Spain
S M A L L XIV Sturnus Collaris S. XV Turdus Arundinaceus Rofens Saxatilis	B I R co. No. 19 Lin. 29 29 29	D S Wil. 4 2 5 14 4 19 4 19 6 19	5. <i>Place.</i> Carniola, Spain 3 Europe <i>paffim</i> 94 Italy 97 91 Italy,

A P P E N D I X.

			V	Vil. orn.	Place;.
XVI Alauda	Cristata	Lin.	288	209	Europe
				-	pa∬im.
	Spinoletta		288	209	Italy
N-	Calandra		288	-	Italy,
					Spain
	Alpestris		299	1 2	Poland
	Lufitanica	поча			Portugal
	Craffiroftris	nova			ibid.
XVII Emberiza	Hartulanua	Lin.	100	170	S. of Eu.
XVII Emberiza	Cia	Lin.	309 310	270 271	ibid.
	Cirlus		310		olo <i>ibid</i> .
	Barbata	Sco. No.	-	209 211	Carniola
	Brumalis	No.			ibid.
		110.	213	12.74	
XVIII Fringilla		Lin.	317-		North
	Lulenfis		318	1	Sweden
	Citrinella		320	265	S. of Eu.
	Serinus		320	265	ibid.
	Petronia		322.	267	ibid.
1	Paffer Campestri	s Brif.III		-	uet ibid.
	Torquatus		85	250 No.	•
·	Stultus		87	249 —	
	Bononienfis		91	250-	
	Albicilla		92	250-	
	Passerculus		93	-	
	Sclavonicus		24	250-	6 Dalma-
					tia
	Argentorate	niis	146		Straf-
	Com ful	E.C.L	r .		bourg
	Grau-fink	rrijch. 1	. 3		Germa-
		- 2			ny
XIX Metacilla	Schœnobanus	Lin.	329		Italy
	Curruca		329		Sweden
10	Ficedula	Lin.	330		S. of Eu.
· · · · · ·				s	tapazina

				Wil.	orn.	Place.
	Stapazina		331	Strapazin	0 233	ibid.
The shares	Dumetorum		334	A. 8.		Austria
	Erithacus		335	3tia Alder	r. 218	Sweden
	Şuecica		336	10 6 3		
	Curruca mir	or <i>Bri</i> . III	. 374	Borin. Wi	1.216	Italy
10	çine	raria	376			Italy,
-				. 5		&c.
	rufa		387			Ger-
						many
	næv	ia	389	Boarina	217	Italy
	Ruticilla Gi	braltar	407			S, of Eu.
	Phænicurus	torqua	411			ibid.
	RubeculaBo	nonien.	422	Spipola	234	Bologna
	Curruca grif	lea næv. 🖌	App. V	VI. 112		
	Tithys	Sco. No.	233			Carniola
	Zya		234			ibid.
	Muscipeta		236			ibid.
	Lusitanica	nova				Portugal
	Hifpanica	nova				Spain
3737 D	Criftatus	Lin.				Car
XX Parus	Critiatus	Lall.	340		242	Ger-
	Pendulinus		34z		•	many Auftria
	Ignotus	Brun.				North
		and with a	. 13			TAOLUL
XXI Hirundo	Melba ·	Lin.	345		1	Spain
	Rupeitris	Sco. No.	167			Spain, &
						Carniola

1 1 0 n. 2 112 - 2 111

Ddd2

V. AQUA-

V. AQUATICÆ FISSIPEDES.

CLOVEN FOOTED WATER FOWL.

Self and a					- 1
27 B			Wil.	orn.	Place.
XXII Platalea	Leucorodia	Lin.	231	289	Europe
					passim
XXIII Ardea	Grus				
AAMI AI UUU	Ciconia	Contractor	234	274 286	
and the set	Nigra	1000	235 ibid.		
	•		ibid.		
to she with	Nycticorax			279	S.of Ev.
	Purpurea		236	-	
	Garzetta		237	280	ibid.
- · · ·	Grifea		239		
	Minuta		240		
	Candida minor	Bri. V.		280	
	Torquata	-	440	282	
	Botaurus major		455	283	
	Botaurus minor		453		
	Botaurus striatus	;	454		
	Botaurus rufus		458	283	
	Botaurus nævius		462	-	
	Cancrophagus		466	281	No. 9 Italy
	Cancroph. caftar	ieus .	468		ibid.
1	Cancroph. rufus		469	281	- 7
-	Cancroph. nævit		47 I		'
	Cancroph. luteu		472	281	-8 Italy
	Viridis Belgica		T/-		Holland
	Ardea alba	Sco. No	. 127		Carniola
XXIV Tantaiu		Lin.	241	295	Germany
			•	- , ,	
XXV Numeniu		novus ?	•	,	Denmark
	Passerinus	novus			Holland

. . .

XXVI

W. Mc.

758

Wil. orn. Place.

XXVI Scolopax	Fuíca	Lin.	243		1.15
	Auftralis	Sco. No.	94	Å.	Carniola
XXVII Tringa	Gambetta	Lin.	248		
,	Striata ?				
1 A A A A A A A A A A A A A A A A A A A	Calidris				
	Helvetica				×
	Varia				
	Totanus na		-		TINXX
	Cinclus to	-			1.
	Calidris gi		233		
	Calidris na		1		
	Bononienfi				
	Erythropu				
million -	Undata	Bru	<i>n.</i> — 183		
XXVIII Pratincol	a Krameria	Krai	ner 381 L.	345 No.	12 Auftria
XXIX Charadriu	s Alexandr.	inus <i>Lin</i>	2. 253	_ 1. T	
	Apricariu	IS	254		
	Luteus	1900	vus		France
XXX Gallinuld	Grinetta	Wi	l. orn. 315	, i ya	Italy
And Annual	Serica		ibia		ibid
12000 - 51	Major	Contrast 1 in	313		
10	-	o Ral	aricus nov		Minorca
100 million in the	÷ [] • -				

VI. PEDIBUS PINNATIS,

WITH FINNED FEET.

XXXI Phalaropus Platyrhynchus Brunnich No. 172 North

Ddd3

VII.

VII. PEDIBUS PALMATIS.

WITH WEBBED FEET.

Tart the backing the T

			Wil. orn	. Place.
XXXII Phænicopteru	s Ruber	Lin.	230 320	S. of Fr.
XXXIII Corrira	Longipes	Raii syn.	118 231	Italy
XXXIV Mergus	Caftor	(a. 1		
	Æthiops	Scop. No.	90	Carniola
XXXV Larus		Scop. No.	106	ibid.
	Merulinus		108	ibid.
Carl Line Stage	Bicolor		110	ibid.
XXXVI Sterna	Cinerea	Bri. VI.	220	
10	Nævia		.216	
XXXVII Anas	Niveus (anfer) Bri. IV.	228	North
(181 - 241)	Mofcoviticus	2 () () () () () () () () () (277 360)
a 1	Spectabilis	Lin.	195	North
	Glaucion		201 367	,
	Histrionica		204	North
	Muscaria	Raii syn.	146 375	1
	Ferroënfis	Bri. VI.	466	Ferroe
2/1/20				ifles
	Subterranea	Scop. No.	83	Carniola
	Cinerea	K. 341 No	-	Auftria
XXXVIII Pelecanus	Onocrotalus			Danubes
				Po.
				10.

CLASS.

CLASS III. REPTILIA.

REPTILES.

* P E D A T A:

Wітн Fеет.

Place.

761

Rana	Bombina <i>Lin</i> . Arborea	355 357 Raii fyn. qua. 23	Sweden 31 Germany
Lacerta	Chamæleon Lin.	364 Raii syn. qua. 2	76 S. of Europe
	Salamandra	371 22	73 ibid.
	Orbicularis	365 20	64. Naples
	Marmorata	368	S. of Europe
	Aurata	ibid.	ibid.
	Umbra?	367	ibid.
	Seps	363	ibid.
	Chalcides 366 Raii fyn. qua. 272 ibid.		
Testudo	Corticata Rondel. pife.	445	Mediterranean
	Orbicularis Lin.	351	S. of Europe
	Græca	352 Raii syn. qua. 2	53 ibid.
	Lutaria	ibid. 2	54 ibid.

** A P O D I A.

WITHOUT FEET.

Serpentes Anguis Æfculapii, Plinii lib. xxix. c. 4. Raii fyn. qua. 291 Italy Coluber Cherfea Lin. 377 Wulff. Boruff. 10 Sweden Afpis Lin. 378 Strom. Sondm. 193 Fr. Norway Jaculus Wulff. Boruff. 13 Pruffia D d d 4 INDEX.

ADDITIONS AND CORRECTIONS

TO

BRITISH ZOOLOGY.

[To be inferted immediately before the Index of Birds.]

VOL. I. Page 280.

OF COCK-FIGHTING.

SOME account of the barbarous cuftom of Cock-fighting, fo frequent, till of late years, a favorite amufement among fome of all ranks in this kingdom, will be no improper appendage to the hiftory of our domeftic birds.

IF it can be any apology for fo cruel a diverfion, we may plead that it was in use among the most polite people of antiquity: first invented, in all probability, by the *Athenians*, and borrowed from them by other nations, in particular by the *Romans*, who introduced it into our islands.

AT Athens was an annual feaft, attended with Cock-fighting, inftituted by Themistocles in honor of the birds from whose fighting he received an omen of his success against the Persians. He obferved, that these birds fought for mere glory; neither for the gods of their country, nor tombs

of

OF COCK-FIGHTING.

of their anceftors, nor yet for their children: * fetting before his foldiers every motive to excite their valor, which they had fuperior to thefe birds. This feftival was filed $A\lambda_{5\varkappa\tau_{\xi}\nu\omega\nu}\alpha\gamma\omega\nu$; and became anniverfary.

THE Cock-pit, or Ynaia, was in the theatre where the public games were exhibited, and was in form of a square stage, not round, like the modern pits. The game of Cock-fighting lafted but one day; for originally it was confidered partly as a religious and partly as a political inftitution. But the cuftom was foon abufed, and Cockmatches grew frequent among private people. The barber Meidias and Callias fought a main: thefe gentlemen were, in all probability, alfo celebrated Cock-feeders, or at left Quail-feeders, being called Opruyreopor; for it is certain that the antients prepared their birds for battle : great fums were layed on the event; and the Lanifta, or Cockers, frequently totally ruined by their purfuits of the diversion +.

THE cuftom fpread foon, as is fufpected, from Athens to Pergunius and Treas. In the first were annual Cock-matches: and their neighbours, the Dardanii Treas, feem equally addicted to the diversion, as is evident from their coins, which had on them two fighting cocks.

On two antient gems, in the collection of Mr.

* Ælian. Var. Hift. ii. c. 20. † Columella, lib. viii. c. 2.

William

10

OF COCK-FIGHTING.

William Hamilton §, are ftrong memorials of this cuftom : on one is a Cock, with his head creft, carrying in his bill a palm-branch, in token of victory over another, which ftanding before with a drooping head. On the other, are two in the action of fighting, and a moufe above, running away with an ear of corn, the caufe of the battle : from both thefe reprefentations, it is evident that the antients neither trimmed their Cocks, nor cut off their combs and wattles.

THE race of birds most esteemed by the antients, was that of *Tanagra*, a city of *Baolia*, the Isle of *Rhodes*, *Chalcis* in *Euboea*, and the country of *Media*^{*}. They preferred the larger kind, or what we call *Shakebags*. The hens of *Alexandria* in *Egypt*, called *MovóCogos*, were highly valued for breeding spirited chickens †.

FROM Greece the diversion was carried to Rome: but did not arrive at the heighth of folly as it did at Athens. The Romans delighting more in quail fightings, as the Chinefe do at this time. But we are told, that the fraternal hatred between Baffianus and Geta, fons of the emperor Severus, began when they were boys, from a quarrel they had about their Quails and Cocks \ddagger .

THE Britons had poultry before the arrival of Cafar, but they owe the barbarous cuftom of

§ Archaologia, vol. iii. tab. ix.

* Plin. Nat. Hift. lib. x. c. z ..

- † Geoponic. lib. xiv. c. 7.
- ‡ Herodian. iii. § 33.

Cocking

OF COCK-FIGHTING.

Cocking to the Romans. Yet it does not occur among our writers, till the time of Henry II. when Fitz-Stephens & mentions it as the school-boys diversion on Carnelevaria, or Shrove-Tuesday. Edward III. difapproved and prohibited Cock-fighting |. But that barbarous prince Henry VIII. gave it fo much encouragement as to build a theatre, near Whitehall, for that purpofe, to this day known by the name of the Cockpit. At length, Oliver Cromwell, in 1654, by a humane edict, fuppreffed thefe difgraceful meetings; which, after his time, revived with full fury: yet it is fome confolation, in this profligate age, that whatfoever other follies flourish, this loses credit, and drops (excepting among the dregs of the people) into the utmost difrepute *.

§ p. 45. || Maitland London, i. 131.

* It will be injuffice not to fay, that almost the whole of this is borrowed from the memoir on this fubject, by that able antiquary the Rev. Mr. Pegge. See Archaelegia, vol. iii. 132. STOCK DOVE, or WOOD PIGEON.

VOL. I. Page 290.

Of the STOCK DOVE, or WOOD PIGEON.

Enas five vinago. Wil. Orn. 185.

THIS bird has been confounded with the Wild Pigeon, and the Rock Pigeon, and made the origin of the domeftic kind. I first had an opportunity of correcting my error, * by feeing the true Stock Dove in the LEVERIAN *Museum*, which fatisfied me that Mr. *Willughby*, with great justice, defcribed it as a diffinct species.

It is equal in fize to the common kind, perhaps larger. The weight of a male is fourteen ounces: its extent of wing, twenty-fix inches: its length, fourteen.

The bill is of a light red : the head, neck, and upper part of the back, of a dark grey; the lower part, and rump, changes into an elegant light grey: the primary feathers of the wings, are dufky: coverts and fecondaries, deep grey, marked with two black fpots on the exterior webs : the lower half of the exterior webs of the two outermost feathers of the tail, are white : the reft, cinereous, with their ends black.

THE fides of the neck, of a variable gloffy green: the breaft, of pale purplish or vinaceous color: the belly cinereous: legs red.

BREEDS in hollow flocks of trees, and fometimes on the tops: from which it derives its name of

• By LINNÆUS alfo, who makes it fynonymous with tha Tame Pigeon. SIZE.

COLORA

PLACE.

Stock

STOCK DOVE, or WOOD PIGEON.

Stock Dove, or Wood Pigeon : in opposition to the other, which breeds in holes of rocks, fteeples, and towers. Those are refident in this kingdom: the former generally migratory: a few breed in the woods in Suffex, * and perhaps other fouthern parts of Great Britain. Their eggs have been hatched under tame Pigeons; but the young, as foon as they could fly, have betook themfelves to their favage state. These perch on trees : the true Wild or Rock Pigeon rarely or never. It has alfo marks different: in particular the lower part of the back, and the rump, are never of any other color than white. Yet, as Pigeons are frequently feen among our tame flocks, with grey back and rumps, it is highly probable, that notwithstanding the above experiment may fometimes fail, yet both kinds may have contributed to ftock our pigeon-houfes.

GENTLEMEN who have pigeon-houses near some of the lofty cliffs which impend over the sea, feldom preferve the pigeons in them the whole year : tempted by food, they will visit and continue fometime in the house, but usually fly to the rocks to breed.

MIGRATION

THE STOCK DOVES migrate into the fouth of *England*, in great multitudes, in *November*; and while the beech woods were fuffered to cover large tracts of ground, came in *myriads*, reaching in ftrings of a mile in length, when they went in

* Mr. Latham Rivett.

the

GREY WHEAT-EAR.

the morning to feed. They retire in the fpring: I fuppole into Sweden; for Mr. Ekmark makes their retreat from that kingdom coincide with the time of their appearance here.

VOL. I. Page 385.

GREY WHEAT-EAR.

Cul blanc gris, Briffon iii. 552. tab. xxi.

A Bird of this fpecies was fhot near Uxbridge. THE crown and back were of a tawny brown; the under fide of the neck, of a-dull brownifh yellow: from bill to eye paffed an obfcure dufky line. Quil feathers and fecondaries black, edged with tawny and white: tail, like the common Wheat-Ear; but the edges were marked with pale tawny.

IN the LINNÆAN System, p. 332. it is made a va-

VOL. II. Page 574.

TRANSFER to the GREY-LAC GOOSE, p. 570, all the fynonyms prefixed, by miftake, to the BEAN GOOSE.

VOL.

SULA. GREEN COD.

VOL. II. Page 620.

SULA.

THIS variety of the GANNET was fent to me in August 1779, by Hugh Stodart, efq; of Treganwy, in Caernarvonshire. I do not recollect that it has been observed in Europe fince the days of Dr. Hoier, a physician at Bergen, who procured it from the Ferroe Isles, and fent it to his friend Clusius. It has fince been feen frequently in Falkland Island, and in the South Seas, especially on the coasts of New Holland and New Zealand. Seamen call it the Port Egmont Hen.

THIS bird differs from the common GANNET only in those particulars: in having fome of the fecondaries feathers black; and the middle feathers of the tail of the fame color: whereas both, in the common fort, are entirely white.

VOL. III. Page 179. GENUS COD.

Gadus virens, Lin. Syft. 438. Faun. Suec. Nº 309.

GREENO

THE Green Cod-Fish is beardless; finooth, of dusky green on the back; and filvery in every

dusky green on the back; and filvery in every other part: jaws, of equal lengths: fide line, ftrait: tail forked.

I was favored by Sir John Cullum, bart. with the notice of this fpecies being British; he observed numbers of them which had been taken in the German ocean; none exceeded seven inches in length. LINNÆUS does not attribute to them a greater fize than that of a Perch.

	Page
Δ BERDAVINE,	341.
Acanthis, what supposed to be, -	334.
Æsopus, his dish of finging birds,	656.
Agasaus, Agasseus, what dogs,	63.
America, no rats there originally,	116.
Anacreon, mentions the carrier pigeon, -	294.
Apodes, of Aristotle,	554.
Ariosto, his account of the carrier pigeon, -	294.
Aristophanes, mentions the use failors made of the flight	
of birds,	509.
Afs,	13.
not originally a native of Britain, -	14.
Asterias, what bird,	425.
Attagas or Attagen, what bird,	440.
Auk, the greater, or Penguin,	507.
common or Razor-bill,	509.
black-billed,	511.
little,	517.
Avoset,	504.
	В.

11 7 12 19 1

D

A.

I

N

E

Χ.

	Page
BADGER,	85.
Barley bird or Sifkin,	340.
BARRINGTON, the Honourable DAINES, of the fma	11
birds of flight by,	649.
Effay on finging birds by, -	660.
Bass Isle, number of birds on,	614.
BAT, great,	146.
long-eared,	147.
horfe-fhoe,	ibid.
common,	148.
a tame one,	150.
Bears, once found in Britain,	77.
Beaver, now extinct,	. 96.
Belon, the first traveller who made remarks in natur	al
hiftory,	253.
Bernacle,	577.
Bison Scoticus,	23.
Bittern,	424.
the Asterias of the antients, -	425.
the little, 4	27, 633.
Black-bird,	308.
Black-cap,	374.
Black-cock, vide Grous.	
fpotted,	268.
Blood-hound, its use,	61.
Boadicea, her use of the hare,	102.
Boar, wild, once found in England, -	57.
Bots, what,	12.
Brambling,	337.
Brawn, a dish peculiar to England,	57.
Brent goole,	579.
Britain, its natural advantages,	Preface.
Bruce, Robert K. of Scotland faved from a wild bull,	23.
	Buck,
	,

.

	Page
Buck, or fallow-deer,	41, 46.
Bulfinch,	320.
Bulls, wild,	22.
BUNTING, common,	324.
yellow, '-	325.
reed,	326.
tawny,	327.
fnow,	329-
its migration,	330.
mountain,	331.
Bustard, great,	284.
leffer,	286.
	287.
Butcher-bird, vide SHRIKE.	
left, vide bearded TITMOUSE.	
Buzzard, bald, or Ofprey,	174.
honey,	190.
common,	188.
moor,	192.
fpotted,	189.

C.

Cagmag, what	-	572.
Canary bird,	-	347*
Capercalze, wide cock of the wood.		
Carrier-pigeon, its uses, -	-	292.
Cat, domestic,	-	82.
its value formerly,	-	83.
odd penalty for stealing the Prince's,	-	83.
wild,	-	80.
Cataracta or Skua,	-	532.
a name applied to the gannet,		619.
86 U		Cattle.

Cattle wild fill in Paisain	rage
Cattle, wild ftill in Britain,	22.
Cavalry, Britifh, respectable,	4.
poor flate of in Queen Elizabeth's time, -	8.
numerous in the time of King Stephen, -	ibid.
Cepphus, gull,	532.
	- 335.
Chariots, fcythed, of the Britains,	4.
CHATTERER, WAXEN,	314.
Cheefe, not made by the Britains,	19.
Chenalopex,	590.
Chenerotes,	579.
Chevy Chace, the flory not improbable,	43.
Childers, a horfe, his speed,	2.
Xeuropureus, of Aristotle,	334.
Churn owl,	416.
Cloven footed water fowl,	421.
Coaches, when first used in England,	. 9.
Cock, common, or poultry,	279.
wild only in India,	280.
the black or grous,	266.
of the wood,	262.
Coddy moddy gull,	537.
Cornish chough,	228.
tarrock,	540.
Cornix of Virgil,	220.
Country Gentlemen, the fludy of natural history recom-	
	reface.
Coldfinch, or pied FLYCATCHER,	351.
Colemoufe,	392.
Coor, common,	494.
great,	
Coracles, or leathern boats,	495.
CORVORANT, -	608.
its voracioufnefs,	609.
Satan faid by Milton to have affumed the	oug:
form of this bird,	ibid.
	Crake,

	Page
Crake, or land rail,	487.
Crane,	629.
CREEPER,	260.
Crofsbill,	319.
Crow,	218.
carrion,	219.
Roy/ton, or hooded,	223.
red-legged,	228.
Сискоо,	232.
why a name of reproach, -	234.
Curlew,	429.
ftone,	287.
Cypfelli, Plinii, -	554-

D.

Decoys, an account of,				592.
DEER, fallow, or buck,		-	e3	41, 46.
Didapper, or little grebe,		-	-	501.
DIVER, northern,	-	-		523.
Imber,	÷	-	-	524.
fpeckled,	-	-	-	525.
red-throated,	6		-	526.
black-throated,		-	-	527.
Divinity, how far natural h	iftory ma	y pron	ote the end o	f, Preface.
Docking of horfes, an ab	furd cuft	om, -		II.
Doc, -	-	-		59,
fetting, -			- n 11	66.
lap,			- 1	67.
fhepherd's,	1		_	ibid.
- English, in high eft	eem with	the R	omans,	- 68.
DORMOUSE, -		-	-	110.
Dottrel, -			-	477.
Dove, turtle,			1 44	297.
		1.00		Dove,

			Page
Dove, ring, -	- 1	- 10	296.
Greenland, -	· -	÷ -	521.
Duck,	-	-	562.
wild and tame,	•	-	591.
Eider, -	÷.		581.
velvet, -	-	_	583.
fcoter, -		1	584.
ferruginous, -		- 200	601.
morillon, or grey headed	ł.	-	588.
tufted, -	1.1	- 10 -	585.
fcaup, -			586.
pintail, -	-	rde -	-
-		-	598.
Duck, long tailed, -	-	•	599:
bimaculated, -	-	-	602.
Ducks, wild, vast drivings forme	erly,	-	595.
Dun-bird, the female pochard,		-	600.
Dun-diver, or female goosander,	-	-	557.
or ferula, -		-	558.
Dunlin,			
and the second sec	-		471.

-	-	
- F		
	4.0	

.

Eagle, golden,	-	-		161.
ringtail or blac	k,	-	-	165.
fea,			-	167.
Eagles carry away child		-	-	163.
their longevity,			-	164.
Edgar, king, his advice	e to the c	lergy,	-	- 45.
did not extirpat	e wolves	out of Wales,		. 75.
Egret, -		- 1	-	631.
Eider duck, -		-	- ,815	581.
Ελεφάντινα ψάλια of Str	abo,		-	. 145:
		-		Elk,

				Page
Elk, or wild fwan,	-	-	-	56z.
Ember goose,	- 011 v	20	Strang !!	524.
Epops of Owid,	-	-	Sec. 40	259.
Ermine, -			9 - H - H	89.
how taken in	Lapland an	d Siberia,	T 1	90.
Erne, or cinereous Eag	gle,	-		170.

F.

Falcon, peregrine,			-	• .6	178.
grey,	-	-		-	180.
gentil,	-	-		· · · · · · ·	181.
rough-legged,		-	-	•	623.
fpotted,	-	-		-	189.
Falconry, -	-		-	-	171.
Fallow deer, the fpotte	ed,	-	-	-	46.
deep brown,	-		-		ibid.
Fallow fmich, or whea	it-ear,		-	-	383.
Feather trade,	-	-	-	- //	573.
Fern owl, -	-		-	-	416.
Ferret, originally of A	lfrica,		•	-	91.
will produce w	with the	polecat	,	-	90.
Ferruginous duck,	-		•	-	601.
Fieldfare, -		-		-	304.
FINCH, -	•		•	-	332.
Finfooted water fowl,		-		-	491.
Fitchet, -	-			-	89.*
Flight, small birds of	•				649.
FLYCATCHER, fpotte	ed,	ė		-	350.
pied,		-		-	351.
Fogs, apology for the	fe of Bri	itain,		-	19.
Fortunate Isles, famous	s for bird	ls,	-		347.
	*		.2		Fox,

	Page
Fox,`	- 100 20 71.
will produce with the dog kind,	- 72.
varieties of,	- 75-
Fresnoy, his observation, -	- Preface.
Froisfart, his ftory of a greyhound,	64.
Fulmar, its uses in the isle of St. Kilda,	- 549-

[.] G.

Gadwal or grey,	603.
GALLINULE, spotted,	486.
crake,	487.
common,	489.
Gambet,	465.
Gannet,	612.
its uses to the inhabitants of St. Kilda, -	615.
Dr. W. Harvey, his elegant account of the	efe
birds,	614.
Garganey,	604.
Geefe, tame, how often plucked,	572.
Goat,	35.
Welch, the largest,	36.
its milk medicinal,	38.
GOATSUCKER,	414.
Godwit,	439.
not the Attagas	440.
cinereous,	442.
red,	ibid.
Cambridge,	
the leffer,	447.
	444.
Golden-eye,	587.
Goldfinch,	332-
not the Acanthis	ibid.
G	oosander,

	Page
Goolander,	556.
Goofe, wild,	575.
bean,	ibid.
Grey-lag,	570.
origin of the common tame, -	571.
the brent,	579.
the rat or road,	580.
white-fronted,	576.
Gofhawk,	184.
GREBE, tippet,	496.
great crefted,	497.
its floating neft,	498.
of Geneva, our grebe, · ·	ibid.
eared,	500.
dufky,	501.
little or dobchick,	ibid。
its fingular neft,	502.
black-chin,	503.
Greenfinch,	322.
Greenshank,	445.
Gre-hound,	63.
Grey-headed duck, ' -	-588.
GROSBEAK, haw,	316.
pine,	317.
crofs-billed,	319.
green,	322.
GROUS, wood,	26z.
	266.
red,	269.
	271.
GUILLEMOT, foolifh,	519.
leffer,	520.
black,	521.
Guinea-hen,	280.
Gull, black-backed	528.
Vol. II. Eee	Gull,

3								Page
Gull, Skua,	•				63	• 0		529.
its fiercer	ness,					•		530.
black-toed,		•			•			532.
arctic,	•			•				533.
herring,								5.35.
wagel,								536.
winter,								537.
common,					•			538.
Kittiwake,								539.
black-head,								541.
brown,				•				543.
cloven-footed,			•				•	547.
Mr. Johnfon's,								492.
Gyrfalcon, .								177.

H.

Halcyon of the ancients,	247.
days, what,	251.
Haliætos,	167.
HARE, common,	98.
alpine,	102.
a food forbidden to the Britains,	ibid.
Hawfinch,	. 316.
Hawks, the Welch,	. 201
fubject to change their colors, .	182.
warrant for the King's, .	647.
Hedge-hog, vide URCHIN.	
Hedge-sparrow,	376.
Hen-harrier,	193.
Herbert, Lord, his censure of races, .	• 7.
HERON, COMMON,	421.
white,	427.
mests of, numerous in one tree,	• 422.
1 9 k k k k	Himantopus,

		Page
Himantopus,	٠	476.
Hinds, milch, kept by a Countefs of	Chester,	• 48.
Hobby, . , .	•	197.
Hog,	. 9	54.
not an undiftinguishing feeder,	•	55.
its parts finely adapted to its way	y of life,	• 56.
used as a beast of draught,		• 57.
Hoofed QUADRUPEDS, domestic, why	y,	. 10.
Ноорое,		257.
believed by the vulgar to port	tend war,	. 258.
Hooper, or wild swan .		. 562.
Horns foffil,		ŝi.
HORSE, British, .		• I.
Arabian,		637.
Perfian, .		642.
- Æthiopian and Ægyptian,		· 643.
its fwiftnefs,		• • • 43•
ftrength, .		-
Spanifb, when first introduced	•	• 3•
numbers,	· و	• 5•
	•	• 9.
natural hiftory and ufes,	•	• ibid.
Hunting, English very fond of,	• • *	• 4.2.
Hufbandry or rural æconomy, how	far indeb	ted to
Zoology, .	Þ	Prefaces.

ţ.

Jackdaw	, –	6	· · ·	0	\$	230.
Jackfnip	be,		141.		4	451.
James I.	his paffi	on for	hunting,	,	ó	47.
	his comb	at of	the lion an	nd British	dogs,	68.
Jay,					ó	226.
Imber,			· · ·	5 . A	0	524.
			Eée2	4	1	Keffrel,

		Page
Keftrel,		195.
KINGFISHER,		246.
the Halcyon of the ancients,		247.
the mute Halcyon of Aristotle,		ibid.
its neft		248.
Kite,		185.
art of fteering taken from, .		186.
Kittiwake, Gull,	,	539.
Knot,		461.
taken in nets,		ibid.

L.

Lagopus, .				271.
- altera of I	Pliny, uncer	tain what b	ird, .	z70.
Lanner, .				182.
Lanthorns, when in	nvented,			25.
Lapland, the great	rendezvou	is of water	fowl durin	g
fummer,				723.
Lapwing, .				453.
taken in	n nets,			454.
LARK, Íky,				353.
wood,				356.
tit,				357.
field,				358.
red,				359.
crefted,			۰.	360.
willow,		•		381.
fea,				479.
				Latax

				Page
Latax of Aristotle,	· *** · · · ·	•		95
Lavellan, a sort of shrew,		•		127.
Linnet, .	•	•	•	342.
red-headed,	•		•	343.
lefs red-headed,		,	4	344.
London, quantity of cattle	confumed	l there,		21.
Loon, vide grebe,	•		•	496.
Lucan, defcribes the Coraci	le,	•	· •	24.
Lumme, .	,			527.

М.

à

Magpie,	225.
Mallard,	591.
Martin (beaft)	92*.
pine,	94*•
numerous in North America, .	95.
Martin (bird)	401.
black or fwift, ,	403.
fand, ·	402.
Mastiff, British, trained for war, .	69,
Maftiffs, three overcome a lion,	68.
Maundeville, Sir John, his account of the carrier pigeon	n, 293.
Meleagrides, the Guinea hens,	280.
Menagery, royal,	79.
Merganser, ,	556.
red breafted,	558.
red headed, .	560.
Merlin,	200.
Mew, winter,	537.
Migration of swallows,	406.
of British birds in general, .	709.
Milton, his fine image of the fkylark,	354.
elegant description of the nightingale's fong,	367.
E e e 3	Milton
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	TITA DE OILS

INDEX,

	Page
Milton his beautiful and natural defcription of the	
fwan,	565.
Missel thrush,	301.
the largest bird that fings, .	303.
Mole,	128.
Moor-hen,	489.
Moofe-deer, horns fossile of a species now unknown,	52.
Morfe, suspected to be British,	144.
Mouflon, musimon, a fort of sheep,	32.
Moufe, long tailed field,	120.
fhort tailed,	123.
common,	122.
harvest,	121.
Male,	16.
errors in breaking, , ,	ibid.

N.

Nevell, Archbisho	p, his grea	t feast,	•	726.
Nightingale,	•	•		365.
Pliny	's-beautiful	description	n of its fong,	369.
Norway rat, or bro	own,			115.
Nuteracker,			•	625.
NUTHATCH,	•			255.

0.

OISTERCA	TCHER	2			ę		482
Oppian's det	criptio	n of the	beagl	le,			63.
Oriole,							626.
Orpheus, his	s foul	faid to	have	tranfm	igrated	into the	
body of	a fwan,						567.
							Ofprev.

The second se	Page
Osprey, · · · · ·	174.
Otter,	92.
confidered as a fifh by the Carthufians, .	94.
fea, of Sir R. Sibbald, .	95.
Ovid, his account of the bat,	150.
of the hoopoe	239.
Ouzel, ring, or rock,	310.
water,	312.
rofe colored,	627.
Owr, eagle,	202.
long-eared, · · · ·	203.
fhort-eared, · · ·	204.
white,	206.
brown,	210.
tawny,	208.
little,	211.
Ox,	18.

Ρ.

Painter, his merit founded on his knowledge of	
nature,	Preface.
Pardalis of Aristotle,	475.
Parks, numerous in England,	44.
Partridge,	274:
white, or white GROUS,	271.
Pasturage, richness of the British and Irish, .	19.
Peacock, an Indian bird, .	278.
Penguin, the great auk,	. 507.
Penhebogydd, or chief falconer of the Welch court,	201.
Petrel,	549.
its faculty of fpouting oil.	550.
formy,	553-
Pettychaps,	376:
Eee4	Pewit,

			Page
Pewit, or Lapwing, -		-	453.
gull, its former value,		-	541.
PHALAROPE, grey, -	9		491.
red, -	-	-	492.
Pheafant, not originally British,	-	-	280.
fea, -	-	-	598.
Pie, fea,	-	-	482.
PIGEON, common, -		-	290.
carrier, its uses,		-	292.
Pintail duck, -	- "	-	598.
PLOVER, golden, -		-	474-
ringed, -	-	-	479.
long-legged,	с»	-	476.
Norfolk, vide Buftard,	-	-	287.
Pochard,		-	600.
Poetry, can scarcely exift without	t the aid of	natural	
hiftory,	-	-	Preface.
Pole-cat, or Fitchet, -	<u> </u>	-	89.
faid to produce with the	he ferret,	· _	90.
Poultry, common, introduced by	the Phænica	ians,	280.
Procurator Cynegii, what,	-	- 1	68.
Provisions, what animals used as,	, by the old	English,	726.
Ptarmigan, or white grous,		-	271.
Puffin,		-	512.
its natural affection,		-	514.
ancient method of taking,	-		515.
Manks, -	-	-	551.
Purre	-	-	472.

Q.

QUADRUPEDS,	digitated,	-	-	59.
	hoofed,	-	-	Ι,
<u>, , , , , , , , , , , , , , , , , , , </u>	pinnated,		-	136,
Harrison , and and	winged,	- ,	-	146.
				Quail,

					Page
Quail,	-	~		-	276.
Queest,	-	-	-	-	296.
~ /					

R.

Rabbet,	104.
	ibid.
Races, account of,	. 6.
Rail, water,	484.
land, or crake,	487.
Rams, great price of,	30.
RAT, black,	113.
brown, or Norway,	115.
of uncertain origin,	ibid.
water,	118.
catcher, the king's,	115.
Raven,	218.
Razor-bill, or auk,	509.
great fize of its egg, -	- 510.
Red-breaft,	372.
endeared to children by the old fong	, the
babes in the wood,	373.
Red-game, wide grous,	
Redfhank,	446.
the fpotted,	448.
Red-start,	371.
Red-wing,	307.
fore-runner of woodcocks, -	436.
Reed-bunting,	326.
Ridinger, the engraver, his merit,	Preface.
Ring-dove,	296.
Ring-ouzel,	310.
Ring-tail, or black eagle,	194.
Rock-ouzel,	310.
*	Roe-

C

I N D E X.

1967	Page
Roe-buck,	49.
Roller,	624.
Rook, the Corvus of Virgil,	221.
Royston crow,	223.
Ruff and reeve,	457.
how fattened, -	460.
and an end of a	1 *
All	
\$.	
All a second second	
Sanderling,	480.
Sand-fwallow,	402.
SANDPIPER,	453.
grey,	456.
afh-colored, -	462.
brown.	463.
fpotted,	ibid.
	465.
Hebridal,	- 467.
green,	468.
red,	469.
Aberdeen,	ibid.
common,	470.
little,	473.
Scarecrow,	547.
Scaup-duck,	586.
Scoter,	584.
Sea-fowl, their harsh note,	516.
Sea-lark, or ringed plover,	479.
- pie, or OISTERCATCHER,	482.
SEAL, great,	136.
common	137.
once used at great feafts as food,	141.
how taken in Cathnefs,	142.
Serula,	558.
	Shag,

Į N D E X.

	Page
Shag,	610.
Shaw, Rev. Dr. his euloge,	253:
Shear water,	551.
SHEEP,	27.
of Hirta or St. Kilda,	31.
trepanning of,	34.
Shieldrake,	589.
poffibly the Chenalopex Plinii,	590.
Shoveler,	596.
red breafted,	597.
SHREW, fetid,	125.
	126.
Shrike, great,	213.
red backed,	215.
Silius Italicus, his fine description of the swan, -	565.
his account of the Halcyon;	251.
Silk-tail,	314.
Singing birds, Effay on, by the Honourable DAINES	3-7-
BARRINGTON,	660.
	655.
vaft power of voice, -	ibid.
Sifkin,	340.
Skua,	529.
Sly goofe, the fhieldrake,	589.
Smew,	559
SNIPE,	433.
common,	448.
great,	450.
jack,	451.
Soland goofe,	612.
Spain, probably the winter refort of fome of our fmall	
birds of paffage,	716.
Sparrow,	338.
tree,	339.
Sparrow hawk,	1984
55 C	Spoon
	÷

	Page
Spoon bill,	634.
Squirrel,	107.
Stag,	·41.
where now found wild,	45.
Irifb, formerly fmall with great horns, -	46.
fevere punifhment for killing,	58.
Stare,	299.
Star fhot, or Star gelly, what,	538.
Statius, his account of the Halcyon's neft, -	499.
Stint, or purre,	472.
Stoat,	89.
the ermine, when white,	90.
Stone, horfes fubject to,	12.
Stone chatter,	386.
Stone curlew,	287.
Stoparola,	350.
Storm finch, or petrel,	553.
Superfætation, hares faid to be subject to, -	100.
SWALLOW,	398.
difappearance of,	406.
found during winter in a torpid state,	410.
fea, vide TERN,	
Swan, wild,	562.
tame, •	564.
punishment for killing,	84.
in high esteem formerly,	565.
facred to Apollo and the Mufes,	566.
finging before its death,	569.
Supposed origin of that fable,	567.
Swift,	A03.

-

Tarrock,

540. Taurosthencs

•

Taurofthenes fends advice of his fuccefs in the Olympicgames by a pigeon,--295.Teal,---606.-fummer,--607.TERN, the great,---545.-leffer,--546.black,--547.Theocritus, his account of the Halcyon,-250.

	effer,		-	-	-	546.
ł	olack,		-	-	-	547.
Theocritus, his	s accour	nt of the	e Halcyo	п,		2500
Thomson, the	naturali	ft's poe	t,	-		303.
Throftle,	-		-		-	.306.
Thrush,		-	-			301.
Titlark,	-		-	~	-	357.
TITMOUSE,	great,		-	-	-	390.
1	blue,	-		-	-	391.
(cole,	-		-	-	392.
1	marfh,		-	- 1	-	393.
1	ong-tai	led,	-		- 1	394.
1	bearded,	,	-	-	-	396.
Tringæ, vide	fandpip	ers,				
Tufted duck,		-	-	-		585.
Turky, an An	merican	bird,	-		-	282.
Turnbull, a su	rname,	whence	derived	l,		23.
Turnstone,		- '	-		-	465.
Turtle,	-	+		-	-	297.
fea,		-	-		-	521.
Twite,	-	-		-	-	346.

U.

15
45.
369.
24.

URCHIN,

I N D E X.

					Page
URCHIN,	-		•	4	133.
3	its great pati	ience under	r torture,	-	136.
Urus,	-		*	•	23.

W.

1.						
Wagel Cornij		<u>م</u>	-	8		536.
WAGTAIL,	white,	-		-	-	361.
	yellow,	-		-	-	362.
	grey,	-	-			363.
WARBLERS,		-	-	-		365.
	hedge,	-		-		376.
	yellow,		-	-		378.
	Scotch,	-		-		379.
	golden-cre	fted.	_			ibid.
	fedge,	-				381.
-	grafshoppe	r.	_			382.
			-	1		389.
Waskesseu, a	-	ican deer	F.	~		53.
Water-ouzel,		tonn acci	.,			312.
Water-hen,			-	ف	-	~
Water-rat,			-	-	-	489.
	-	1		*	-	118.
Webbed-foot	ed water-fo	owl,	-	**	-	504.
WEESEL,	-	-		-	-	89*.
co	mmon,	-		-	ei.	95*•
co	ot,	-	-	-	° -	560.
Welch names	of birds,			-		731.
Wheat-ear,	-			ai	-	383.
Whimbrel,	÷	-		-		430.
Whinchat,	-	-			4	385.
White-throat	t _y		-	4	-	387.
Wigeon,	-	-		4	. 4	601.
5 .					17	Vinter
					Y	THICT.

,

			Page
Winter mew, -	-	-	537-
Wolf,		-	75.
when extirpated,			ibid.
not by K. Edgar,		-	ibid.
writ for the taking wolves,	&c.		645.
Wolf-moneth, -	n a	· · · · ·	77-
Wolf-fhed, -	*	2	ibid.
Wood-chat,	-		217.
Woodcock,	·		433-
its migration,		-	437-
Wood-lark,	c.		356.
WOODPECKER, curious structure	of, -	- 0	2 40,
green,	· •	· •	ibid.
great fpotted,			243.
middle,		A 10	244.
lest spotted,			245.
Wood-pigeon, or Ring PIGEON,			296.
Woollen manufacture, long negl		47 CB	28.
its fuccefs		owing to.	30.
Wool, where the beft, -	-		ibid.
Wren,		Ca	380.
Writ of Edward I. for extirp	ating wolu	res out of	3000
England, -	~ ~		76.
another for taking of w	olves. &c	in Degram	70,
fbire,		III DE.001/-	610
WRYNECK, -			645.
fore-runner of the C	Juckon.		237.
		23	238.

 \mathbf{Y}_{\bullet}

<u>.</u>

Yellow-hammer, or BUNTING,

÷ 325.

Z.

Z.

Page Zoology, claffical, too much neglected by travellers, - - - - - - - - - 252.

THE END.





