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PIED FLYCATCHER.

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A

HISTORY

OF

BRITISH BIRDS.

BY

Francis O. Morris

THE REV. F. O. MORRIS, B.A.,

MEMBER OF THE ASHMOLEAN SOCIETY.

VOL. II.

CONTAINING FORTY-SEVEN COLOURED ENGRAVINGS.

'Gloria in excelsis Deo.'

LONDON:
GROOMBRIDGE AND SONS, 5, PATERNOSTER ROW.

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1862
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OF
THE SECOND VOLUME.

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HISTORY OF BRITISH BIRDS.

PIED FLYCATCHER.

COLDFINCH. EPICUREAN WARBLER.

Muscicapa luctuosa,
" *atricapilla*,
" *muscipeta*,
Rubetra anglicana,

TEMMINCK. SELBY.
GMELIN.
BECHSTEIN.
BRISSON.

Muscicapa. *Musca*—A fly. *Capio*—To catch or take.
Luctuosa—Mourning—mournful.

THIS species is met with in abundance in the southern countries of Europe—France, Germany, Greece, and Italy; and also occurs in Norway and Sweden in the summer.

With us it is very local; and, like the majority of ornithologists, I have never seen it alive.

In Yorkshire, the following localities are given as being or having been the resort of this bird:—The lofty oaks in Stainborough woods, but only within the Park enclosure; Danby, near Middleham, not far from the most beautiful scenery of Jerveaulx Abbey; Wharnccliffe; Ovenden; Studley Royal; Copgrove; Bolton Abbey; and the woods of Harewood House—woods which indeed seem alive with birds, at least so I am persuaded will any one say, who comes by them at about three o'clock on a summer morning, as I have done after a night's fishing in the Wharfe. I have often heard birds sing in concert before, but this was such a 'Music Meeting' as I had till then no conception of. At Dalton, also, the Pied Flycatcher used to breed for several successive years, but disappeared, probably destroyed by some collector;

and the same remarks apply to Luddenden Dene. It has very rarely been seen in the East-Riding, or near York. One was killed at Lowestoft, in Norfolk, several others near Lynn, and nineteen in various places near Norwich, where a few occur every season, the beginning of May, 1849.

At Battisford, Suffolk, one male bird was shot in May, 1849, the 'first on record' there. In Kent, one near Deal, on the 17th. of September, 1850; two, birds of the year, near Yoxall Lodge, Staffordshire, August 20th., 1827; one near Melbourne, in Derbyshire; one in Cornwall, at Scilly, the middle of September, 1849. In Sussex, three—one at Halnaker, in 1837, another at Henfield, in May, 1845, and a third in the same year at Mousecombe, near Brighton, in a garden; others near Penrith, in Cumberland; some in Dorsetshire; and several in Northumberland, in May, 1822, after a severe storm from the south-east; also two near Benton. Many on the beautiful banks of the Eamont and the Lowther, in Westmorland, the Eden, and Ullswater; also near Wearmouth, in Durham; one near Uxbridge, in Buckinghamshire; also London: a pair built near Peckham, in 1812; rarely in Devonshire; one in the Isle of Wight; also in Lancashire, Derbyshire, and Worcestershire. In Scotland, one, a male, was shot near Bruckley Castle, Aberdeenshire, in May, 1849. In Ireland none have been observed. It will be perceived that a large proportion of the above specimens occurred in the month of May, 1849.

It seems to be concluded that it is only a summer visitant to us, and not a resident throughout the year. The males precede the females by a few days.

In many of its habits the Pied Flycatcher seems to resemble the Redstart; and it is a curious circumstance that Rennie discovered a hen Redstart dead in one of their nests; and upon another occasion, a Redstart's nest having been taken, the hen bird took forcible possession of that of a Pied Flycatcher, which was near it, hatched the eggs, and brought up the young. Both species contend sometimes for the same hole to build in. A curious anecdote is related in the 'Annals and Magazine of Natural History,' for March, 1845, by John Blackwall, Esq., of Hendre House, Denbighshire, of a pair of Pied Flycatchers which built close to the portico over the hall door, having been debarred entrance to the hole in which their nest was by a swarm of bees, the latter completed the wrong by stinging their young ones to death. This tragedy

occurred on the 18th. of June, 1843. On the parent birds returning in the April of the following year to the same place, they were again assailed by the bees; on which they entirely forsook the spot, and built in a hole in a neighbouring stone wall.

Their food consists of insects, which they capture in the air, and also, it is said, from the leaves of the trees they frequent.

The note is described as pleasing, and is said to resemble that of the Redstart, and to be occasionally uttered on the wing. The bird has also a voice of alarm, resembling the word 'chuck.'

Nidification takes place in May, and the young are hatched the beginning of June.

The nest, which is composed of moss, grass, straws, chips of bark, leaves, and hair, is built sometimes high up in trees, but often only a few feet from the ground, in a hole of a tree, or of a wall, bridge, as also, occasionally, on a branch or stump of a tree; if in a hole, and it be too large, the bird is said to narrow the entrance with mud. This species seems to have a predilection for the neighbourhood of water, probably on account of the greater number of insects to be there met with. The same situation appears to be resorted to in successive years.

The eggs, from four or five to seven or eight in number, are small, oval, and bluish green, or sometimes nearly white; but they vary considerably in size and shape. Those observed in one nest by Mr. T. C. Heysham, of Carlisle, were disposed as follows:—'One lay at the bottom, and the remainder were all regularly placed perpendicularly round the side of the nest, with the smaller ends resting upon it, the effect of which was exceedingly beautiful.' The young are hatched in about a fortnight; both birds by turns sit on the eggs.

These birds are said, by Meyer, to moult twice in the year, which causes some difference in the colours of their plumage. Male; weight, a little over three drachms; length, about five inches; bill, black; iris, dark brown. Head on the sides, dark brown, spotted with white; crown, black; forehead, white, the connexion of two white spots; neck and nape, brownish or greyish black; chin, throat, and breast, white, tinged with yellowish brown at the sides. Back, black, blackish grey in winter.

The wings expand to the width of seven inches and

half, or more, and reach to one third of the length of the tail. Greater wing coverts, brownish black, edged with white, in some tipped with white on one web; lesser wing coverts, dark grey. Primaries and secondaries as the neck, white at the base of the feathers. The first feather less than half the length of the second, which itself is equal to the fifth, the fourth longer than the second, the third the longest; tertiaries, white, in some at the base, in others on the outer webs, in many on the whole of three feathers, but only on part of the first; tips black. Tail, black, with the exception of the basal half of the outer web of the outer feather, but it is said to be totally black in age; in younger birds the whole of the inner web also, of the outer, and of the next feather is white, as is part of the outer web of the third. Tail coverts, greyish black; under tail coverts, white; legs, toes, and claws, black.

Female; forehead, dull white; in some, dependent on age, black like the head; crown, neck, and nape, dark brown; chin, throat, and breast, dull white, tinged on the upper part with dusky yellow. Back, blackish grey; greater wing coverts, dark brown, edged with dull white; lesser wing coverts, dark brown; primaries, brownish black; tertiaries, dark brown, edged with dull white. Tail, dull black; legs, toes, and claws, black.

The young are at first much mottled over with dull white spots on the back, and with brown on the breast; when a year old the bill is black, brown at the base, a dusky streak descends from it along the sides of the neck; iris, brown; forehead, with less white, and more dull; head, crown, neck, and nape, grey tinged with brown; chin and throat, white or yellowish white; breast the same, tinged with grey or brown on the sides; back, as the head. Greater wing coverts, greyish brown, tipped with yellowish white; lesser wing coverts, grey tinged with brown; primaries, brownish black; the fourth and next ones have a white spot at the base of the outer web; the two nearest the body margined with white; secondaries, brownish black; tertiaries, brownish black, three of them slightly margined with white, and a white spot at the base. Tail, brownish black, the three outer feathers edged with white; tail coverts, dark grey; under tail coverts, white; legs, toes, and claws, dark slate-colour.



SPOTTED FLYCATCHER.

SPOTTED FLYCATCHER.

BEAM BIRD. RAFTER. COB-WEB BIRD.
BEE BIRD. CHERRY CHOPPER. POST BIRD. CHERRY
SUCKER. CHANCHIDER.

Y GWYBEDOG, OF THE ANCIENT BRITISH.

Muscicapa grisola,

MONTAGU. PENNANT.

Muscicapa. *Musca*—A fly.

Capio—To catch or take.

Grisola—.....?

THIS bird is common throughout Europe, as far north as Norway and Sweden; as also in Africa, along the whole of the western coast, from the north to the south. It is well known in England and Wales, Ireland and Scotland; but least so in the extreme north. It frequents walled and other gardens, orchards, lawns, shrubberies, and pleasure grounds.

The Spotted Flycatcher is with us a summer visitant, but unusually late in its arrival, which varies in different localities and seasons, from the 7th. to the 20th. of May; and it departs similarly about the end of September, or even as late as the middle of October.

This familiar bird is very noticeable for a solitariness and depression of appearance, as well as for its habit of perching on the point of a branch, the top of a stake, a rail, or a projection of or hole in a wall, from whence it can 'comprehend all vagroms' in the shape of winged insects that come within its ken. You seem to think that it is listless, but on a sudden it darts off, sometimes led a little way in chase in an irregular manner like a butterfly; a snap of the bill tells you that it has unerringly captured a fly, and it is back to its perch, which it generally, but not invariably returns to

after these short sorties. Though so quiet a little bird, it will sometimes daringly attack any wanderer who seems likely to molest its 'sacred bower,' signifying first its alarm by a snapping of the bill. It is, like many other harmless birds, under the ban of the ignorant, and though its whole time is taken up in destroying insects which injure fruit, which it scarcely ever touches itself, it is accused of being a depre-dator, and too often suffers accordingly. It must, however, on the other hand, be admitted that some very trifling damage may be done by its destruction of bees, from which it has been given one of its trivial names. White, of Selborne, says that the female, while sitting, is fed by the male as late as nine o'clock at night.

The following curious circumstance has been recorded of some young Flycatchers, which had been taken from a nest, and placed in a large cage, with some other birds of different species, among which was a Robin. The young birds were fed regularly by one of their parents—the female; while her mate, who accompanied her constantly in her flight, used to wait for her, outside the window, either upon the roof of the house, or on a neighbouring tree. Sometimes the little birds were on the top perch in the cage, and not always near enough to the wires of the cage to be within reach of the parent, when she appeared with food; but the Robin, who had been for some time an inhabitant of the cage, where he lived in perfect harmony with all its associates, and had from the first taken great interest in the little Flycatchers, now perceiving that the nestlings could not reach the offered food, but sat with their wings fluttering, and their mouths open, anxious to obtain it, flew to the wires, received the insects from the mother bird, and put them into the open mouths of the nestlings. This was repeated every succeeding day, as often as his services were required.

Its food consists almost exclusively of insects, which after capturing in the manner already described, it generally holds for a short time in its bill before devouring. Occasionally a few cherries are consumed, but so seldom, that it is almost the most that can be said, that it makes 'two bites' of them. In feeding its young, two or three insects are frequently brought at a time.

The note is a weak chirp. There is something in it which attracts the attention.

Nidification commences immediately after the arrival of the

birds; they almost seem to have paired before their migration, or if not, at all events they do so at once when here.

The nest, which is built at the beginning of June, is composed of various materials, such as small twigs, catkins, and moss, lined with feathers, hair, down, and cobwebs. The same situation is resorted to year after year, and scarce any attempt is made at concealment. A pair, which built in the trellis-work close to the drawing-room window of a house I once resided in, not being disturbed, returned there three successive summers, and I hope that they or their descendants do so still. A favourite resort is such a place, or a tree trained against a wall, on account of the support afforded by it. Trees are also built in, ledges of rocks, holes in walls, the exposed roots of trees over a bank, the side of a faggot stack, or a beam in an out-building, whence, perhaps, another of its provincial names—the ‘Beam Bird.’ One pair made their nest on the hinge of an out-house door in a village, which people were continually passing and re-passing; another couple placed theirs in a tree, immediately over an entrance-door, which, whenever it was opened, caused them to fly off; another pair on the angle of a lamp-post in Leeds; and another on the ornamental crown of one in London. Another pair placed theirs on the end of a garden rake; another in a cage hung up in a tree, the door having been left open; and another in a stove, which seemed to be made ‘too hot to hold them’ when the thermometer in the hothouse rose above 72°, for the bird used then to quit the eggs, and only returned to them again when it fell below that point, disliking, it would seem, the ‘patent incubator.’ Two broods are not uncommonly reared in the year; the first being hatched early in June; but the second may be only the consequence of the first one having been destroyed.

The eggs, four or five in number, are greyish or greenish white, spotted with pale orange-coloured brown; in some the broad end is blotted with grey red. After the young have quitted the nest they are very sedulously attended by the parents.

The garb of this bird is singularly plain, sober, and unpretending. Male; length, about five inches and a half, or a little over; bill, dusky, broad, flattened, and wide at the base—a ridge runs along the upper part; the under one is yellowish at the base; iris, dark brown; a few bristles surround the base of the bill. Head, brown; crown, spotted with darker.

neck on the sides, streaked with brown; nape, as the back; chin, dull white; throat, dull white, streaked with brown; breast, as the chin, tinged on the sides with yellowish brown; back, light brown. Greater and lesser wing coverts, as the back; primaries, darker brown, sometimes edged with buff brown; the first feather is very short, the second and fourth nearly equal, the third the longest; secondaries, as the primaries; tertiaries, the same, with a narrow margin of light brown. Tail, brown, paler at the tip, slightly forked; under tail coverts, dull white; legs, toes, and claws, dusky black.

The female resembles the male in plumage.

The young have the feathers at first tipped with a yellowish white spot, which gives them a general mottled appearance.



ROLLER.

ROLLER.

GARRULOUS ROLLER.

Y RHOLYDD, OF THE ANCIENT BRITISH.

Coracias garrula,
Galgulus,
Garrulus argentoratensis,

PENNANT. MONTAGU.
 BRISSON.
 RAY.

Coracias—The Greek name of some bird of the Jackdaw kind.
Garrula—Garrulous.

THE proverb says that ‘fine feathers do not make a fine bird,’ but what the naturalist says is more to our present purpose:—‘Look on this picture.’

The Roller, called also the German Parrot, is a native of the northern parts of Africa, from whence it migrates to Europe in the spring, returning in the autumn: it also occurs in various other parts of that continent. Numbers are taken at Malta, while tarrying there as their half-way house, being thought good eating. In Germany it is frequently found, and in Denmark occasionally, the south of Russia, Norway, Sweden, France, Spain, Italy, Sicily, and Greece; also in Asia Minor and Japan.

In Yorkshire a pair of Rollers were seen in July, 1847, in a plantation called ‘Forty-pence,’ belonging to John Thomas Wharton, Esq., of Skelton Castle, near Redcar: one of them, a female, was obtained. Another was shot in Fixby Park, near Huddersfield, in 1824; one at Hatfield, near Doncaster; another, about the same time, near Halifax; and a sixth near Scarborough, in 1832. One, a female, near the Land’s End, in Cornwall, on the 8th. of October, 1844; and two or three others in the same county. A male was shot on the 29th.

of May, 1849, near Nutley, on the borders of Ashdown Forest, in Sussex; one at Oakington, in Cambridgeshire, in October, 1835. One in Northumberland, near Newcastle; another near North Shields; a third in Bromley-hope, near Bywell, in May, 1818; and another, a female, was found dead at Howick, June 19th., 1828. Six in Suffolk and Norfolk; the latest in 1838.

In Ireland, one is related to have been seen at Carton, the seat of 'Ireland's only duke,' the Duke of Leinster, in the middle of September, 1831; another to have been shot in the county of Sligo; and another somewhere in the south.

In Scotland a few individuals have been met with—one on the eastern side, one at Dunkeld, in Perthshire, and two in the Orkney Islands; one from the south of Shetland, sent to Sir William Jardine, Bart., as a curious kind of Duck! One at Strathbeg Loch, between Peterhead and Fraserburgh; and another, a female, was shot in the woods of Boyndie, near Banff, on the 25th. of September, 1848: a strong gale from the east had prevailed for some days previously.

The Roller may be tamed if taken young, but not otherwise: they become, however, only familiar with their masters; to others they are distant; and are in their wild state very restless birds, never long remaining stationary. They are very shy and wary, and quarrelsome among themselves, though they live amicably with other birds, except those of prey: they frequently fall to the ground together in their contests. Nevertheless, they breed in societies, a single pair being seldom seen alone at that season. These birds are said to have a habit of dropping through the air, like the Tumbler Pigeon, and particularly during the time that the hen is sitting the male bird thus amuses himself: perhaps at times his partner also: hence probably the name.

The flight of the Roller is quick, with hurried flappings of the wings, and resembles that of the Pigeon. They hop awkwardly, rather than walk, on the ground, and for the most part prefer keeping in trees, perching on the outermost and most exposed branches. They frequent the lower districts, avoiding those that are mountainous, or swampy.

Their food consists of the larger beetles, cockchaffers, grasshoppers, and other insects and their larvæ. Flies they capture in the air, somewhat after the manner of the Flycatchers; but they also take their food on the ground, and may be seen, like Rooks, in the ploughed fields. They also feed on

worms, snails, and berries; and when these cannot be had, on frogs, it is said, and even carrion. The indigestible part of their food is cast up in pellets, as with the Hawks and Owls. They are said never to drink.

The Roller is a noisy and clamorous bird, like the Jay, and its voice is described as a mere squall, or chatter, resembling that of the Magpie. Meyer renders it by the words 'wrah, wrah,' 'rakker-rakker,' and 'crea.'

The nest, composed of small fibres, straws, feathers, and hair, is built in the hollows of trees, but also where trees are scarce, on the ground, or in holes of banks. In the former case the birch is said to be preferred; whence its German name of the 'Birch Jay.' The same situation is resorted to again and again if the birds have not been disturbed.

The eggs, of a rotund form, are four or five to six or seven in number, and of a shining white, like those of the Bee-eater and Kingfisher. The male and female sit on them by turns, and they are hatched in about three weeks; during which time the latter is so devoted to her task, that she will frequently allow herself to be captured on the nest. The young are fed with insects and caterpillars, and the parents exhibit a strong attachment towards them.

Male; length, about one foot one inch; bill, yellowish brown at the base, black at the tip; iris, reddish brown; there is a small bare tubercle behind each eye; a few bristles surround the base of the bill. Forehead, whitish; head, neck, and nape, pale iridescent bluish green; chin, greyish white; throat, dark purple; breast, pale bluish green; back, pale reddish brown.

The wings expand to the width of two feet four inches, and extend to two thirds of the tail; beneath they are a splendid blue; greater and lesser wing coverts, intense greenish blue. The primaries have a bar of pale purple at the base, and are bluish black at the tips; the two first have their narrow webs black tinged with green, the four next pale blue to the middle, then gradually darker, ending in black; the other quills still darker; the first feather is rather longer than the fourth, the second rather longer than the third, and the longest in the wing; secondaries, greenish blue at the base, with a bar of pale purple; beneath, rich blue; tertiaries, yellowish brown; larger and lesser under wing coverts, greenish. The tail, of twelve feathers, has the outermost ones, which are elongated in the male bird, pale ultramarine blue, tipped

with a spot of blackish blue; the two middle ones deep greyish green, tinged with blue at the base, the others deep bluish green for two thirds of their length, paler on the outer webs, the shafts black; underneath, it is rich blue for two thirds of its length; the end greyish blue, with a black spot on each side of the outer feathers, forming their tips; upper tail coverts, dark bluish purple, with a tinge of copper-colour; legs, brown, and feathered below the knee; toes, brown; claws, black.

The female resembles the male, but when young the breast is paler, and more inclining to green; the brown on the back is more grey, and the blue not so bright. The tips of the primaries more rusty black, edged with dull very pale green; the tail feathers of equal length.

Young; bill, brown, black towards the tip, yellow at the corners; iris, greyish brown; head, neck, nape, chin, throat, and breast, dull olive brownish grey, the tips of the feathers paler than the rest; back, rusty yellowish grey, the feathers edged with pale brown; the upper part is the darkest. Wings, below as in the adult, but more dull; greater wing coverts, dull bluish green; primaries, edged and tipped with dull white; the first has a streak of dull bluish green on the outer side; the second a brown streak at the base, and the last the base dull bluish green; secondaries, dull bluish green at the base, blue black at the ends, tipped and edged with dull white; tail, olive greyish brown, with a reflection of bluish green on the outer side; underneath, as in the adult, but duller; under tail coverts, very pale bluish green; legs, pale yellow.



KINGFISHER.

KINGFISHER.

KINGSFISHER. COMMON KINGFISHER
COMMON KINGFISHER.

GLAS Y DORIAN, OF THE ANCIENT BRITISH.

Alcedo ispida,
Ispida Senegalensis,
Gracula Atthis,

LINNÆUS.
BRISSON.
GMELIN. LATHAM

Alcedo—A Kingfisher. *Ispida* (or, properly, *Hispida*.)—
Rough, as with wet.

A GOOD figure of the Kingfisher was stated a few years since to be still a 'desideratum.' The accompanying plate, from a design by my friend, the Rev. R. P. Alington, supplies the want, and leaves nothing to be yet desired. I fearlessly assert it to be the best ever yet produced.

My 'random recollections' of the Kingfisher are associated with my school days—'halcyon days' indeed—when so gay a bird was an especial mark for our guns, a prize to figure in the drawing books in which the 'exuvia' of our excursions were arranged. The next of the 'seven stages' saw me on the banks of the stream in Berkshire, already alluded to when speaking of the Merlin, following up a more congenial pursuit than the ostensible one of 'reading with a private tutor.' Standing on a little wooden bridge, 'in utrumque paratus,' a flying or a sitting shot, the often admired Kingfisher glittered up the brook, and, alas! though the first that I had ever obtained a shot at, fell into the water, and was soon floated down to where I stood. A fortnight afterwards, at the very same spot, almost literally 'stans pede in uno,' the same thing happened again. A third, years afterwards, unfortunately flew in front of a boat in which I was rowing my brother, whose gun came but too readily to my hand.

This specimen I have now preserved. The question has been raised as to whether the Kingfisher is a difficult bird to shoot or not: the above is my experience on the subject.

The Kingfisher is a native of Europe, Asia, and Africa. It inhabits the temperate parts of Russia and Siberia; in Denmark it is rare. It is found in Germany, France, Holland, Italy, and Greece. In the other two continents it is likewise widely dispersed. In this country it is universally, though nowhere numerously diffused. It is a splendid bird, its iridescent colours varying according to the light they are seen in, from bright turquoise blue to the deepest green in some parts of its plumage, and in others the darker colours of copper and gold. When dead, however, much of its beauty is gone; and one writer has imagined that even alive, it has, when perceiving that it is observed, the power of dimming the resplendency of its plumage, as if conscious how marked an object it otherwise was; and I fancy that some idea of the sort has before now occurred to myself.

In Yorkshire, this bird is as frequently to be met with as in other parts of the country, but, speaking of the neighbourhood of Huddersfield, Mr. W. Eddison writes to Mr. Allis, 'The destructive plan of snaring them or catching them with bird-lime will shortly place them in the list of rare birds;' and Mr. Richard Leyland, 'to the same,' says—'In autumn, an assemblage of them in some of the narrow glens, or cloughs, as they are called about Halifax, takes place; probably the river swollen by the autumnal rains renders the acquisition of their food difficult, and consequently compels them to seek it in shallow water. A bird-stuffer, with whom I was well acquainted, procured in one season more than fifty specimens by placing a net across the bottom of a clough, and commencing to beat the bushes from above, which drove every bird into it.' It is to be wished that he had confined himself to the more sportsman-like use of the arrows, for which 'Clym of the Clough and William of Cloudeslie' were so famous, when 'merrie it was under the greenwood tree.'

In Northumberland, near Newcastle-on-Tyne, in December, 1849, and January, 1850, great numbers of the Kingfisher appeared, more coming into the hands of one game-dealer than he had had during the previous sixteen or eighteen years. In Scotland it is much less frequent than with us. One was shot near St. Andrews, in 1854. In Sutherlandshire it is rare.

Rivers, streams, and brooks are the natural resort of this king of fishers, but I have known it to frequent a very small pond in a field, about a mile from any running water; so that the former are not its exclusive haunts. It may be seen perched on some dry bough overhanging a stream, from whence it glides off on perceiving the approach of an enemy, or to procure its food, either by darting on it if passing within reach, or, if otherwise, to seek it elsewhere. Not unfrequently the sea shore is resorted to for the supply of its wants, and this especially in the winter, not so much, as I imagine, from its fluviatile resorts being frozen up, as probably from the fish having retired at that season into deeper water, and the insects being in the chrysalis state.

In the 'North Derbyshire Chronicle,' of February, 1838, it is related—'On Saturday last, a Kingfisher, handsomely feathered, was discovered with its claws frozen to the bough of a tree, on the canal side near this town. It was quite dead; and attached to each claw was a piece of ice.'

It appears to be somewhat, locally, migratory at different seasons of the year.

It would seem that the Kingfisher may be kept in confinement if brought up from the nest, and if a sufficient supply of its proper food can at all times be procured for it. It is a solitary bird, seen, almost invariably, either in pairs or singly. It is also described as being of a pugnacious disposition; so that as it takes two parties to make a quarrel, the peace is preserved by its habit of isolation. One of these birds has been known to alight on the fishing-rod of a 'brother of the angle.'

The flight of this bird is rapid, and the wings being short, is sustained by their quickly-repeated beating. It is always in a straight and horizontal direction, and, for the most part, close above the surface of the water. The Rev. W. T. Bree, of Allesley, has noticed how tenaciously it keeps in its flight over water, as if it felt a greater security in so doing, or in case of necessity, as he has suggested, to be able to submerge itself, like the Wild Duck, out of sight. One which was alarmed by his presence, and therefore could not have acted as it did in search of food, went out of its way to follow the windings of a series of brick-ponds.

The food consists of water insects, crustacea, mollusca, leeches, and especially minnows, bleak, young gudgeons, dace, and other small fish, which it darts upon, generally with

sure precision, frequently after hovering like the Kestrel, and plunging like the Tern, and first kills either by the force of its bill, or by knocking it against a rail, a stone, or the ground. One has been known to plunge from a branch, at a height of six feet from the water. The bones are cast up in the form of pellets. The fish that it catches it swallows head foremost.

The note is a shrill pipe, resembling that of the Sandpiper, but louder.

The birds pair in May, and nidification commences immediately.

The nest is placed two or three feet within a hole in a bank, that, for the most part, of a water-rat, which the bird enlarges or alters as need be. It is said also sometimes to hollow one out for itself. It slants downwards, the principles of drainage being sufficiently understood by instinct: the same situation is perseveringly resorted to from year to year. Much discussion has taken place on the question, whether the Kingfisher forms an artificial nest or not, the eggs being often found 'on the cold ground,' and often on a layer of fish bones. My theory has for some time been that no nest is formed, but, that the bird resorting to the same locality year after year, a conglomerate of bones is by degrees formed, on which the eggs being necessarily laid, a nominal nest is in such case found. Since forming this theory I see that it is borne out by other writers. One has been found in Cornwall, in May, 1817, which was composed of dry grass, lined with hairs, and a few feathers; so at least says 'C,' in the 'Magazine of Natural History,' vol. iii, page 175. The nest has been found at a distance from water, in a hole in a bank frequented by Sand Martins; and one is recorded in 'Jesse's Gleanings in Natural History,' as having been placed in the bank of a dry gravel pit, near Hampton Court; another has been found 'in a hole on the margin of the sea, a quarter of a mile distant from a rivulet.' The young remain in the nest until fully fledged, and able to fly. For a short time they then, perched on some neighbouring branch, receive their food from their parents, who both purvey for them, and whose approach they greet with clamorous twittering; but soon learn to fish for themselves.

The eggs, six or seven in number, are transparent white, and rather rotund in form.

Male; weight, one ounce and a half; length, seven inches;

bill, blackish brown, reddish at the base: from the lower corner of it proceeds a streak of bluish green, joining to that colour on the back, also a dusky streak to the eye; iris, reddish hazel; behind each eye is a patch of light orange brown, succeeded by a white one. Forehead, on the sides rufous, the commencement of the same colour behind the eye; crown, deep olive green, the feathers tipped with light green; the neck has a patch of green down the sides, in front of the patches behind the eye; nape, as the head; chin and throat, yellowish white; breast, orange brown, with a sprinkling of green by the shoulder of the wing; upper part of the back, green; down the back is a list of greenish blue, varying in different lights.

Greater and lesser wing coverts, deep greenish blue, margined with a paler shade, forming spots; primaries, brownish black, edged with olive green; secondaries, the same; greater and lesser under wing coverts, pale chesnut. Tail, greenish blue, the shafts black or dusky; underneath, brownish black, edged with olive green; under tail coverts, light orange brown; legs, very short and pale red, with a tinge of yellowish brown; toes and claws, the same.

The female is less vivid in all her colours, and the white on the side of the neck is also more subdued: the bill is not so long as in the male.

The young have the bill wholly black; iris, darker than in the old bird.

BELTED KINGFISHER

GREAT BELTED KINGFISHER.

Alcedo Alcyon,

LINNÆUS. WILSON.

Alcedo—The Latin name of the Kingfisher. *Alcyon*, or
Halcyon—The Greek name of the Kingfisher.

THE far-famed Halcyon of the ancients, whose name this species bears, but, doubtless erroneously, as being an American bird, must not be altogether left unnoticed in treating of the Kingfisher, particularly as many of the superstitions of so 'long, long ago,' have been continued, even down to our own enlightened age, and are in existence at present. By some, its head or feathers have been esteemed a charm for love, a protection against witchcraft, or a security for fair weather; by many it has been dreaded, by others venerated. It has been supposed to float on the waters in its nest, and during the period of its incubation, forty days, days therefore designated by its own name as happy and beautiful ones, to be the cause of every wind being hushed, and every storm calmed; its stuffed skin hung up, has been recently, and probably is still thought to act a sort of magnetic part, by always pointing its beak towards the north, or, according to another version, towards the quarter from whence the wind might blow. It has again been imagined to have the power of averting thunder, revealing hidden treasures, bestowing beauty on the person that carried it, and when dead, to renew its own feathers at the season of moulting.

The accompanying figure is taken from a foreign specimen, which I have had in my collection for some years. For the description of the habits of the bird, I am indebted to Wilson.



BELTED KINGFISHER.

This species is by some thought good eating, and is accordingly exposed for sale in the markets.

Two of these birds have been killed in an evidently wild condition, in Ireland, so that, acting on the principles expressed in the introduction to this work, I unhesitatingly give the present species a place in the 'British Birds.' One was shot at Annesbrook, in the county of Meath, on the 20th. of October, 1845, by Frederick A. Smith, Esq.; and another on a stream connecting the Lake of Luggela with Lough Dan, by the gamekeeper of — Latouche, Esq., of Luggela, within the same month.

It migrates to the south in the winter, and returns to the north in the summer to breed.

The flight of this bird resembles that of its kinsman of the old world. It courses along the windings of the brook or river, sometimes suspending itself over its prey, and at other times settling on a branch to reconnoitre.

The note is loud, harsh, and sudden, and is described as resembling the sound produced by the twirling of a watchman's rattle.

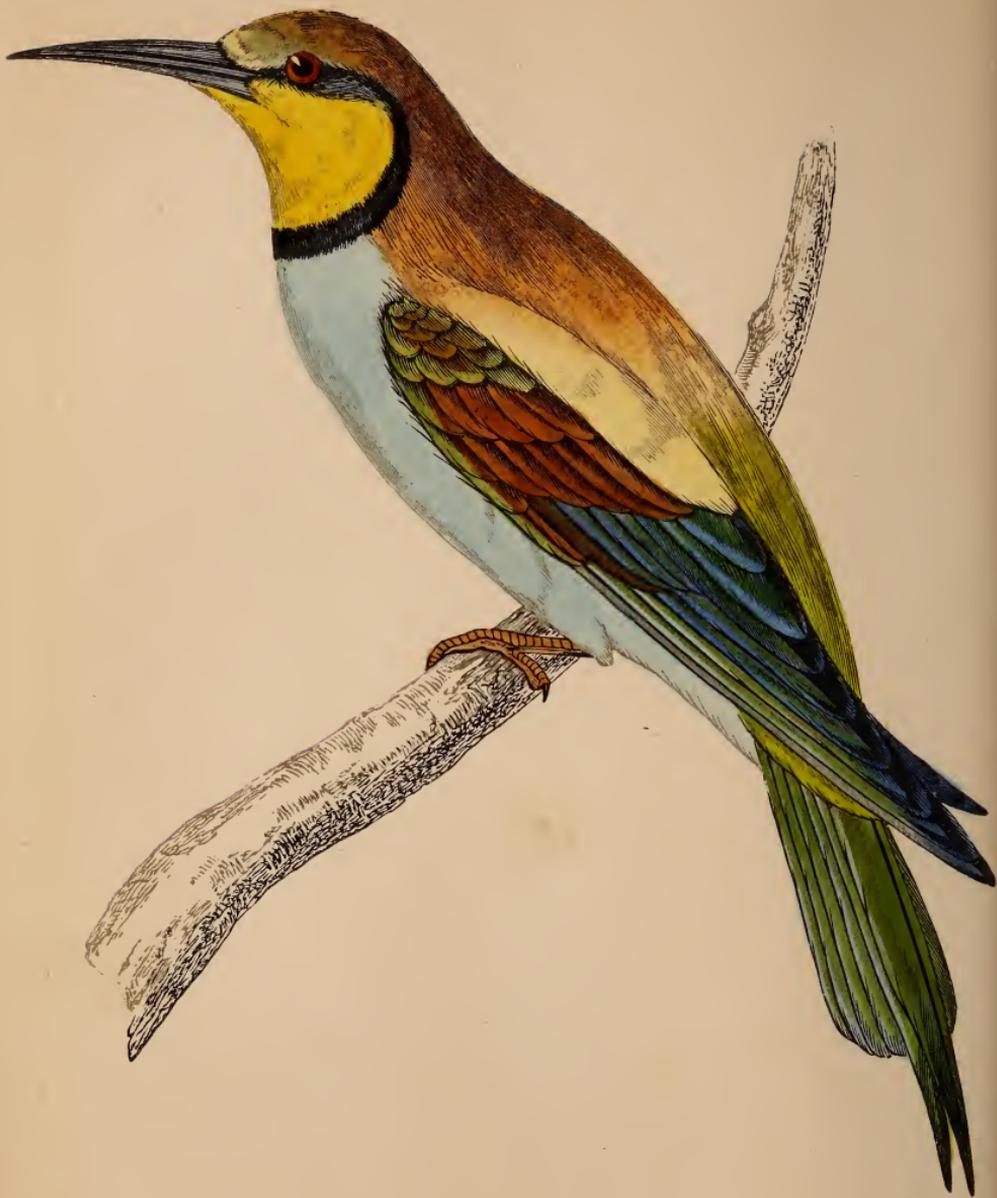
The nest, composed of a few feathers, and a little grass, is placed in a hole in the steep bank of a river, the excavation of the bird itself by means of its bill and claws, to the depth of one or two feet. The same situation is tenaciously revisited from year to year.

The eggs are five in number, and the bird has been known to go on laying, some of them having been from time to time removed, to the number of eighteen. The female sits in April. There seems to be two broods; of which the first is hatched the end of May, or beginning of June.

Male; length, twelve inches and a half; bill, black horn-colour at the tip, and at the base of the lower part; iris, yellow; before it is a small white dot, and an elongated one beneath it; a crest of elongated feathers surmounts the head; the shafts black, as are those of the feathers of all the plumage except the white parts. The neck is surrounded by a collar of white; breast, white, variegated with the blue colour at the sides; on the upper part of the breast is a blue band, interspersed with some light brown feathers, and its edges are jagged, especially on the lower side, and most so in the middle; back, light bluish slate-colour. The wings expand to the width of one foot eight inches; greater and lesser wing coverts, slate blue, spotted with white; primaries,

black, spotted with white; secondaries, the same on the inner webs. The tail feathers black, elegantly spotted with white on the inner webs, and slate blue on the outer; beneath it is light coloured; legs, very short, dull yellowish, bare for half an inch above the knee. The two outer toes are united together for nearly their whole length; claws, strong and black.

The female is sprinkled all over with spots of white. Head, deeper coloured than the back; the white on the chin and throat is of an exquisitely fine glossy texture, like satin; the band on the breast is nearly half reddish brown, and a little below it is a band of bright reddish bay, spreading on each side under the wings; the feathers on the breast are very strong and stiff.



BEE-EATER.

BEE-EATER.

YELLOW-THROATED BEE-EATER. COMMON BEE-EATER.
GNAT-SNAPPER.

Merops apiaster,
" *chrysocephalus*,
" *Galilæus*,

LINNÆUS. PENNANT.
LATHAM.
HASSELQUIST.

Merops—A bird that eateth bees.

Apiaster. *Apis*—A bee.

THE splendid-plumaged Bee-eater holds some affinity, as will appear, to the Swallows—in its flight, manner of taking its food, nidification, the shortness of its legs, and the appearance of its eggs. In Italy it is esteemed good eating, and is sold in the markets accordingly. Perhaps the taste may have descended from Heliogabalus; for, if I remember right, even the gay exterior of birds was called into requisition to give zest to the 'recherchè' character of his 'gourmanderie,' so to gallicize a word for the occasion.

In Asia Minor and the adjacent countries to the north, and in North Africa, these birds are extremely abundant, and may often be seen flying about in thousands. In various parts of Europe they are also plentiful, in small flocks of twenty or thirty, the more so towards the East—in Turkey and Greece; in Spain also, from its proximity to Africa; Portugal, Italy, Crete, the Archipelago, Malta, Sardinia, and Sicily; as also, though in fewer numbers, in France, Switzerland, and Germany; likewise in Madeira. Two were killed in Sweden, a male and female, in 1816.

In Yorkshire one, described in the paper as a 'Beef-eater,' was obtained near Sheffield, about the year 1849; in Surrey, one near Godalming; in Kent, one at Kingsgate, in the Isle of Thanet, in May, 1827; in Hampshire, one at Christchurch,

in the autumn of 1839; in Dorsetshire one, at Chideock, preserved in the museum of the late Dr. Roberts, of Bridport, whose supposition, as expressed to me, was, that it had escaped out of some gentleman's cage. In Cornwall, four specimens occurred in the parish of Madern, in 1807, and a flock of twelve at Helston, in 1828, of which eleven were shot. In Sussex, one was shot at Icklesham, and another near Chichester, on the 6th. of May, 1829.

The first recorded specimen in England was shot out of a flock of twenty, at Mattishall, in Norfolk, in June, 1794; and in October of the same year, some were again seen at the same spot, but fewer in number; probably the survivors of others that had been slain of the original flock. Another was killed at Beccles, in the spring of 1835; and three others are recorded in the fifteenth volume of the 'Linnæan Transactions.'

In Ireland, one was killed in the county of Wicklow, one on the sea shore near Wexford, in the winter of 1820, and two others have occurred in the interior. In Scotland, one was shot in the Mull of Galloway, in October, 1832.

The precipitous banks of rivers are most frequented by these birds, but not exclusively, as they also resort to vineyards, olive-yards, and sheltered valleys.

Their flight resembles that of the Swallow, but is more direct, and less rapid.

Bee-eaters are exclusively insectivorous, but they have a wide range of choice among beetles, grasshoppers, bees, wasps, flies, gnats, 'et id genus omne.' They capture their food for the most part on the wing, and may be seen from 'dewy morn till eve' in pursuit of their winged prey, like Swallows in our own country.

'Their note,' says Meyer, 'which they utter on the wing, is loud, and sounds like the syllables 'grillgririririll,' and also 'sisicrewe,' according to the testimony of an old and learned author.' It reminds one of the 'Torotorotorotorotororinx' of Aristophanes in his Political History of 'Birds,' where the very 'Epos' himself is most scientifically placed in juxtaposition with this mellifluous species.

The nest is placed in holes in banks, which latter are thus, as is only to be expected in the case of a Bee-eater, completely 'honey-combed.' The bird scoops out a hole by means of its bill and feet, to the depth of from one to two yards, sufficiently large to admit its body; and its legs being short, a wide orifice is not required: this passage is widened out at

the end into a receptacle for the nest, which is said to be composed of moss.

The eggs, which are hatched in May, are glossy white, of a globular form, and five to six or seven in number.

Male; length, ten to eleven inches; bill, black, long, and curved, with a strong blunt ridge; from its corners a bluish black streak descends to a narrow black ring which encircles the neck; on its upper side it shades into the chesnut of the crown; iris, red, behind it is a small bare brown patch. Forehead, dull white, passing into pale verdigris green; crown and neck, deep orange-coloured brown, tinged with green; nape, the same, but paler; chin and throat, bright yellow; breast, greenish blue; back, above as the nape, below bright yellow, tinged with both chesnut and green.

The wings reach to within one fourth of the length of the tail, and expand to the width of one foot and a half; greater wing coverts, pale orange, here and there tinged with green; lesser wing coverts, bright green; primaries, narrow and pointed, blackish grey on the inner webs, fine greenish blue on the outer, in some shades greyish blue—tips and shafts, black; the first feather is very short, the second the longest in the wing; secondaries, brown, with black tips; tertiaries, as the primaries, on the webs; the shafts of all the quill feathers black; larger and lesser under wing coverts, fawn-colour. Tail, of twelve feathers, greenish blue, with a tinge of yellow; the two middle feathers darker, elongated nearly an inch beyond the rest, and pointed, ending in blackish green; beneath it is greyish brown, the shafts dull white; tail coverts, bluish green with a tinge of yellow; under tail coverts, as the breast, but paler; legs, very short, reddish brown, scaled finely behind, and strongly in front; toes, the same, scutellated above; the small hind toe is broad on the sole, and the three front ones connected together, as in the Kingfisher; claws, reddish black.

The plumage of the female is not so bright as that of the male, but less distinctly defined. The throat paler yellow, and the green parts tinged with red. The central tail feathers are shorter than in the male, by two lines.

In the young male the iris is light red; the black band round the throat is greenish. The middle tail feathers extend but little beyond the rest.

HOOPOE.

COMMON HOOPOE

Upupa Epops,

PENNANT. MONTAGU.

Upupa—A Hoopoe, (Latin.)

Epops—A Hoopoe, (Greek.)

THE elegant Hoopoe is a native of North Africa, from Egypt to Gibraltar, Asia Minor, and the south of Europe; it goes northwards in summer as far as Denmark, Sweden, Tartary, Russia, and Lapland. In Germany, France, Italy, Holland, and Spain, it occurs in small flocks; also, I believe, in Madeira.

In Yorkshire, one of these birds was shot at Buckton, in the East-Riding, in May, 1851; and several others in other parts previously—one of them taken while alighting on a boat in Bridlington Bay. Another at Bedale wood, near Cowling Hall; two near Doncaster; and another seen in 1836, in Sir William Cooke's wood; one at Armthorpe; one at Pontefract; one at Eccup, a young bird, by the Hon. Edwin Lascelles, October 8th., 1830; one at Low Moor, near Bradford; one at Skircoat Moor, near Halifax, September 3rd., 1849; one, a female, at Ecclesfield, near Bradford, April 9th., 1841; one at Coatham, near Redcar; and one near Scarborough.

The figure before us is coloured from a specimen in my own collection, which was shot some years ago on the south-western border of Dorsetshire. Not a year passes in which one or more of these birds do not arrive in this country, and the same remark applies to Ireland. Mr. Thompson gives an accurate register of such in nine successive years, from 1833 to 1842, inclusive, with the exception of 1836, in which none were known to have been observed. In Scotland too, it sometimes occurs; in Sutherlandshire rarely: one was caught near Duff House, Banff, in September, 1832; also in the Orkney Islands.

Occasionally it has even been known to breed here, and doubtless would oftener do so, were it not incontinently pur-



HOOPOE.

sued to the death at its first appearance. In Sussex, a pair built at Southwick, near Shoreham, and reared three young, and another pair close to the house at Park-End, near Chichester, in the same county. Montagu mentions that a pair in Hampshire forsook a nest which they had begun; and Dr. Latham had a young bird sent to him on the 10th. of May, 1786. In 1841, a pair built near Dorking, in Surrey, but the eggs were taken. A pair also frequented a garden near Tooting, in the same county, in the summer of 1833.

The Hoopoe is a migratory bird, at least to some extent, and one has been met with, seemingly unfatigued, half-way across the Atlantic. It appears, however, that some of them do not change their quarters, while others do; and it is also related that the latter do not associate with the former when they arrive among them: their 'Travellers' club' being, like its London namesake, an exclusive one, save for such as have visited foreign parts. They migrate by night, and move singly or in pairs, 'unless the young brood follows close in the rear of its parents.' They move but slowly in their peregrinations, attracted probably by the presence of food.

These birds pass much of their time on the ground in search of food, which, however, they also take among the branches of trees, and seem to prefer low moist situations near woods. They are said to fight furiously among themselves, but, as most quarrelsome people are, to be at the same time very cowardly, crouching to the ground in a paroxysm of terror, with wings and tail extended, at sight of a Hawk, or even a Crow. They are very shy also at the appearance of mankind. These birds are easily tamed when young, and follow their owner about. 'The greatest difficulty in preserving them during confinement, arises from their beaks becoming too dry at the tip, and splitting in consequence, whereby the birds are starved, from their inability to take their food.'

The flight of the Hoopoe is low and undulated, and the crest is kept erect or lowered at the pleasure of the bird, as it is excited or not. It is said to perch low. Its walk is described as something of a strut, and it keeps nodding its head, as if vain of its gay top-knot.

Their food consists of beetles, other insects, and caterpillars; superfluous food they hide, and resort to again when hungry.

The note, from whence the name of the bird, resembles the word 'hoop, hoop, hoop,' 'long drawn out,' yet quickly, like the 'gentle cooing of the Dove.' It has also another

note, 'tzyrr, tzyrr'—a grating hissing sound, when alarmed or angry. It seems to utter its call with much exertion.

The nest, built in May, is placed in the hollow of a tree, or a crevice of a wall, and is composed of dry stalks of grass, leaves, and feathers.

The eggs vary from four to seven in number, and are of a uniform pale bluish grey, faintly speckled with brown.

Incubation lasts sixteen days. After the young leave the nest they assemble in the immediate vicinity, and are long and sedulously attended to by their parents.

Male; weight, about three ounces; length, from eleven inches to one foot and half an inch; bill, black, pale reddish brown at the base; iris, brown. The crest, the charming ornament of this species, is composed of a double row of long feathers, the fronts turning towards the side; they are of a rich buff colour, the ends white, tipped with velvet black, except those on the forehead, which are shorter, and without the white patch. Head on the sides, neck behind, and nape, pale buff, with a tinge of grey; chin, throat, and breast, pale buff; back, reddish buff, with three semicircular bands, bent downwards—one white between two black; the lower part white.

The wings, when expanded, measure one foot seven or eight inches across; greater and lesser wing coverts, black, with a cross bar of light buff; primaries, black, with a bar of pale buff; the first feather is half the length of the second, the second a little longer than the eighth, and a little shorter than the seventh, the third and sixth equal, and but little shorter than the fourth and fifth, which are also equal, and the longest in the wing; secondaries and tertiaries, black, with four or five narrow bars of white, some of the latter also edged and tipped with pale buff, with an oblique stripe of the same on the inner web of the last tertial feather. The tail, of ten feathers, square at the tip, black, with a well-defined semilunar white bar, tending on the sides towards the end; upper tail coverts, white at the base, black at the ends; under tail coverts, white. Legs, brown, feathered in front above the knee, scaled below; toes, brown; claws, horn-colour or black, slightly curved.

The female is paler in colour. The crest is less than in the male. Tertiaries without the buff.

In the young, (which are at first covered with long grey down, and the bill very short and straight,) the breast is crossed with narrow dusky streaks.



CHOUGH.

RED-LEGGED CROW. CORNISH CHOUGH. CORNISH DAW.
 CORNWALL KAE. KILLIGREW. MARKET-JEW CROW.
 CHAUK DAW. HERMIT CROW. RED-LEGGED JACKDAW.
 CLIFF DAW. GESNER'S WOOD CROW.

Pyrrhonorax graculus,
Corvus graculus,
 " *docilis*,
Fregilus graculus,

FLEMING.
 PENNANT. MONTAGU.
 GMELIN.
 SELBY. JENYNS.

Pyrrhonorax. *Pyrrhos*—Red. *Corax*—A Crow.
Graculus—A Chough, Jackdaw, or Jay.

ALTHOUGH generically distinct, yet, both in song and story, 'the Chough and Crow' seem fated to be associated together.

This bird is a native of the three continents of the old world. It is known to inhabit France, the mountains of Switzerland, Spain, the Island of Crete, Egypt, and the north of Africa, the mountains of Persia, the southern parts of Siberia, and the Himalayan mountains in India.

In Yorkshire, one of these birds was killed by the gamekeeper of Randall Gossip, Esq., of Hatfield, near Doncaster. Two others are spoken of; one as having been shot near Sheffield, and another mentioned by Mr. J. Heppenstall, to Mr. Allis; but it seems doubtful whether they are not referable to the same specimen.

In Cornwall, the Chough has formerly been plentiful, but seems to be getting rare; that county, in fact, would seem to have been its main stronghold, the name of 'Cornish Chough' appearing to have been used as a term of reproach, as, for instance, to Tressilian, in 'Kenilworth.' The Dover cliffs, and those of Beachy Head and Eastbourne, in Sussex; the Isle of Purbeck, in Dorsetshire; Devonshire, and the Isle of Wight,

it has also frequented a score of years ago, but a war of extermination has been carried on against it, and the consequence I need not relate. Whitehaven, in Cumberland, has been another of its resorts. In August, 1832, a Red-legged Crow was killed on the Wiltshire Downs, between Marlborough and Calne. It has also been seen on Mitcham Common, in Surrey. In 1826, one was shot at Lindridge, in Worcestershire.

In Wales, it has occurred in the cliffs of Glamorganshire; and is common in those of Pembrokeshire, from Tenby to St. David's Head; Flintshire, the Isle of Anglesea, and Denbighshire. In the latter place a pair bred for many years in the appropriate ruins of Crow Castle, in the inland and beautiful vale of Llangollen; but one of them being killed by accident, the other continued to haunt the same place for two or three years without finding another mate, which was certainly a 'singular' circumstance; also in the Isle of Man, and in Jersey.

In Ireland, according to Mr. Thompson, of Belfast, it is to be found in suitable localities all round the island; in some parts, particularly near Fairhead, in considerable abundance, the basaltic precipices of those parts being peculiarly suited to it: a pair were seen at Belfast, after a storm of wind from the south, on the 5th. of March, 1836.

In Scotland, it has been known on the rocky cliffs between St. Abb's Head and Fast Castle; Coldingham; and near Berwick-on-Tweed; in Sutherlandshire, at Durness, and other precipitous parts, but rarely; Portpatrick, Wigtonshire; Ballantrae Castle, Ayrshire; and the coast; as also in the Hebrides, in the Island of Barry, and in Galloway.

These birds, which are very easily tamed, and become extremely docile, exhibit all the restless activity, prying curiosity, and thievish propensities of their cousins—the Crows: they have in sooth a 'monomania' for pretty larceny, especially of glittering objects; and it is said that houses have been set on fire by lighted sticks which they have carried off. In their wild state they are very shy; but in the breeding season they have allowed themselves to be approached within half-a-dozen yards. In the autumn and winter they keep in families. The following particulars are related of one kept tame by Colonel Montagu:—It used to avoid walking on grass, preferring the gravel walk; (Mr. Thompson, however, quotes from Dr. J. D. Marshall's 'Memoir of the Island of Rathlin,' that there they frequent the pasture fields even more than the shores,) was

fond of being caressed, but, though attached to them, was pugnacious even to its best friends if they affronted it: children he excessively disliked, was impudent to strangers, and roused by the sight of them to hostility even to his friends. One lady he was particularly friendly with, and would sit on the back of her chair for hours. He showed a great desire to ascend, by climbing up a ladder or stairs; would knock at a window with his bill until he was let in, and would pull about any small articles that came in his way.

Bishop Stanley says, 'on a lawn, where five were kept, one particular part of it was found to turn brown, and exhibit all the appearance of a field suffering under severe drought, covered, as it was, with dead and withering tufts of grass; which it was soon ascertained the Choughs were incessantly employed in tearing up the roots of, for the purpose of getting at the grubs. The way they set about it was thus:—They would walk quietly over the surface, every now and then turning their heads, with the ear towards the ground, listening attentively in the most significant manner. Sometimes they appeared to listen in vain, and then walked on, till at length, instead of moving from the spot, they fell to picking a hole, as fast as their heads could nod;' they were often successful in their search, so that this account, in two respects, both as to their food and their going on the grass, militates against that of Montagu.

The flight of this species is described as resembling that of the Rook, but is said to be quicker, and occasionally to be performed in airy circles, with little motion of the wings. 'They flap their wings, then sail on forty or fifty yards, and so on gradually, until they alight.' They do not alight on trees, but perch on the rocks, and their gait is stately and graceful. The feathers of the wings are much expanded in flying, as in others of the Crow tribe, giving the wing a fringed appearance.

The food of the Chough consists principally of grasshoppers, chaffers, and other insects, in search of which it sometimes follows the plough like the Rooks; and crustacea, but it also eats grain and berries, and certainly carrion sometimes. Smaller insects are devoured whole; the larger it holds in its feet to peck at. 'It seldom attempts to hide the remainder of a meal.' These birds drink much.

The note is shrill, but is said to be lively and not disagreeable, which is, however, but negative praise. It somewhat resembles

that of the Jackdaw, but may be distinguished from it, and is rendered by Meyer by the words, 'creea, creea,' and 'deea.' It has also a chatter, like the Starling.

The nest is made of sticks, and is lined with wool and hair. It is placed in the most inaccessible clefts and cavities of cliffs, or in old church or other towers, generally in the neighbourhood of the sea, but not always, as will have appeared from the previous and other statements.

The eggs, four or five in number, are dull white spotted with grey and brown, most at the thicker end.

Male; length, between one foot four and one foot five inches; bill, red; yellow within—it is said to be very brittle: iris, red in the centre, surrounded by a circle of blue. The whole plumage is black, glossed with blue. The wings reach nearly to the end of the tail; the first feather is three inches shorter than the second, which is one inch shorter than the third, and the third a little less than the fourth, which is the longest in the wing. The tail is of a more metallic lustre than the rest of the plumage. Legs and toes, red; claws, glossy black, large, and much hooked.

The female weighs about fourteen ounces; length, between one foot two and one foot three inches; her bill is shorter than that of the male. The quill feathers are less black than in the male.

The young birds have but little of the purple gloss. Iris, yellowish brown; legs, orange.



RAVEN.

RAVEN.

CORBIE. CORBIE-CROW. GREAT CORBIE-CROW.

Corvus corax,

PENNANT. MONTAGU.

Corvus—A Crow. (Latin.)

Corax—A Crow. (Greek.)

THE geographical distribution of the Raven is soon described. He is a citizen of the world. His sable plumage reflects the burning sun of the equator, and his shadow falls upon the regions of perpetual snow; he alights on the jutting peak of the most lofty mountain, and haunts the centre of the vast untrodden plain; his hoarse cry startles the solitude of the dense primeval forest, and echoes among the rocks of the lonely island of the ocean: no 'ultima Thule' is a 'terra incognita' to him; Arctic and Antarctic are both alike the home of the Corbie-Crow. 'In the best and most ancient of books,' says Wilson, 'we learn, that at the end of forty days, after the great flood had covered the earth, Noah, wishing to ascertain whether or no the waters had abated, sent forth a Raven, which did not return into the ark.'

The Raven is, in some degree, migratory; though not, as it would appear, instinctively so; but only when circumstances make a change of situation desirable.

However the naturalist may look with complacency on the exterior of the Raven, yet it must be admitted that, judging by the standard of our own morality, his internal character corresponds therewith in blackness. But in truth we must not so judge him. He fulfils, and no doubt perfectly fulfils, his allotted place in creation; and has, moreover, more than one redeeming feature, even in the view of an oblique censorship. The union of the male and female Raven is for life; they are generally seen singly, or in pairs, but occasionally

in small flocks of about a score. They defend their young with great courage against the attacks of other birds, even those that are much their own superiors in size; though they tamely suffer them to be kidnapped by men or boys.

In this country Ravens are extremely shy and wary, their dark side only, if so one may say of them, being looked upon, and persecution being the order of the day; but where their good points are more appreciated, they are seen in considerable numbers, even near towns, and shew themselves pert and confident. When young they are easily tamed, and may be taught to utter a few words, and to perform a variety of tricks. 'They are, however, always bold and mischievous, sagacious, and sharp-sighted, and display their natural cunning in constantly pilfering. Any bright objects, as silver, glass, etc., are particularly alluring; and these they secrete in some hole or crevice, thus establishing a regular depository for their thefts.' A dozen silver spoons have been found in one of these, the discovery having been made by Ralph being detected in the act of flying off with a 'silver spoon in his mouth.' It is said that these birds were formerly trained to catch others. They will pursue even the Buzzard, the Goshawk, or the Eagle, to endeavour to obtain from him his own capture.

A 'Book of Anecdotes' might be compiled relative to the Raven, and I deeply regret that I cannot do him the justice that I would in this respect. One kept at an inn, is related to have been in the habit of taking a seat on the top of some one of the coaches, the coachman of which was a friend of his, until he met some returning coach, driven by another friend, with whom he used to come back.

Mr. Thompson gives the following:—'It was a common practice in a spacious yard at Belfast, to lay trains of corn for Sparrows, and to shoot them from a window, only so far open as to afford room for the muzzle of the gun; neither the instrument of destruction, nor the shooter being visible from the outside. A tame Raven, which was a nestling when brought to the yard, and probably had never seen a shot fired, afforded evidence that it understood the whole affair. When any one appeared carrying a gun across the yard towards the house from which the Sparrows were fired at, the Raven exhibited the utmost alarm, by hurrying off with all possible speed, but in a ludicrously awkward gait, to hide itself, screaming loudly all the while. Though alarmed for its own safety, this bird always concealed itself near to and within

view of the field of action; the shot was hardly fired, when it darted out from its retreat, and seizing one of the dead or wounded Sparrows, hurried back to its hiding-place. I have often witnessed the whole scene.' And again, the following communicated to him by Mr. R. Ball:—'When a boy at school, a tame Raven was very attentive in watching our cribs or bird-traps, and when a bird was taken, he endeavoured to catch it by turning up the crib, but in so doing the bird always escaped, as the Raven could not let go the crib in time to seize it. After several vain attempts of this kind, the Raven, seeing another bird caught, instead of going at once to the crib, went to another tame Raven, and induced it to accompany him, when the one lifted up the crib, and the other bore the poor captive off in triumph.'

Ravens often fly at a considerable height in the air, and perform various circling evolutions and frolicksome somersets: the sound produced by the action of their wings is heard at some distance. They hop on the ground in a sidelong sort of manner and make rapid advances; if in haste, making use of the help of the wings; and at other times walk sedately.

The present is a very voracious bird, and whatever the sense be by which the Vultures are attracted to their food, by the same, in equal perfection, is the Raven directed to its meal, with unerring precision. It too is as patient in hunger as they are, but when an abundance of food comes in its way, like Captain Dalgetty, it makes the most of the opportunity, and lays in a superabundant stock of 'provant.' It performs the same useful part that those birds do, in devouring much which might otherwise be prejudicial.

Live stock as well, however, it stows away; weak sheep and lambs it cruelly destroys, as also poultry: hence its destruction by shepherds and others, and hence again its consequent shyness and resort to some place of refuge. The eggs of other birds it also eats, watching its opportunity when the birds are absent; it transfixes them with its bill, and thus easily conveys them away: those of Cormorants even, it has been seen flying off with. Leverets, rabbits, rats, reptiles, shell-fish, which, Wilson says, it drops from a considerable height in the air on the rocks, in order to break the shells; worms, insects, caterpillars, and sometimes, it is said, grain: carrion, whether fish, flesh, or fowl, it likewise devours. I have often seen these birds searching the sea shore for any such waifs and strays.

The note is, as is so well known, a harsh croak, or rather 'craugh,' which word it resembles, and is doubtless the origin of. It has also a different sound, uttered when manœuvering in the air; and others rendered by 'clung,' 'clong,' or 'cung,' and 'whii-ur.'

Nidification commences early, even in the coldest climates; here sometimes so soon as January, and the eggs have been taken in the middle of February. Incubation lasts about twenty days: the male and female both sit, and the former feeds and attends upon the latter.

The nest, which is large, and composed of sticks, cemented together with mud, and lined with roots, wool, fur, and such materials, is placed in various situations—in the clefts of the branches of tall trees, church towers, caves, cliffs, and precipices. The mausoleum in the park of Castle Howard, the seat of Lord Carlisle, in Yorkshire, is still resorted to for the purpose.

The eggs are four or five, six or seven, in number, of a bluish green colour, blotted with stains of a darker shade, or brown. The young are generally fledged about the end of March, or beginning of April.

Male; weight, about two pounds seven ounces; length, about two feet two inches; bill, black; iris, grey, with an outer circle of brown; bristles extend over more than half the bill. The whole plumage is black, glossed on the upper part with blue. The wings extend to the width of four feet four inches; the first feather is short, the fourth the longest, the third and fifth nearly as long, and longer than the second. The tail consists of twelve feathers, rounded at the ends, and slightly bent upwards; legs and toes, black and plated. Claws, black and much curved.

Pied varieties occasionally have occurred, and one has been seen entirely white.



CROW.

CROW.

CARRION CROW. GOR CROW. GORE CROW.
BLACK NEB. FLESH CROW.

Corvus corone,

PENNANT. MONTAGU.

Corvus—A Crow. (Latin.)

Corone—A Crow. (Greek.)

THE Carrion Crow is a small edition of the Raven. The Italian proverb tells us that, 'chi di gallina nasce convien che rozole,' 'as the old Cock crows, so crows the young;' and thus do we find it to be with these two birds; the one, as it were, a derivative of the other; the major comprehending the minor.

The Carrion Crow occurs throughout Europe, in Germany, France, Spain, Greece, Prussia, Austria, Hungary, and Italy, in Denmark, Norway, and, but rarely, in Sweden, as also, according to Temminck, in Asia—in Japan. It is found throughout England, Wales, Ireland, and Scotland, but less frequently in the extreme north.

These birds keep in pairs the whole year, and are believed to unite for life, and more than two are seldom seen in company, unless it be when met over a carrion, or while the brood remain together. In their wild state they have been known occasionally to pair with the Hooded Crow: in one instance for two or three years in succession. It does not appear for certain what the progeny are like, but one nest was said to contain some young birds resembling one of the parents, and some the other. The male spiritedly defends the female when sitting, and both bravely repel any bird, though much larger than themselves, that may shew symptoms of having a design upon their young. They fearlessly assail

the Raven, the Kite, the Buzzard, and even the Peregrine; but the last-named frequently makes them pay their life as the forfeit of their temerity: they roost in trees and on rocks. Mr. Weir, in a communication to Mr. Macgillivray, relates that having shot a male at the nest, the female soon found a new partner, 'some disconsolate widower, or disappointed bachelor;' and when she was likewise shot, the step-father continued single-handed to feed his adopted young.

The Rev. W. Waldo Cooper has known a new partner acquired thrice in one winter by the survivor; I was going to say of the original pair, but this would be almost as difficult to decide as the case of the new-handled, and then new-bladed knife. Mr. Weir also found that a pair of old birds either did not discover, or did not heed the substitution of some young Rooks for their young, but continued to feed their supposititious children as they had done their own. The Crow is easily tamed, and exhibits precisely the same roguish propensities that the Raven does, and like him may be taught to imitate the human voice and a variety of sounds.

'The Carrion Crow,' says Mr. Weir, in a communication to Mr. Macgillivray, 'is very easily tamed, and is strongly attached to the person who brings him up. I kept one for two years and a half. It flew round about the neighbourhood, and roosted every night on the trees of my shrubbery. At whatever distance he was, as soon as he heard my voice, he immediately came to me. He was very fond of being caressed, but should any one, except myself, stroke him on the head or back, he was sure to make the blood spring from their fingers. He seemed to take a very great delight in pecking the heels of bare-footed youths. The more terrified they were, the more did his joy seem to increase. Even the heels of my pointers, when he was in his merry mood, did not escape his art of ingeniously tormenting. His memory was astonishing. One Monday morning, after being satiated with food, he picked up a mole, which was lying in the orchard, and hopped with it into the garden. I kept out of his sight, as he seldom concealed anything when he thought you observed him. He covered it so nicely with earth, that upon the most diligent search I could not discover where he had put it. As his wings had been cut to prevent him from flying over the wall into the garden, he made many a fruitless attempt during the week to get in at the door. On Saturday evening, however, it having been left open, I saw him hop to the very

spot where the mole had been so long hid, and, to my surprise, he came out with it in the twinkling of an eye.'

Its flight is not lofty, and is generally sedate and direct, performed by regular flappings. Its walk too resembles that of the Raven.

The Crow feeds on all sorts of animal food, alive and dead, and its sense of perception, whatever it be, is as acute as that of the Raven. It is a most predaceous bird, and a fell and relentless destroyer of any creature it can master; young lambs, among which it often does much damage, leverets, young rabbits, pigeons, ducks, and the young of game and poultry, crustacea, fish, shell-fish, which it breaks open by letting fall from a height upon the rocks, as also at times fruit, vegetables, grain, berries, potatoes, tadpoles, frogs, snakes, insects, eggs of all birds, which it either transfixes with, or holds in its bill, and so removes; walnuts; in fact anything. One which carried off a duckling from a pond, in its bill, was observed to kill it by walking forwards and backwards over it; another was seen to seize and kill a Sparrow engaged at the moment in inducing its young ones to fly: Montagu saw one chase and pounce at a Pigeon, like a Hawk, and strike another dead from the roof of a barn. These birds will hide any redundant food for a future occasion; and Colonel Montagu saw a pair of them thus removing small fish left by the tide above high-water mark. He also saw one of them make repeated pounces at some animal, in a field where the grass was long, which raised itself on its hind legs, and defended itself stoutly; it proved to be a leveret: a small one has been seen to be carried off in the air by one of these birds. Mr. Hogg saw one dart out at, and chase, but unsuccessfully, a Grouse, which his approach had been the means of rescuing from the talons of a large Hawk.

The Crow is often garrulous like the Magpie, and its note is a croak like that of the Raven, but hoarser. Nidification begins the end of February, or beginning of March, both birds helping to make the nest.

The nest is built in rocks or in trees, generally high up, and is made of sticks, firmly cemented with clay, and lined with roots, and again with straw, wool, moss, fur, hair, or anything else that is soft: the latter the Crows pull for the purpose from the backs of animals. A pair built on the ground in one of the Fern islands, and their nest was made of pieces of turf laid one upon another, and lined with wool,

all brought from the mainland four or five miles distant. The Rev. W. Waldo Cooper has known a nest repaired the second year.

The eggs, four to six in number, are pale bluish green, spotted and speckled with grey and brown: some are pale blue undertinted with grey.

Male; weight, about nineteen ounces; length, one foot eight to ten inches; bill, black, covered at the base by bristly feathers turned downwards; iris, dark brown. The whole plumage is black, glossed with blue and green, but the edges of the feathers on the back are without the burnish; the back reflecting shades of metallic green. The wings expand to the width of three feet five inches; the first feather is half the length of the fourth, the second one inch shorter than the fourth, the third and fourth nearly equal, the latter the longest in the wing, the fifth scarcely shorter than the third, the sixth the same as the third. The tail, nearly square at the end, and shorter in proportion than the Raven's; legs, toes, and claws, black.

The female resembles the male; length, one foot six to eight inches; the wings, in width three feet two to three feet four inches.

The young in the first year have less of the metallic lustre on the back.



HOODED CROW.

HOODED CROW.

ROYSTON CROW. GREY CROW. GREY-BACKED
CROW. SCARE-CROW. HOODY. DUN CROW. BUNTING CROW

Corvus cornix,
" *cinerea*,

LINNÆUS. GMELIN.
BRISSON. RAY.

Corvus—A Crow.

Cornix—A Crow.

THIS species has obtained the specific name given by the Romans to some bird of the Crow kind, deemed of unlucky omen—the 'sinistra cornix.'

It is found in Europe—in Denmark, Sweden, Norway, the Feroe Islands, Iceland, Germany, Greece, Italy, Holland, Russia, and Siberia; in Asia Minor, the Crimæa, and Japan. It occurs throughout England, Ireland, and Scotland.

In this country these birds are migratory, frequenting the south only in the winter, arriving in October, and returning in April. In the north of Scotland, and the Hebrides, Orkney and Shetland Islands, they are stationary, but in the south they partake of the habits of the 'southrons.' Mr. Selby is of opinion that those which appear in the south have come over from Norway and Sweden, as they generally arrive with the first flight of Woodcocks, taking advantage of a north-east wind. His reason of the supposition is, that there is no apparent diminution in the number of those in the north at the time; but such a calculation cannot be accurately made, and unless there were any apparent simultaneous increase of the numbers in the north, the argument would hardly be conclusive, for it is not to be supposed that foreign birds of the same kind as those which frequent the north of the kingdom, would migrate westwards from the same, or a still farther parallel of latitude, only to the south of it.

The habits of this bird resemble those of the preceding one, except that it more confines itself to the sea-shore, and the adjacent line of country, about a dozen miles inland, following also the course of tidal rivers and estuaries, on whose banks it finds its food. They are to be seen in larger or smaller companies of every possible variety of number. On the east coast of Jura, one of the western islands of Scotland, as many as five hundred were seen together after a storm. In the East-Riding of Yorkshire, I generally see them in small flocks of half a dozen or a dozen. A pair are said to have built near Kings Lynn, in Norfolk, in 1816, but this is the only instance that seems to have occurred so far south. Near Scarborough, in Yorkshire, a few pairs have bred. In one instance indeed, on a large tree at Hackness, a pair they were not, for one was a Carrion Crow, and the other a Hooded Crow. The former was shot by the gamekeeper, and the next year the female returned with a black partner. He and his progeny, some of which resembled their male parent, and others the female, were shot; she, by cunning, managed to keep out of harm's way, and the third year returned again with a fresh mate. This time, however, she was herself shot, and is now preserved in the Scarborough Museum. Some have supposed, from repeated instances of this kind, that this species and the Crow are identical.

The sea-shore, with its ebbing and flowing tide, furnishes the main support of this species, and it also plunders the nests of sea-fowl, and is said occasionally to destroy young lambs. No animal substance comes amiss to it, and it is only stern necessity that makes it at all put up with a vegetable diet. It resorts to the same mode as the Carrion Crow of breaking shell-fish open.

Its note resembles that of the Carrion Crow, but is rather more shrill. It has two tones; the one grave, the other more acute.

The Hooded Crows do not build in companies, like the Rooks, but separately, like the Carrion Crows.

The nest is placed in trees, or in the clefts and chasms of rocks and hill sides, and is composed of sticks, roots, stalks, and heather, and is lined with wool and hair.

The eggs, from four to six in number, are light green, mottled all over with greenish brown.

Male; weight, about twenty-two ounces; length, one foot eight inches; bill, bright black—the basal half covered with

stiff feathers; iris, brown. Head on the sides, neck in front, chin, and throat, bright bluish black, farthest down in the centre; breast, nape, and back, grey, the shafts of the feathers dark, but much more decisively so in some specimens than in others. Wings; the first feather is three inches shorter than the second, which is one inch shorter than the third, the third a little shorter than the fourth, which is the longest in the wing; primaries, secondaries, and tertiaries, bright black. Tail, bright black, rounded at the end; legs and toes, bright black, and plated; claws, bright black.

The female is less than the male, and the grey of her plumage is tinged with brown.

Young birds resemble the old. Selby says, 'sometimes this bird varies in colouring, and is found entirely white or black.'

ROOK.

YDFRAN OF THE ANCIENT BRITISH.

Corvus frugilegus,
Cornix frugilega,
 “ *nigra frugilega*,

LINNÆUS. GMELIN.
 BRISSON.
 RAY. WILLUGHBY.

Corvus—A Crow.

Frugilegus. Fruges—Fruits.
 or gather.

Lego—To collect

THE Rook is a native of most of the temperate regions of Europe and Asia, and is found in Japan, according to M. Temminck. Latham says that it does not occur in the Channel Islands, though it does in France; also in Denmark, Sweden, Russia, Silesia, and other countries of the former continent. It is, perhaps, more abundant in England than in any other part of the world, but decreases in numbers towards the extreme north, and is not found in the Orkney or Shetland Isles.

There are two opinions as to the bare space at the base of the bill in these birds; some contending that it is natural, and others that it is caused by the thrusting of the bill into the ground in search of food. I cannot myself but lean to the former theory of the fact, and for it I give the following reasons conclusively set forth by the Rev. W. Waldo Cooper, of West-Rasen, Lincolnshire, in ‘The Naturalist,’ No. 3, pages 53-54:—‘First, though the Rook is a great delver, yet he does not at all seasons dig equally; and at some seasons so little, as to allow the feathers to grow, at least partially, were abrasion the ‘sole’ cause of their absence. Secondly, the mode of his digging is not such as to cause much abrasion. Thirdly, I have never seen or heard of a specimen, not kept in confinement, in which this process was taking place; that is, the feathers ‘damaged only’ by digging. Fourthly, the



ROOK.

operation of abrasion must be painful, and it must be continued; so that the poor bird must be put to torture every time he digs deep after a worm or a grub; and this I cannot but consider as inconsistent with the universal tender-kindness of that Almighty Being, who has ordered him to seek so large a portion of his food below the surface of the earth. Fifthly, the Carrion Crow and the Jackdaw, which are also great diggers, never exhibit, as far as I know, any signs of abrasion. Sixthly, the exact correspondence of the line of denudation in all the specimens I have examined, points rather to natural, than to artificial causes.'

Rooks are strictly gregarious in all their habits, and are thus identified with the 'corvus' of the Romans: they build together in trees, and consort together in search of food throughout the year. The same colonies, however, admit of no influx of strangers; none but natives born are made free of their society—their freedom is that of birth. They breed on the same trees, and occupy the same nests from year to year; if, however, the trees give symptoms of decay, they are quitted for sounder ones, and it has even been observed that they have forsaken some, the bark of which had been peeled off preparatory to their being felled. Strange stories are told, one in my neighbourhood, of their following the fortunes of owners who have left their dwelling-places, and of their having through some mysterious instinct, abandoned their rookeries near a mansion when the house was about to be pulled down, or even to be left untenanted.

The food of the Rook consists of the larvæ of cockchaffers, and those of other beetles, moths, and insects, wire-worms, snails, slugs, and worms, as also potatoes and other fruits, and grains; 'fruges consumere nati,' as their specific name imports. In the autumn they pluck and frequently bury acorns in the earth, and probably walnuts and fir cones, which they likewise carry off, provident, it is thought, of a season of want.

The 'caw' of the Rook needs no description.

Early in March, the nests of the previous year are begun to be repaired, and some new ones are necessarily built by the young of that date. The male diligently feeds the female, and occasionally takes her place on the eggs. The young are fledged by the end of May, or the beginning of June; and second broods are sometimes produced as late as November; but possibly they should be considered rather as early than late ones.

Rooks build their nests for the most part in the vicinity of old mansions or other buildings; chiefly, as I imagine, on account of ancient and full-grown trees being the accompaniments of these; but they by no means make exclusive choice of such situations; I have seen their nests in perfectly isolated places, and they have been known, in several instances, to build on trees of low growth; as for example on young oaks, only ten or twelve feet high, in the grounds of the Duke of Buccleuch, at Dalkeith Palace, although large trees were all around them. They have occasionally been known to domicile even in the midst of cities, and that not only on trees, but in other and the most unlikely places. Three pairs built on some low poplars, in a central part of the town of Manchester, and returned to them the following year: another pair on the crown which surmounts the vane of St. Olave's church, London; and another between the wings of the dragon on Bow church, and there they remained, clearly 'within the sound of Bow bells,' till the spire required to be repaired; others in the gardens of noblemen in Curzon Street, and others in those of Gray's Inn, as I am informed by W. F. Wratishaw Bird, Esq., who says of them, 'We have a colony of Rooks in Gray's Inn gardens, which are so tame, that they come regularly to the trees in front of my chambers, and those of other inhabitants who encourage them, to be fed. In winter sometimes they are so eager for food, that they scramble for it on the ground the moment it is thrown down, like poultry. It is a curious and pleasing sight to see twenty or thirty birds, usually so wild and wary, struggling and tumbling over one another under your window, for pieces of bread, which they sometimes catch before it reaches the ground: they soon make away with half a loaf. A magnificent plane tree, said to have been planted by Addison, and named after him, is a favourite nesting-place for them. In summer, we have not above eight or nine couples, but in winter the number is doubled: they do not, however, appear to increase; the surplus population emigrate probably to Kensington Gardens; they may be seen there, and in the Parks, almost as familiar as Sparrows. The well-known nest in the tree in Cheapside, has been inhabited many times since 1836, when Mr. Yarrell says it was deserted; and two years ago, there were two nests, each tenanted by its pair of owners, who might be seen feeding their young in cawing pride, by all the busy passers in that most crowded of thoroughfares.'

The nest is composed of large sticks, cemented with clay, mixed with tufts of grass, and is lined with roots.

The eggs, four or five in number, are of a pale green ground colour, blotted over with darker and lighter patches of yellowish and greenish brown: they vary much.

Male; length, one foot seven or eight inches; iris, dark brown. The whole plumage is black, glossed with purple, particularly on the upper parts. The wings and tail underneath have a tinge of grey. The first feather of the wing is three inches shorter than the second, the second one inch shorter than the fourth, which is the longest in the wing, the third is as much shorter than the fourth, as it is longer than the fifth. Legs, toes, and claws, bright black.

The female is about one foot five or six inches in length: her plumage has less brilliancy than that of the male. Young birds resemble the female, but have at first feathers at the base of the bill.

White, cream-coloured, and pied varieties of the Rook occasionally occur; one which was at first 'of a light ash-colour, most beautifully mottled all over with black, and the quill and tail feathers elegantly barred,' became of the usual hue after moulting. Malformations of the bill in this species have also been noticed; one is figured by Yarrell, in which the lower part is much elongated, projecting upwards; in another the points of both were slightly crossed; and in another, they were greatly elongated, and much curved.

JACKDAW.

DAW. KÆE.

Corvus monedula,

LINNÆUS. GMELIN

Corvus—A Crow. *Monedula*—A Jackdaw, (perhaps from *moneo*—To warn; as a bird of augury.)

THE Jackdaw is found in Europe, Asia, and the north of Africa; occurring in Germany, Denmark, France, Russia, Italy, the islands of the Mediterranean, Holland, Belgium, Siberia, Iceland, Asia Minor, and Asiatic Russia and Japan.

It inhabits England, Scotland, Ireland, and Wales; but 'doctors disagree' about its being found in the Orkneys, Hebrides, and Shetland Islands, and I am unable to give a true verdict on the question.

The Jackdaw is a gay, pert, bold, sprightly, and active bird. It is very easily tamed, and soon learns to imitate the sounds of the human voice, and exhibit other amusing results of its education. It naturally becomes attached to the person who feeds it; but the thievery of its race attaches too strongly to it to prevent it from pilfering his goods, whether glittering objects, or cherries and other fruits. Meyer says "We knew a Jackdaw that used to enter a bed-room window, and strip a pincushion of pins, scattering them about the table, to the no small perplexity of the owner, until the perpetrator was discovered." One of these birds, which we once kept in a walled garden, used invariably, in the most cunning manner, to go down the walk on one side, so as always to keep the 'weather-gauge' of any suspected pursuer on the other.

Jackdaws frequent whatever places may be convenient to



JACKDAW.

them, whether close to, or remote from the dwellings of man: the male and female are believed to pair for life. They are sociable birds, and friendly among themselves, dwelling together in considerable numbers, and associating also with the Rooks, with whom they intermingle.

The flight of this species is more quick than that of the Rooks, and performed with more repeated flappings of the wings: they are seldom observed to sail.

The Jackdaw feeds on insects, shell-fish, dead fish and animals, eggs, grain, and seeds. It may often be seen entomologizing on the backs of sheep, which also supply its staple of wool for the formation of its nest.

The well-known 'caw' of the Jackdaw is expressed by this word. It is more shrill than that of the larger species of the genus.

Jackdaws build in cliffs, church and other towers, rabbit burrows, the roofs of buildings, the holes of ruins, hollow trees, the sides of chalk-pits, and even in chimneys, despite of the smoke, as if conscious that it could not blacken their plumage: they inhabited the ruins of Stonehenge, in Pennant's time, and may do so yet. The nest is built of sticks, and is lined with wool, hair, grass, and other soft substances. Very large quantities of sticks are collected for the purpose, so as even to block up chimneys, and the spiral stairs of church towers; the immense masses heaped together in the western towers of York Minster, formed a most unfortunate kind of firewood for that tremendous conflagration. They used to build in the tower of my own church, but when it was restored, wire net-work was placed in the belfry windows, so as effectually to stop them there; one persevering pair, however, would not be even thus foiled, but actually brought a mass of sticks through one of the loop-holes in the tower, and though their being naturally conveyed crosswise in their bills created an almost insuperable difficulty, quantities falling down outside, yet it was marvellous to see the numbers which 'by hook or by crook' they got in. The spiral nature of the staircase increased their difficulty, so much larger a quantity of materials being required to make a foundation. One instance is related by Alexander Hepburn, Esq., in the 'Zoologist,' of the Jackdaw having built on the branches of trees.

The eggs, from four to six in number, are pale bluish white, spotted with grey and brown. The young are hatched the end of May.

Male; weight, about nine ounces; length, about one foot two inches; bill, black, covered at the base with depressed feathers; iris, greyish white; crown, black; neck on the back, and nape, fine hoary grey; the whole of the rest of the plumage is black. The first wing feather is two inches and a half shorter than the second, which is three quarters of an inch shorter than the third, the third and fourth nearly equal in length, and the longest in the wing. Legs, toes, and claws, bright black.

The female is less than the male; the grey on the neck is less conspicuous, being not so light as in the male, and less in extent. Young birds have but little of the grey at first; it increases with their age, unlike the 'Prisoner of Chillon,' whose hair was 'grey, but not with years.'



MAGPIE.

MAGPIE.

COMMON MAGPIE. PIANET. MADGE.

Pica caudata,
*Corvus Pica,*FLEMING. SELBY. GOULD.
PENNANT. MONTAGU.*Pica*—A Pie—A Magpie.*Caudata*—Tailed, (a factitious word.)

IF I remember aright, in the great French Revolution, the zeal of the people for 'libertè' was so great, that they opened the doors of all the cages, and let the birds fly out. I should have enjoyed the sight; though some of the captives perhaps preferred remaining where they were, and did not value the unwonted freedom which they had never known the possession of, even as the poor prisoner who returned to the dungeon, with whose walls he had become familiar. To him the world was become the prison, the spider a more agreeable companion than his fellow-man: certainly he had found the one more friendly than the other. Nothing is to me more miserable than to see a bird in a cage, and, with reference to the species before us, who can tell what a Magpie is, either in character or in beauty, from only seeing him thus confined? He is, when himself, a brilliant—a splendid bird; gay alike in nature and in plumage.

The Magpie is met with in Europe, Asia, Africa, and America, being found in Spain, France, Italy, Belgium, Sweden, Lapland, Norway, and Greece, Asia Minor, Russia, and Siberia; India, China, and Japan, and the United States.

It is common in all wooded parts of the three kingdoms of England, Ireland, and Scotland, but is unknown, except as a straggler, in the Orkneys, the Hebrides, or the Shetland Islands. Shy and wary, it keeps at a secure distance from

the gunner, and so, though a marked bird, for the most part contrives to save itself; but many a one garnishes the gable-end of the gamekeeper's house.

It is a crafty, noisy, artful bird, and its chatter set up at the sight of almost any creature, proclaims and calls forth at once a mutual hostility. Magpies continue in pairs throughout the year, but several are often seen together, probably the family party in general, but sometimes as many as a score. If taken young they are very easily tamed, and learn to imitate many words, and to perform various tricks. Thieving is as natural to them as to the rest of their tribe, and any thing shining, in particular, they cannot resist the instinct to purloin.

The flight is made with quick vibrations, as if with some effort: on the ground this bird advances either by hopping or walking.

The Magpie's appetite is omnivorous; young lambs, and even weakly sheep, leverets, young rabbits, game, fish, carrion, insects, fruits, and grain, all meet its requirements.

Its note is a harsh chatter.

Nidification begins early in the spring.

The nest, which is resorted to from year to year, is placed in the top of a tall tree or hedge, or sometimes in a lower one, if otherwise suitably protectant. It is rather of an oblong shape, built of strong sticks and thorns, cemented together with mud, and lined with roots and grass; an aperture to admit the bird is left on one side, and from this loop-hole any approaching danger is descried, in order to a timely retreat; the top is covered over. I am informed by W. F. W. Bird, Esq. that the Magpie builds in Kensington Gardens.

The eggs are six or seven, rarely eight in number, pale bluish white, spotted all over with grey and greenish brown, more or less dark.

Male; weight, between eight and nine ounces; length, one foot and a half; bill, black; iris, dark brown; head, crown, neck, and nape, jet black; chin and throat, black, the shafts of some of the feathers being greyish white; breast above, black, below, pure white; back, black. The wings short, and rather rounded: the white feathers from the shoulder form a distinct white patch along them. The first feather is only two inches and a half long, the fifth the longest, the fourth and sixth nearly as long; greater wing coverts, fine blue; lesser wing coverts, black; primaries, black, with an elongated

patch of white on the inner web of each of the first ten feathers; secondaries and tertiaries, fine blue. The tail is graduated, the outer feathers being only five inches long, and the middle ones nearly eleven inches; their colours are brightly iridescent, blue and purple shades near the end, and green from thence to the base; the inner webs of all except the centre pair are purple black; beneath it is dull black; tail coverts, black; legs, toes, and claws, black.

The female is less in size than the male, being about one foot four inches in length, and the colours not so bright; the tail also is shorter.

Occasional varieties are met with, and malformations of the bill, both crosswise at the tip, and in the way of elongation, have occurred in the Magpie.

NUTCRACKER.

Nucifraga caryocatactes,
Caryocatactes nucifraga,
Corvus caryocatactes,

SELBY. JENYNS.
 FLEMING.
 PENNANT. MONTAGU.

Nucifraga. *Nux*, (plural *nuces*,)—A nut. *Frango*—To break.
Caryocatactes. *Karion*—A nut. *Katasso*, (the same as
katagnumi and *katagnuo*,)—To break in pieces.

THE Nutcracker is dispersed throughout Europe, Asia, and America. The mountain forests of Switzerland are its stronghold: it is found also in Austria, France, Italy, Denmark, Sweden, Russia, Siberia, and Kamtschatka; the north of Asia, and North America.

In this country it is of rare occurrence. On October 5th., 1753, one was killed near Mostyn, in Flintshire; another was afterwards killed in Kent. One was seen near Bridgewater, in the autumn of 1805; in August, 1808, one was shot in North Devon; another was seen on a tree on the banks of Hooe Lake; another was shot in the same county, in 1829, near Washford Pyne Moor, and another in December of the same year, in the adjoining county of Cornwall. A specimen was seen in Netherwitton wood, Northumberland, in the autumn of 1819, by Captain (now Rear-Admiral) Robert Mitford, R.N. In Surrey, one was seen in Pepper Harrow Park, the seat of Lord Middleton; in Norfolk, one was shot at Rollesby, near Yarmouth, on the 30th. of October, 1843. In Sussex, one at Littlington, near Alfriston, on the 26th. of September, 1833.

In Scotland three have occurred. In Ireland, Mr. Thompson relates that one was said to have been met with at Silvermines, in the county of Tipperary, but that there was no authentication of the account.

Mountainous countries, covered with fir woods, are the natural resort of this species.



NUTCRACKER.

These birds, though not migratory, strictly speaking, move about from one part of the country to another. They occasionally go in large flocks, but generally in small ones of six or eight, probably the parents and their young, descending at times from the woods of the mountains, to those of the plains; their food being furnished by the various cone-bearing trees. They are shy and wary birds, like the Crow tribe, and it is also said that they climb the trunks of trees like the Woodpeckers, and that the end of their tails are worn, from resting on them, as those birds do when ascending trees. They frequent the depths of the forest, remote from observation; but when they have young they may be approached very closely. These birds are easily tamed, but they have the unfriendly habit of devouring any companions of their captivity. As in the case of the Woodpeckers, it must be a strong cage that will confine them; but if well supplied with nuts, they solace themselves therewith.

The flight of the Nutcracker 'resembles that of the Jackdaw, but being wavering and unsteady, he avoids crossing any extended space. In the course of its migration, should any open country intervene, this bird avails itself of every bush in its way for the purpose of resting.'

Its food, whence its name, consists of nuts; which, like the Nuthatch, it fixes in a crevice of a tree, and pecks at till the shell is broken, the seeds of pine trees, beech-mast, acorns, berries, and insects of various sorts, bees, wasps, and beetles. It sometimes attacks and devours birds, as also their eggs; and one has been known to eat a squirrel.

The note, oddly enough, resembles the word 'crack' 'crack,' as also 'curr.' The latter he loudly utters in the spring of the year, perched on the top of a tree.

The nest is placed in holes of trees, which they scoop out like the Woodpeckers, till their purpose is gained.

The eggs are five or six in number, of a yellowish grey colour, spotted with lighter and darker shades of brown.

Male; length, one foot and nearly two inches; the bill is black, except the tip of the upper part, which, projecting beyond the lower one, though both get worn down by the 'tough morsels' it has to operate on to an equal length, is horn-colour; the space between the bill and the eye is dull white; iris, brown; bristles, white with brown streaks, cover the nostrils. A sort of semi-crest, like the Jay's, surmounts the head, which is brown and unspotted; forehead, crown,

neck, and nape, dark brown; chin, throat, breast, and back, brown, each feather terminated with an elongated triangular spot of dull white; on the throat these spots are small, on the sides of the head larger, and largest on the upper part of the breast, but I think that all the white markings are variable with age.

The wings have the first quill feather one inch and a half shorter than the second, the second three quarters of an inch shorter than the third, the third the same length as the eighth, the fourth, fifth, and sixth, nearly of equal length, one quarter of an inch longer than the third, and the longest in the wing; greater wing coverts, blackish brown, the ends of the feathers rather lighter in colour than the other parts; sometimes white; lesser wing coverts, brown tipped with white. The primaries and secondaries have a small triangular spot towards the tip, from the sixth to the twelfth feather; greater and lesser under wing coverts, dusky. The tail, which is composed of twelve feathers, is blackish brown, with slight blue reflections, as have the other darkest parts of the plumage, the two centre ones entirely so, excepting in some specimens, at the tips; the next on each side has a narrow white tip, the next a more extended one, the next still more, and so on, the outside ones having a space of three quarters of an inch, or more, of white; beneath it is greyish brown, ending in dull white; upper tail coverts, black, or blackish brown; under tail coverts, greyish brown, sometimes quite white; legs, black and scaled, as the Crows; toes, the same on the upper surface; claws, black.

In the female the brown colour of the plumage has a tinge of red. In some instances these birds have occurred entirely white; and one spotted with black and white.

There is an interesting paper in the 'Zoologist,' by W. R. Fisher, Esq., of Yarmouth, p.p. 1073-1074, respecting two supposed species of the Nutcracker as having occurred in Britain. The most evident mark of difference is in the form of the bill, that of the one being thick and obtuse, and of the other more slender and pointed, and the upper part, as stated, somewhat longer than the lower one. That very eminent naturalist, M. De Selys Longchamps, has expressed his belief, in a paper read before the Institute of Belgium, that the two species are distinct, and I cannot myself but incline to this opinion, In the absence, however, of either figure or separate description of the two, I am obliged, for

the present, to leave the matter undecided. Mr. Fisher adds, (but his own opinion, I should add, is against the supposed difference of the species,) 'the other distinctions between the thick and thin-billed Nutcrackers are the greater strength of the feet and claws of the former, a circumstance noticed by Brehm, who described them as two species, under the names of the long and short-billed Nutcrackers, and the different form of the white mark at the end of the tail, which in '*Nucifraga caryocatactes*' is much straighter than in '*Nucifraga brachyrrhynchus*.' This, with the other distinctions which I have mentioned, obtain more or less in all the specimens I have had an opportunity of examining.'

JAY.

Garrulus glandarius,
Corvus “

FLEMING. SELBY.
 PENNANT. MONTAGU.

Garrulus—Chattering, as birds. *Glandarius*—Of or belonging to acorns

THE plate, if I may be pardoned a brief record of a pleasing reminiscence, is coloured from a specimen in my collection, the first stuffed bird I ever possessed, which was brought to me by my father from York, just after I had gone to school.

The Jay is found in all the temperate parts of Europe, in Denmark, Sweden, Norway, Switzerland, Germany, Spain, France, Holland, Belgium, Italy, Greece, Crete, and the Ionian Islands, in Asia Minor, and in Africa, in Barbary and Egypt. The Greeks eat it as food.

In this country it is sufficiently common, and would doubtless be much more so were it not so unrelentingly pursued as a ‘vermin.’ It occurs in more or less plenty throughout the southern half of Ireland, and also throughout Scotland, but in very much fewer numbers towards the extreme north. In Shetland it is only known as a rare straggler.

This bird is exclusively addicted to woods and their immediately neighbouring trees for its habitat.

Jays, if not actually birds of passage, yet are decidedly of a roving disposition. ‘When they are obliged, during migration, to cross a wide open country, they fly quicker, for fear of being attacked by birds of prey; and their fear may be perceived by their frequently turning back to their starting point, before they finally undertake the journey, and then it is performed in haste, one flying behind another in a singular manner. During their migration the Jays alight on the first tree they meet with, and from thence utter their harsh note of joy, on having thus far travelled in safety. They never sit long on one branch, but shift and change continually; and when on the ground they hop about very awkwardly.’



JAY.

Jays continue together long after the young have left the nest; indeed frequently until the following spring; sometimes small flocks of from twenty to forty collect together. They are easily tamed if brought up from the nest, and become very familiar, imitating all sorts of sounds in a facile manner. They are most restless birds, ever changing their position, raising and lowering their crests, and ever and anon uttering some outlandish note.

The flight of the Jay is very observable, as heavy and irregular, effected with some degree of apparent difficulty, and in a scurrying sort of manner, as if conscious that it was a proscribed bird, and doomed to destruction for either real or supposed faults.

As imported by its specific name, the acorn is the most choice 'morceau' of the Jay, and for them he even searches under the snow; but he also feeds on more delicate fruits, such as peas and cherries, as well as on beech-mast, nuts, and berries, corn, worms, cockchaffers and other insects, larvæ, frogs and other reptiles, and mice, and is deterred by no scruples or qualms from making away with young birds, even partridges, and eggs. These birds are said, in the autumn, to hide some food for winter use, under leaves in some secure place, and in holes of trees.

Their true note is singularly harsh, and almost startling, resembling the syllables 'wrak, wrak,' but they have a decided talent for mimicry, and both in their wild and their tame state have been heard exhibiting their acquired and varied accomplishments, in imitating the bleating of a lamb, the mewing of a cat, the neighing of a horse, the shriek of the buzzard, the song of the greenfinch, the human voice, the note of the kite, the warblings of birds, the crowing of a cock, the bark of a dog, and the calling of fowls to their food; and Bewick says, 'we have heard one imitate the sound of a saw so exactly, that though it was on a Sunday, we could hardly be persuaded that there was not a carpenter at work in the house.'

The nest is placed in a tall bush or hedge, generally at a not greater elevation than about twenty or thirty feet from the ground, and sometimes less. It is of an open shape, formed of twigs and sticks, and well lined with small roots, grasses, and horse-hair. Some are much more cleverly constructed than others.

The eggs, five or six in number, are greenish or yellowish

white, freckled all over with two shades of light brown. They vary occasionally both in size and in degree of polish.

Male; weight, about seven ounces; length, nearly one foot two inches; bill, black; from its base a black streak extends backwards about one inch; iris, light blue. Forehead and crown, greyish and bluish white, some of the feathers longer than the rest, streaked down the middle with black, and the ends of those at the back of the head tinged with reddish purple; these form a sort of crest, which the bird raises or depresses at will; nape, cinnamon-colour; chin, greyish white; breast, light reddish buff colour; back, cinnamon-colour.

The wings, which extend to within two inches and a half of the end of the tail, have the first feather about two inches and a half long, the second about four inches and a half, and one inch shorter than the third; the fourth, fifth, and sixth nearly equal, and the longest in the wing; the under side is grey. Greater wing coverts, barred with black, white, and brilliant blue alternately, across the outer webs, the inner being nearly black; lesser wing coverts, chesnut. Primaries, dusky black on the inner webs, the outside edges dull white; secondaries, black, with an elongated patch of white on the basal half of the outer web of some of the feathers; some of the tertiaries, black, indistinctly barred across with blue, and black at the base of the outer web, the last ones of a rich chesnut colour, especially on the webs. Tail, dull black, indistinctly barred at the base, the outer feather on each side lighter than the rest and approaching to brown, underneath it is grey; upper tail coverts, white; under tail coverts, dull white; legs, toes, and claws, rather light reddish brown.

The female resembles the male.



WAXWING.

WAXWING.

BOHEMIAN WAXWING. BOHEMIAN CHATTERER. SILKTAIL.
EUROPEAN CHATTERER. WAXEN CHATTERER.

Bombycivora garrula,
Bombycilla “
“ *Bohemica*,
Ampelis garrulus,

TEMMINCK.
FLEMING.
BRISSON.
LINNÆUS. GMELIN.

Bombyx—A silk-worm. *Voro*—To devour. *Garrula*—Garrulous.

THE endless variety of nature, though doubtless in the whole connected by almost imperceptible links, yet to the student of only a part, is, as it were interrupted here and there by sudden breaks, origins of fresh series, from whence again the chain goes on. The bird before us, with its ‘hues like these,’ is an instance and example of this.

This most singularly elegant bird, the silky texture of whose plumage resembles that of the Jays, is distributed throughout the more northern division of Europe, the elevated regions of Asia, where, according to some, it breeds, and North America. It is found in the Arctic regions, Russia, Sweden, Poland, Bohemia, Silesia, Germany, Switzerland, and France. It is said to be very delicious food, and is accordingly caught for the table in those countries in which it is plentiful, being imbued with a delicate bitter taste; doubtless, like the Grouse, from the nature of the food on which it subsists.

Until lately the Waxwing, so called from the red wax-like tips to some of the feathers of its wings, was considered a rare bird in this country. ‘In the winter of 1810,’ says Selby, ‘large flocks were dispersed through various parts of the kingdom, and from that period it does not seem to have visited our island till the month of February, 1822, when

a few came under my inspection; and several were observed during the severe storm in the winter of 1823. In the winter of 1827, Waxwings again visited our island.' So they also did in large numbers in most parts of the country, though chiefly in the eastern counties or those bordering on them, in the months of January and February, in the year 1850, the weather being very severe for some time; and not a few have been met with since. I have hardly a doubt but that some have visited us every year.

In Yorkshire, some have occurred in most winters, especially in hard frosts, but most in the year just named. One was caught alive in a bush near Bridlington Quay. I am informed by Mr. Robert Dunn, of Helister, near Weesdale, in the Shetland Islands, that one was taken at Northmaven, in the north part of Shetland, on the 1st. of April, 1851; and about the same time another at Lerwick; and a third seen at a place called Aithsting, near Helister. In Ireland, divers specimens have at various times occurred. In Scotland they are also said to appear annually.

It is migratory in its habits, leaving in the latter part of November, the polar countries for the more genial climes of more southern districts, from which latter it returns to the former in March or April, according to the season.

Birds of this species seem to associate in flocks, sometimes of two or three hundred individuals. They are easily tamed, and are gentle and quiet.

Their flight strongly resembles that of the Starling. 'They roost among the thickest branches of trees and bushes; and in windy weather seek shelter very near the ground, or hide in the crevices of rocks in rocky countries.'

The Waxwing feeds on berries, such as those of the common thorn, the mountain ash, the juniper, the arbutus, and the whortle-berry.

The note is a shrill whistle.

These birds are believed to breed within the limits of the Arctic circle—in holes among rocks, or in deep forests.

Male; length, about eight inches and a half; bill, black, inclining to yellowish white or horn-colour at the base: the upper part is much notched about one fourth from the tip, and the under one has a corresponding groove on its edge, as in the Shrikes. Iris, purplish red; a black streak runs to and beyond it: bristly black feathers cover the nostrils. A pendent crest of silky feathers, nearly an inch and a half in

length, surmounts the crown of the head. It is raised or lowered at the pleasure of the bird: on the forehead the feathers lay smooth, but are disunited backwards. Head, reddish grey; forehead, black, bordered with rust-colour shaded off; neck and nape, reddish grey; chin and throat, velvet black; breast, reddish grey above, mellowed below into a much fainter tint; back, reddish grey. Greater wing coverts, black tipped with white; lesser wing coverts, brownish ash-colour; primaries, black, all but the first two or three marked upon the shaft near the tip with a line of bright yellow, and in some specimens the feathers are tipped with the same on the outer webs, which are there white; secondaries, grey; three or four or more of them tipped with white and a coral-like or wax-like appendage, or prolongation of the shaft; they vary in number: in one described by Montagu, there were five on one side, and six on the other; tertiaries, purple grey, tipped with white, some of them with the coral adjunct; greater and lesser under coverts, greyish white, greyish ash-colour towards the tips. Tail, ash-colour at the base, black in the central portion, and bright yellow at the tip; in old birds it is also furnished with the wax-like appendages: upper tail coverts, ash-colour; under tail coverts, reddish brown, with a tint of orange; legs and toes, strong and black, the former scaled in front, and the latter on their upper part; claws, black.

The female resembles the male, but the colours are paler. In the young birds the iris is chesnut brown, the crest is shorter, the yellow on the quill feathers and the tail less bright, and the coral appendages on the wings smaller, as well as fewer in number, than in the mature bird, and entirely wanting on the tail. The moult takes place in August or September.

NUTHATCH.

NUTJOBBER. WOODCRACKER.

Sitta Europæa,

PENNANT. MONTAGU.

Sitta—.... ..?*Europæa*—European.

THE vernacular name of this bird, as descriptive of its habit of hacking and hewing at the nuts, which furnish it with food, is derived from some primitive word, the original likewise of the word hatchet, as is its second name of Nutjobber, from another root of the like import.

The temperate regions are the home of the Nuthatch: it occurs in the central and more northern parts of Europe and Asia—in Norway, Denmark, Sweden, Italy, and France.

In this country it is but sparingly distributed, though it by no means ranks with very rare birds. In Yorkshire, it breeds in Castle Howard Park, the stately avenues of beech trees there being exactly to its taste. It is also met with at Seacroft, near Leeds; about Harewood Bridge and Park; in the neighbourhood of Sheffield, Doncaster, and Barnsley; in Stainborough woods, and those of Wentworth Castle, the splendid seat of Thomas Frederick Vernon Wentworth, Esq. I have seen it in Dorsetshire, in the parish of Glanville's Wootton. It is pretty common, as W. F. W. Bird, Esq. informs me, in Kensington Gardens, near London.

In Ireland and Scotland it appears to be unknown.

In the winter, the Nuthatch leaves the woods for less dreary situations, and is then not unfrequently found in orchards and gardens, but it resides with us throughout the year.

More than two or three of these birds are not often seen together, except indeed while the parents and the young are kept together by the family tie. They are easily tamed, and



NUTHATCH.

display their natural propensities upon whatever wood-work may be used to confine them. Even in their wild state they are far from shy, and may be approached pretty closely in the 'sweet spring time,' when the male bird is engaged in singing ditties 'to his mistress's eyebrow.'

The Nuthatch does not often alight on the ground, though it does so occasionally in search of food. It does not use its tail as a rest in climbing trees, as the Woodpeckers do, but its claws are sufficiently prehensile and adhesive to enable it to traverse the trunks of trees in every direction, not only upwards like those birds, but downwards also. Its not requiring the help of its tail for the 'facilis descensus,' is doubtless the reason of its organization being such as to enable it to do without its aid at all. It supports itself mainly on the hind part of the leg, and what may be called the heel. Its posture on the tree is straight, and close to the bark, and it does not aid its progress by an occasional hop, as is the case with the Woodpeckers, but steps along quickly and smoothly. It flies rather rapidly, with an undulating motion, if to any distance, but otherwise, in a straight line, with flapping wings.

Nuts are its favourite food. It also feeds on berries, acorns, beech-mast, seeds, barley, oats, and other grain, beetles and other insects, and caterpillars, and, according to Bewick, will pick bones; and lays up in different little granaries, a supply of food against a day of want.

The note sounds like the syllables 'quit, quit,' and it is uttered repeatedly while the 'ups and downs' of the bird are being quietly and stealthily performed upon the tree on which it seeks its sustenance.

The nest is placed in some hole in a tree. If the entrance is too large they narrow it with clay, until it is of the right width. It is lined with dry leaves, the scales of fir-cones, moss, bits of bark and wood, and sometimes a little grass.

The eggs, from five to seven, or eight or nine in number, of an oval form, are greyish white, spotted, and sometimes much blotted with reddish brown.

Male; weight, about six drachms; length, about five inches and three quarters; bill, dark lead-colour, dusky at the tip, dingy white at the base of the lower part; it is very hard and pointed: a black streak runs from it through the eye to the shoulder; iris, bright chesnut; over it is a white band; head, crown, neck on the back, and nape, light slate-colour;

chin, white; throat and breast, buff-colour; the latter chesnut on the sides, and towards the neck, with a tinge of orange; back, light slate-colour. Tail, except the two middle feathers, which are light slate-colour, black at the base, grey at the end, with a patch of white between these two colours on the three outside feathers, lessening inwards; legs, toes, and claws, light brown, the former scaled.



WRYNECK.

WRYNECK.

CUCKOO'S MATE. CUCKOO'S MAID. CUCKOO'S MESSENGER.
 BINDING-BIRD. SNAKE-BIRD. TONGUE-BIRD. EMMET-HUNTER.

GWAS Y GOG, OF THE ANCIENT BRITISH.

Yunx torquilla,

LINNÆUS. LATHAM.

Yunx—The Greek name of some bird, applied to the Wryneck.

Torquilla—A factitious word, from *Torqueo*—To turn, twist, or wrest.

THIS singularly elegant, though plain-coloured bird, a seeming link between the Woodpeckers and Cuckoos, is found in the three divisions of the so-called old world. In Europe, it frequents Lapland, Norway, Sweden, Denmark, Germany, Spain, Greece, Italy, and, though but seldom, Holland. It is said also to be met with in Kamtschatka. In Asia, it is found among the Himalaya Mountains; and also, according to Temminck, in Japan.

In this country it is found in all the more southern counties, but mostly on the eastern side of the island, and, but rarely, as far north as Northumberland. A few have been met with in Scotland, namely, two in Berwickshire, one in Fifeshire, and one or two in other parts. In Ireland it has not yet been noticed. In Yorkshire I have once seen it, between Armthorpe and Doncaster, and it has been observed there occasionally by others, as well as near Sheffield, Barnsley, Halifax, Hebden-Bridge, and York. I have also seen it not very unfrequently in Worcestershire.

This bird is a regular periodical visitant to us, and usually arrives, though in uncertain, and, I fear, from whatever cause, in gradually diminishing numbers, the first or second week in

April, a few days before the Cuckoo, whence one of its provincial names. It takes its departure the end of August or beginning of September. On the Continent it is an inhabitant of the colder parts, during the summer months.

The Wryneck is not a shy bird, and, if disturbed, flies only to a short distance. It has a curious habit, whence its name, of turning its head and neck about in an odd manner, first extending the former forwards, then moving it slowly awry from side to side, and even twisting it quite round, when the black line on the back of the neck adds to its peculiar appearance, accompanying this singular proceeding with a fanning of the tail, and a bowing and scraping of the whole body, uttering the while a croaking sound. These postures, however, are only performed by the old birds, who also, at times, express their feelings by a puffing out and distention, in apparent excitement, of the feathers of the head and throat, and this they also do if approached in the nest, making at the same time a hissing noise, the origin, probably, of their provincial name of Snake-bird, unless indeed it be derived from the writhing motion of the head and neck. The young are easily tamed.

More than a pair of Wrynecks are not, except by accident, seen together. They are unsocial birds, solitary except during the breeding season. Orchards, gardens, coppices, plantations, and, occasionally, trees in the open fields, are their resorts. For the most part they may be seen on an ant-hill, a bank, or the lower branches of a middle-sized tree, giving a preference to a leafless or a dead one, a low bush, or a hedge-row.

The Wryneck does not, in general, fly far at a time, but only from one bush or tree to another, and its flight is rather awkward than otherwise. It roosts in some hole of a tree. On the ground it moves by hopping, and, though it supports itself against the trunk of a tree, like the Woodpeckers, yet does not move forwards in that position.

Its food consists principally of ants, and their eggs and larvæ. These it obtains by means of its long projectile tongue, to the glutinous substance on which they adhere, having first, if necessary, shaken with its bill their house about their ears, and so dislodged and collected them together; otherwise, if the earth be hollow, the hard-tipped tongue, which is two inches and a quarter in length, is thrust into the interstices, and the tenants extracted: not a little earth is also swallowed with them. It also feeds on other insects, and Bechstein

says, will eat elderberries. Montagu kept one for a short time, and he observed that the tongue is darted forward and retracted with unerring aim, and at the same time with such velocity, 'that an ant's egg, which is of a light colour, and more conspicuous than the tongue, has somewhat the appearance of moving towards the mouth by attraction, as a needle flies to a magnet.' The young are fed with caterpillars, ants, and their eggs.

The note is peculiar, and somewhat resembles that of the Kestrel, Hobby, and other smaller species of Hawk. It is rendered by the words 'good, good, good,' 'cue, cue, cue, cue,' or 'qui, qui,' and an abrupt 'shick,' the former before the young brood are hatched, and the latter afterwards, but only 'sotto voce.'

The nest is placed in a hole of a tree, the mouldered wood of which seems to supply its chief, or only lining, or rather, layer. The apple tree is frequently chosen. It is made of small roots, and the old nest of a Woodpecker or some other bird would appear to be sometimes adapted, and in some slight degree fashioned with its bill to its own use by the Wryneck. It domiciles at various heights from the ground, and various depths from the surface of the tree, often close to a road side, in view of every passer by.

The eggs, from six or seven to nine or ten in number, are pure white. Mr. Salmon relates, that having removed the nest of a pair of these birds, in quest of their eggs, and having replaced it, on finding that it did not contain any, they still resorted to it, and he obtained successively from it, though the nest was necessarily again taken out, the several numbers of five, six, four, and seven eggs. The poor bird thus, according to this inveterate and unrelenting bird-nester, 'suffered her nest to be disturbed five times, and the eggs, (amounting altogether to twenty-two,) to be taken away at four different periods within the month before she finally abandoned the spot she had selected.' The young are hatched in about fourteen days, and the female bird is so much attached to them, that she may easily be taken, not only while sitting on the eggs, but even after the young are hatched and fledged. The same spot is resorted to year after year.

Male; weight, about ten drachms; length, about seven inches, or seven and a half; bill, yellowish brown; iris, chesnut brown; head, hoary grey, with a tinge of yellow or

white, most elegantly mottled, speckled, striated, and barred with brown, the bars of an arrow-shape, and most on the crown; neck, in front, pale yellow brown, with narrow transverse black lines; nape, the same—a streak of black mixed with brown runs down from it to the lower part of the back; chin and throat, yellowish white and brown, with transverse black bars; breast, white, with numerous arrow-shaped black spots, on its sides it has a patch of brown; back, as the head.

The wings have the first and third feathers nearly equal in length, longer than the fourth, and a little shorter than the second, which is the longest; greater and lesser wing coverts, as the head; primaries, barred alternately with pale yellow, brown, and black; secondaries, brown, speckled with yellow brown, and a few white spots; tertiaries, the same, with a line of black. Tail, long, and much rounded at the end; the colour is grey, mottled with brown, and with four irregular black bars, underneath it is pale greyish brown, barred and speckled with black; upper tail coverts, grey, speckled with brown; under tail coverts, dull white, tinged with pale yellow brown; legs, toes, two before and two behind, and claws, brown.

The female resembles the male, but the colours of her plumage are not so bright, and the band on the back not so long as in the male.

The young are also lighter in colour.



CREEPER.

CREEPER.

TREE CREEPER. COMMON CREEPER. FAMILIAR CREEPER.
TREE CLIMBER.

Certhia familiaris,

PENNANT. MONTAGU.

Certhia—.....?

Familiaris—Familiar, common.

THIS modest and retiring little bird is, so to speak, neither common nor uncommon. Even where it is to be seen, it often is not seen, for, not only is its dress of a sober and unpretending character, bearing resemblance, likewise, as is the case with many of nature's animate works, to the less highly-organized substances on which it plays its part, but, it also, more shy apparently than fearful, shuns observation, and, on coming within the range of your glance, withdraws at once from sight. By watching for its return, you will often catch a glimpse of it, but, frequently, hid by the tree, it flies off to some neighbouring one, on which you next see it. It is more frequently detected by its note than by its appearance.

It is found plentifully throughout Europe; as far north as Russia, Norway, Denmark, and Sweden; and southwards in Germany and Italy. It is also found in North America, and occurs in all parts of our Islands.

Wooded districts, and the larger kinds of trees, providing it with food, are its resort.

The Creeper, though in other countries it moves from exposed to more sheltered localities, for the purpose of rearing its young, arriving thereat in March, and departing in September or October, remains with us throughout the year.

These little birds are mostly seen singly, or in pairs, and sometimes in company with the Titmice, almost always engaged in creeping up the trunks of trees, or flitting from

one tree to another, and seldom on the ground. In winter, 'when the hoar-frost is chill,' they come to farm-yards and other out-buildings, in search of any food which such less-exposed situations may have caused to be left in their way. They are of most diligently active and industrious habits, being rarely indeed to be seen, from any cause, in an attitude of rest. Their progress is only upwards on the trees, aided by the rest afforded by their deflected tails, or underneath or on the horizontal branches, and performed with great celerity by a series of impulses, the outline of their general contour, contributed by their arched bill, back, and tail, assuming almost the form of a segment of a circle.

Their flight is undulated, and generally short—a journey from tree to tree, alighting at the base, and nimbly winning their way to the top, when the like course is again and again repeated.

The food of this species consists, for the most part, of small beetles and other insects, spiders and caterpillars, which, with its long and slender curved beak, it extracts from fissures in the bark of trees, as well as at times from those of old fences and other wooden buildings; and it also eats seeds.

The note of the Creeper resembles the word 'tree tree,' quickly and shrilly repeated. It attracts your attention, being evidently produced by a very tiny throat.

Nidification commences in March, and a second brood is very frequently reared the same year, but not, it seems to be thought, in the same nest.

The nest is composed of grass, straws, fibres of roots, and twigs, bits of bark, spiders' webs, and the cocoons of chrysalides, lined with the latter and feathers. It is placed either in a hole or some crevice of the bark of a tree, the willow, as most affording such as it requires, being preferred, or even between two stems, and has been found in the interstice afforded by two palings: a hole previously tenanted by a Titmouse or other small bird is sometimes resorted to. It is shaped more widely, or more narrowly, according to the width afforded by its plot of building ground. The Rev. Gilbert White, in his 'Natural History of Selborne,' says, 'a pair of Creepers have built at one end of the parsonage house at Greatham, behind some loose plaster. It is very amusing to see them run creeping up the walls with the agility of a mouse. They take great delight in climbing up

steep surfaces, and support themselves in their progress with their tails, which are long and stiff, and inclined downwards.'

The eggs, eight or nine at the former brood, laid in April, and four or five at the second, are white, with a few red spots all over, or only at the thicker end. They are hatched in thirteen days, and both birds sit on them by turns. The young are fed with small caterpillars. 'If the young,' says Meyer, 'are disturbed, they crawl out of the nest up the tree, but if they should fall to the ground, they run quickly amongst the grass and hide themselves, and are almost certain to make their escape.'

Male; weight, about two drachms; length, from five inches to five inches and a quarter; bill, long, slender, and curved downwards; it is compressed towards the tip, and ridged on the upper part, which is larger than the lower one; the latter is dull yellowish white, except at the tip, which, as is the whole of the upper one, is dusky: the space between it and the eye is brown ash-colour. Iris, brown; a white streak runs over it, and ends in a spot of the same at the side of the nape: from the eye backwards extends a dusky streak. Head on the sides, brown ash-colour, spotted with white; crown, dusky brown, with markings of dull white, and darker and lighter yellow; neck and nape, the same, the spots larger; chin and throat, white. Breast, silvery soiled white, yellowish on the sides and the lower part; back, as the neck.

Wings; the first feather is very short, the second nearly half an inch shorter than the third; the third, fourth, fifth, and sixth nearly equal in length, the fourth rather the longest; greater wing coverts, dusky, white on the tips of the outer webs, the edges of the white yellowish; lesser wing coverts, dusky tipped with white; primaries, secondaries, and tertiaries, dusky tipped with white, more extended over the ends of the three last feathers; from the fourth to the fifteenth feather, a yellowish white band across the middle of each, which is straight when the wings are extended, but is in heraldic phrase 'wavy' or, rather, 'crenellè', when they are closed. Tail, reddish or brownish ash-colour, yellowish towards the outer edge, the shafts pale brown yellow; upper tail coverts, as the back, tinged with tawny rust-colour; under tail coverts, reddish yellow, tipped with white. Legs, toes, and claws, pale yellow brown, the last named with a tinge of pale red; they are very long and curved.

The female nearly resembles the male.

BLACK WOODPECKER.

GREAT BLACK WOODPECKER.

Picus martius,

PENNANT. MONTAGU.

Picus—A bird that makes holes in trees, supposed to be the Woodpecker. *Martius*—martial—warlike; also, belonging to the month of March.

THE Black Woodpecker is found in Europe in the mountain forests of Switzerland, as also in Russia, Siberia, Norway, Denmark, Sweden, Germany, Italy, and France. It has been met with in Persia; and also, by my friend Hugh Edwin Strickland, Esq., in Asia Minor. It is a native likewise of some parts of North and South America.

The following specimens of this bird have been met with in this country:—Two were shot in Yorkshire, and unfortunately not preserved; two were seen by Thomas Meynell, Jun., Esq., in the grounds of his father's seat, the Friarage, at Yarm; and one was shot the first week in March, 1846, near Ripley, the seat of Sir William A. Ingilby, Bart.; one shot by Lord Stanley in Lancashire; one on the trunk of a tree, in Battersea fields, near London, in 1805; one in the collection of Mr. Donovan; one in Lincolnshire; two in a wood near Scole, in Norfolk; a pair seen several times in a wood near Christchurch, in Hampshire; one shot in a nursery garden near Blandford, in Dorsetshire; and another at Whitchurch, in the same county; both recorded by Dr. Pulteney. Others, according to Dr. Latham, in Devonshire and some of the southern counties; and one in Scotland, as recorded by Sir Robert Sibbald.

In addition to all these, J. Mc'Intosh, Esq., of Charminster, Dorsetshire, records in 'The Naturalist,' No. 1, page 20, that



BLACK WOODPECKER.

he has known these birds to occur more than once at Charborough Park, in that county, the seat of J. S. W. S. E. Drax, Esq.; and also to have built several times, one pair he believes, three successive years, at Claremont, Surrey.

In Ireland, the Black Woodpecker has not yet been seen.

The gloomy recesses of the sunless pine woods are the proper places of this sable species. In the 'Black Forest' he is at home, and does not consider himself as an 'Exile of the Landes.'

These birds are of a morose and unsociable disposition. Two are the most that associate together; a third is, immediately on its appearance, banished from their neighbourhood. 'The Black Woodpecker is a strong, active, and lively bird. Its restless nature drives it from spot to spot; and when aware of being observed too nearly, it endeavours to effect its escape, unnoticed by its pursuers, at an incredible rate, but may generally be detected by the noise it makes, first in one place then in another, in less time than seems possible. When hurried, it runs up a tree, taking reiterated leaps forward, with such force that its claws may plainly be heard hooking into the rough bark of the tree, and its tail beating against it alternately to balance itself. Under these circumstances the bird holds its head back and raises its breast from the tree, which gives it, in that attitude, a noble appearance.'

Its flight is heavy, and not extended—a series of falls and risings, performed with some degree of apparent difficulty, the wings being exerted to a more than ordinarily forward extension. In general it is only continued from the top of one tree to the bottom of another, up which the bird runs with nimble alertness, evidently perfectly at home. It is said to roost at night in the hole of a tree, perhaps, at times, that in which it builds, and to enlarge it for itself if necessary.

It preys on beetles and other insects and their larvæ; ants and their eggs; which are captured by means of the glutinous substance exuded from its elongate tongue, darted out whenever they are likely to be obtained. In default of this food, it is said, by Temminck, to eat nuts, seeds, and berries,

The note, at least that of the male bird, is rendered by the syllables 'cree, cree,' and 'kirr, kirr;' and it has other flexions of varied import, not without meaning, doubtless, to the birds themselves. While thus engaged, the crimson

feathers of the head are erected, and have a beautiful appearance fanning in the sun. The beating and vibration of the dead branches, caused by the 'sturdy stroke' of the potent bill of the Black Woodpecker, is said to be heard at the distance of half a mile.

These birds commence building in the beginning of April, and the nest is placed in the hole of a tree, most frequently the fir, at a height, generally, of about fifty or sixty feet from the ground, or occasionally, in a hollow of a wall.

The entrance to it is narrow, being only of sufficient diameter to admit a man's hand; but beyond this, it widens in a downward direction, to the width of about nine inches. The chips and splinters made by the bird in excavating its nursery, frequently betray the locality to the curious, some of them being of considerable size, even several inches long; so great is the power of the bill, acting almost like a bill-hook.

The eggs, from three, it is said, to five or six in number, are white, smooth, and shining. The male is reported to take his turn on the nest, and this labour of both lasts for seventeen or eighteen days. The young are fed with ants' eggs, and are so carefully guarded by their parents, that they will hardly quit the nest if it be approached.

Male; weight, twenty to twenty-three ounces; length, one foot four inches, to as much as one foot seven or eight, according to different accounts; bill, black at the tip, the base almost white, the remainder bluish horn-colour, ending in yellowish: the upper part is longer than the lower. Iris, pale yellow; a small tuft of bristly feathers extends forwards from the base of the bill; crown, deep rich red, the feathers black at the base. The whole of the rest of the plumage is black, the under part more dull than the upper.

The wings, which extend to half the length of the tail, have the first feather narrow, pointed, and only two inches in length; the second about five inches long, also narrow and pointed, and of equal length with the ninth; the third shorter than the fourth, fifth, or sixth, which are of about equal length, and the longest in the wing, the fifth the most so; the tips of the wings are rusty black. The two middle feathers of the tail are the longest, the outside ones the shortest, the former being seven inches, and the latter only two and a half long, all much narrowed at the tips, hollowed beneath, and the webs at the tips resembling bristles;

legs, slate-colour, partly feathered; two of the toes are turned backwards, the inner one being only half as long as the outer one; claws, black, much curved, strong, and sharp.

The female has the crimson colour only at the back of the head.

The young males have the iris grey, and the crown of the head only spotted with red.

GREEN WOODPECKER.

ECLE. LARGE GREEN WOODPECKER. POPINJAY.
 WOODSPITE. RAIN-BIRD. RAIN-FOWL. WHITTLE. HIGH HOE.
 HEW-HOLE. PICK-A-TREE. AWL-BIRD. YAPPINGALL.
 YAFFLE. YAFFER. NICK-A-PECKER.

Picus viridis,
Brachylopus viridis,

LINNÆUS.
 SWAINSON.

Picus—A bird that makes holes in trees, supposed to be the
 Woodpecker. *Viridis*—Green.

THOUGH to man it is a difficulty to make even a copy without some variation from the original, yet, to strike out a fresh design, is by no means so easy as it might therefore be thought. Let the thoughtful artist then devoutly wonder at the unspeakable beauty of the varieties which the hand of Almighty power and wisdom has pourtrayed in the 'fowls of the air,' as in all the other 'wonderful works' of nature, 'which God created and made.'

This handsome species is a native of Europe, being found in more or less plenty, according to the suitability of the locality, in Russia, Siberia, Spain, Greece, Italy, Scandinavia, France, and Holland; also in Africa; and in Egypt, according to Meyer.

It is common throughout England, and, according to Selby, in Scotland, that is to say, in all the wooded districts. In Ireland its occurrence has not yet been authenticated.

These birds roost early, and repose in their holes at night. The young run on the trees before they are able to fly, and if then captured are easily tamed.

Like the rest of its tribe, this species only ascends, for the most part obliquely, on the trees; any descent is performed



GREEN WOODPECKER.

by a retrograde motion. It alights near the base, and, tapping at intervals to alarm any hidden insects, quickly makes its way to the higher part of the bole, from which it flies downwards to another tree, or to another part of the same one, to commence again 'de novo.' Occasionally it may be seen in strong hedges. In severe weather it approaches villages and farms, searching for its food in the walls of old buildings and barns, as well as in the neighbouring trees.

The flight of this bird is generally short, from tree to tree, heavy and laboured, the wings being rapidly fluttered, and producing a rustling noise; it gains a long reach by the impetus it has acquired, and then drops, the effort requiring to be renewed. On the ground it walks horizontally, the tail dragging after it.

The 'laugh' of the Green Woodpecker, for so is its harsh note of 'glu, glu, glu, gluck' designated, is supposed to prognosticate rain; hence one of its trivial names. It is almost startling if suddenly and unexpectedly heard.

Its hard and wedge-shaped bill enables it, without difficulty, to procure its food by boring into the decayed wood of trees, even through any sound exterior part, and with its long and extensile tongue, it extracts the insects and their eggs, spiders and caterpillars, on which it lives, from the crannies in the bark in which they lie concealed, and ants and their eggs from their hills; in searching for which it is frequently seen on the ground; and, Bewick says, uses not only its bill, but its feet: failing such a supply, it will eat nuts. The tongue is a most wonderful organ, as in the rest of the Woodpeckers. 'It has the appearance of a silver ribbon, or rather, from its transparency, a stream of molten glass; and the rapidity with which it is protruded and withdrawn is so great, that the eye is dazzled in following its motions: it is flexible in the highest degree.'

Preparations for building are commenced even so early as February, and the old nest is frequently resorted to and repaired. The nest, if decayed wood-dust may be called such, is placed at a height of fifteen or twenty feet from the ground, in a sound hole in a tree; and it is said that the birds carry away the chips and fragments of wood to a distance, as if afraid that they might lead to a discovery of their retreat. If necessary, it perforates a hole, or else suits one to itself, with its trenchant bill, the strokes of the active worker being

so incessantly repeated, that the head can hardly be perceived to move; and the sound of the 'Woodpecker tapping the hollow beech tree,' may be distinctly heard, it is said, at a distance of half a mile.

The eggs, four or five, to six or eight in number, are bluish white in colour. In the 'Zoologist,' page 2229, Alfred Newton, Esq. mentions his having met with five eggs of this bird in a nest at Elvedon, near Thetford, Norfolk, which were blotted and spotted with reddish brown and tawny yellow; and at page 2301, he speaks of having been informed of two other similar instances, one or both of them, in the same neighbourhood.

The young are hatched in June. The parents are sedulously devoted to them, and, when fully fledged, they all quit together in company.

Male; length, one foot one inch and a half; bill, black, or bluish black, the base of the lower part being nearly white; from its corner a black streak runs downwards, the middle part being brilliant red, the feathers grey at the base; iris, greyish white, with a faint tinge of yellow; it is surrounded by a black space, part in fact of the streak; black bristles surround the base of the bill. Forehead, jet black; head, on the sides, greenish white; crown, brilliant red, running downwards to a point brighter than the rest; neck, on the sides, greyish green, on the back and the nape, greenish yellow; chin, as the breast; throat, brownish white; breast, yellowish grey, with a tinge of green; back, above greenish yellow, below yellow.

The wings reach nearly to half the length of the tail; the first feather is very short, the fourth and fifth the longest in the wing; greater and lesser wing coverts, yellowish green; primaries, greyish black, spotted with faint yellowish white square spots along the outer web, and the inner half of the inner one, with round ones, the tips not spotted; secondaries and tertiaries, green on the outer web, and greyish black spotted with dull white on the inner one, most dull towards the primaries; greater and lesser under wing coverts, dusky and greyish white, in bars, and rows of spots, the whole tinged with greenish yellow. The tail, of twelve feathers, is barred with dull greyish white, or greenish white, and dull greyish black; it is long, stiff, and pointed, the two middle feathers being the longest, the others graduated; they are grooved underneath; beneath it is dusky, with bars of greyish

white; upper tail coverts, yellow; under tail coverts, with dusky greenish transverse markings; legs and toes, blackish grey, with a tinge of green, and strong, with large scales in front, and small ones behind; the toes are roughened beneath, as in all the rest of the genus; two toes are in front and two behind; claws, black and much hooked.

Female; length, about one foot; there is no red on the black moustache, and less on the crown than in the male. The whole plumage is also more dull in colour.

The young have the scarlet of the moustache, which is itself faint, as is the black round the eye and that on the head, mixed with yellow, greyish white, and greyish black; the neck, chin, and throat are dull greyish white, with a tinge of dull yellowish green, streaked with greyish black; the breast the same, but barred transversely; on the back and wings the green feathers are interspersed with grey, and tipped with yellow, and have a yellowish white mark along the shafts.

Temminck says that varieties of a yellowish white colour occasionally occur.

GREAT SPOTTED WOODPECKER.

WHITWALL. WITWALL. WOODWALL. WOODNACKER.
 WOODPIE. FRENCH PIE. PIED WOODPECKER.
 GREATER SPOTTED WOODPECKER. GREAT BLACK AND
 WHITE WOODPECKER. FRENCH WOODPECKER.

Picus major,
 “ *varius major*.

PENNANT. MONTAGU.
 RAY.

Picus—A bird that makes holes in trees, supposed to be the
 Woodpecker. *Major*—Greater.

THIS species is found over the whole of the European continent, from Russia to Italy, Sweden to France, Denmark and Norway to Germany, and other countries. In Asia Minor it has been noticed by E. H. Strickland, Esq.; and, Meyer says, is found in America also.

In this country it is of local distribution, dependent entirely on the nature of the locality, and nowhere to be called common. Wooded districts are, of course, its resort; and it is most frequent in the midland counties, in parks, forests, and woods, and is occasionally to be seen in gardens. It becomes much less numerous farther north.

In Yorkshire it occurs not very unfrequently near Huddersfield, as Peter Inchbald, Esq. informs me; and it has been known to breed there. Near Sheffield, also, it is not rare; and has been met with near Hebden-Bridge, Barnsley, and Plumpton, all in the West-Riding; Castle Howard, in the North-Riding; and one at Boynton, in the East-Riding. In Northumberland it is scarce, and in Cumberland. W. F. Wratlaw Bird, Esq. has written me word, that one of these birds, which, probably, as he remarks, had strayed from Ken-



GREAT SPOTTED WOODPECKER.

sington Gardens, where they are not unfrequent, was observed, a few years since, early in the morning, climbing up the wall of a house near Cavendish Square, London. Was it making its way to the 'Woods and Forests?'

In Scotland it sparingly occurs in Roxburghshire and Dumfriesshire, and even farther north; and in the neighbourhood of the Spey and the Dee. In the Orkney Islands, one was shot near Scapa; another by Mr. Strang, on the 10th. of September, 1830; a young one was caught at Stronsay; another shot in the garden of Mr. Traill, of Woodwick, Kirkwall. For these particulars I am indebted to the complete 'Historia Naturalis Orcadensis,' published by W. Baikie, Esq., M.D., and Mr. Robert Heddle, and very obligingly forwarded to me by those gentlemen, for the use of this work.

In Ireland, eleven specimens have been placed on record by William Thompson, Esq., of Belfast, as having occurred in various parts of the island.

Mr. Selby considers that these birds are probably migratory, as he has met with them in Northumberland in the months of October and November, generally after storms from the north-east. They, at all events, wander about more in the autumn than in any other part of the year.

This species naturally displays the capabilities of climbing, which distinguish its race. With the most easy adroitness it runs in all upward directions over the branches and trunks of trees, seeming at the same time to prefer having the latter between you and it, should you approach. Sometimes they will run up to the top of the tree, and then fly off. They seldom alight on the ground, and their movements then are neither quick nor graceful. The old birds shew great attachment to their young. Montagu mentions one instance in which 'notwithstanding that a chisel and mallet were used to enlarge the hole, the female did not attempt to fly out till the hand was introduced, when she quitted the tree at another opening.' The Greater Spotted Woodpecker is a courageous, active, strong, and lively bird; but unsociable with strangers and defensive of its own food.

The flight of this Woodpecker is straight and strong, but short and curved; the wings being quickly moved from, and brought close back again to the body.

Their food consists of insects and caterpillars, seeds, fruits, and nuts. Mr. Gould observes that they 'sometimes alight

upon rails, old posts, and decayed pollards, where, among the moss and vegetable matter, they find a plentiful harvest of spiders, ants, and other insects; nor are they free from the charge of plundering the fruit trees of the garden, and, in fact, commit great havoc among cherries, plums, and wall fruit in general.' They alarm the insects from their recesses by the noise made with their bills upon the trees, which is audible at the distance of half a mile. Meyer says that they do not eat ants; but he adds the eggs of insects, nuts, the seeds of fir-cones, and other seeds to the above bill of fare; and he also remarks, though I own I cannot think it a circumstance of very common occurrence, 'the jealousy of this bird leads it into danger, as it is sure to take notice if any one taps against a tree; and approaches sometimes near enough to be caught with the hand.

In the spring, these birds produce a like jarring noise to that made by the Green Woodpecker; and their note is expressed by Meyer by the syllables 'gich,' and 'kirr,' uttered only once at a time, at long intervals; perched, when wooing, at the top of a tree.

About the end of March, or beginning of April, the nidification of these birds commences.

No nest is formed; the eggs are laid on the dust that lodges at the bottom of the hole, at a depth of six or seven inches, but sometimes as much as two feet from the orifice. A pine tree seems to be preferred, but the oak and others are also made available; a pre-existing hole being adapted to their wants, or if there be none such, a new one is scooped out of the most unsound part of the tree. There is frequently a second hole, which facilitates the escape of the bird in case of danger.

The eggs are four or five in number, white and glossy, and are hatched after an incubation of fifteen or sixteen days.

Male; weight, about two ounces and three quarters; length, about nine inches and a half; bill, dark shining horn-colour; from its base proceeds a streak of black towards the nape, from the middle of which another passes down each side of the neck, meeting upon the upper part of the breast, where it forms a half-moon-shaped patch. Iris, purple red. The eye is surrounded by a dull white ring; a few bristly feathers project about the base of the bill; forehead, buff or rusty yellowish white, black behind it; head on the back, bright scarlet; crown, dark bluish black; on the back part of the

side of the neck is a white patch; nape, black; chin, throat, and breast, dingy or buff white; back, black.

The wings expand to the width of one foot, and have the first feather very short; the second shorter than the seventh, but longer than the eighth; the third, fourth, and fifth the same length as the seventh, the sixth the longest. The outer greater wing coverts black, the inner white; lesser wing coverts, black; primaries, black, with from two to five white patches on the outer web of each feather, and rounder ones on the inner; secondaries, black; tertiaries, black. The tail has the two middle feathers black, pointed, and longer than the rest; the two next black, tipped with white; the next black and white, the white barred with black; the middle feathers are three inches and three quarters in length, while the outer ones are only an inch and a quarter; upper tail coverts, black; under tail coverts, red; legs and toes, blackish grey, the former feathered part of the way down in front; claws, much hooked and black.

The female is without the red on the head. These birds moult as late as the beginning of November.

Young; at first the whole head is scarlet, till the first moult, when the females lose that colour entirely, and the males retain it only on the back of the head. The young of the year are a little less in size than the old birds; and all the colours are less bright. Forehead, white; head, on the back, black, and in front, behind the forehead, scarlet; crown, red, sometimes with a few black feathers interspersed.

I am much indebted to W. F. W. Bird, Esq., for a careful 'resumé' of the various authorities 'pro and con,' on the subject of a supposed occurrence of another species of Woodpecker, the Middle Spotted; from which, on the whole, it seems to be incontestably established that it is only the young of the one before us; though, as Hunt remarks in his 'British Ornithology,' 'it is certainly a curious circumstance that the beautiful scarlet on the head of the young is next to the white forehead, whilst in the old bird the scarlet is at the back of the head, and the black next to the white forehead;' and also that in the case of a nest of three young birds and an old one, sent to him from the Rev. Mr. Whitear, one of the young ones weighed more than its parent; but 'maternal solicitude' may have been the cause both of the one and the other effect.

LESSER SPOTTED WOODPECKER.

LEAST SPOTTED WOODPECKER. LITTLE
 BLACK AND WHITE WOODPECKER. BARRED WOODPECKER.
 LITTLE FRENCH WOODPECKER.
 HICKWALL. PUMP-BORER. CRANK-BIRD.

Picus minor,
 “ *varius minor*,
 “ “ *tertius*,

LINNÆUS. PENNANT.
 BRISSON.
 RAY.

Picus—A bird that makes holes in trees, supposed to be the Woodpecker.
Minor—Less—lesser.

THIS species is found in Europe—in France, Italy, Scandinavia, Siberia, and Holland; in which latter it is rare.

In Yorkshire one of these birds was shot by Peter Inchbald, Esq., of Storthes Hall, near Huddersfield, in the winter of 1848; and this gentleman writes me word that a nest of the same species, containing five eggs, was found in that neighbourhood on the 31st. of May, 1851. In Worcestershire I have known it to occur, as has also W. F. W. Bird, Esq. In Norfolk it breeds, but is rare: one was shot at Blickling, in April, 1847. In Suffolk, one was shot at Haughleigh, near Stowmarket, in 1847. In Sussex a pair bred at Peasmarsh, in the beginning of June, 1849, in a plum tree, only a few yards from a house: a male was shot in 1844, at Arundel; another at Albourne, in December, in 1848; and one was captured at Parham House, having flown in through an open window; a few near Chichester, and others on the eastern side of the county. In Derbyshire, one near Newton, in the parish of Melbourne, December 11th., 1844. It has also occurred in Lancashire, Shropshire, Buckinghamshire, Surrey, not very unfrequently; Gloucestershire, Berkshire, Wiltshire, Devonshire, Dorsetshire, Cornwall, Herefordshire, Warwickshire, Essex, Cambridgeshire, Leicestershire, Lincolnshire, and Middlesex, not very uncommonly near London—in Kensington Gardens; at Southgate, and in Greenwich Park. In North-



LESSER SPOTTED WOODPECKER.

umberland one was killed near Newcastle, in the month of January, 1829. In Orkney one was shot by Mr. Low, near Stromness, in the winter of 1774; and another was observed at Sanday, on the 14th. of October, 1823.

Like the rest of its race, nay, like the rest of another race, the great object of this bird is to get to the 'top of the tree.' Its motive, however—more than can be always said in the other case—is only a laudable one—to procure its necessary food: it sometimes perches on the topmost branch. It more peculiarly affects the apple, plum, beech, and elm; but not by any means exclusively.

The Little Woodpecker is of a morose disposition, and prefers its own company: excepting while the young birds continue to require their 'parents' fostering care, more than two are not seen together, and even this number only in the breeding season. It is not at all a shy bird. Wooded districts are its natural and necessary resort.

Its flight is undulated like that of its congeners, the wings being drawn close to the body, and then quickly flapped while extended.

Its food consists of small insects and their larvæ, spiders and ants, which are generally procured from the branches of trees in the fields and orchards, and, abroad, in the vineyards; but occasionally on the ground. The mode of their capture is the same as in the case of the other species of the genus.

It makes the same sort of jarring noise that the other Woodpeckers do, but of course in a 'minor' key. Its note, which is rather shrill and often repeated, but not frequently uttered while on the wing, resembles the syllables 'keek, keek, keek, keek;' and one of the sounds it makes is likened by the country people to that made by an augur in boring; hence one of its vernacular names.

The nest, so to call it, is placed at the bottom of a hole in a tree, in some cases found ready made to its hand, and in others adapted by itself to its requirements. Sometimes more than one hole is either wholly or in part thus fashioned, though only one can be finally occupied.

The eggs, generally five in number, are white: they are hatched in fourteen days.

Male; weight, not quite five drachms; length, five inches and a half to six inches; bill, lead-coloured, black at the tip, rather weaker than in the other species, sharply ridged on the upper surface: from the corner of the bill a moustache pro-

ceeds, first black and white, then black, ending in a triangular black spot, the lower part of which shades off into dusky shaft streaks; iris, red; the feathers around it are brownish yellow: over it, and extending down the sides of the neck, is a white streak; greyish brown bristles surround the parts near the bill. Forehead, brownish yellow or greyish white; head and crown, bright red, palest towards the front and darker towards the nape; the sides are margined with black, which, meeting behind, forms an irregular patch, pointing downwards, and running into the black of the neck, (which has a patch of white on the side,) nape, and back; the sides of the head are white; chin, throat, and breast, dull white, with a tinge of brown on the sides, the feathers brownish black in the centre; back, white, barred across with black, and black downwards.

The wings expand to the width of one foot; underneath they are greyish black, with white bars; greater wing coverts, black, spotted with white; lesser wing coverts, black; primaries, dull black; the first quill is very short, the third, fourth, and fifth nearly equal, the fourth the longest in the wing, the second and seventh the same length, nearly as short as the first; the outer webs have angular spots of white, and the inner webs rounded ones, almost forming white bars; secondaries, dull black, very broad, and abruptly rounded; tertiaries, dull black; greater and lesser under wing coverts, white, with a few oval-shaped greyish black spots. The four middle feathers of the tail are black, the two next have white marks at the tip, the fourth is white, black at the base and tip; the fifth white, with five black bars; the outer black, with a white spot near the tip; underneath it is dull black and yellowish white; upper tail coverts, black; under tail coverts, spotted with dusky. Legs, lead-coloured, small, and not robust; they are feathered two thirds of their length down in front, and the remaining part is scaled; toes, lead-colour, yellowish beneath; claws, lead-coloured, black at the tips, short, weak, and dull.

The female wants the red on the head, which is yellowish white, and there is more white on the side of the head; the black of her plumage is more dull than in the male, and the white less pure.

In the young bird, the red on the head, which is assumed in the autumn, is at first interspersed with white; the iris chesnut; the breast light chocolate-colour, with dusky streaks.



HAIKY WOODPECKER.

HAIRY WOODPECKER.

Picus villosus,

LINNÆUS. GMELIN.

Picus—A bird that makes holes in trees, supposed to be the
Woodpecker. *Villosus*—Hairy.

I AM here also indebted to W. F. W. Bird, Esq., for a careful collection of the different accounts of this species as a British bird. Dr. Latham's is as follows:—'This has been met with in England, but I have only heard of two or three instances of the circumstance; one, in particular, communicated by the late Mr. Bolton, of Stannary, near Halifax, Yorkshire, of a pair being shot among the old trees in the park of Sir George Armitage, Baronet, at Kirklees Hall, where they no doubt had been bred, but the wood being cut down the succeeding winter, the rest forsook the ground, and could not be traced further. The above pair were presented to the late Duchess Dowager of Portland, in whose collection I saw them many years since. These birds answered to the general description in every particular, except in not having the red bar across the back of the head so complete, their being only a patch of that colour on each side of the head.' So also says Wilson.

In the 'British Cyclopædia,' vol. iii, page 447, it is observed, 'This is understood to be a discursive bird, at least to a considerable extent, for a specimen or two are reported to have made their appearance in England; and either it, or a species very similar, has been found in the eastern parts of Siberia. That an American Woodpecker should find its way to Siberia is by no means unlikely; coming to England, however, is a different matter.' The writer of the above does not seem to have calculated that though the difficulty may

have been great, for a Woodpecker to cross the Atlantic, yet ~~thus~~ having got, on his own shewing, to Siberia, this 'overland route' removes the said difficulty at once; and Whitby being on our north-east coast, is in favour of the supposition that this course may have been followed by the specimen presently to be spoken of, as well as by the other two previously met with in the same county.

This Woodpecker is common in North America, where it frequents orchards.

One of these birds, a female, was shot near Whitby, in Yorkshire, in the beginning of the year 1849, as recorded in the 'Zoologist,' pages 2496-2497, by Mr. Edmund Thomas Higgins, of York. Another was received from Worcestershire, about the year 1846, by W. F. W. Bird, Esq., which there seems no reason to doubt was killed in that county.

The motto of the midshipman on the mast, 'I aspire,' is in practice adopted by our present subject, as by all the rest of its genus; and doubtless it does often 'swarve the mainmast tree,' the very same 'tall pine' while growing yet in its native forest, which is afterwards to be 'toss'd on the stormy sea' in some goodly man-of-war or portly merchantman: upwards the bird toils in quest of the means to support him in life. The Hairy Woodpecker is by no means shy; frequently approaching the farm-house and the outskirts of the town, and pursuing its search for food in the trees, while people are constantly passing immediately below.

Its flight is described as 'consisting of alternate risings and sinkings.'

The food of this species consists of insects and their larvæ; and these it extracts from fissures in the bark, and holes in branches of trees.

The note 'is strong, shrill, and tremulous; they have also a single note or 'chuck,' which they often repeat in an eager manner as they hop about and dig into the crevices of the tree.'

Nidification begins in May, when a branch already hollow is pitched upon, or a fresh opening is made. 'In the former case,' says Wilson, 'I have known his nest more than five feet distant from the mouth of the hole; and, in the latter, he digs first horizontally, if in the body of the tree, six or eight inches, and then downwards, obtusely, for twice that distance; carrying up the chips with his bill, and scraping them out with his feet. They also not unfrequently choose

the orchard for breeding in, and even an old stake of the fence, which they excavate for this purpose.'

The eggs are white, five, or thereabouts, in number, and are laid in June.

Male; length, eight or nine inches; bill, bluish horn-colour, straight, grooved, and wedged at the end; from its base a white band passes under the eye, almost forming by a junction a ring round the back of the neck; beneath it is a black band; over the eye is a broad white band, and a black line runs through it, widening as it descends; tufts of bristles, or hair-like feathers, of a dull yellowish white colour, surround the base of the bill. Head on the crown, black, behind scarlet, sometimes with black intermixed; neck and nape, black; chin, throat, and breast, white; back, above and below, black, white on the middle; down its middle the feathers are loose, webbed, and of a hairy appearance.

The wings expand to the width of one foot three inches; greater and lesser wing coverts, black, each feather with two or three rounded white spots on the outer and inner webs; primaries and secondaries, black, slightly tinged with brown, with eight, (five on the former and three on the latter,) well-defined, rather elongated spots of white on the outer web, and rounded patches of white on the inner web, forming eight distinct bands; the third, fourth, fifth, and sixth feathers tipped on the outer web with white; shafts, black; the first feather is very short, the second two inches longer than the first, and one inch shorter than the third; third, fourth, fifth, and sixth feathers nearly of equal length, but the fourth and the fifth rather the longest in the wing. The tail, of ten feathers, has the four middle feathers black, stiff, and pointed, the next on each side black on the inner half, white on the outer, most of the latter on the outer web, two outer feathers on each side white, tipped with a brownish burnt colour; upper tail coverts, black or greyish black; under tail coverts, white. Legs, toes, and claws, blackish blue, the latter are very strong.

The female is black on the back of the head, and the white of the chin, throat, and breast is tinged with brown.

THREE-TOED WOODPECKER.

NORTHERN THREE-TOED WOODPECKER.

Picus tridactylus,
Apterus “
Picoides “

LINNÆUS.
 SWAINSON.
 LACEPEDE.

Picus—A bird that makes holes in trees, supposed to be the
 Woodpecker. *Tridactylus*—Three-fingered.

THIS species, as conveyed by its specific name, is without the hind toe. It is a native of the ‘far west,’ being very common in the northern parts of North America, from whence, by Kamtschatka, it spreads into the north-eastern parts of Europe—Siberia, Russia, Norway, Sweden, Lapland, especially in Dalecarlia, and is also found in the mountain gorges of Switzerland and the Tyrol, where it breeds, and occasionally in Germany and France. Temminck, however, considers that the American and European species are distinct.

The pine forests which fringe the lower sides and ravines of mountainous districts are the especial resort of this bird.

I insert this species on the authority of Donovan, vi, plate 143: Mr. G. R. Gray, in his ‘List of the British Birds in the British Museum,’ who gives the ‘North of Scotland’ as the place of its occurrence; ‘Stephens’ General Zoology;’ Edwards, and others; and the ‘Zoology List of Birds.’

These birds do not migrate, but in the severity of winter some make their way southwards, in America to the United States, and probably the like is the case in Europe.

No sooner has the Woodpecker toiled up to the summit that it has been seeking to reach, than it finds the prospect a barren one, and the most that it has gained has been a



THREE-TOED WOODPECKER.

temporary supply of necessary food; again it must begin, again, and again, and yet again. 'Telle est la vie.' How often! But I must not moralise, nor think that I am writing a sermon. I can, however, do better—recommend my readers to study the 'wisdom of Solomon,' and to profit by it.

Wilson says that this species is easily decoyed by imitating its voice.

Its food consists of insects and their eggs, caterpillars, and sometimes seeds and berries.

A hole in a pine tree is the favourite receptacle for the eggs of the Three-toed Woodpecker; and these, four or five in number, are of a brilliant whiteness.

Male; length, between nine and ten inches; the bill, which is remarkably broad and flattened along the basal part, is bluish grey above, whitish beneath at the base; the tip is obtuse—a white mark between it and the eye; iris, bluish black; from it a white line runs to the nape, where it spreads out; another proceeds in like manner under the eye, dilating sooner, and under it is a black one, which runs into the black of the back; thick and long blackish bristles, white at the base, and somewhat mixed with reddish white, are about the base of the bill. Forehead, glossy black, with purple and greenish reflections, as have all the black parts of the plumage, and thickly spotted with white; head on the sides, black, and the rest black, except the crown, which is pale yellow, faintly tinged with orange, with white specks shining through, and spotted around as the forehead, which perhaps disappear with age; neck behind, and nape, black, as described above; chin and throat, white; breast, white, thickly waved and barred on the sides with black; in very old birds the white prevails; back, black; the feathers on the middle part are downy, and barred with white.

The wings, which expand to the width of one foot four inches, reach to two thirds the length of the tail; greater wing coverts, dull black, in some specimens a little spotted with white; lesser wing coverts, glossy black; primaries, dull black, tipped with white, (so at least says Swainson, but Wilson says that none of the quill feathers are tipped with white,) and spotted with white square spots on their margins, larger on the inner webs and as they approach the base; the first is the longest, and hardly longer than the seventh; the four following ones are subequal and longest; secondaries, dull black, some of them tipped with white; the inner web only is spotted, the spots

taking the appearance of bands; tertiaries, dull black; larger and lesser under wing coverts, white, barred with black. The tail, of twelve feathers, has the four middle feathers brownish black, and acute; the next on each side also acute, black at the base, yellowish white at the end, obliquely and irregularly tipped with black; the two next are yellowish white at the tip, banded with black on the inner web at the base, the outer one of the two being somewhat rounded, and having the white purer; the outermost one short and rounded, and banded throughout with black and pure white; upper tail coverts, in some specimens spotted a little with white; under tail coverts, white, except at the base, where they partake of the black waves of the breast. Legs, lead-coloured, feathered in front for nearly half their length, the feathers white, slightly barred with black; toes, lead-coloured; claws, lead-coloured, much curved, and acute.

The female is less than the male; head, on the sides and back, glossy greenish black; she wants the yellow on the crown, the top of the head being thickly spotted with white, or, as described by Gould, white, interspersed with five black bars. In other respects the female exactly resembles the male.

In the young the bands on the side of the head are obscure and narrower; the feathers of the crown are tipped with white, constituting thick dots on that part, to which they give a silvery appearance; the yellow of the crown is gradually assumed by the young male, being at first of a pale lemon-colour, through which white dots are for some time seen; these are very conspicuous in the female at first, without any yellow, but she loses them entirely when adult; the neck on the back is more or less varied with white. The breast is more thickly waved with black; the back is banded with white, which gives to that part a waved appearance. The tail has six feathers almost wholly black, and the outer ones have only two or three whitish spots on the outer web.



GREAT SPOTTED CUCKOO.

GREAT SPOTTED CUCKOO

Cuculus glandarius,

LATHAM. GOULD.

Cuculus—A term of reproach.*Glandarius*—Of or belonging to acorns.

THE northern and western coasts of Africa are the native regions of this species, and it also occasionally dwells in the southern parts of Europe bordering on the Mediterranean—Spain, France, and Italy; it has been met with also in Germany.

One specimen has occurred in Ireland, apparently fatigued, as if after a long flight: whence it had flown, is indeed, as Aristophanes says, 'hard to say.' It was observed, pursued by Hawks, on the Island of Omagh, and having taken refuge in a hole in a stone wall, was captured by two persons who were walking there. It was fed and kept alive for four days. The month of March, in the year 1842, is said to have been the time of its occurrence. It was subsequently obtained by Mr. Ball, for the museum of Trinity College, Dublin, where it is now preserved.

Male; length, one foot three inches and a half; bill, bluish black; iris, yellow; a crest of considerable length proceeds from the top and back of the head; head on the front and sides, dark ash-colour; throat and breast, light reddish white; back, greyish black. Greater and lesser wing coverts, greyish black; primaries, the fourth is the longest in the wing; greater and lesser under wing coverts, white; the tail has the middle feathers eight inches long, the outer one but four inches and three quarters; the two centre feathers are brown, the outer ones darker, but all tipped with white; upper tail coverts, greyish black; under tail coverts, white; legs, toes, and claws, bluish black.

In the young the head and crest are darker-coloured; the throat and upper part of the breast light reddish brown; the back more inclining to reddish brown, with slight reflections of green; primaries, rufous, tinged with greenish brown towards the points, which are pure white.



YELLOW-BILLED CUCKOO.

YELLOW-BILLED CUCKOO

AMERICAN YELLOW-BILLED CUCKOO. VIRGINIAN
 CUCKOO. CAROLINA CUCKOO. COW-BIRD. RAIN-CROW.

Cuculus Americanus,
Coccyzus Americanus,
Cuculus cinerosus,
 " *Carolinensis*,
Erythrophrys Americanus,

LINNÆUS.
 LINNÆUS. JENYNS.
 TEMMINCK.
 WILSON.
 SWAINSON.

Cuculus—A term of reproach.

Americanus—American.

THE American Cuckoo, as its name imports, is a native of that continent, that is to say of the northern division of it, where it is a common bird.

In this country four examples have occurred. One was shot in Cornwall; another in Wales, in the autumn of 1832, on the estate of Lord Cawdor. One near Youghall, in the county of Cork, in the autumn of 1825; and another at Old Connaught, near Bray, in the county of Wicklow, also in the autumn of 1832.

The American Cuckoo frequents the retired glades and deep hollows of lonely woods, the borders of solitary swamps, and also orchards.

The Yellow-billed Cuckoo is a migratory bird, arriving from the more southern parts in the more northern about the 22nd. of April, from whence it returns in the autumn.

It is a shy and solitary species. The female is remarkably attentive to her nest, and when roused feigns lameness, after the manner of several other birds, fluttering and trailing her wings to endeavour to decoy any stranger from the spot. The male keeps watch within view, and gives an alarm by his note of the approach of any danger.

Its food consists of insects and caterpillars, as also berries, and it occasionally destroys the eggs of other birds. With the former-named the young are also fed, and both birds unite in the task of providing for them.

The note, resembling the syllables 'kove, kove, kove, kove,' is uttered first slowly, and then faster until it ends so rapidly that the notes seem to run into one another, and it is also repeated backwards with a relative change of time. It appears to have some imitative powers of voice; and hence Wilson imagines its name of Cow-bird to be derived; but it occurs to me as possible that its note, just described, may have been the origin of it. The name of Rain-bird has also, he says, been applied to it from its being observed to be most clamorous immediately before rain.

The nest is commenced about the end of the first week in May.

This species of Cuckoo does build a nest for itself, though of rude construction, and nearly flat. It is placed on the branch of a tree, and is made of small sticks and twigs, intermixed with weeds and blossoms. Meyer says that it is made of roots and wool.

The eggs, three, four, or five, generally four in number, are of a uniform greenish blue colour, and of a duly proportionate size. As if, however, every kind of Cuckoo must have something peculiar about it, the one before us does not begin to hatch its eggs when all have been laid, but commences at once with the first, the necessary consequence of which is that each successive egg is hatched later than its predecessor; and thus the family of Cuckoos exhibit various stages of advancement while yet in the nest. The 'rationale' of this is assuredly not as yet 'dreamt of in our philosophy.'

Male; length, one foot to one foot one inch; bill, rather long, and a little curved, black at the tip above and below; the remainder of the lower part is yellow, and of the upper black, edged with yellow at the base; iris, hazel, but Meyer says yellow, feathered close to the eyelid, which is yellow. Head, crown, neck, which on the sides is white, behind, and nape, cinereous brown, with a tinge of olive; chin, throat, and breast, greyish white; back, as the head and nape. The wings expand to the width of one foot four inches; the first quill feather is more than an inch shorter than the second, the second shorter than the third or fourth, but equal to the fifth; the third longer than the fourth, and the longest in

the wing; greater and lesser wing coverts, bright rufous; primaries, bright rufous. The tail, of ten feathers, has the two middle feathers cinereous brown, with a slight tinge of olive; the others black, with a broad white space at the end of each of the three outermost; the fourth just tipped with white; the two outer feathers are scarcely half the length of the middle ones; the others gradually shorten to them. The legs, of a light blue colour, black, according to Meyer, are covered on the upper part with large feathers; the toes, two placed behind and two before, are also light blue.

The female closely resembles the male. The four middle tail feathers are cinereous brown, tinged with olive, with a greenish reflection; and the white on the breast is more dull than in the male bird.

CUCKOO.

COMMON CUCKOO. GOWK.

COG, OF THE ANCIENT BRITISH.

Cuculus canorus,
 “ *hepaticus*,
 ‘ *canorus rufus*,

LINNÆUS. MONTAGU.
 LATHAM.
 GMELIN. LATHAM.

Cuculus—A term of reproach.

Canorus—Musical.

‘A HORSE, a norse, my kingdom for a horse!’ cried Richard at Bosworth field; and much would the author of the ‘History of British Birds,’ give for more discursive opportunities when he has arrived at so wide a field as the mysterious Cuckoo opens out.

Pleasant is every thought associated with the ‘Cuckoo’s time o’ coming:’ two opinions there will not be about this.

The Common Cuckoo is found throughout the whole of the European continent—in the north, in Denmark, Sweden, Norway, Lapland, and Siberia; and in the south, in Greece and its Archipelago, and Italy. In Asia, it is found in Japan, Java, Kamtschatka, Asia Minor, India, and many other parts. In Africa also, in Egypt, and, according to Temminck, in the south of that continent.

In our own country it occurs in every county of England, Ireland, Wales, and Scotland; and in the Orkney Islands the Cuckoo is frequently heard. A few breed every season in retired parts of Hoy and Waas: two were killed in Sanday, by Mr. Strang, in September, 1827.

A Cuckoo in the plumage of the first year was killed at Letton, in Norfolk, on the 5th. of May, as recorded by John



Henry Gurney, and William Richard Fisher, Esqrs., in their account of the Birds found in that county.

The general appearance of the Cuckoo is strikingly like that of the female Sparrow-Hawk. It frequents localities of the most opposite description—the dreary fen, the wild heath of the open treeless moor, as well as those in which brushwood abounds, and the well-wooded hedge-rows of the best cultivated districts.

It need hardly be mentioned that the Cuckoo is a migratory bird: 'in April come he will,' and that about the middle of the month—generally on the 17th.; it has been heard on the 15th.; once on the 13th., as mentioned by Mr. Thompson, of Belfast, but frequently not until one or other of the days between these dates and the 30th. One was both heard and seen at Malvern, in Worcestershire, a neighbourhood which has been noticed as more than ordinarily abounding in these birds, on the 12th. of January, 1851, as recorded by F. R. Gibbes, Esq., of Northallerton, in 'The Naturalist,' page 43; and on the 14th. of April, also in the present year, two were seen by J. O. Harper, Esq., of Norwich, as recorded in 'The Naturalist,' page 162. One of them was heard at the same time, and the other was shot, and proved to have been carrying its egg in its bill. The males arrive a day or two before the females; and the old birds leave the country in the autumn before the young ones. The general time for the former to depart is in the end of July or beginning of August; but it would appear as if, though they commence their outward-bound movement from north to south, about this time, that they do not finally quit the land until rather later.

An adult Cuckoo was shot near Thirsk, Yorkshire, by Mr. Johnstone, son of the Rev. Charles Johnstone, Canon of York, on the 14th. of August, in the present year, 1851; and another old one near Leeds, on the 24th. of July, also in this year, by Mr. Bond, of that place. Another has been seen on the 31st. of July. The young birds do not leave before September; and have been known in Cornwall until October, and likewise in Oxfordshire, by the Revs. Andrew and Henry Matthews, who also record in their 'Catalogue of the Birds of Oxfordshire and its Neighbourhood,' that 'on the 23rd. and 24th. of September, 1848, a Cuckoo was heard singing in the early part of the morning:' another was heard near Belfast, on the 7th. of July, 1838; and another by Mr. W. H. White, on the 28th. of July, as recorded in the 'Magazine of Natural History,'

vol. iv, page 184: this bird was seen for some days afterwards. Again, in 'Graves' British Ornithology,' the author records that he saw two Cuckoos, on the 26th. and 27th. of August, and heard the former one uttering its well-known note. He too says, that he has known them in October also. On the 14th. of October, 1848, one is mentioned by Martin Curtler, Esq., of Bevere House, near Worcester, as having been shot close to that city; but it must probably have been a young bird. Two young ones were shot in a garden near Tralee, in the county of Kerry, on the 5th. of October.

Occasionally at the time of their departure, considerable numbers of Cuckoos have been seen collected together—sixteen were seen flying in company from the north-east end of the Grampian hills, in Scotland, towards the German Ocean, distant about half a mile. Bishop Stanley relates that a gentleman living on the Cheshire side of the Mersey, opposite to Liverpool, was awoke one morning early in the spring—the time of their arrival, by a chattering noise, with an occasional 'cuckoo,' in a low plantation near his house, which he found to proceed from a pretty large flock of these birds, which at sunrise, or soon after, took flight: three or four, or more, are not unfrequently seen together. In the county of Down, in Ireland, from the 18th. to the 22nd. of July, not less than forty were once observed feeding on the caterpillars that infest gooseberry trees.

In several instances the Cuckoo has been kept, great care being used, through the winter, until the following spring; one for nearly two years, and it was then only killed by accident; and Buffon says, 'Though cunning and solitary, the Cuckoo may be given some sort of education: several persons of my acquaintance have reared and tamed them. One of these tame Cuckoos knew his master, came at his call, followed him to the chase, perched on his gun, and if it found a cherry tree in its way, it would fly to it, and not return until it had eaten plentifully; sometimes it would not return to its master for a whole day, but followed him at a distance, flying from tree to tree. In the house it might range at will, and passed the night on the roost.'

Not only is the Cuckoo when come to maturity, a bird of marvel, but even from the very first, the chapter of its strange proceedings commences.—The instinctive propensity of the young one to turn out of the nest, by forcible ejection, any other occupants, its lawful tenants by right of primo-

geniture who may have been preserved from previous expulsion, is well known. 'Two Cuckoos and a Hedge-Sparrow,' says Dr. Jenner, in his account of this strange bird, published in the 'Transactions of the Royal Society,' for the year 1788, 'were hatched in the same nest, this morning, (June 27th., 1787:) one Hedge-Sparrow's egg remained unhatched. In a few hours after a contest began between the Cuckoos for the possession of the nest, which continued undetermined till the next afternoon; when one of them, which was somewhat superior in size, turned out the other, together with the young Hedge-Sparrow and the unhatched egg. This contest was very remarkable—the combatants alternately appeared to have the advantage, as each carried the other several times nearly to the top of the nest, and then sank down again, oppressed by the weight of its burden; till at length, after various efforts, the strongest prevailed, and was afterwards brought up by the Hedge-Sparrows.'

In some instances, as for example where the nest is built on the ground, and especially if in a hollow, it may be impossible for the young Cuckoo to turn out his companion or companions, and in one such case four young Wagtails were found lying dead beneath the usurper of their abode. Other birds who have young in the vicinity, display great apparent repugnance to the young Cuckoo. On the other hand there is an instance of an exactly opposite character, related in the 'Magazine of Natural History,' vol. vi, page 83, by Mr. Ensor. In the neighbourhood of Ardress, the son of a tenant found a Cuckoo in the nest of a Titlark. 'He brought it home, and fed it. In a few days, two Wrens, which had a nest with eight eggs, in the eaves, and just above the window fronting the cage in which the Cuckoo was placed, made their way through a broken pane, and continued to feed it for some time. The cage was small, and the boy preferring a Thrush to the Cuckoo, took it away, to give greater room to the Thrush. On this the Wrens repaired to their own nest, and brought out the eggs that had been laid.'

Bishop Stanley relates the two following somewhat similar incidents:—'A young Cuckoo was taken from the nest of a Hedge-Sparrow, and in a few days afterwards, a young Thrush, scarcely fledged, was put into the same cage. The latter could feed itself, but the Cuckoo, its companion, was obliged to be fed with a quill; in a short time, however, the Thrush took upon itself the task of feeding its fellow-prisoner, and

continued so to do with the utmost care, bestowing every possible attention, and manifesting the greatest anxiety to satisfy its continual craving for food.

The following is a still more extraordinary instance, corroborating the above, and for the truth of which we can vouch in every particular—'A young Thrush, just able to feed itself, had been placed in a cage; a short time afterwards, a young Cuckoo, which could not feed itself, was introduced into the same cage, a large wicker one, and for some time it was with much difficulty fed; at length, however, it was observed that the young Thrush was employed in feeding it, the Cuckoo opening its mouth and sitting on the upper perch, and making the Thrush hop down to fetch food up. One day, when it was thus expecting its food in this way, the Thrush seeing a worm put into the cage could not resist the temptation of eating it, upon which the Cuckoo immediately descended from its perch, and attacking the Thrush, literally tore one of its eyes quite out, and then hopped back: the poor Thrush felt itself obliged to take up some food in the lacerated state it was in. The eye healed in course of time, and the Thrush continued its occupation as before, till the Cuckoo was full grown.'

Mr. Jesse too, in his 'Gleanings in Natural History,' relates the following circumstance as having occurred at Arbury, in Warwickshire, the seat of Francis Newdigate, Esq., the account having been written down at the time by a lady who witnessed it:—'In the early part of the summer of 1828, a Cuckoo, having previously turned out the eggs from a Water-Wagtail's nest, which was built in a small hole in a garden wall at Arbury, deposited her own egg in their place. When the egg was hatched, the young intruder was fed by the Water-Wagtails, till he became too bulky for his confined and narrow quarters, and in a fidgetty fit he fell to the ground. In this predicament he was found by the gardener, who picked him up, and put him into a wire cage, which was placed on the top of the wall, not far from the place of his birth. Here it was expected that the Wagtails would have followed there supposititious offspring with food, to support it in its imprisonment; a mode of proceeding which would have had nothing very uncommon to recommend it to notice. But the odd part of the story is, that the bird which hatched the Cuckoo never came near it; but her place was supplied by a Hedge-Sparrow, who performed her part

diligently and punctually, by bringing food at very short intervals from morning till evening, till its uncouth foster-child grew large, and became full-feathered, when it was suffered to escape, and was seen no more. It may possibly be suggested that a mistake has been made with regard to the sort of bird which hatched the Cuckoo, and the same bird which fed it, namely, the Hedge-Sparrow, hatched the egg. If this had been the case, there would have been nothing extraordinary in the circumstance; but the Wagtail was too often seen on her nest, both before the egg was hatched, and afterwards, feeding the young bird, to leave room for any scepticism on that point; and the Sparrow was seen feeding it in the cage afterwards by many members of the family daily.'

In 'The Naturalist,' old series, No. 16, page 7, Mr. W. H. Benschel relates an instance of two Wagtails feeding a young Cuckoo, which had been taken from their nest; and on its being placed in a hive, where they could visit it, 'delight and joy really appeared in all their actions. They rushed to and fro in the air, flying about the hive, and hovering near it.' At the same time, on seeing the Cuckoo, Swallows gave their note of alarm, and their young flew off; a Wren approached, and shewed some signs of curiosity; and a Robin, who seemed disposed for hostilities, was attacked and driven off by the Wagtails.

Again, 'It is wonderful,' says Dr. Jenner, 'to see the extraordinary exertions of the young Cuckoo, when it is two or three days old, if a bird be put into the nest with it that is too weighty for it to lift out. In this state it seems ever restless and uneasy. But this disposition for turning out its companions begins to decline from the time it is two or three, till it is about twelve days old, when, as far as I have hitherto seen, it ceases. Indeed, the disposition for throwing out the egg appears to cease a few days sooner; for I have frequently seen the young Cuckoo, after it had been hatched nine or ten days, remove a nestling that had been placed in the nest with it, when it suffered an egg, put there at the same time, to remain unmolested. The singularity of its shape is well adapted to these purposes; for, different from other newly-hatched birds, its back, from the shoulders downwards, is very broad, with a considerable depression in the middle. This depression seems formed by nature for the design of giving a more secure lodgment to

an egg, or a young bird, when the young Cuckoo is employed in removing either of them from the nest. When it is about twelve days old, this cavity is quite filled up; and then the back assumes the shape of nestling birds in general.'

The young Cuckoo is for the most part hatched before the eggs of its foster-parent, if any have been left to be incubated; and in the latter case it loses no time in asserting its usurped rights, but generally on the very day it is hatched, its might takes the place of right, and one by one the true-born birds are thrown out, to be killed by the fall, or by any other mishap that may befall them. If it should happen that one or more of the little birds should be, by some means or other, preserved in the nest, their parent feeds them and the interloper with the like attention; making it to appear that she cannot discriminate between them. 'Tros Tyriusve' share equally her maternal care; and this even after leaving the nest, both on the ground and in trees. A Robin has been known so devoted in its attention that it came to feed out of a person's hand to obtain sufficient food for its adopted child. One instance is mentioned in the 'Zoologist,' page 1637, by Mr. J. W. Slater, of Manchester, as having been witnessed by Mr. Beech, of Droylsden, in which the young birds of a Meadow Pipit having been found on the ground outside the nest in which was a young Cuckoo, and having been replaced to see what would happen, the parent birds, on their return, 'immediately threw out their own offspring, to make room for the parasite.' They do the same with their own eggs if replaced.

As before hinted, the adult Cuckoo occasionally herself destroys, by throwing out, one or more of the eggs of the bird into whose nest she surreptitiously introduces her own. But how does she introduce them? Here again is another singularity! It is perfectly certain that in some instances she conveys them in her bill into the other birds' nests—it has been already mentioned that one was shot with her egg actually in her bill—Spurzheim says he has seen one carrying it in her feet. Mr. Williamson, the curator of the Scarborough Museum, found the egg of one in a nest which was placed so close under a hedge, that the Cuckoo could not possibly have got into it! and T. Wolley, Esq. records another similar instance, communicated to him by Mr. Bartlett, of Little Russell Street, London, in which he found one in the nest of a Robin, which was placed in so small a hole that

the same mode must have been resorted to. So again, Dr. Jenner has related an instance in which the egg was placed in the nest of a Wagtail, built under the eaves of a cottage. The like proceeding must have been adopted in all cases where the Wren's nest, which is a covered one, has been made use of; and in fact, excepting in such as that of the Lark, which is built on the open ground, most of the nests in which the Cuckoo lays, are built in such thick and tangled parts of hedges, that it is next to impossible for so large a bird as the Cuckoo to approach them bodily. R. A. Julian, Esq., Junior, records in 'The Naturalist,' page 162, that F. Barlow, Esq., of Cambridge, found a Cuckoo's egg in a Redstart's nest, in a hole in an old willow tree, which he had great difficulty in getting out, the aperture being only about an inch wide. The Cuckoo has been seen removing the egg of a small bird from a nest, in which she had just placed her own changeling, by the same mode by which in cases where she could not otherwise, if not in all, she introduces her own, namely, in her bill. Cuckoos do not pair, but are polygamous, the reason of which has been suggested to be that parental care is not required for the young. They are bold and fierce birds, and ruffle up their feathers in displeasure at an early age.

The flight of the Cuckoo is steady and straight forward. At times he may be seen perched upon a rail, branch, or eminence, swinging himself round with outspread tail, and uttering his note the while in an odd and observable manner.

The food of the Cuckoo, generally procured in bushes or trees, but sometimes on the ground, consists of insects, spiders, and caterpillars; and White of Selborne says seeds, but they may have been accidentally swallowed with the insects. There seems some slight reason for supposing that the Cuckoo will eat the eggs of other birds, possibly those which she takes out to make room for her own; and one instance is mentioned by Bishop Stanley, in his 'Familiar History of British Birds,' in which the flock of Cuckoos, observed in the county of Down, devoured, or at least pulled in pieces the greater part of a late brood of young Blackbirds in the nest. The Cuckoo's food being insects, it is guided, one should say by instinct, but that its instinct is, as will appear, by no means unerring in this respect, to lay its egg generally in the nest of an insectivorous bird, for the most part in that of a Robin, or a Dunnock. It does not, however, invariably do so, the egg

having been found, as hereafter mentioned, in the nest of a Greenfinch, a Linnet, and a Chaffinch. It is, however, on the other hand, very remarkable that such birds as these latter will very often, though not always, in such case, feed the young Cuckoo with insects; their own most natural food being grain, and with which latter, when prepared in their own craw, they feed their own young. Even a Canary, in whose cage a young Cuckoo was lodged, fed it with caterpillars placed there for the purpose, instead of with the seed on which she herself was always accustomed to feed. At times, however, birds of the Finch tribe, at whose door these unwelcome foundlings have been dropped, supply them with young wheat, vetches, tender blades of grass, and seeds of different kinds.

The small bird has been known even to follow its foster-child into a cage, and to feed it there, as well as in other instances to attend upon it outside the cage. William Reynolds, Esq., of Walton, near Glastonbury, Somersetshire, has written me word of an instance of this in the case of a Robin; and of another which fed her charge within thirty feet of a constant thoroughfare. The aperture to the nest was only three inches and a half wide, and when the young Cuckoo found himself becoming rather straitened in his circumstances, he worked himself out, and fell down, which led to his discovery and capture; but when able to fly he was restored to liberty.

Again, it is a fact worthy of being remarked in connexion with the above, though militating strangely against the general theory to be deduced from it, that small birds will very frequently, perhaps as frequently as they suffer the Cuckoo's egg to remain in their nest, turn it out. If then they have this antipathy, certainly no unreasonable one, against the unwarrantable intrusion, how are they influenced to their more than ordinary and even, so to speak, unnatural care of their supposititious foster-children?

The Cuckoo drinks frequently. They may often be seen pursued, or rather followed by small birds, especially by Tit-larks, which can hardly be wondered at after the facts here mentioned, which may also well leave it in doubt whether it be in hostility, or a kind of stupid and wondering admiration. Swifts join in the pursuit, though the Cuckoo does not lay her egg in their nests: their migration is too early for her young.

The food of the young Cuckoo consists of caterpillars, small

snails, grasshoppers, flies, and beetles, but in either case, whether it be their natural, or rather their unnatural parents, or their foster-parents that purvey for them, they are insatiable in their cravings for food, and their continual cry, like Oliver Twist, is for 'more! more!' Equally earnest is the foster-parent in providing for their wants: one has been seen to alight on the back of the intruder who filled her nest, the better to supply it with food.

But, though the Cuckoo entrusts her offspring in the unaccountable and extraordinary way that she does to the fostering care of an alien species, she does not altogether lose sight of it, but keeps in the neighbourhood, and, it may be, even takes it in some degree under her own protection after it has left the nest. This observation has just been corroborated to me by G. Grantham, Esq., and certain it is that in some places, probably the same where her egg has been deposited, you will hear the note of one or the other of the parents from day to day for a considerable time. Nay, more than this, it has been indisputably established that the Cuckoo, doubtless the female will, on occasion it may be, but certainly occasionally, feed her own young. This interesting fact was witnessed in the past year, 1850, by J. Mc'Intosh, Esq., of Charminster, Dorsetshire, who was so obliging as to communicate it to me in the first instance, and has since published a notice of it in the pages of 'The Naturalist' Magazine. In the instance he mentions, a Cuckoo laid her egg in the nest of a Dunnock, in which the latter subsequently laid four eggs. The young birds hatched from these were dislodged soon after their birth, and simultaneously their parent disappeared also—a victim perhaps to grief, the gun of some fowler, or the talons of a cat. The want then of her care may have been the cause of the Cuckoo from thenceforth looking after her own young one, over whom she must in such case have been keeping some watch; and the like may have been the cause in some of the other similar instances, which have indubitably occurred. Mr. Mc'Intosh distinctly saw the parent Cuckoo in question feed its young one, from day to day, with the greatest care and attention, with caterpillars; for which it flew over the wall into the adjoining garden, in which they were abundantly to be procured. The indigestible part of the food of the Cuckoo is cast up, as in the case of the Hawks, in pellets.

Mr. William Kidd, of Hammersmith, relates the following:—
—'A few years since, the sight of a Redbreast feeding a

young Cuckoo, assisted by the old Cuckoo, was witnessed by a most truthful and worthy ornithologist, a friend of mine, now no more. His animated countenance is even now before me, whilst relating minutely, and with intense interest, the singular and ridiculous disparity observable between the natural and the putative parent.' He adds, 'nor is this by any means a solitary instance of the natural affection of the Cuckoo.' Mr. Blyth, too, says 'it is certain that the maternal feelings of the Cuckoo are not quenched: astonishing as this may appear, Mr. John E. Gray, of the British Museum, informs me that he has himself seen a Cuckoo, day after day, visit the nest where one of its offspring was being reared, and which it finally enticed away from its foster-parents. I had previously heard of analogous cases.'

Again, in the 'History of the Birds of Melbourne,' in Derbyshire, given by J. J. Briggs, Esq., in the 'Zoologist,' he writes, 'I believe that, although confiding her young to the care of other birds, the Cuckoo does not entirely forget them. I am strengthened in this opinion by a fact which fell under my notice in June, 1849. As I was walking over a particular part of this parish, with a dog, I was struck with the remarkable actions of a Cuckoo. It came flying about me within a hundred yards, seeming agitated and alarmed, and occasionally struck down at the dog in the same manner as the Lapwing does. It immediately occurred to me that the bird had young near, and that these actions were the result of maternal solicitude. I examined the neighbouring hedge-rows in order to find the nest, but without avail. The next day a neighbouring farmer told me that he had something to shew me, which proved to be a young Cuckoo in the nest of a Hedge-Sparrow, and the place where the nest was situated was but a very short distance from the spot where the old Cuckoo had attracted my attention in the manner described.'

I must here observe that the statement of Mr. Mc'Intosh is strongly confirmed by the statement of the Rev. Mr. Stafford, communicated by Pennant to the Hon. Daines Barrington, and recorded by Derham in a manuscript paper on Instinct. Walking in Glossop Dale, in the Peak of Derbyshire, he disturbed a Cuckoo from a nest in which were two young ones, 'and very frequently, for many days, beheld the old Cuckoo feed there her young ones.' Probably only one of them was her own veritable offspring, and it is equally probable that she did not know which was which. Certain it is that

such a statement as this of a fact, repeatedly witnessed, cannot be lightly received by an impartial and unwarped judgment. But it is further corroborated by another recorded instance. The Rev. Mr. Wilmot, of Morley, near Derby, wrote Dr. Darwin word of the occurrence of a similar fact:—In the month of July, 1792, he was attending some labourers on a farm, when one of them told him that he had observed a bird ‘exactly like a Cuckoo’ sitting upon a nest. This it must be observed is a third evidence, all three deponents being perfectly unprejudiced and unbiassed. The Rev. Mr. Wilmot proceeds:—‘He took me to the spot; it was in an open fallow ground. The bird was upon the nest; I stood and observed her some time, and was perfectly satisfied it was a Cuckoo....In the nest....I observed three eggs. As I had labourers constantly at work in that field, I went thither every day, and always looked if the bird was there, but did not disturb it for seven or eight days, when I was tempted to drive it from the nest; and found two young ones that appeared to have been hatched for some days, but there was no appearance of the third egg.’ This circumstance also, is in some degree confirmatory. The other egg may have been that of the original framer of the nest, for we need not suppose with Dr. Fleming, from the previous instance, that the Cuckoo sometimes makes a nest for herself. ‘I then mentioned this extraordinary circumstance, for such I thought it, to Mr. and Mrs. Holyoake, of Bidford Grange, Warwickshire, and to Miss M. Willes, who were on a visit at my house, and who all went to see it.’—Three more witnesses let it be observed. ‘Very lately I reminded Mr. Holyoake of it, who told me he had a perfect recollection of the whole, and that considering it a curiosity, he walked to look at it several times, and was perfectly satisfied as to its being a Cuckoo.’

The note of the Cuckoo, uttered both when flying and perched in trees, is expressed by its name. It is often however, varied from the plain ‘cuckoo,’ to a quicker ‘cuckoo; cuckoo; cuc-cuc-koo.’ Both the male and female birds utter it, but the latter, it may be, only seldom; though I am inclined to think that it is equally common to both. They have besides another soft note, rendered by the syllables ‘cuie. ule,’ uttered rapidly, and continually repeated several times; another exclamation of anger, and another more like the bark of a little dog: the young bird has a plaintive chirp. The

female, as I imagine it to be, has also a very different note, which I can best liken, so at least I did most carefully some years ago, when I heard it, to the words 'witchet-witchet-watchet.' This note, preceded immediately by the ordinary 'cuckoo,' I heard myself most distinctly uttered from the throat of one and the same individual bird, flying only a few yards from me, over an open field, so that there could be no possibility of any mistake; and this undoubted fact may possibly suffice to set at rest the unfounded supposition that the female Cuckoo does not cry 'cuckoo;' for I have not yet heard it theorized that the male bird utters the note in question, which has been described as a 'harsh chatter.' The Italian proverb says, 'i fatti sono maschii, le parole femine'—'Facts are masculine, talk is feminine:' one is worth a hundred baseless fancies.

That both the male and female utter the word 'cuckoo,' is also thought by Mr. Yarrell, and most decidedly maintained by Mr. Blyth, who gives in the 'Magazine of Natural History,' vol. viii, page 329, one unquestionable instance of a female having been shot while in the act of repeating the well-known note. The Cuckoo has been heard singing its song at night, near Ryde, in the Isle of Wight, by T. Bell Salter, Esq., at nine, ten, and eleven o'clock; and on one occasion it was continued, as he was informed, till two o'clock in the morning. Another has been heard to commence its song at a quarter-past two; and another at half-past three. At times, and especially, it is said, in warm weather, it sings all through the night, even though there be no moon. A young Cuckoo has been known to repeat the note of a Titlark, by whom it had been so far educated. The note of the Cuckoo, like that of other great vocalists, is much affected by the weather; in times of drought it becomes hoarse, but is mollified again by the summer shower.

At this stage of the account of the Cuckoo, its nidification should be described; but, as is so well known, there is none to describe. It deposits its parasitical eggs in the nest of some other small bird, for which they are not too large, being singularly small in proportion to its own size—just one-quarter what they should be in proportion to those of small birds than which they are themselves four times larger. If the Cuckoo's egg were larger than it is, it would require to be laid in a larger nest, with the natural possessors of which, the young one, as Mr. Selby points out, would be, or might

be unable successfully, to cope. And first, to mention the different species of birds with whose domestic arrangements it so unscrupulously makes free. The following have been already ascertained, and doubtless there are others to be added to the list, or, even if not, there would be, did the parent Cuckoo stand in need of such, failing those about to be enumerated. These are the Dunnock, commonly called the Hedge-Sparrow, the Robin, the Titlark, the Pied Wagtail, the Redstart, the Whitethroat, the Willow Warbler, the Rock Lark, the Sky Lark, the Reed Warbler, the Reed Bunting, the Sedge Warbler, the Willow Wren, the Yellow-Hammer, the Blackbird, the Wren, the Thristle, the Whinchat, the Greenfinch, the Grasshopper Warbler, the Chaffinch, and the Red-backed Shrike.

Some say that the Cuckoo deposits her egg before the other bird has laid hers, in some instances, and in others afterwards; but in the former case the deceived little bird goes on to lay hers, in happy ignorance of the fate that awaits their embryo contents when hatched. It is, I think, quite an erroneous supposition that the Cuckoo ever meets with any delay in finding a nest suitable for her to lay her egg in. At the time when she does lay, birds' nests of all the common species are abundant in every hedge, and there is no more difficulty in her finding one than another. It has been imagined that she lays her eggs later in the day than other birds; and this possibly may prove to be the case.

Mr. Blyth, alluding to the supposition that the egg of the Cuckoo is already partially advanced towards maturity before being laid, thinks that it is somewhat confirmed by its being, as he argues, impossible for the Cuckoo to lay her egg in the nest of a bird which has already begun to sit; but this is quite inconclusive, for not only do birds sit more or less from the very first, as for instance while laying the second and following eggs, at any of which periods the difficulty he imagines would be equally in existence, and the Cuckoo could not tell how soon it would be removed, nor could she wait to see; but it must also be remembered that occasionally the bird leaves her eggs for a short time, even after she has begun to sit, which opportunity the Cuckoo might avail herself of; doubtless also her approach, so manifestly a cause of alarm to small birds, as proved by the way in which the latter pursue the former on the wing, might and would have the effect—perhaps the desired and intended effect, of driving off

the bird from the nest, that the Cuckoo might, for the time, and for her own ends, usurp her place.

It seems that in most cases where the eggs of small birds are found in nests which contain those of the Cuckoo, the former have been laid after the latter, and in addition, often, to others previously thrown out by the Cuckoo. In one instance six young Titlarks were found in a nest with a young Cuckoo. It appears that the Cuckoo lays her own egg before removing any already in the nest; and her being disturbed in the eviction, may be the cause of the other eggs being sometimes found with hers; for more than once a small bird has been observed resolutely attacking and successfully repelling a Cuckoo from her nest. If there be no egg in the nest at the time that the Cuckoo lays hers, it is asserted that the other bird will turn the Cuckoo's egg out, though she will not if the Cuckoo have removed one or more that have been in it.

The eggs are not laid until the middle of May, and they require about a fortnight's incubation. Montagu found one so late as the 26th. of June; and Mr. Jesse records that a young Cuckoo which had only just left the nest of a Wagtail, was found in Hampton Court Park, on the 18th. of August, 1832. The young birds are not able to fly in less than five or six weeks.

Occasionally two Cuckoos' eggs are found in one and the same nest; but they are supposed to be those of different birds. It is thought, however, that the Cuckoo lays more than one egg in different nests, and probably more than two, at intervals, in the season—Bewick says from four to six; but I think it must have been a guess; Blumenbach also says six. Mr. M. Capper, of Shirley, informs me that he found on Shirley Common, in the nest of a Meadow Pipit, two Cuckoos' eggs, of dissimilar colouring and size, and therefore probably deposited by two different birds. Lighter-coloured varieties occur.

Male; weight, about four ounces and a half; length, one foot one inch and a half to one foot two inches; bill, black, or blackish brown, and slightly bent, yellowish at the base of the lower one; inside it is red; iris, yellow; head, crown, neck behind, and nape, dark ash-colour; chin, throat, and breast above, pale ash-colour, in some specimens inclining to rufous brown; below the latter is dull white, barred across with undulating black lines; back, dark ash-colour. The wings

extend to half the length of the tail; greater and lesser wing coverts, as the back, but darker; primaries, dusky, barred on the inner webs with oval white spots from the base to within an inch, and a half of their tips; the first feather is very short; secondaries and tertiaries, dusky; larger and lesser under wing coverts, white barred with dusky. The tail, rather long, of ten feathers of unequal length; the two middle ones are black, dashed with ash-colour on the outer edges of the webs, and sometimes a gloss of green, and tipped with white; the others are black, marked with white spots on each side of the shafts; in some the side feathers have white spots only on their inner webs, but all are tipped with white; the outer feather is very short; upper tail coverts, as the back, but paler; under tail coverts, white, with a tinge of yellowish rust-colour, and crossed with transverse black bars. Legs, yellow; toes, yellow, the outer hind toe is reversible; claws, whitish.

The female is less in size; neck in front, tawny brown; breast, tawny brown, barred with dusky; greater and lesser wing coverts, marked with light rust-coloured spots; the primaries have the spots inclining to reddish brown on their edges; in the tail the white spots incline to reddish brown on their edges. It is said that in mature age the female assumes the plumage of the male.

It would appear that the young bird does not entirely lose its first feathers until the second year's moult, but that after the first moult, and even this it would almost seem does not take place before these birds leave us in the autumn; the male, both male and female having been alike till then, assumes a deep olive ash-colour, the red spots wearing off, while in the female they continue longer. I think that the moult is continuous and gradual, more so than in most other birds, and, as a matter of course in late-hatched individuals, is thus carried over longer into the ensuing year. Iris, greyish or reddish brown; forehead, white; the head on the back has a white patch; crown, dusky black; neck on the sides tinged with rufous; on the back and the nape a mixture of dusky black and clear ferruginous; chin, throat, and breast, dull yellowish white, the latter barred across with distinct bars of dusky black; each feather has in general two or three bars; back, dusky black and ferruginous, faintly barred with white.

Primaries, more or less barred on the inner webs, the oval spots reddish brown; the side tail feathers more or less barred

with white, black, and light brown, and tipped with white; upper tail coverts, slightly tipped with white; legs and toes, light yellow. The young female has more of the reddish brown on her plumage, and has scarcely any indication of the white on the forehead and the white patch on the back of the head.



NIGHTJAR.

NIGHTJAR.

GOATSUCKER. DOR-HAWK. NIGHT-HAWK. FERN-OWL.
 WHEEL-BIRD. EUROPEAN GOATSUCKER.
 NOCTURNAL GOATSUCKER. CHURN-OWL. JAR-OWL.
 PUCKERIDGE.

ADERYN Y DROELL, AND RHODWR, OF THE ANCIENT BRITISH.

Caprimulgus Europæus,
 “ *punctatus,*
Nyctichelidon Europæus

PENNANT. MONTAGU.
 MEYER.
 RENNIE.

Caprimulgus. *Caper*—A goat. *Mulgeo*—To milk.
Europæus—European.

THE Nightjar may be looked upon as a kind of gigantic and sombre Swallow, whose movements are made in the dusk of night, instead of in the glare of day.

It is found throughout Europe—in Spain, France, Germany, and Italy, Russia, Siberia, and Kamtschatka, Denmark, Norway, and the rest of Scandinavia, and in Holland, but rarely. In Africa also, and in Asia as far as the East Indies.

It is tolerably common in all the southern counties of England, and also indeed in the northern ones.

In Yorkshire it frequents the sea coast near Scarborough, according to Mr. Patrick Hawkridge, and has been not unfrequent near Halifax, Hebden-Bridge, and other districts. I have seen it in the neighbourhood of Doncaster, in the wood called ‘Sir William Cooke’s wood,’ between that town and Armthorpe. It also occurs near Norwich, in fir plantations, as I am informed by Mr. Charles Muskett, who adds, ‘Three years since, I found a young bird on the ground in a heathy

plantation; the old bird led me to search by her dissembling incapacity of flight. I looked again, when it was nearly ready to fly. Being a night-feeder it is seldom destroyed by game-keepers.' Surrey, Sussex, Hampshire, Wiltshire, Dorsetshire, Devonshire, Cornwall, Cumberland, and Westmorland, contain localities for this bird; Wales also, and some parts of Ireland, as also of Scotland. In the Orkney Islands, 'two were shot at Lopness, during the summer of 1810. One was killed near Kirkwall, by Captain Chisholm, 9th. R. V. B.; and another was obtained at Lopness, by Mr. Strang, on the 1st. of June, 1825.' Mr. Dunn mentions the occurrence of one in Shetland.

The Nightjar inhabits woods, both of old and young growth, and also open moors, heaths, and commons, where fern and brushwood afford it shelter.

It is a migratory bird, visiting this country in the middle or end of May—a very late arrival; and leaving again by the middle or end of September, or beginning of October; some say so soon as the end of August: a few individuals, however, stay longer. Montagu records his having shot one in Devonshire, on the 8th. of November, 1805; and Mr. Couch reports that one was shot in Cornwall, on the 27th. of November, 1821.

The remarkable trait in the character of the Nightjar is that it perches lengthwise, instead of crosswise, on the branch of a tree, generally with its head downwards, according to the inclination of the branch, especially while in the attitude of repose; during the day it crouches very close to it; its brown colour assimilating to that of the bark. They have been seen dusting themselves in the middle of a road. In his 'Catalogue of the Birds of Melbourne,' in Derbyshire, in the 'Zoologist,' page 2606, J. J. Briggs, Esq. relates that in 1844 two of these birds were seen near Donnington Park, hawking for insects at mid-day, by the side of a large wood; which perhaps may have been rather a shady situation; and two other such instances are recorded in the fifteenth volume of the 'Linnæan Transactions.' Such, however, is certainly not their usual habit. Occasionally these birds are to be seen 'couchant' on a stone heap or other eminence, and they also at times bask in the sun on the side of a bank or other such sheltered situation. They are very fearless when they are engaged with their young, and will glance in their fitful phantom way quite close by you. White of Selborne says, 'when a person approaches the haunt of the Fern Owls in

an evening, they continue flying round the head of the obtruder, and by striking their wings together above their backs, in the manner that the Pigeons called Smiters are known to do, make a smart snap; perhaps at that time they are jealous for their young, and their noise and gesture are intended by way of menace.' They are said to be good eating. As many as eight or ten have been seen in one locality together, skimming, like Swallows, over the surface of the ground in search of their prey. When approached in the day-time, they are either fearless, or listless, or taken by surprise; and do not seem intimidated by your approach; hence the idea of their being foolish birds. During the day they rest on the ground, among fern, broom, or heath, or on the low branch of a tree. At the commencement of twilight, when first roused from their daily slumber, they perch upon some wall or rail, or heap, or eminence; perhaps waiting entomologically for the appearance of the moths.

The powers of flight of this bird are, as the Rev. Gilbert White, of Selborne, has observed, truly wonderful, exceeding, if possible, and in the most easy manner, the various evolutions and quick turns of the Swallows on the wing. 'Yet,' says another writer, it flits along, noiseless as a shadow; 'not a rustle is heard.' At other times, when disturbed, it is abrupt and wavering, though still buoyant.'

It is a truly pleasing sight to see the Nightjar circling, in its smooth and effortless way, round and round a tree in the quiet calm that precedes the 'stille nacht'—the 'heilige nacht'—when all nature is hushed in the deep silence that announces the hour of rest;

'Save where the beetle wheels his droning flight,
And drowsy tinklings lull the distant folds.'

Save also, the poet might have added, where the hum of the moth passes nervously by your ear; or the bark of the distant watch-dog suddenly breaks upon the 'solemn stillness;' or the shutting of a gate, let fall to by some returning lover or careful shepherd, reminds you of 'bygone hours;' or the striking of the bell in the grey tower of the quaint old parish church; the lowing of some stray cattle; the cawing of a few restless Rooks; the cooing of a Wood Pigeon or two; or the wild cry of the Heron, keeps your attention awake, and you 'wait a little longer;' or the sudden dash of a startled water-rat into the stream wakes you from a reverie; or the 'rise' of a

trout, with a sort of quiet determination, which tells you that he is 'on the feed,' makes you wish that you had a rod and a landing-net in your hand; and even though you have them not, you cannot help peering over the edge of the bank, almost as anxiously as if you had. Well might Horace sigh for the country; 'O rus quando te aspiciam.' If you cannot find that happiness which beneficent Providence wills you to enjoy, 'in scenes like these,' 'far,' and the farther the better, 'from the madding crowd's ignoble strife,' believe me you will find it nowhere. Thank God for a love of nature.

But to return to the Nightjar, whom I have left wheeling round the 'old oak tree;' from which habit, I may mention, has been derived one of its provincial names.

In flight, the tail is expanded, and the white spots are very conspicuous in the male bird. Now he starts suddenly upwards to a height of thirty or forty feet, and then gradually descends; again he rises in a like series, and then falls as suddenly as before he rose; now he glides round and round, and then forwards in a straight line; now he skims along the ground; and now drops with wings closed above him.

The food of this bird consists of moths, beetles, such as, in their season, the ghost-moths and the cockchaffers, which abound in the silent air on a summer's night, and any other insects which it can meet with on the wing. In the pursuit of these, Gilbert White says that it uses its feet, the middle toe being furnished with a serrated claw, the use of which is inconclusively supposed to be to grasp and hold the more readily such prey, which may also be the object of the long bristles, 'vibrissæ,' as they are scientifically called, on the bill. Linnæus Martin thinks that White of Selborne was mistaken in imagining that the bird thus conveyed its food to its bill; and certainly its legs are very short for such a feat; but, on the other hand, as Bishop Stanley remarks, the idea is rather borne out by its evolutions while on the prowl; for, as he says, 'at twilight, it may sometimes be seen at work, flitting about, hovering now over one spot, then over another, occasionally dropping or tumbling over, as if shot; this is the moment, when having seized a moth, the bird reaches it to its mouth, and loses its balance; when again rising, it glides away like a ghost, till lost in shade.'

The general note of this species, partaking of the nature of a hiss and a buzz, uttered upon the tree, but at times on the wing, and prolonged for some minutes, is a mere mono-

syllabic 'ja-r-r-r-r-r-r-r-r-r-r-r-r-r-r-r-r'—whence the descriptive name. It has besides a 'dec, dec,' which it utters when launching on the wing, and also a third 'variation'—a sort of squeak. The Nightjar, like the Corncrake, has considerable powers of ventriloquism, for, the cause perhaps being alarm at your approach, when you think that you are close upon the vocalist, it seems, 'presto,' like the 'will o' the wisp,' to have moved by magic; 'abiit, evasit;' and yet all the while you are as close to it as you were at first. The sound of the Nightjar's hum is exceedingly pleasing to me; it is one thoroughly associated with sylvan scenes.

In the middle or the end of May, nidification, so to speak where no nest is found, commences.

The nest, if a few chance leaves in a hollow of the ground are to be called such, is found in the open rides and walks in woods, as also in their bordering neighbourhood, in moors and barren places, among heath, grass, or fern, from the latter of which one of its secondary names is derived. It is frequently placed at the foot of a tree or bush.

The eggs are generally two in number, but three have been known in two instances: in one by Mr. Eddison, and in the other by the Rev. J. Pemberton Bartlett, namely, in the latter case, two young birds and an egg. They are very beautiful, and of nearly a perfect oval shape, the ground colour being white, which is most beautifully clouded and streaked with bluish grey and yellowish brown. The eggs are laid the beginning, and the young are hatched in the middle, of July.

The whole plumage is remarkably soft and downy. Male; weight, between two and three ounces; length, about ten inches and a half; bill, very short and weak, black, dark brown colour at the tip, the lower one light brown at the base—a few white feathers below the corner of it; it has a tooth on each side of the hooked tip: a line of white runs backwards from its corner; iris, inordinately large, 'the better to see with,' and dull black; nine or ten strong bristles, made to diverge or contract, project downwards from the under edge of the upper mandible. Head, on the hinder part of the sides, dark brown, edged below and behind with pale yellowish brown, making a 'line of demarcation' between it and the markings of the head and back; the shafts are margined with deep black; crown, pale greyish brown, the ground colour being yellowish white, and dotted over with dusky specks; two dark stripes of blackish brown feathers pass centrally to

the nape of the neck; chin and throat, mottled with two large white oval spots, which nearly converge together down the middle, and dull yellowish orange and black, the latter extending backwards round the neck in a sort of collar; breast, pale yellow brown, with numerous bars of darker brown and orange; back, a mixture of orange, yellow, brown, and grey, beautifully pencilled with rich dark brown, the shafts margined as on the head.

The wings expand to the width of about one foot nine inches; greater and lesser wing coverts, mottled as the back; primaries, secondaries, and tertiaries, dark brown, spotted with yellowish brown; the three first feathers have a well-defined oblong patch of white on the inner web, near the tip; the first is shorter than the third, the second a little longer than the third, and the longest in the wing. The tail, of ten feathers, has the middle ones freckled with grey and yellowish brown, with seven or eight dark zigzag transverse bands; the two outer feathers are dark brown, barred with yellowish brown on both webs, and the ends pure white; the legs, which are partly feathered in front, the toes, which are small in proportion to the size of the bird, and the hinder one reversible, and the claws, dark orange brown; the middle claw is flattened on the inner edge, and the margin is pectinated, forming a sort of comb of seven or eight teeth: these teeth point forwards, and not backwards, which is against the general supposition that they are intended for holding the insects the better. Here, as in so many other instances, we are still in the dark. The toes are connected by a membrane as far as the first joint.

The plumage of the female is more subdued and blended, darker, with less of the grey and ferruginous, and the white markings have a tinge of yellow. The wings want the white spots; the two outer feathers of the tail are without the white at the ends.

In the young the tail does not attain its full length before the first moult. They are at first covered with grey down, darker above and paler beneath.



SWIFT.

COMMON SWIFT. SWIFT SWALLOW. BLACK MARTIN.
SCREECH. SCREECH MARTIN. SCREAMER. CRAN. SQUEALER.

MARTIN DU, OF THE ANCIENT BRITISH.

<i>Hirundo apus,</i>	LINNÆUS. PENNANT. MONTAGU.
<i>Cypselus murarius,</i>	SELBY. GOULD.
“ <i>apus,</i>	JENYNS.
<i>Micropus murarius,</i>	MEYER.

Hirundo—A Swallow. *Apus. Apous*—Without a foot.

THE Swallows seem always considered as visitants to us, and are so spoken of accordingly: it seems to me, however, that this is an erroneous designation; for, although absent from us the greater part of the year, it is with us that they build and inhabit their dwellings; and here they rear their young: it is to other countries that they are visitants; our is ‘their own—their native land:’ elsewhere they are but sojourners—unsettled excursionists—destitute of a ‘local habitation.’ No one who knows the meaning of the word ‘home,’ can doubt for a moment here.

The Swift is a native of the greater part, if not the whole, of the continent of Africa, as also of that of Europe. It visits Denmark, Norway, Sweden, Lapland, and Italy, and is known also in Asia Minor and Madeira; Montagu and Meyer say in America also; but I believe this is not the case.

It is met with in all parts of the United Kingdom; but it seems to be generally thought, and with some reason, that it is less frequent than it used to be. Why it is so, is entirely unknown. In Ireland it is decidedly local. In the

Orkney Islands, the Rev. George Low, in his 'Fauna Orcadensis,' mentions that he had once or twice seen specimens. Dr. Baikie and Mr. Heddle, in their 'Natural History of Orkney,' also record that 'on the 25th. of July, 1830, a flock of about forty were seen flying south. Another flock appeared in Sanday, on the 27th. of September, in the same year. On the 8th. of July, 1836, Mr. Strang shot one at Fair Isle; and one was caught alive by the same gentleman at Lopness, on the 9th. of June, 1839.' During the summer of 1847, a pair were observed flying about St. Magnus' Cathedral, on which most likely they had their nest.'

The favourite haunts of Swifts are buildings in towns and villages, church-steeple, fortresses, and castles.

The Swift, migratory like all our Swallows, arrives among us later than the others, namely, not until the beginning of May, and leaves us in the beginning or middle of August. This is the rule; but exceptions to it, as a matter of course, have occurred, do occur, and will occur. Thus, the Rev. Gilbert White, in the year 1781, noticed that one pair of Swifts remained after all the others had, on or about the 1st. of August, taken their departure. In a few days but one bird remained, the female, as imagined; but there is nothing to shew that it was not the male. Whichever it was, it continued feeding its young, which were then discovered, until the 27th. of the month, when both parent and children disappeared. Mr. Yarrell imagines that the other parent forsook its family for its companions; but in the absence of proof of this, it will be, as far as concerns the bird, a more charitable supposition, and certainly very far from an impossible one, that some reckless shooter cut him or her off.

Mr. J. B. Ellman, of Lewes, saw two on the 29th. of August, 1850. The Rev. J. C. Atkinson saw three or four companies of Swifts near Eyemouth, on the 30th. of August, 1843, 'evidently winging their way southwards. The first lot consisted of four or five individuals, the next of twelve or fifteen. One company loitered a little over a field of beans, but none of them remained long in sight. For the most part their line of flight seemed to lie along the edge of the coast; for few of them ranged to any distance, either seaward or inland. On the 31st. one was seen; and on September the 3rd. two or three at a short distance over the sea.' F. Wayne, Esq. observed one at Much Wenlock, Shropshire, on the 28th. of

August, 1844; and two on the 1st. of September, in the same year. One was seen by Robert Blagden Hale, Esq., M.P., of Alderley, on the 9th. of September, 1839; two by the Rev. W. T. Bree, near Penzance, on the 15th. of September; three young ones by E. W. Dowell, Esq., of Jesus College, Cambridge, on the 25th. of September, 1842, at Salthouse, near Cley, Norfolk; and one by Mr. F. A. Chennell, at St. Anne's Hill, Chertsey, on the 1st. of October, 1844. A pair were observed by Mr. Salmon to feed their young until the 4th. of October. One was seen by the Rev. Mr. Jackson, October 18th., 1836; three near Brighton, on the 29th. of October, 1849; one by Mr. Blackwall, on the 20th. of October, 1815; others by Mr. W. H. White, on the 27th. of October. One in Perthshire, on the 8th. of November, 1834; and one by the Rev. Mr. Cornish, in Devonshire, on the 27th. of November, 1835. In Ireland, W. Thompson, Esq. observed a number near Belfast, on the 19th. of August, 1840; and on the 20th. of that month in 1832. On the 18th., in 1845, they were as numerous as in June; and on the 22nd. and 23rd. a single bird was seen. In 1833, he saw about twenty on the 30th. In 1848, one or two were observed on the 1st. of September; several about Dunluce Castle on the 4th. of that month, in 1835; and on the 11th. in the following year, three were seen by Mr. Thompson at the seat of Lord Hillsborough, in the county of Down. The arrival of Swifts is sudden and simultaneous, and their departure the same; but they are more than ordinarily noisy for a few days previously. Cold or wet weather soon after their arrival sometimes proves fatal to these birds; perhaps through lack of subsistence in consequence.

The following curious circumstance is recorded by Mr. T. Catchpool, Jun., in the 'Zoologist,' pages 1499-1500:—Speaking of an excursion for the day, in the end of June, 1835, to Walton-on-the-Naze, on the Essex coast, he says, 'Our attention was soon directed to a Common Swift, which had just entered a small crevice: it flew away before we could reach it. But almost directly after, we saw others clinging to slight projections, and settling on the ledges; and so entirely did they appear weakened by the low temperature of the atmosphere, that they allowed themselves to be taken by the hand without the least struggle to escape. In some places they were settled one upon another, four or five deep, and we literally took them up by handfulls—five or six together. So numerous were they, that we could probably have caught some hundreds;

but having secured about thirty in a basket, we carried them home with us in the evening, and having placed them in a warm situation during the night, in the morning they were strong enough to fly away, with the exception of two which had died.'

This bird, from the great length of its wings, and the extreme shortness of its legs, finds it difficult to rise from a level place; so that when it alights, it is almost always in some situation from which it can drop at once into the air. It may occasionally be seen adhering to the flat surface of a wall, 'the whole length of the toes being straightened by an action not practised by the generality of birds, so as to be opposed to each other in pairs; while the claws are bent beneath, with the points directed inward.' In the 'Magazine of Natural History,' vol. v, page 736, Mr. Couch remarks, 'It is not long that Swifts have frequented stations convenient for my observation. At first there were about two pairs; but they have now increased to four or five; and it is singular that, according to my observation, there is always an odd bird.' Mr. Thompson, of Belfast, has remarked a like singularity for two successive years at Wolf Hill, near that place. Swifts are sociable birds, but restless, wild, and quarrelsome in the breeding season.

'Handsome is that handsome does,' says the proverb, and well and truly does the Swift deserve its name. Equalled in its powers of flight, it may be and is, by some other birds, and exceeded, doubtless, for the moment, by the impetuous dash of the Falcon; but for its size and the unceasing continuation of its evolutions, there must be few that can compete successfully with it. Wonderfully too, does it guide itself in all the mazes of its seemingly headlong course: one has, however, been known to be killed by being carried inadvertently against a wall. Like the rest of the Swallows, the Swift both drinks and bathes, or rather dashes while on the wing. It skims along the tranquil surface of the lake and river, and wings its way through the liquid air at a great height—the latter in clear and fine weather, the former when the atmosphere is damp and heavy. Rarely indeed do they take rest, except during the short summer night, or some say in the extreme of the 'noontide heat,' or in very stormy weather, when they are supposed to shelter in their holes; but Mr. Thompson points out that at such times they have only shifted their quarters to some more suitable hunting-

place. They fly until the dusk of the evening, and have been noticed until after nine o'clock. In the morning again they are betimes on the wing.

They never seem to weary, nor do their wings once flag. They are indeed marvellously endowed in this respect, as when, says Bewick, they 'are seen in flocks describing an endless series of circles upon circles; sometimes in close ranks, pursuing the direction of a street, and sometimes wheeling round a large edifice, all screaming together; they often glide along without stirring their wings, and on a sudden they move them with frequent and quickly-repeated strokes.' They are gregarious birds, joining in small troops of from half-a-dozen to a score.

The food of the Swift consists entirely of insects of various kinds. Bishop Stanley relates, speaking of the quantity of insects destroyed by Swallows, that from the mouth of a Swift which had been shot, a table-spoonful were extracted. The indigestible part of the food is cast up in pellets.

The note is a harsh scream. Mr. Selby remarks upon the theory of White of Selborne respecting the note, that it is fanciful, and so it is; but the one he has suggested in lieu of it—that it is the consequence 'of irritability excited by the highly electrical state of the atmosphere at some times,' is certainly still more so; for it is uttered in the most opposite kinds of weather: I look upon it as a simple exclamation of enjoyment, 'particularly induced,' says Mr. Macgillivray, 'by fine weather and an abundance of food.'

The nest is generally placed in holes about steeples of churches, and the old walls of lofty towers, as also under the eaves of cottages and barns, crevices under window-sills, and even in hollow trees; under the arches of bridges, in the sides of cliffs, and of chalk-pits. It is roughly formed of straws, wool, grasses, hair, feathers, and such like materials agglutinated together, picked up with great dexterity while the bird is on the wing, or purloined, as some say, from, or found in the nests of Sparrows, which they appropriate to themselves. It may be that no nest, or next to none is formed, unless the remains of a Sparrow's nest are used. With the Martins, however, the case is exactly opposite: 'thou art the robber,' they might say or sing to the Sparrow.

The ordinary number of the eggs is for the most part two, but sometimes three; and J. J. Briggs, Esq. has, in one instance, at Melbourne, in Derbyshire, known four. Speaking of the

nest that contained them, he also relates 'a pair of Swifts has inhabited a particular hole in a cottage for more than twenty summers.' This is not a solitary instance of four eggs being found in one nest. They are white. The young birds, which are hatched towards the end of June, are sedulously attended to by the parents, while they remain in the nest, but soon this care ceases, being no longer required; and in some instances the whole family leave this country as soon as ever the young are able to fly well. They generally leave the nest towards the end of July, but sometimes are later, as they remain in it a long time, until able, or nearly able to forage for themselves.

Male; weight, nearly an ounce; length, seven inches or more, even up to eight inches and a half; bill, very short and black; iris, dark brown; head, broad. The whole plumage, which is close set, with the exception of a small patch of greyish white under the chin, is blackish brown, with a tinge of green, light yellow, and purple. The wings, of extraordinary length, expand to the width of eighteen inches; the second quill feather is the longest, the first a little longer than the third. Tail, much forked; the legs, which are covered with short feathers in front, the toes, four in number, and all directed forwards but the innermost, which is the smallest, and reversible, and the claws, which are short, blackish brown.

The female resembles the male. In the young bird the chin is white, the back has some of the feathers tipped with buff white, and the tertiaries the same.



ALPINE SWIFT.

ALPINE SWIFT.

WHITE-BELLIED SWIFT.

Cypselus alpinus,

SELBY. JENYNS.

Cypselus—A Martlet.*Alpinus*—Of or belonging to alpine places.

THIS Swift is found throughout Europe—in Spain, France, Switzerland, Italy, Sardinia, Malta, Greece, and the Archipelago; it is also believed to be a native of Africa, and probably of Asia Minor. It is considered as excellent for the table.

Several of these birds have been met with of late years in these islands:—One was shot in the beginning of June, 1820, at Kingsgate, in the Isle of Thanet, Kent; a second near Buckenham Church, Norfolk, in the middle of September, 1831; a third was picked up dead near Saffron Walden, in Essex, in July, 1838. Another of these birds, a fourth recorded specimen, flew into a house, through a window, at or near Dover, as I am informed by Edward Cole, Esq., of Ryther, and was captured on the 20th. of August, 1830; a fifth was seen near Cambridge, by E. B. Fitton, Esq., on the 26th. or 27th. of May, 1845. In Ireland, one was killed early in March, 1833, at Rathfarnham, in the county of Dublin; and another was obtained off Cape Clear, at a distance of some miles from land.

Lassitude seems to be a word unknown to the vocabulary of the Swallows. The Alpine Swift, if possible, exceeds the Common Swift in velocity; ceaselessly chasing its prey in the lofty regions of the air, in the more rarefied state of the atmosphere, and lower down in dull weather, and in the evenings. It follows the chase as long as daylight lasts; but, though its flight has been continued in the most rapid manner.

and with the most untiring energy throughout the livelong day, and though even for hours after it is dark its voice may be heard in the midst of the aerial gambols in which these birds delight, yet 'early to rise' is ever and always its motto; and at dawn of day he is up, and like Izaak Walton's 'Complete Angler,' 'leaves the sluggard sleeping.'

'The Alpine Swifts,' says Meyer, 'are seldom seen to alight on the ground, and when they do so, the construction of their legs and feet not being adapted for walking and perching, they shuffle along and look very awkward; and the great length of their wings renders it very difficult for them to rise again. But when desiring to retain themselves in a hanging position against a wall or a perpendicular rock, they exhibit great facility in preserving their equilibrium: by means of their strong claws they cling firmly on, and their tails serve them as a rudder or rest, wherewith they balance themselves so as to be enabled to move the upper part of the body in any direction they may require.' They are restless and turbulent birds, and, though sociable among themselves, keep aloof, for the most part, even from birds of their own genus.

The note is a constant twitter, and an occasional brief scream, resembling this word in its sound; but is said to be less harsh than that of the Common Swift.

The Alpine Swift builds its nest among high rocks in mountainous districts, and in holes in the steeples of cathedrals and churches: the old situation is often again resorted to. It is composed of straw, grass, leaves, wool, feathers, and moss, cemented together with gluten, which gives it a varnished appearance. The nest is said to be rather small in reference to the size of the bird; and is adapted in shape to the situation in which it is placed.

The eggs, two, three, four, or five in number, and of an elongated form, are white: they are laid towards the end of May, and are hatched after fourteen days incubation. The young, when first able to fly, still follow their parents, by whom they are for some time supplied with food on the wing.

The general plumage of this species is of a very silky texture, and is charged with a fine white dust, which is easily rubbed off. Male; length, about eight inches and a half; bill, black, and rather longer in proportion than that of the Common Swift; iris, blackish brown. Head on the crown, brown; neck

and nape on the sides, brown; chin, throat, and breast, white; there is a dusky band across the upper part of the latter; back, brown. The wings reach two inches beyond the end of the tail; the second quill feather is the longest in the wing, the first feather a little longer than the third—the shafts of all black; greater and lesser wing coverts, primaries, secondaries, and tertiaries, brown—the two latter are very short. The tail is forked, and the feathers, which are brown, are very stiff; under tail coverts, brown. The legs are feathered with brown feathers; toes, orange brown; claws, dark brown.

The female differs in no perceptible respect from the male, but is rather smaller in size.

SPINE-TAILED SWALLOW.

AUSTRALIAN SPINE-TAILED SWALLOW.
 NEEDLE-TAILED SWALLOW. PIN-TAILED SWALLOW.
 NEW HOLLAND SWALLOW.

Hirundo caudacuta,
Chatura Australis,
 “ *macroptera,*

LATHAM.
 STEPHENS.
 SWAINSON.

Hirundo—A Swallow. *Caudacuta.* *Cauda*—A tail. *Acuta*—Sharp

THIS is the largest of the Swallows yet discovered. It is a native of the eastern and south-eastern part of Australia and Van Diemen's Land. It is believed also to be a native of India.

The only specimen of this bird that has as yet been met with in this country, was shot on the 8th. of July, 1846, in the parish of Great Horkesley, near Colchester, in Essex, by a farmer's son named Peter Coveney. It is certainly a very strange and unaccountable circumstance, how, why, and wherefore this bird should have thus winged its way from so remote a part of the earth, our very Antipodes, to our island.

Mr. Gould observes of this bird that it is so exclusively a tenant of the air that it is rarely seen to perch, and in cloudless weather very seldom approaches sufficiently near the earth to admit of a successful shot. In dull weather, and late in the evening when 'the prey it seeks' has led the way, it follows it at a lower elevation. 'Its whole form is especially and beautifully adapted for aerial progression, and, as its lengthened wings would lead us to imagine, its power of flight, both for rapidity and extension, is truly amazing.' 'Before retiring to roost, which it does immediately after the sun has gone down, the Spine-tailed Swallow may frequently be



SPINE-TAILED SWALLOW.

seen either singly or in pairs sweeping up the gullies, or flying with immense rapidity just above the tops of the trees, their never-tiring wings enabling them to perform their evolutions in the capture of insects, and of sustaining themselves in the air during the entire day without cessation.' These birds are supposed to roost at nights in the clefts of rocks and in trees.

Male; length, eight inches; bill, short, broad at the base, and black; iris, hazel: in front of and over the eye is a line of stiff black bristly feathers; forehead, greyish white; crown and neck on the back, glossy brown, with purple and green reflections; chin, white; throat, white; breast, brown, darkest on the sides, which are spotted with white; back, greyish brown, lightest in the middle. The wings extend three inches beyond the end of the tail; the first and second quill feathers are of nearly equal length, and the longest in the wing; greater wing coverts, dull brown, with purple and green reflections, the innermost feathers being more or less white on the inner web; lesser wing coverts, dull brown, with purple and green reflections; primaries, dull brown, lightest on the inner web; secondaries, the same. Tail above, as the crown; beneath, brown; it is square in shape, the feathers ten in number, and the same colour as the wings; the shaft of each feather projects beyond the web, forming a series of spines about an eighth of an inch long from the middle feathers, and gradually shortening on the side ones. Upper tail coverts, as the crown; under tail coverts, white; legs, dark brown. The toes, which are dark brown, are placed three before and one behind, the latter rather on the inner side; claws, dark brown.

SWALLOW.

CHIMNEY SWALLOW. COMMON SWALLOW.
RED-FRONTED SWALLOW.

Hirundo rustica,
" *domestica*,

LINNÆUS. PENNANT.
RAY. BRISSON.

Hirundo—A Swallow. *Rustica*—Of or belonging to the country

THE Swallow, so called, is a permanent resident in the tropical parts of the western coast of Africa; but is said to be less numerous there in the rainy season than at other times: it appears also to be a native of Abyssinia, and to dwell there throughout the year. In Europe it visits the less frigid parts of Siberia, the Crimæa, Denmark, Russia, Sweden, Norway, Lapland, as likewise Italy, and the southern countries. It is also found in Asia Minor; and Temminck includes it among the birds of Japan.

‘Although arriving in large flights upon our coasts, they afterwards disperse, and penetrate by degrees further into the country: a few alone at first are seen among us, coursing in their never-ending chase for food: by degrees their numbers thicken, until the air is again peopled by this interesting race.

The Swallow always makes friends among us; its useful and harmless life and social habits attract our notice, and its familiar approaches to our dwellings make it looked upon as half-domesticated; it lives among us, yet independent, requiring of us nothing but quiet possession of its accustomed nook or chimney. The Swallow is almost as much respected and cherished as the Redbreast himself, and shares with that favoured bird exemption even from the persecutions of village urchins.’



SWALLOW.

The Swallow attaches itself, for the most part, to the habitations of man, and frequents especially such as are in the neighbourhood of water, over which it delights to sweep in search of its food, which there abounds. The eye cannot fail to be attracted and pleased by its graceful flight, and when, in autumn, we first miss the favourite bird, we feel that a blank is made, and that the hey-day of that summer is gone. We are not, however, altogether taken by surprise, as, for some short time previously, we have seen the birds marshalling themselves in large companies for their approaching journey—collecting together at some selected place of rendezvous, flying to and fro, twittering and chirping, as if discussing their route, and arranging all the preliminaries necessary for a lengthened voyage.

Swallows are generally thought to arrive here in the night, but it does not appear certain that this is, at all events always, the case. They have been seen departing in the afternoon in great numbers, 'in a continuous line of more than half a mile in length,' their families having been of course increased since the previous census. After their arrival they sometimes disappear again, re-migrating, as is thought, owing to the weather being unfavourable, or food being scarce in consequence; but it is possible that they may only shift their quarters, in search of a more congenial situation, or a better supply. In the summer, on a change of weather from drought to rain, numbers will at once appear where none had been seen before.

The Swallow so times its migration as to pass about half the year in this country. The period of its arrival is generally about the 10th. of April; but there is no fixed chronology of the date; for it varies in different seasons—sometimes earlier, sometimes later. Three were seen hawking for insects near Wakefield, Yorkshire, January the 18th., 1837. One was seen near Lewes, Sussex, on the memorable 1st. of April, in 1851; and one near the Eddystone lighthouse on the 4th. of April, 1831. Several at Plymouth, on the 8th. of April, 1849. It has been known as late as the 8th. of May. The time of departure is early in October, and so strong is the migratory instinct, that if the young of the second brood are not sufficiently advanced, they have been known to have been deserted. Some leave, or at least change their quarters, as soon as the middle of August; others about the middle or end of September, which is perhaps the chief time of their

departure; and others not until the middle of October. One was seen at Penzance, in Cornwall, on the 30th. of November, 1845; one at Redcar, in Yorkshire, on the 3rd. of December, in the same year, careering over the sea—the day dull and gloomy: one at Goole, in the West-Riding, on the 10th. of December, 1843. In 1849, some remained about Plymouth until the 23rd. of October. Others at Springfield, near Temple Balsall, Warwickshire, on the 18th. of November, 1847, as seen by the Rev. W. Bree, of Allesley.

Mr. J. B. Ellman relates, in the year 1848, 'On the 13th. of November I saw two young Swallows. On the 14th. the same again. On the 17th. I saw another. On the 18th. the same again. On the 28th. I saw nine. On the 29th. the same again. These were the last I saw. None of these were our Swallows, which departed long before.' This is consistent with what may often be observed, namely, in the words of the Rev. William Bree, that 'after the general flight has departed, and not a Swallow is to be seen, a few will often appear again after a considerable interval, later in the season.' These doubtless are those which are on their way from some more northern district, in which possibly they may have been themselves detained by their young brood. Mr. Bree proceeds, speaking of the year 1848, 'I lost sight of the Swallows on the 5th. of October, on which day I observed a few. Ten days elapsed, and not a Swallow to be seen in this neighbourhood. On the 16th., however, I observed one flit across the window, as I was dressing in the morning; on the 17th. two appeared; and on the 18th., though it was very cold, and snow had fallen in the morning, five or six Swallows, and one House Martin, were to be seen sporting throughout the greater part of the day on the south side of the house, and between the church and the sheltered walk of trees, occasionally perching and sitting in a row on the sill of one of the south attic windows of the house. In this situation they allowed us to approach them through the chamber from behind, the window being closed. They were evidently all of them young birds, which had but recently left the nest, and had as yet no great experience of the world. They remained with us on the 19th. and 20th., joined, on the latter day, by a second Martin, one of which, however, before evening, was found dead on the sill of the window, having perished probably from cold, to the no small grief of some members of the family, to whom they had become objects of considerable

interest. On the 21st. and 22nd., the party was reduced to one or two Swallows and one Martin. On the latter day, a little before dark, one of the Swallows permitted itself to be caught by the hand, as it sat on the window sill; and after having been duly caressed, as a matter of course, was soon restored to liberty, and flew briskly away. After the 22nd., we saw no more of our little feathered favourites.'

In the same year, 1848, three were observed by Mr. C. R. Bree, at Stowmarket, Suffolk, on the 25th. of October, none having been previously seen since the 1st. of the month. In the year 1836, the 'last Swallow' was seen at Tooting, Surrey, by Mr. Edward Blyth, on the 21st. of October. At Skipton, in Craven, Yorkshire, a pair were observed by R. Dyneley Chamberlain, Esq., to remain, after the others had all gone; and on examining into the cause, he found that one of the young birds was detained in the nest by having had its leg entangled in a piece of cord; in a few days after releasing it from which, they all disappeared, having no doubt spent the interval in preparing the young one for its long flight.

In Ireland, William Thompson, Esq., of Belfast, mentions two which were seen flying over the bay near that town, on the 30th. of March, 1846; and on the following day, a single bird was observed on each side of its shores. Winter birds were seen at the same time, and a neighbouring mountain 'displayed snow in its ravines; proving, as it were, that even two Swallows do not make a summer.' One of these birds was observed to remain without a companion for ten days afterwards. On the 6th. of April one was observed between Antrim and Ballymena, but, nevertheless, the main body were remarkably late in coming that year. On the 2nd. of April, 1835, one was seen. Mr. Templeton notes his having observed a few on the 30th. and 31st. of October, 1813. On the 14th. of November, 1815, one was repeatedly seen flying about Stranmillis, near Belfast, where also on the 28th. of October, 1819, three appeared after a severe fall of snow, and a good deal of frost. In 1835, a Swallow was observed on the 26th. of October, near that town; one on the 16th. and 17th. of November, 1846; and one on the 28th. of November, 1845. On the 3rd. of November, 1834, Mr. H. Dombraïn shot one at sea, near Lambay Island. From the 18th. to the 24th. of December, 1842, a number were seen about the village of Hollywood, near Belfast. Mr. Poole saw two in the town of

Wexford, on the 5th. of December, 1842; also on the 10th. of November, 1844. One was seen at the end of November, 1847, at Castle Warren, near Cork.

One would suppose, from their ceaseless flight while with us, that the Swallows would never know fatigue; but, nevertheless, they shew unmistakeable signs of being wearied, by alighting on the yards and rigging of ships when in their transit; nevertheless, and it is a most striking proof of the imperative impulse that guides them in their migration, they will not diverge from their pathway over the ocean, to rest on land that may be only a few miles on one side; but 'on, on,' is, like Marmion's, their motto, and from their bidden course nothing can induce them to swerve aside. They also, at such times, are said to refresh themselves by dropping on the sea, from which they rise with fresh invigoration. Audubon and other writers state this fact.

It was formerly imagined that Swallows passed the winter in a torpid state, submerging themselves in lakes for this purpose. The following is the scientific 'dictum' of Dr. Johnson:—'Swallows certainly do sleep all the winter. A number of them conglobulate together, by flying round and round, and then all in a heap throwing themselves under water, and lie in the bed of a river;' a very cold bed certainly. Alexander Mal Berger also says, in a calendar kept at Upsal in 1755; 'August 4th.—Birds of passage, after having celebrated their nuptials, now prepare for departing;' and then 'September 17th.—Swallows go under water.' The 'Kendal Mercury,' in 1837, detailed the circumstance of a person having observed several Swallows emerging from Grasmere Lake, in the spring of that year, in the form of 'bell-shaped bubbles,' from each of which a Swallow burst forth; and the editor added, 'we give the fact, well authenticated by the parties from whom we received it, in the hope that it may prove an acceptable addition to the data on which naturalists frame their hypotheses.'

That the great body of them leave our wintry shores at the annual time of their migration for the sunny south, is unquestionable; but, nevertheless, it appears equally certain that some individuals, more or fewer in number, hibernate with us. Mr. J. B. Ellman records in the 'Zoologist,' page 2303, some instances of their having been dug out of hollows in banks in the winter; and Mr. Edward Brown Fitton, at page 2590, 'tells the tale as it was told to him' of 'immense

quantities' having been taken out of the cleft of a rock in the cliff near Hastings.

Mr. Selby, on this subject, says as follows:—'Let it be admitted that a few individuals may, at different times, have been found in a half-dead or benumbed state, under the eaves of houses, or in similar places of retreat, (the natural consequence of remaining in an uncongenial climate,) such will, doubtless, have been young birds of late hatchings, not able to undergo the fatigue of so long a flight, or old birds reduced by sickness and other casualties to a similar condition; and all of which, I should be strongly inclined to believe, die before the expiration of winter. As a proof that the circumstances may happen, I adduce two instances of having found this bird in the months of December and February, both of which individuals appeared to have recently died.' This reasoning is, however, defective in all its parts. First, one Swallow does not make a winter. Secondly, if it be granted, as he seems to have done, that these birds had continued in a torpid state up to the end of the year, the continuation of that state would be much more likely than the destruction of it without reason. Thirdly, their being found in this benumbed state is anything but 'the natural consequence of remaining in an uncongenial climate.' The natural consequence of so doing would be the death of the bird, not its becoming torpid only and remaining so for months; but when this unnatural state is entered upon, universal experience in all other similar cases shews that nothing breaks it off but the genial warmth of the succeeding year. Mr. Selby also adds as another reason, the fact that February is the time of the moult, which he thinks is totally at variance with the idea of this bird going into such a torpid state as has been represented, and sufficient to prove the improbability or impossibility of such an event. But this is somewhat like arguing in a circle; for the difficulty being got over of going into torpidity, and the ordinary course of nature which would require moulting at an otherwise fixed time, being suspended, the suspension or postponement of the latter follows as a necessary sequence. Before departing, large flocks of Swallows roost together in such places as osier beds, and the brushwood that fringes some lake or stream, and hence has arisen the notion that they retire under water for the winter.

The following singular circumstance has just been commu-

nicated to me by my friend, the Rev. R. P. Alington, as having occurred on the 26th. of September, in the present year, 1851; a day I well remember for the dreadful storm which came on at night, with an unusually sudden change of wind—the cause of most disastrous and numerous shipwrecks on all sides of the island, and noted in my diary as an awful gale. He says, ‘I was dining last week at my brother’s, near Spilsby, when a medical gentleman, Dr. Hunt, who lives at Addlethorpe, below Spilsby, on the bleak marsh near the sea, told me a curious anecdote relative to the severity of the weather on Friday, the 26th. of September, 1851. He said that so intense was the cold on that day, that in the evening he picked up no less than ninety-two Swallows on the ground, young chiefly, completely starved;’ (starved, I must here observe, means, in the north of England, perished by cold as well as by hunger.) ‘They were put into a hamper, and the following morning being mild, they all flew away quite well. William Dodson, Esq., of Claxby, Chairman of the quarter sessions at Louth, being present, followed up the conversation by saying, (in what year I could not make out, as there was a large party, and I had no opportunity of asking questions,) that on an exceedingly cold day, all the Swallows congregated on his window-sills, not singly, but in separate heaps, with their heads all one way, one piled on the other. These balls heaved up and down with the breathing of the birds, and upon the cessation of the storm, when the outermost ones flew away, the lower ones were found smothered in considerable numbers.’ Another somewhat similar case is on record in the ‘Zoologist,’ page 2604, though without the like fatal result.

A great number of Swallows and Martins were found dead in barns, sheds, and churchyards in various parts of the county of Norfolk, on the 10th. and 11th. of May, 1849, the weather being very cold and boisterous. ‘No doubt they perished either from the direct effects of the cold, or from the destruction of the insects on which they generally feed.’

Swallows have been kept for two or three years by judicious and careful treatment. Bewick records instances of this, as established by Mr. James Pearson, of London, and also by M. Natterer, of Vienna. They may also be tamed, as he shews in an interesting account, furnished to him by the Rev. Walter Trevelyan, of Long Witton, Northumberland.

Mr. Couch, in his 'Illustrations of Instinct,' mentions 'a pair of Swallows which were observed on the wing, engaged in a chattering contest, close to an opening which led into a solitary barn. It was the evident intention of one of them to obtain an entrance, and equally the determination of the other that no admission should be permitted. They flew in various directions about the only aperture, with incessant and angry chattering; but the bird which appeared to be the rightful occupier always maintained his advantage in keeping nearest the opening. When at last nothing that he was able to do or utter seemed capable of repelling the pertinacious intruder, another bird suddenly darted out through the opening, with a double portion of indignation marked in her motions; and without uttering a sound, joined her mate in repelling the foe; after which she again returned to her solitary station within the building.' I fancy that I have seen something of the sort, as first related, myself.

'A pair of Swallows,' says Bishop Stanley, 'no doubt those of the preceding year, on their arriving, found their old nest already occupied by a Sparrow, who kept the poor birds at a distance, by pecking at them with its strong beak, whenever they attempted to dislodge it. Wearied, and hopeless of regaining possession of their own property, they at last hit upon a plan which effectually prevented the intruder from reaping the reward of his roguery. One morning they appeared with a few more Swallows, their mouths distended with a supply of tempered clay, and, by joint labour, in a short time actually plastered up the entrance hole, thus punishing the Sparrow with imprisonment and death by starvation. This instance of apparent reasoning occurred at a rectory-house in Lancashire; and a similar story is on record near London, of a pair of Swallows calling in the assistance of their neighbours, for the very same purpose.' Mr. Jesse records a precisely similar incident as having occurred in regard to a nest built against the window of a house in Merrion Square, Dublin, and remarks upon it, 'In this case, there appears to have been not only a reasoning faculty, but the birds must have been possessed of the power of communicating their resentment and their wishes to their friends, without whose aid they could not thus have avenged the injury they had sustained.' Again, 'A pair of Swallows built their nest under the ledge of a house at Hampton Court. It was no sooner completed, than a couple of Sparrows drove them from it,

notwithstanding that the Swallows kept up a good resistance, and even brought others to assist them. The intruders were left in peaceable possession of the nest, till the two old birds were obliged to quit it to provide food for their young. They had no sooner departed, than several Swallows came and broke down the nest, and I saw the young Sparrows lying dead on the ground. As soon as the nest was demolished, the Swallows began to rebuild it.'

Every one must have observed that on a sudden 'note of exclamation,' given by a single Swallow, the whole flock, which may have been previously congregated on some spot near, on a sudden dash off in a strange and unaccountable manner. 'A Swallow, apparently at some height in the air, utters two shrill notes; on hearing which the whole of the flock quit the water, and rise into the air, so as almost to disappear from the sight. After a short time they return to hawk for flies, and touch the surface of the river at exactly the same place they had just before quitted.' 'On mentioning this circumstance to an observant friend, he informed me that when he was lately at Malvern, he had observed the effect of the two notes I have just described. A large number of Swallows had congregated on the roof of a house at that place. The preceding evening had been cold and somewhat frosty, so that early in the morning the Swallows were so torpid that he caught two or three of them in his hand, as they rested on the roof near the window of the room in which he slept. While they were in this state, he heard two shrill notes from a Swallow, and in an instant the whole of them took wing simultaneously, and having made two or three circuits in the air, disappeared altogether. He fancied that these circuits were preparatory to their migration, but they were more probably a notice that food was at hand. At all events it seems clear to me, that there is a master or leading Swallow who guides the movements of the rest.'

Swallows may often be seen pursuing birds of prey, and on returning from a chase of this kind, 'unite in a song, (apparently,) of exultation.' Mr. Thompson, of Belfast, records two curious instances, one of them witnessed by himself, of their flying up and down to and from the top of a very tall chimney. 'There was a constant stream of birds ascending and descending; their flight had a most singular appearance, from the circumstance of their flying upwards from the ground to the chimney top almost in a vertical line, and coming down

in a similar manner. So regular were they in series, and so vertically disposed, as at once to remind me of a rope-ladder up the mast of a ship; really not too extravagant a simile.'

'Who has not watched the Swallow on the wing,' says Linnæus Martin, who has not marked its rapid flight; now smoothly skimming along, now executing sudden turns and intricate evolutions with astonishing celerity? If the weather be warm, it dips in the water as it passes along, and emerges, shaking the spray from its burnished plumage, uninterrupted in its career.' The Swallow is, like all its compeers, indefatigable in its flight, and is not often seen to alight. It does, however, occasionally settle on the ridge of a roof, or even sometimes on the branch of a tree, or some such elevated spot, from whence you may see it suddenly drop again into the ambient air and renew its course, to chase its prey, or to join with some sportive companion in all the eccentric meanderings of the labyrinth which it ever and anon follows the thread of. 'These birds,' says Meyer, 'delight the eye by their ever-glancing flight, passing and repassing us with noiseless wing; sometimes dipping their glossy wings into the stream, or sweeping an insect from its surface; then shooting past us quicker than the eye can follow, they turn and wheel, as if delighting to evade our eager sight.'

In perching, the Swallow occasionally rests on the ground by choice, roads being thus not unfrequently resorted to, and sometimes the sea-beach; and objects are, though but rarely, picked up. When they alight on trees, they for the most part prefer to alight on withered and dry branches, in preference to flourishing and leafy ones. The young birds do not return to the nest after they have become able to provide for themselves, and appear then to roost in trees. Swallows may often be noticed in a row, or perfect line, on the ground: after hawking for flies, the whole troop will thus settle on the ground, as if to rest themselves:—but why in straight rank? They may also often be seen coursing over the sea, as zealously and regularly as over the land. They fly very late in the evening—until nine o'clock, or after; sometimes till they can be no longer distinguished. During eclipses of the sun they have been observed, in some instances, to disappear, and in some to cease to sing, and retire, as if to roost; while in others, 'though the Rooks and Sparrows had gone to bed, thinking it was night, the Swallows continued flying about as usual.'

The food of the Swallow consists entirely of insects, and it is in pursuit of these that it is seen soaring far above in the settled days of summer, and, again, suiting itself to the changes in the weather, skimming close above the surface of the lake, or river, or meadow, along the side of a cliff, a hedge, a paling, or a sheltered avenue of trees. When feeding, it flies with the mouth more or less open, and the capture of an insect is indicated by an audible snap of the bill. It drinks and frequently laves itself while on the wing. The indigestible part of the food is cast up in pellets.

The utterance of the Swallow in the way of song, though neither powerful or varied, is cheerful and pleasant—a pretty warbling, which you like to stop in your walk and listen to. It may be heard very early in the morning, even so soon as from a quarter-past to half-past two, and also very late in the season. Mr. Thompson, of Belfast, has recorded separate instances of his having heard its song, on the 2nd. of September, the 10th. of September, and the 13th. of September, in different years.

In the month of May, about a month after the arrival of the bird, the nest is commenced, and, as imported by one of its trivial names, the inside of a chimney is a common selection, and some angle or corner a few feet down is taken advantage of for the support that it affords. The precise situation is frequently resorted to that had been made use of in previous seasons. The nest, which is open at the top, is formed of moist earth, which the bird collects bit by bit in its bill, from the side of a pond or stream, or the middle of a road, as may often be seen: it is moulded into shape, intermixed with straw and grass; and is finally lined with feathers, or such like soft materials.

Bell turrets are often built in, as also the ledge under the roof of a barn, the inside of the arch of a bridge, the shaft of an old mine or well, unused rooms or passages to which access can be gained, even such as a small orifice in a door affords; any projection of a spout, lintel, beam, or rafter that will serve as a buttress being built upon,—a 'coign of vantage;' gateways, and outhouses of every kind are chosen; and I have known a pair to build under the wooden shed of the station at Hutton-upon-Derwent, near Malton, almost within reach of the hand.

It is curious that in Ireland Mr. Thompson observes that he has never known the Swallow to build in chimneys, which,

as before remarked, are so often built in with us. Thus Gilbert White says, in his 'Natural History of Selborne,' that 'in general with us, this *Hirundo* breeds in chimneys; and loves to haunt those stacks where there is a constant fire, no doubt for the sake of the warmth; not that it can subsist in the immediate shaft where there is a fire, but prefers one adjoining to that of the kitchen, and disregards the perpetual smoke of the funnel, as I have often observed with some degree of wonder.'

Yarrell mentions one which was lodged in the half-open drawer of a table in an unoccupied garret, to which access was obtainable through a broken pane of glass; and in the Museum of the late Sir Ashton Lever, one was preserved which had been attached to the body and wing of a defunct Owl, which had been nailed against a barn. Sir John Trevelyan, Bart. wrote to Bewick, 'At Camerton Hall, near Bath, a pair of Swallows built their nest on the upper part of the frame of an old picture over the chimney, coming through a broken pane in the window of the room. They came three years successively, and in all probability would have continued to do so if the room had not been put in repair, which prevented their access to it.' Yarrell mentions the nest of one pair which was built on the bough of a sycamore hanging low over a pond, at the Moat, Penshurst, in Kent, in the summer of 1832. Two sets of eggs were laid in it. The first brood was reared, but the second died unfledged.

W. Thompson, Esq., of Belfast, mentions one or two peculiar instances of the nidification of the Swallow, in the neighbourhood of Belfast:—'A pair of these birds built their nest in a house, although the door, by which alone they could enter, was locked every evening, and not opened before six o'clock the next morning; so that being early risers they thus lost, for no inconsiderable part of the season, fully three hours every day.' A similar fact is mentioned in Captain Cook's 'Sketches in Spain,' where it is stated that in the southern provinces the Swallows live in the *posadas*, their nests being built on the rafters where they are shut up every night. In the 'Northern Whig,' a Belfast paper of July the 2nd., 1829, the following paragraph appeared:—'We understand that a pair of Swallows have built their nest in Mr. Getty's schoolroom at Randalstown; and, notwithstanding there are above forty scholars daily attending, the birds

rearlessly went on with their labour, and now have their young ones out. One of the windows had been for several nights left down, at which time the Swallows found admittance, and after much apparent deliberation commenced their structure, which they carried on chiefly during the hours of the school; and, though they had abundance of time to build, either before the school commenced, or after it was dispersed, yet they always preferred a few hours about noon for their labour, and seemed to do little at any other time. The scholars, much to their credit, gave them as little annoyance as possible, and the window is still kept open.'

In a natural state, or rather in a country where suitable structures are wanting, it is very probable that rents in rocks and caves are always built in.

The Rev. Gilbert White, of Selborne, records the choosing of two odd situations for Swallows' nests; one of them on the handles of a pair of shears which were placed against the wall of an outhouse. Mr. Jesse, too, in his 'Gleanings in Natural History,' mentions one which he saw built on the knocker of the hall-door of the Rectory house of the Rev. Egerton Bagot, at Pipe Hayes, Warwickshire. He further observes, 'The confidence which these birds place in the human race is not a little extraordinary. They not only put themselves, but their offspring in the power of man. I have seen their nests in situations where they were within the reach of one's hand, and where they might have been destroyed in an instant. I have observed them under a doorway, the eaves of a low cottage, against the wall of a tool-shed, on the knocker of a door, and the rafter of a much-frequented hay-loft.'

Bishop Stanley mentions one which was built in a bracket for holding a lamp in a corner of an open passage, close to the kitchen door in a nobleman's house, in Scotland, and though the lamp was taken down to be trimmed every day, and lighted every evening, there a Swallow, and it is naturally believed the same Swallow, built her nest for three or four years, quite regardless of the removal or light of the lamp, and the constant passing and repassing of the servants. His Lordship adds, that on the opposite side of the same open court, the great house bell was hung, under a wooden cover, fastened to the north wall of the house. It was a large bell, and was rung several times a day to call the servants to their meals. Under the wooden cover of this bell, the

same Swallow, it is believed, which had formerly built on the bracket for the lamp, built a nest for several years, and never was in the least disturbed by the ringing of the bell, or the rattling of the rope. A figure is given of the nest, in the form of a cornucopia—both ends affixed to the roof of the cover.

The eggs are usually from four to six in number, white, much speckled over with ash-colour and dark red, or brown and rufous.

Two broods are frequently hatched in the year, the first of which flies in June, and the second the middle or end of August. When the young are fledged, they may often be seen perched in a row on the edge of the chimney top, pluming themselves, and waiting for, and watching their parents' return with food for the supply of their wants. When they have advanced a step to some neighbouring bough or building, they still are dependent on them; and, even when they can fly, are still fed by them in the most dexterous, and almost imperceptible manner on the wing. The old birds supply them with food once in every three minutes, during the greater portion of the day. Think of this, and, in the words of the 'Wanderings,' a book I love, applied to our present subject, 'Spare, O spare the unoffending' Swallow!

The glossy purple of the upper part of the plumage of the Swallow is only to be perceived upon a close inspection, or when you have the advantage of looking down upon the bird as it skims from under some bridge in the light of the sun, or beneath some other such elevation, from whence you have a commanding view of it. Male; length, eight inches and a half or three quarters; bill, small and black, the ridge elevated, the space between it and the eye, black; iris, dark brown; forehead, chesnut; crown, side of the head, neck, and nape, very glossy dark blue; chin and throat, chesnut, below which is a bluish black band, which ends in a straight line across the breast, which is buff white, more or less tinged with brown; back, glossy blue.

The wings, which expand to the width of one foot two inches, and reach to about the middle of the tail, are long and pointed, reaching beyond the end of the second tail feather; the first and second quill feathers are nearly equal in length, but the first rather the longer of the two. Greater and lesser wing coverts, glossy blue; primaries, dull black, with bronze reflections and pale brown edges; secondaries, the

same, very short, with slanting tips; tertiaries, glossy blue; greater and lesser under wing coverts, buff white, darker than the breast, and ending on the edge of the wing in a border of black, brown, and white. Tail, very much forked, the outer feather on each side almost five inches in length, being as long again as the others, and nearly black, with bronze reflections and pale brown edges, with an oblong patch on the inner web beginning near the base, and ending near the end of the second feather, which, as well as the three next feathers, which decrease in length, have each a rounded white patch on the inner web; the two middle feathers are the shortest of the whole, and dull black, without any white on either web. The white spots on the others form a sort of bar when the tail is expanded, but when it is closed they are not apparent—they shine through. Upper tail coverts, glossy blue; under tail coverts, buff white; legs, very short, and, as the toes, slender, and reddish grey; their upper surface is covered with small scales, underneath the latter are grey; claws, weak, sharp, and almost black. The Swallow moults in January and February.

The female resembles the male in plumage. The brown on the forehead is less extended than in the male; the black on the upper part of the breast is not so broad; the breast has less of the rufous and buff tinge; the back is not so lustrous, and the outer tail feathers are shorter than in the male bird.

The young are at first thickly covered with grey down. They soon assume the garb of the adult bird, but are without the lustrous tint, and the feathers do not lie so compactly together. Bill, yellow at the corners of the base; iris, brown. There is no chesnut on the forehead; the throat is paler and duller—the black band is but faintly indicated. The outer tail feathers are much shorter, not reaching to their proper length till after the first moult; the legs are reddish black; the toes beneath, grey.

Buff varieties occasionally occur, as well as white ones, and also pied, or black and white; yellowish white, with a faint rufous tinge on the head and chin; and one silver grey one has been met with, with the same red on the head and throat, and one white above, with the chin and breast reddish white. One of a very light fawn-colour; another of a lighter fawn-colour, of various shades, the wings and tail being almost white on the upper surface; another with the body, head, and breast, buff-colour, the wings and tail white. Mr. Thompson

says, I have always remarked that in particular seasons, birds are more prone to assume variety in the colour of their plumage, than in others.

While staying last summer, 1851, with my sincerely valued friend and old schoolfellow, the Rev. Henry Hilton, Rector of Milsted, near Sittingbourne, Kent, I noticed, in the course of a walk by Torry Hill, the seat of Mr. Pemberton Leigh, a white bird on the wing, which I at first took to be a Starling, but which proved to be a young Swallow. After two or three unsuccessful flying shots with an ancient 'piece,' which might be supposed to be from the same armoury as that from which Robinson Crusoe was supplied, it at last fell from a rail where I aimed at it sitting. I had previously been informed of a brood of White Swallows at this place, and having applied to Mr. Chaffey, of Dodington, near Sittingbourne, for a chronicle of the facts, he obliged me with the following statement:—'In 1849, a pair of Swallows built a nest, and hatched their young in a bakehouse attached to a farm-house, in the parish of Frinsted, in the occupation of a Mr. Filmer. Out of the number of young ones there was a milk-white one, which was shot some time after they had flown, and is now in my collection. In the following year, 1850, a pair, most likely the same, built another nest in the same place, and hatched two white ones, one of which was sent to me; what became of the other I never heard. This year, 1851, a pair again built their nest in the same place, and hatched two white ones, the fate of one of which you, sir, are acquainted with. They had ingress and egress through a broken pane of glass. The bakehouse was constantly used for baking and other purposes, of which the old birds took little or no notice.'

PURPLE MARTIN.

AMERICAN PURPLE MARTIN.

Hirundo purpurea,

WILSON. AUDUBON.

Hirundo—A Swallow.*Purpurea*—Purple—purple-coloured.

THIS Swallow appears to hold the place in America that our own does with us. Wilson says, 'I never met with more than one man who disliked the Martins, and would not permit them to settle about his house. This was a penurious, close-fisted German, who hated them because they 'cat his peas.' I told him he must certainly be mistaken, as I never knew an instance of Martins eating peas; but he replied with coolness that he had many times seen them himself 'blaying near the hife, and going schnip, schnap;' by which I understood that it was his 'bees' that had been the sufferers; and the charge could not be denied.'

It is a sociable and half-domesticated bird; and it would appear that in America it is the custom to encourage these Martins to frequent the neighbourhood of farmsteads, as they are supposed, or rather indeed known to be useful in driving off birds of prey. They are the terror of Eagles, Hawks, and Crows; which at their first appearance they assail so vigorously, that they are instantly compelled to have recourse to flight. Poultry, as soon as they hear the voice of the Martin engaged in fight, instinctively know what is the matter, and exhibit alarm and consternation. The King-bird is in like manner attacked, but if a common enemy appears, he is united with in repelling such. Wilson relates an anecdote



PURPLE MARTIN.

dote communicated to him by the late John Joseph Henry, Esq., Judge of the supreme court of Pennsylvania, of the place put up by him for the reception of the Martins having been forestalled by Blue-birds. The latter succeeded in repelling the former, and kept possession of their abode, and this for eight successive years; the Martins always attempting to obtain a footing, but being as uniformly forced to give up the attempt.

The following specimens of the Purple Martin have been met with in this country:—Two were shot on different days by Mr. John Calvert, of Paddington, the first week in September, 1842, at the reservoir, Kingsbury, Middlesex. One was a young bird of the year, the outside tail feathers not being grown to their full length, the other was an old male in full plumage.

In Ireland, one was shot near Kingstown, in the county of Dublin, and is now preserved in the Museum of the Royal Dublin Society.

The Purple Martin, as may be imagined, is migratory in its habits, arriving at the scene of its parental duties in May, being to be observed on the way thither at various half-way houses in February, March, and April, and leaving again about the 20th. of August. 'Unde datum sentit;' whence it is gifted to know, the time when, in pursuance of the not-to-be-resisted mandate of nature, it must set out on its travels, and, in obedience to the like dictate, the time when it must again return by the same route by which it went forth on its long journey, is hidden in the unfathomable mind of that Divine Being whose thoughts are past finding out; 'His ways are higher than our ways, and His thoughts than our thoughts.' How, too, does the Swallow know the place to which it must wend its way; and how does it track the trackless path to it?

Insects are the food of the Purple Martin, and of these bees constitute an ordinary portion, as also wasps, and even beetles of large size.

'Just as dawn approaches, the Martin begins its notes, which last half a minute or more, and then subside until the twilight is fairly broken. An animated and incessant musical chattering now ensues, sufficient to arouse the most sleepy person.' The usual note is described as resembling the syllables, 'peuo, peuo, peuo,' frequently succeeded by others more low and guttural.

'The summer residence of this agreeable bird,' says Wilson, 'is universally among the habitations of man; who, having no interest in his destruction, and deriving considerable advantage, as well as amusement, from his company, is generally his friend and protector. Wherever he comes, he finds some hospitable retreat fitted up for his accommodation, and that of his young, either in the projecting wooden cornice on the top of the roof, or sign-post, in the box appropriated to the Blue-bird, or, if all these be wanting, in the dove-house among the Pigeons. In the latter case, he sometimes takes possession of one quarter or tier of the premises, in which not a Pigeon dare for a moment set its foot.' Some persons, he further observes, have regular places fitted up beforehand for the reception of their visitors, to which it is noted that the same individuals return from year to year. Even the solitary Indians of the Chickasaw and Chactaw tribes have a fondness for this bird, and shew it by lopping the bows off a sapling tree by their wigwam door, on which they hang an empty gourd or calabash prepared thus for it to build in. The Negroes also, on the banks of the Mississippi, place the like on the tops of long canes, which they put in the ground for the same purpose.

Nidification commences in April or May, according as the place halted at is farther or otherwise on the 'great north road.' The nest is made of leaves, hay, straw, and feathers in considerable quantity.

The eggs are about four in number, small for the size of the bird, and pure white without any spots. The first brood appears in May, the second late in July. Both the male and female assist in the work of incubation; the former relieving and attending on the latter with much careful tenderness.

Male; length, eight inches; bill, strong; iris, full and dark; head, crown, neck, nape, chin, throat, breast, and back, deep purple blue, with reflections of violet-colour. The wings expand to the width of one foot four inches; primaries, secondaries, and tertiaries, brownish black. The tail consists of twelve brownish black feathers; it is considerably forked, and edged with purple blue; legs, short, strong, and dark dull purple.

Female; bill, strong; head, crown, neck on the back, and nape, blackish brown, with blue and violet reflections thinly scattered; chin, throat, and breast, greyish brown, the latter

darker under the wings, and tinged below with dusky and yellow.

The young bird is six inches and three quarters in length; bill, black; head, crown, neck, nape, chin, throat, breast, and back, shining purple blue. Greater and lesser wing coverts, tinged with blue; primaries, edged with brown; legs and toes, blackish brown.

MARTIN.

HOUSE MARTIN. MARTIN SWALLOW. WINDOW MARTIN.

Hirundo urbica,

PENNANT. MONTAGU.

Hirundo—A Swallow.*Urbica—urbs*—A city.

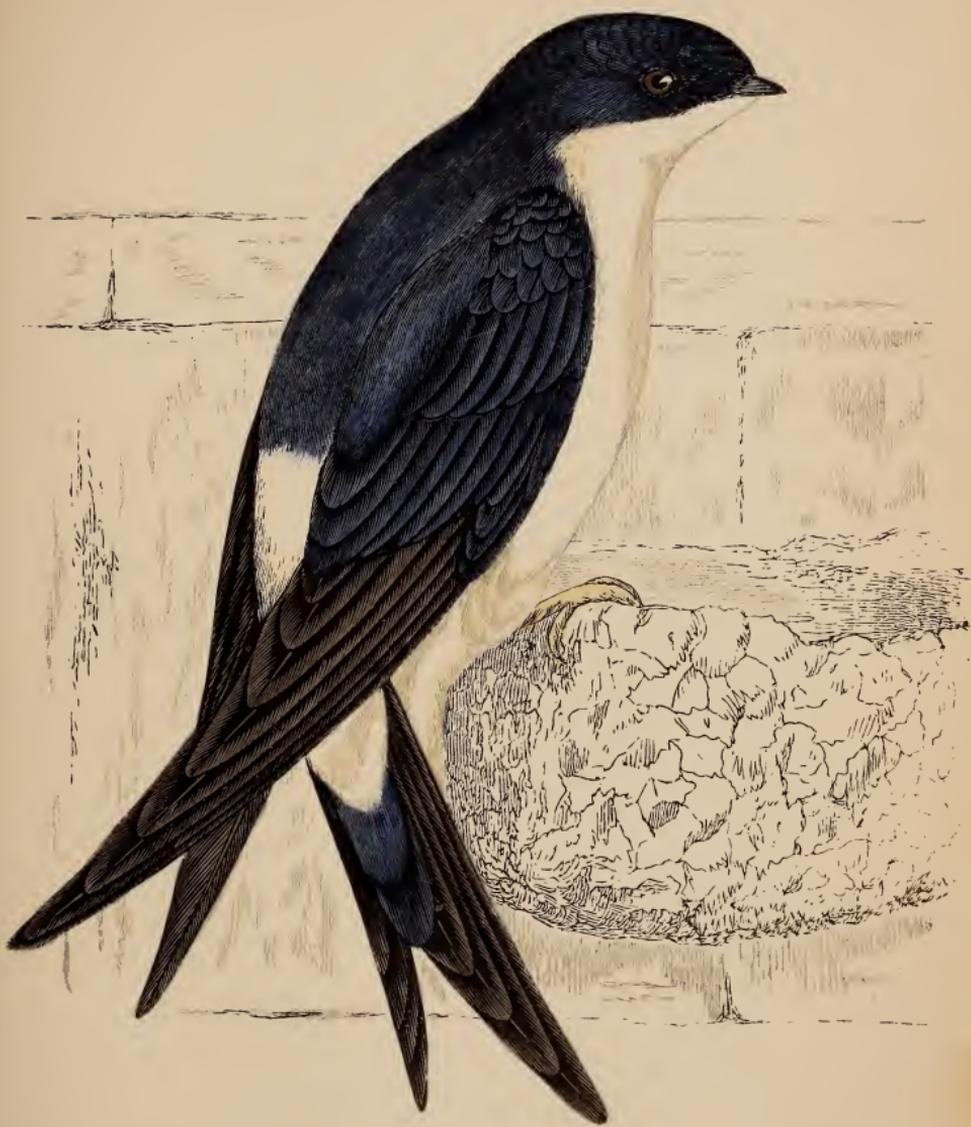
‘WOULD I a house for happiness erect,
Nature alone should be the architect.’

So says the poet Cowley, and those who are wise will say the same, and will build after her model, and on the foundation she lays, so far as is consistent with the duties of life.

The pretty chirruping of the Martin over your window is the pleasantest alarm to wake you up to enjoy the ‘dewy breath of incense-breathing morn,’ and both the associations of earliest recollection and the adventitious aids of poetry combine to invest it with a never-failing charm. So again, at night, when the parent bird has returned to her brood, for whom she has toiled all the day, and takes them under the shelter of her wings; what more pleasant sound is there in nature than the gentle twittering of the ‘happy family’—the unmistakeable expression of the veriest and most complacent satisfaction!

The Martin is an attendant on civilization, and endeavours to establish itself about the habitations of man. It cannot be called a native of Africa, being born elsewhere; but it visits us and other countries from thence. It frequents Lapland, Sweden, Norway, and Denmark, and even Siberia, Iceland, and the Ferroe Isles.

The trite remark of Cervantes ‘una golondrina no hace verano;’ ‘one Swallow does not make a summer,’ is as true



MARTIN.

of this species as of all the rest. There is, in fact, hardly a month, nay, there is hardly a day in the winter half of the year, on which, on one occasion or another, a Martin has not been seen, either a late arrival, or a late tarrying, or one roused up from the lethargic slumber of a torpid hibernation, in which it would appear that, in some instances at least, these birds are wrapped. The average time of the arrival of the Martin is about the 21st. of April—a few days later than the Swallow; but, as already pointed out in the case of that species, after they have made their first appearance, they often disappear for weeks, and again shew themselves, and then remain through the summer. About the middle of October they generally depart in large flocks, having first congregated on house-tops, church-towers and roofs, and even on trees. They are often, however, much later in leaving us. White of Selborne saw a small flock on the 3rd. of November. A flock of more than one hundred were seen at Dover, on the 13th. of November, 1831. Montagu saw several at Kingsbridge, in Devonshire, until the 15th. of November, 1805. A flight of more than two hundred were seen at Barnstaple, on the 17th. of November, 1838; and the Rev. W. F. Cornish saw one near Sidmouth, on the 10th. of December, 1835.

‘Timid as they appear to be,’ says Bishop Stanley, ‘when occasion calls for exertion and courage, they can not only fight a good battle, but manifest a good deal of generalship. A pair of Martins having built in a corner of a window, one, of which, from a remarkable white feather in one of its wings, was known to be the same bird which had built there the year before, had no sooner finished their nest, than a strange Swallow conceived the plan of taking possession of the property, and once or twice actually succeeded in driving the owners out. For a week there was a constant battling; at length the two rightful owners were observed to be very busily engaged in lessening the entrance into the nest, which in a short time was so reduced, that it was with difficulty they could force themselves into it singly. When they had accomplished their object, one or other of them always remained within, with its bill sticking out, ready to receive any sudden attack. The enemy persevered for a week, but at length, finding its prospects hopeless, left the pair to enjoy the fruits of their forethought.’

The following curious circumstance, originally communicated

to me by Mr. George B. Clarke, of Woburn, Bedfordshire has been recorded in 'The Naturalist,' vol. i., pages 23-24:— 'In the summer of 1849, a pair of Martins built their nest in an archway at the stables of Woburn Abbey, Beds., and as soon as they had completed building it, and had lined it, a Sparrow took possession of it, and although the Martins tried several times to eject him, they were unsuccessful; but they, nothing daunted, leaving him in full possession, flew off to scour the neighbourhood for help, and returned in a short space of time with about thirty or forty Martins, who dragged the unfortunate culprit out, took him to the grass-plot opposite, called 'the circle,' and there all fell on him, and killed him. This was related to me by an eye-witness, a day or two after the occurrence took place.'

So also, in the 'Zoologist,' page 2605, Mr. J. J. Briggs relates, 'In the year 1846, a pair of House Martins built their nest beneath one of the windows of our house, and had just made it ready for the reception of eggs, when two Sparrows took possession of it, and defied all the efforts of the rightful owners to force them out. During the absence of the Sparrows one day, the Swallows blocked up the entrance, and finally built another nest over it, and so excluded the usurpers.' Also, 'in 1836, I was an eye-witness to an interesting circumstance, which illustrated the natural affection of this bird. During the third week in October, a pair of Martins built a nest underneath the battlements of one of the public buildings in Derby, in a warm and sheltered situation. At the end of the month, the main body of Martins departed, leaving this pair behind, which continued in the neighbourhood until the extraordinarily late period of November 27th., when the young being fledged, left the nest, and they and their parents disappeared together. This appeared to me extraordinary, as I have known more than one instance in which the old birds have forsaken their offspring to obey the migratory impulse: sometimes, if a nest is examined immediately after the departure of a pair of these birds, the young will be found half-fledged, and evidently having died from starvation, occasioned by the parents abandoning them.'

The flight of the Martin is powerful and rapid, but often wavering and unsteady.

Its food consists of insects.

Its note is a lively twitter, often elevated, especially early in the morning, into an extremely pleasing warble.

The Martin rears two broods in the year, and sometimes lays a third or even a fourth time, though the last brood cannot be attended to before they themselves leave. White of Selborne says that they are never without young ones in the nest as late as Michaelmas; for as soon as one brood is able to fly, the hen bird begins to lay again, but the latter clutch is smaller in number than the former one. Those which are unfortunately unable to fly when the 'moving power' seizes their parents, are left behind, speedily to perish, as has repeatedly been discovered. When only two broods are produced, the first nest is commenced about the 25th. of May, and the young leave the nest about the 2nd. of August. The second nest is begun about the 11th. of August, and the second brood quit it about the 29th. of September.

The same nest is resorted to from year to year. Thus the Rev. Gilbert White says:—'July 6th., 1783, some young Martins came out of the nest over the garden door. This nest was built in 1777, and has been used ever since.' The young birds of one year often add another the following to 'the row' of nests which ornament the eaves where their parents have built, and sometimes the birds will form a continuous line of the mud they build with along the wall, without any apparent or discernible motive, for there it remains without any use being made of it. The mud they use in building is tempered and cemented in some way or other, for it will adhere firmly even to glass.

The nest, which is generally built under the eaves of a house, but also frequently on the sides of cliffs, is of an hemispheric form, and is lined inside with a little hay and feathers.

The eggs are four or five in number, smooth and white. Incubation lasts thirteen days. At first the parent birds enter the nest each time to feed the young ones, but by and by the latter may be seen anticipating their arrival by thrusting out their heads at the door of their house, in expectation of the meal which they there receive; the old bird holding on to the nest outside, in the attitude depicted in the plate.

Male; length, a little over five inches and a quarter. Bill, short and black; iris, brown; head on the crown, neck on the back, and nape, glossy blue black; chin, throat, and breast, white; back, glossy blue black. The wings reach to the end of the tail; the first quill feather is the longest; greater and lesser wing coverts, glossy blue black; primaries,

secondaries, and tertiaries, dull black. Tail, dull black and forked; upper tail coverts, white; legs and toes, small, and covered with short white downy feathers; claws, curved, sharp, and of a greyish horn-colour.

The female resembles the male, but the colour is not so bright, and the white on the chin and throat is less pure.

The young resemble the female.

White varieties are sometimes obtained; one has been shot with the middle feather of the tail white.



SAND MARTIN.

SAND MARTIN.

BANK MARTIN.

Hirundo riparia,

PENNANT. MONTAGU.

Hirundo—A Swallow.*Riparia*—Of or belonging to banks.
Ripa—A bank.

THIS diminutive species of Swallow makes its way from Africa, along the whole of which continent it is believed to be found, to its northern summer haunts; and advances to all the south of Europe, and as far as Siberia, Russia, Denmark, Sweden, and Norway. It is said to be resident in Malta all the year round. In India also and America it is met with.

It is somewhat local in its distribution with us; in fact, according to the localities themselves, so is its frequentation of them.

In Ireland it occurs, though not so plentifully as the others of its race. In Scotland also. In the Orkney Islands these birds were formerly more numerous than they are at present. They frequent Skaill, Sanday, and the Loch of Stenness. They also visit Shetland.

Sand banks, especially in the neighbourhood of water, are the favourite resort of this species.

The Sand Martin, though one would think that the wild winds would retard the progress of so tiny a traveller, arrives here rather before the others of its congeners. On the 24th. of March, 1847, W. F. W. Bird, Esq. has known it at Kidderminster, in Worcestershire. Near Penzance more than a dozen were seen by Edward Hearle Redd, Esq., on the 29th. of March, 1847. In two different seasons, it has been noticed

even so far north as Carlisle, as Mr. Heysham has recorded, before the end of March. In Cumberland it has been observed on the 4th. and the 11th. of April. In the Orkney Islands it arrives in May. In the month of August it departs.

In favourite situations, the holes that these birds have bored may be seen in great numbers, and close to each other. Two broods in the year are sometimes reared, the first being able to forage for themselves in about a fortnight; and when the first batch of young have left the nest, they roost in numbers in such places as osier beds in small islands, on the banks of rivers, and other suitable resting-places. The second brood is not unfrequently forsaken by its parents, who find the call, 'away, away,' too strong to be resisted, and even natural affection gives way to its all-powerful command. Both parents feed the young as long as is necessary: they all return at night to sleep in the nest. They are sociable birds, as evinced by the great number of their tenements that are to be seen in the immediate vicinity of each other. In some instances, however, single pairs have been known to build by themselves, and in others only small numbers.

Their flight is rapid, flickering, and unsteady. When searching for food, they may be seen skimming low over meadows and commons; and, like the other Swallows, they often drop upon the water as they fly, to drink, or to lave themselves.

The food of this species consists, like that of the rest of their genus, of insects, and these are frequently dashed at on the water. The young are fed with the same, sometimes of large size.

The nest of the Sand Martin, as intended by its name, is placed in the straight banks of rivers, cliffs of the sea-shore, sand-pits, and such other like situations as are sufficiently soft for the bird to perforate—not always at a high elevation—I have known them almost within reach of the hand from the beach. It hollows out for itself a way to its intended resting-place to the depth of from two to three, and even nearly four feet. The work is performed with its bill, which it keeps closed for the operation, swaying itself round as occasion requires on its feet as a pivot. It begins at the centre and works outwards, and hence the former is more deeply penetrated than the latter. The gallery, which tends upwards, is more or less tortuous; the entrance is from two to two inches and a half wide, and is widest at the inner

end, where a little hay or wool, or a few small feathers are placed, on which the eggs are laid; the loose sand having all been lightly removed from the surface, as the bird has worked on, with its feet. The 'excavators' complete their work, though they are such 'feeble folk,' in about a fortnight. The same hole is resorted to from year to year, or, if it has fallen away, another is hollowed out in the same neighbourhood. The weight of sand mined in a day is from sixteen to twenty ounces, and pebbles of even more than two ounces in weight have been known to be removed.

The eggs are from four to six in number, and white. They are very tender, and are hatched after an incubation of twelve or thirteen days.

Male; length, four inches and three quarters: Meyer says from five and a quarter to five and a half; bill, dark brown, or nearly black, and very small and weak; iris, dark brown; head, crown, neck, and nape, light brown; chin, throat, and breast, white, the latter having a band of light brown, with a few spots of the same below it, across its upper part, and light brown also on the sides; back, light brown. The wings reach beyond the end of the tail, and expand one foot in width; the first feather is the longest, the others gradually shortening in succession; greater and lesser wing coverts, brown; primaries, secondaries, and tertiaries, dark brown, almost blackish, underneath lighter; greater and lesser under wing coverts, light brown. Tail, forked, dark brown, almost blackish, underneath it is lighter; upper tail coverts, lighter brown than the back; under tail coverts, white. Legs and toes, dark reddish black or brown, and scaled; there are a few buff white feathers just above the junction of the hind toe to the leg; claws, dark brown.

In summer the plumage loses its gloss.

The female closely resembles the male.

The young birds have the chin buff white, the throat dashed with brown and rufous, and often spotted with grey, and the feathers of the head, back, wing coverts, and tertiaries, tipped with the same buff white. This is sometimes separated from the ground colour by a darker band; the legs are paler than in the adult, and without the tuft of feathers behind the hind toe.

Varieties have occasionally occurred—white, and yellowish white.

PIED WAGTAIL.

WATER WAGTAIL. WHITE WAGTAIL.
 BLACK AND WHITE WAGTAIL. WINTER WAGTAIL.
 PEGGY WASH-DISH. DISH-WASHER.

Motacilla Yarrellii,
 “ *alba*,
 “ *lotor*,

GOULD. MACGILLIVRAY.
 LINNÆUS. LATHAM.
 RENNIE.

Motacilla—A Wagtail.

Yarrellii—Of Yarrell.

ONE is often led to wonder, and doubtless the same remark would apply to other lands, how the most trivial names of antiquity keep their place in the vocabulary of the country; while modern inventions last but for the day, or for the hour, and are then consigned for ever to the ‘tomb of all the Capulets.’ One may soon be lost in speculation as to the time when each of such old names was first assigned, and who it was that gave it; what combination of circumstances first procured for it the honour of the durability which bids fair to be perpetual; and through what succession of changes it has been maintained. These considerations make us smile at the vain conceits of some of our modern self-styled naturalists. Do they really think, dogmatically as they may lay down the law to their own entire satisfaction, that their whimsical combinations will ever be adopted by the people of the country—that the old will be displaced to make room for the new? They are fondly mistaken if they entertain the notion. The name of the favourite and elegant little bird before us—no case of ‘lucus a non lucendo’—will even remain one of the ‘old standards:’ no ‘weak invention’ will ever supersede it in the idiom of the nation. The Wagtail will



PIED WAGTAIL.



always continue a Wagtail, not only in nature, but also in name.

Two species are now believed to have been hitherto included under one; that which is the commoner in this country being comparatively rarer on the continent; the other being here the more unfrequent. At different seasons of the year, too, the one before us appears in two such different dresses, that it might naturally be supposed to be anything but identical at each time with itself.

This bird is stated by Mr. Gould, to have been only procured by him from Norway, Sweden, and the British Islands.

The sides of rivers, and of lakes, of pools, streams, and mill-dams, and the shores of the sea, both among sand and pebbles, are the more natural haunts of the Pied Wagtail; but they are frequently to be seen on the grass and walks in our gardens, coming up often to the kitchen door; and they also frequent ploughed fields and meadows. To the former watery situations they resort in numbers, when the early education of their family has been completed.

In February these birds pair, and early in March begin their migratory movement: then they arrive from the continent: many at least of them, not all, for some have remained, and some still remain in the south, while others advance northwards, even to the extremest boreal shores of Scotland. They leave the cold north for more southerly districts before the winter; and about the middle of August they again begin to move southwards to the sea coast. There, at the end of that month, or the beginning of September, they move in an easterly direction; and towards the middle of October many of them again wing their way elsewhere; but a considerable number remain. In severe weather they approach more nearly to houses and farm-yards, and may then be seen quietly meandering along, flitting up, if disturbed, to the house top, and occasionally, though but rarely, alighting on trees. Their movements appear to be rather uncertain, but after a periodical absence, they again return—sometimes unexpected, but at all times welcome visitors.

The Pied Wagtail is a very elegant bird, and it is truly a pleasing sight to watch it nimbly running or lightly treading on the most treacherous sands, in quest of its food, ever and anon flirting up its tail, which, indeed, is always rather elevated, as if to keep its neatness unsoiled. Occasionally you may see it wading ankle deep in the water; now perching on

a little stone; now flying off on a sudden to join some neighbouring troop of companions, whose companionship it greets with a shrill though gentle twitter; now springing into the air to capture a fly; now threading its way among a herd of cattle, or a flock of domestic birds; still almost heedlessly awaiting your near approach. If disturbed, it springs up with a sharp but delicate note of alarm, and after a few aerial bounds frequently alights again, but sometimes goes right away.

The parent bird is extremely solicitous for the safety of her young, and will almost suffer herself to be taken off the nest sooner than forsake them. If she does fly off, it is only to a short distance, and immediately the danger is past she is back to her post. The young continue with their parents during the summer and autumn, the difference in their respective plumage pointing each out at a glance.

The flight of this bird is light and undulated, but unsteady. It rises and falls alternately, renewing the motion of its wings at the pause of each descent.

Its food is chiefly composed of insects; and these, as Mr. Macgillivray well describes, are sought in various diverse localities. Actively and dexterously the bird steps among rocks and stones, and then pitching on the top of one, instantly vibrates its tail, as if poisoning itself. Again it makes an aerial sally, flutters about a little, seizes an insect or two, then glides over the ground, swerving to either side, and resumes its attitude of momentary pause. Sometimes it essays an excursion over the water, one while darting forwards in a straight line, then hovering in the same spot, to seize some prey; and then, as if fatigued with the unwonted effort, it makes a sudden detour, and betakes itself to some offering place of rest. At times it may be seen running along the ridge of the top of a house, and every now and then capturing a fly. It has been asserted that it also feeds on minnows, the small fry of fish, and on minute shell-fish.

The note is a sharp cheep, which it repeats frequently when alarmed, flying about in a wavering manner. It sometimes aspires to a pleasant modulation, which may almost be dignified with the name of a song.

The nest is commenced in the beginning or middle of April, according to the season. It is placed in situations of very opposite kinds—in a hole of a stone wall, the side of a bridge, in a hollow of a tree, on a heap of stones, the

bank of a streamlet or river, the side of a stack of hay, peat, or wood, a stony or grassy bank, a mud wall, or on the grass. Meyer has known one in the middle of a turnip field. It is about five inches wide externally, by about three and a half internally, and composed of stems of grass, leaves, small roots, and moss, lined with wool, hair, thistle down, or feathers, and any other such soft substances, all somewhat rudely, or rather loosely put together. Mr. Weir sent Mr. Macgillivray an account of a pair of these birds which built their nest in an old wall, within a few yards of four men, who, during the most part of the day, were working at a quarry, where they were occasionally blasting the limestone with gunpowder. There the female laid and hatched four eggs. She and the male became so familiar with the workmen that they flew in and out without shewing the least signs of fear; but if he himself approached, so quickly did they recognise a stranger, they immediately flew off, and would not return until he had removed at least five or six hundred yards from their abode. Also in May, 1837, another pair built their nest under the platform at the top of a coal-pit, which was jarred against every time that the coals were drawn up. They became quite familiar with the colliers and other persons connected with the works, flying in and out only a few feet off them, without shewing the least symptoms of fear. The nest was built within a few inches of where one of the men used to stand. Mr. Jesse mentions another pair which built their nest in a workshop occupied by braziers, and, though the noise was loud and incessant, there they securely hatched their young.

The eggs, five or six in number, and of an elongated oval form, are light grey, or greyish or bluish white, sometimes tinged with yellowish or greenish, spotted all over with grey and brown. They vary, however, very considerably both in size and colour, some being much larger than others, some much more deeply coloured, and some most spotted at the thicker end, in the form of a zone or belt.

The young are hatched after an incubation of a fortnight; a second brood is generally reared in the year, the former one having been produced early.

Male; length, seven inches and a half to seven and three quarters; bill, deep black; iris, dusky black; there is a narrow space of white over it. Short bristles occur at the base of the upper bill; forehead, white; side of the head, white; back

of the head on the crown, deep black, with a glossy blue tinge in summer; neck, above in front, white, as is a band on each side in summer; on its lower part is a semicircular band of black, narrowing upwards towards the base of the bill. In the spring the interval is filled up with black. Nape, deep black; chin, throat, and breast, white, the sides tinged with grey; back above, in summer deep glossy bluish black; on the middle greyish black, with a tinge of green in some individuals, becoming darker as the season from spring to summer advances, but still generally tinged with grey, though in some specimens it is entirely black.

The wings extend to the width of eleven inches and a half or one foot, and reach to within two inches and a half of the end of the tail; the second quill feather is the longest, the first longer than the third, but all nearly equal. Yarrell describes the first as the longest. Greater wing coverts, greyish black, margined with greyish white; lesser wing coverts, greyish or brownish black, their edges and tips white in summer, the extreme edge grey; both forming two bars of white on the wing; primaries, greyish black, some of them margined on the inner web with greyish white in summer; secondaries, the same, the white edge wider, and tinged with grey; tertiaries, one of which is very long, the same, the edge still wider, but less in summer. The tail, which is very long, and composed of twelve narrow feathers, rounded at the ends, and of nearly equal length, is black, the eight middle feathers black; the outside feather is usually white, with a narrow black wedge-shaped band along the inner edge, excepting towards the end; the next also is white, with the inner black band more extended—the base of both black; the third has a narrow margin of white; the middle pair are the widest at the base, but much narrower towards the tip. Upper tail coverts, which are very long, deep black, with a glossy blue tinge in summer; under tail coverts, white. Legs, toes, and claws, deep black, the hind claw rather short.

The female resembles the male. Length, seven inches and a half; the crescent on the fore part of the neck is not so large, and in the summer it is tinged with grey. The breast is greyish white; the back has more grey, especially in summer. The wings expand to the width of ten inches and three quarters, or from that to eleven and a quarter; the quill feathers are dusky; the tail has the two middle feathers brownish black.

In the young the bill is dusky, the edges partly yellowish. There is a narrow light grey or yellowish white streak over the front of the forehead; head behind and crown, grey, darker than the back; neck, in the front and on the sides, greyish white. The throat has a dusky line down each side, forming a curved band in the front; the white of the breast is obscured with grey and yellowish brown, and the crescent is but obscurely indicated; sides, light grey; the back is dull grey, in some specimens tinged with green. Greater and lesser wing coverts, blackish brown, edged with greyish white, making two bands; primaries and secondaries, larger and lesser under wing coverts, greyish brown, tipped with whitish. The tail has the middle feathers blackish brown, the rest darker, the two side ones nearly all white; upper tail coverts, grey, darker than the back. Legs and toes, brownish; the feathers on the former are greyish brown, edged with whitish.

After the autumnal moult the colours become more distinct; the head is still grey, the crescent on the breast is black, and the back is grey as the head.

A. E. Knox, Esq. says, "These birds moult soon, having completed the change at the end of July, or early in August. The black feathers gradually disappear from the throat in both sexes, and the dorsal plumage becomes of a lighter colour in each; the back of the male assuming the grey of the female during the breeding season; while that of the female, and the young of the year in both sexes, changes to a very light grey. Indeed, between the two latter, there is no external difference of appearance." This moult is completed at various periods, from the end of August to the end of October; the difference being, doubtless, the consequence of there having been one or two broods. In the spring there is another moult, which commences in February, and is completed by the middle of April. The throat first changes, then the head, back of the neck, sides, back, and breast, in succession; but the quill feathers of the wing and of the tail are not changed.

Albino individuals have been met with, and there is often some yellow on the lower part of the breast.

WHITE WAGTAIL.

GREY AND WHITE WAGTAIL.

Motacilla alba,
 “ *Brissoni*,

LINNÆUS. GMELIN.
 MACGILLIVRAY.

Motacilla—A Wagtail.

Alba—White.

As stated in the previous article, these two supposed species of Wagtail have only lately been considered as such; having been previously, and, as is thought, erroneously, combined under one. I will not pass a decided opinion upon the subject—the imagined differences will appear in the specific description; but I must observe that some degree of uncertainty even still prevails. Thus Mr. Macgillivray, usually so scrupulously accurate, in treating of the present bird, quotes Mr. Gould as saying that it, the Linnæan one, has never yet been discovered in any part of England, yet Mr. Macgillivray is himself describing it as a sufficiently plentiful species at the time; and then, nevertheless, after so saying, he gives his own description from continental specimens. So again, Mr. Yarrell says that ‘although’ believing the birds to be distinct, he gives figures and descriptions of ‘both;’ and then follows, with the figure of the Pied Wagtail, one of the Continental White Wagtail, which, he says, he has very little doubt ‘will be’ occasionally found in this country. All this seems like ‘confusion worse confounded;’ and I cannot with truth profess to be able to see my way very clearly. In the last edition, however, he gives it. The Prince of Musignano considers that two distinct species exist.

This bird is found over the whole of the continent of



WHITE WAGTAIL.

Europe, taking there the place, as regards numbers, which the Pied Wagtail holds with us; the latter being the less common species there, as the former is here. It is plentiful from Iceland, Sweden, and Norway, to Malta and Sicily, Crete and Corfu; and is also a native of Asia and of Africa.

Like its predecessor, this species is to be met with almost everywhere at times—on the open moor and in the well-cultivated garden; by the side of the rapid mountain stream and the slow and sluggish river; the shore of the boundless ocean, and the estuaries which lead to and from it. Arable and pasture land, if indeed the herbage of the latter be short, are both alike to it; the gravel walk and the well-kept lawn, the village street, and even that of the larger town, the farm-yard pond, and the running rill of the most sequestered dell.

In autumn they migrate, the young accompanying their parents in their travels, seeking the warmer countries for their winter sojourn, after having enlivened the colder districts in the summer.

These Wagtails may frequently be seen in summer time bathing and washing themselves upon some shallow shore. They also, like the other kind, delight at times in running along the tops of houses, walls, and buildings, and perch on stacks of wood, and piles of stones; doubtless they 'find good in everything.' At night they roost among branches of low trees, as also among reeds and various kinds of brushwood; and are said to collect together for the purpose in considerable numbers, and with some degree of clamour. They are ever active and restless by day, and would seem to have discovered the great secret of 'perpetual motion.' They run along the ground with a quickness whose steps the eye cannot follow, and this from morning to night, with but very few intervals of equivocal rest. Their heads too, as well as their tails, are in motion, their legs and their whole bodies. Often they may be seen chasing each other in some fitful humour, and again uniting with aliens in attempting to repel some common foe. One of these birds has been noticed by M. Julian Deby to come for a month to a window, knocking itself against the pane of glass. Another similar instance has been recorded by James Cornish, Esq., of Black Hall, Devonshire. A Wagtail came in the like way to his window, and after some days it was opened to let him in; he became very tame, and used to alight even on the dressing-glass, which he took apparent pleasure in inspecting himself in: his mate would not venture

inside the window. In June he disappeared, but returned again for a short time, after an absence of a few weeks. The next year a pair, of which he probably was one, came again to the window, but did not advance any further.

Its food consists of insects and their larvæ, and as these are procured, as may be gathered from the previous remarks, in every variety of situation, they are doubtless of as great variety of kinds. Many a 'scarce article' that would be a prize in the entomological cabinet, goes unheeded into the indiscriminating pouch of the insectivorous bird.

The nest is generally placed in a hole of a bank or of a tree, higher or lower indifferently; sometimes under the caves of a thatched house, or between the timbers of a roof, among felled wood, the roots that the earth may have fallen away from, a meadow, under a bridge, or in a heap of stones. Both birds assist in its formation, bringing together for the purpose small twigs and sticks, moss, grass, straws, leaves, and roots, and lining the whole with wool and hair.

The eggs, which have little or no natural polish on them, and are four or five, six or seven in number, are bluish white in colour, speckled all over with minute grey specks, and spotted with larger spots of brown, principally at the larger end; occasionally in the way of an irregular belt.

Male; length, seven inches and a quarter; bill, black; iris, black; forehead and sides of the head, white; crown, black; neck on the sides, white; part of the nape, black; chin and throat, black, but not extending back to that of the nape, a white space being left between the two, which runs into the grey of the back; in the winter it becomes white, a crescent only of black being left on the breast. Breast, white, light grey on the sides; back, pale grey. The wings have the first, second, and third feathers nearly equal in length, the second rather the longest; greater and lesser wing coverts, black, edged with white; primaries, black, narrowly edged with white; tertiaries, black, rather more edged with white. The tail, which is very long, and the feathers narrow, has the eight middle ones black, the two outer ones white with a black stripe along the inner margin, and a small portion of the base also black: the end is rounded; upper tail coverts, black; under tail coverts, white; legs, toes, and claws, black.

The female has less black on the head; the forehead is dull white; the crescent on the throat is dusky grey, and in the summer it spreads up to the under bill. The greater and

lesser wing coverts are grey; the primaries and secondaries tinged with brown. The tail is tinged with brown.

The young are at first covered with black down; the bill reddish brown, its corners yellow; the legs reddish brown; afterwards a greyish brown or grey crescent spreads on the throat, the back is light brownish grey, the wings brownish black, the tail the same.

Varieties have been met with, either totally or partially white.

GREY WAGTAIL.

WINTER WAGTAIL. YELLOW WAGTAIL.

Motacilla sulphurea,
 “ *cinerea,*
 “ *boarula,*
 “ *melanopa,*

BECHSTEIN.
 RAY.
 PENNANT. MONTAGL.
 GMELIN.

Motacilla—A Wagtail. *Sulphurea*—Sulphureous—sulphur-coloured.

THIS is one of the most elegant of our native birds, and on this account, as well as for its comparative infrequency, ‘always a welcome guest.’

It is a perennial denizen of the southern part of Europe, being found in Switzerland, Italy, France, and Spain; also in Madeira. It likewise inhabits Java, Sumatra, Japan, and other parts of India.

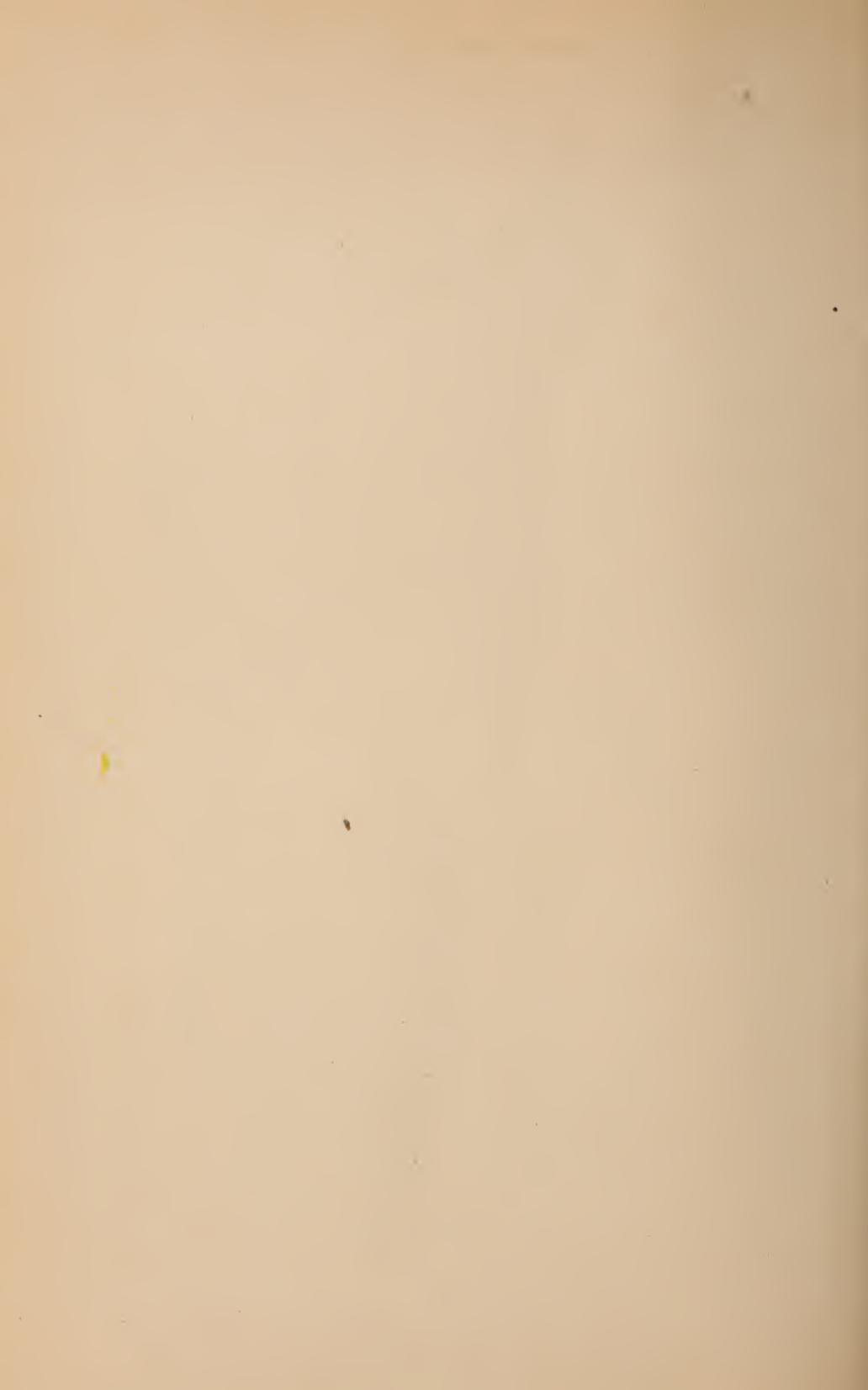
In this country it is generally diffused, being found all over England and Scotland, though rarely in the extreme north. It is unknown in the outer Hebrides. In the Orkney Islands it is occasionally seen in the summer.

The sides of small streams, rivers, lakes, and ponds, are more peculiarly affected by this species.

The Grey Wagtail is said to migrate southwards in the winter, and northwards in the spring, the former movement being made in September, and the latter in April; but some certainly do not leave Yorkshire, for I have seen them here this winter, a pair on the 5th. of this present January, 1852; and another a month ago in very severe weather; a few are also seen about Edinburgh in the winter. Some in like manner remain in the south in the breeding season. They probably



GREY WAGTAIL.



move into more retired situations to breed, and are then supposed to have migrated.

They are solitary birds, a pair being the number ordinarily seen together. Instances have been known of their coming to windows like the other species, but whether to look at themselves as in what in Yorkshire is called a 'seeing glass,' or for some other reason, is a matter about which we are in entire ignorance. In severe weather they naturally become more tame than at other times; one has been known, of all places, to enter a museum.

The flight of this Wagtail exhibits the same airy lightness that characterizes the rest of its family. On a sudden it bounds away in an undulating sweep, if alarmed, to a distance, but otherwise, probably, it soon drops again: then it runs with rapid steps along the margin of the 'glassy, clear, translucent lake,' as 'fair' in the eye of the ornithologist, as 'Sabrina' herself, or glides on the bank of the winding river, the still pool, or the running brook; into which at times it wades, or alights on some extant weeds, or bank of apparently treacherous mud, or quicksand, on which its light feet scarce leave a faint impression. On first alighting, the side feathers of the tail are conspicuously expanded. These birds, like the others, are fond of running along the ridge of a house top, probably in pursuit or quest of insects. They perch occasionally on trees, especially when first alarmed.

Their food consists of insects and minute shell-fish. The former they capture both by running and flying after them.

The note is rather shrill, but feeble.

Two broods are produced in the year; the first of which is generally fledged by the end of May, the latter in July, and these consort with their parents till late in autumn.

The nest is generally placed on the ground, among grass or stones, in the hollow of a bank or rock, usually near the borders of a stream; but not always, for it has sometimes been met with at a distance from water. One pair has been known to build in a spout, and the following year on a shelf in an outhouse, to which a broken pane of glass gave them ingress; and again, on the window sill of a dairy, near the previous one. Another pair built their nest between the 'switches' of a railway, within two or three inches of every train that passed. It is formed of small fibres and roots, moss and grass, and is lined with wool, hair, or feathers.

The eggs are from five to six, or even eight in number,

GREY-HEADED WAGTAIL.

BLUE-HEADED WAGTAIL. YELLOW WAGTAIL.

Motacilla neglecta,
Budytes flava,
Motacilla flava,

GOULD. JENYNS.
PRINCE OF MUSIGNANO.
LINNÆUS. TEMMINCK.

Motacilla—A Wagtail.

Neglecta—Neglected.

THE Grey-headed Wagtail is plentiful throughout the central parts of Europe—Germany, France, or Holland; and is found also in Norway, Sweden, Denmark, Lapland, and other countries. It occurs likewise in Asia, in India, among the Himalaya Mountains, and in Japan, and also in Africa.

It was discriminated from our common yellow one by Mr. Gould, and since then it has occurred in several instances. A pair were shot by John Gatcombe, Esq., of Wyndham Place, Plymouth, as he has informed me, in a large marsh at Laira, near that town, May 1st., 1850; and to him I am very much indebted for excellent coloured drawings of both specimens, from one of which the plate is taken. In May, 1848, several were procured, and many more seen, as Edward Hearle Rodd, Esq. has recorded, in the neighbourhood of Penzance and Marazion, in Cornwall; one was killed near Melbourne, in Derbyshire, November 23rd., 1846. A pair were also shot at Dover, near the harbour, in July, 1851, which Mr. Chaffey, of Dodington, has written me word of.

One was shot by Mr. Henry Doubleday, of Epping, in October, 1834, on Walton Cliff, near Colchester, Essex; another was seen at the same time. On the 2nd. of May, 1836, another, a male bird in adult plumage, was shot by Mr. Hoy, in the parish of Stoke Nayland, Suffolk. One of a pair which were seen was shot in the same month of the



GRAY-HEADED WAGTAIL.

same year, near Newcastle, in Northumberland; and another, also a male, was taken in April, 1837, near Finsbury, London.

In Scotland, one was met with near Leith, and another near Edinburgh.

It is a migratory bird, like the others of its clan, and arrives here about the middle of April, departing again in September, though some remain until October.

This species seems, if report speaks true, to frequent small streams of water more than the Yellow Wagtail, but it also resorts to meadows, downs, and fields.

The gait of the Grey-headed Wagtail is alike in graceful activity to that of the rest of its congeners, and when it alights, the same fanning motion of the tail bespeaks its family name. It runs with great rapidity, and perches on trees, but it seems much the most at home on 'terra firma,' and to be rather insecure when perched; its feet being more adapted for walking and running than for holding on to a branch.

Its food consists of insects of various kinds, and their larvæ, and doubtless any 'unconsidered trifles' that are eatable.

The note is said to be sharper than that of the Yellow Wagtail.

The nest is generally placed on the ground in holes or hollows, especially in marshy or moist places, and among the projecting roots of trees; also, it is said, in fields and meadows. It is formed of grass, moss, or heath, lined with finer portions of the former materials and hair.

The eggs are about six in number, whitish in colour, mottled nearly all over with yellowish brown and grey.

Male; length, six inches and a half; bill, black: a white band, composed in fact of two, extends from it over the eye, and a dark one to the eye; iris, dusky brown; head on the crown, bluish grey. The neck has a white band on the sides, and on the back it is, as is the nape, bluish grey; chin, white; throat and breast, bright yellow, almost white, or pale primrose-colour in autumn. Back, yellowish green, tinged with brown, the latter colour being on the centre of each feather, and the yellowish fading out in autumn.

The wings extend to within an inch and three quarters of the end of the tail; greater and lesser wing coverts, dusky brown, margined with yellowish white; of the primaries, the first is scarcely longer than the second, the third a little shorter; they and the secondaries and tertiaries are dusky

brown, margined with yellowish white. The tail is very long, and slightly rounded at the end; the middle feathers are nearly black, edged with greenish yellow, the two outer ones white, excepting an oblique nearly black band, widest in the second, extending for half an inch from the end over part of the outer web, and the greater portion of the inner web; the next with a narrow outer edge of white; upper tail coverts, yellowish green, tinged with brown, the former fading out in autumn. Legs and toes, brownish black, and not so slender as in some of the family; claws, black.

In the female the length is nearly six inches and a quarter; the bill is brownish black; iris, dusky brown—over it runs a white streak; head and crown, grey, duller than in the male, mixed with greenish brown in the autumn. The neck in front, yellowish white, with some brown feathers; on the back and the nape the grey is duller; chin, white; throat, yellowish or buff white; breast, pale yellow; back, greyish brown. Greater and lesser wing coverts, dusky brown, nearly white on the edges; under tail coverts, yellow. Legs and toes, brownish black.

The young male, in his first plumage in autumn, resembles the female, except that the grey on the head is more mixed with brown, and afterwards with green; chin, yellow. The yellow on the breast is clouded with brown and buff orange.

The young female has the chin and throat buff white; the breast mottled with brown above, and on the lower part pale yellow, as are the under tail coverts.

One has been seen pure white.



YELLOW WAGTAIL.

YELLOW WAGTAIL.

RAY'S WAGTAIL.

Motacilla flava,
Budgtes Rayi,

PENNANT. MONTAGU.
PRINCE OF MUSIGNANO. MEYER

Motacilla—A Wagtail.

Flava—Yellow.

THIS is a common species with us in summer, but most so in the southern and midland counties. It is not numerous either in Ireland or Scotland. In the Orkneys it has been observed several times. One was shot near Kirkwall, by Mr. Ranken, in the autumn of 1845; and another was seen near the same place on the 25th. of September, 1847.

Water courses, water meadows, and such like localities, are the choice of the Yellow Wagtail; but it also, like the others of the genus to which it belongs, frequents at times, and even more than they do, very dissimilar places, such as open downs and pastures, ploughed fields, and various other situations. On their first arrival I have often noticed them in numbers in fields that had been flooded, the saturation of moisture doubtless bringing many insects within reach. They have been observed perching on the stems of plants in quest of these. They not unfrequently appear on the lawns in front of houses.

The Yellow Wagtail migrates hither in summer, and leaves us again in time to avoid the hyemal blasts, which those which stay behind must feel. It arrives about the end of March, or the beginning or middle of April, and leaves the north of the kingdom for the south, about the middle of August or September.

These birds will occasionally pursue insects on the wing,

somewhat after the manner of the Flycatchers. They are of a gentle and affectionate disposition among themselves, and are generally seen in pairs, but in the autumn in small families—the parents and their offspring.

The sylph-like motions which distinguish the rest of its tribe, belong equally to the species before us, as well as the vibration of its body, and the expansion of the feathers of the tail, especially on first alighting. Its flight is extremely graceful—a series of lengthened undulations.

Its food consists of insects, and these it seeks both on the 'high and dry' upland, and in moist and low situations.

Its note, which is a double one, is rather shrill.

The nest is placed on the ground, or near it on the stump of a tree, and is compacted of dry stalks and fibres, and lined with hair. Meyer describes one made of moss, with a few tufts of grass outside, and a few horse-hairs within.

The eggs, four or five or six in number, are pale brown, or greenish white, sprinkled all over with a darker shade, in some very obscurely, of grey, or pale rufous or yellowish brown; some specimens are nearly plain dull yellow, slightly marbled over; these are said to be smaller in size. They are of a rather long oval form. The young birds are able to fly about the end of May.

Male; length, six inches and three quarters; bill, black; iris, dark brown, over it is a line of yellow; forehead, yellow; sides of the head, crown, neck, and nape behind, yellow, with a tinge of greyish green; chin, throat, and breast, rich yellow; back, pale greenish brown, the middle part of the feathers being brown, and their margins yellowish green.

The wings expand to the width of ten inches and a half; the first three quill feathers are of nearly equal length, the second the longest, the first nearly as long: Yarrell describes the first as the longest; probably different specimens vary in this respect, as already shewn in the case of Montagu's Harrier. Greater and lesser wing coverts, dusky brown, the first row tipped with pale yellow; primaries, dusky brown, edged with dull yellowish white; secondaries, dusky brown, edged with yellowish white; tertiaries, dusky brown, edged and tipped with yellowish white; greater and lesser under wing coverts, greyish. The tail is long, and slightly rounded, its feathers narrow, dusky in colour, slightly edged near the base with yellow, the middle feathers edged with greenish yellow, the two outer ones on each side nearly white on the outer web, and the shaft,

and half of the inner web, with a streak of black on the inner web; tail coverts, yellowish green. Legs, toes, and claws, black, very slender, the hinder one long, and nearly straight.

In the female the length is six inches and three quarters; bill, brownish black; iris, dark brown; the line over it is yellowish white. Head on the crown, light greyish brown, tinged with green. The breast is paler than in the male; back, darker brown than in the male, below greenish, as in the male. The wings expand to the width of ten inches; toes, brownish black.

RICHARD'S PIPIT.

Anthus Ricardi,

FLEMING. BEWICK. SELBY.

Anthus—Some small bird.*Ricardi*—Of Richard.

THIS is a rare bird, a veritable 'rara avis,' even in Europe, which is the only quarter of the globe in which it has hitherto been discovered; its native home is probably, however, elsewhere. A few specimens have been met with in Italy, Greece, France, Germany, Spain, the island of Crete, and Austria, in which last-named country it is the most frequent.

In our own country one was taken alive near London, in the month of October, 1812; two others occurred, also near London, in the spring of 1836; and another has been procured since; a fifth was taken near Oxford. One was shot near Howick, in Northumberland, on the 13th. of February, 1832, by Mr. W. Proctor, Curator of the Museum of the University of Durham. Another, as recorded by William Richard Fisher, Esq., of Yarmouth, was killed near there on the 22nd. of November, 1841; another in the following April, and another on the Denes, between that town and Caistor, by the same person who had previously killed one, and who remarked its peculiar appearance. Two were shot near Penzance, in Cornwall, and two near Marazion, in that county, and one near Newcastle, in Northumberland.

In addition to these, John Gatcombe, Esq., of Wyndham Place, Plymouth, who has most obligingly furnished me with a highly-finished coloured drawing of the bird, from which the plate is taken, has written me word that, in the neighbourhood of that town, one was shot by himself in the month of November, 1842. He has also informed me that three others were procured at the same time, and two more a few years afterwards.



RICHARD'S PIPIT

In Ireland and Scotland it has not occurred up to the present time.

Richard's Pipit appears to be partial to dry rocky situations. It seldom alights in trees, being addicted to the ground, where it finds its sustenance.

Its food consists of insects of various kinds.

The note is said to be very loud, and to be uttered frequently by the bird when on the wing.

The eggs are described as being of a reddish white ground colour, speckled with darker red and light brown.

This bird seems to vary much in size, different individuals measuring respectively, six inches and three quarters, seven inches and a quarter, seven and more than a half, and eight inches in length. The upper bill is dark brown, the lower one paler in colour, with a tinge of purple: two dark lines proceed from its base; one of them, which is made up of small spots, losing itself in the spots of the breast; the other ends near the ear coverts. Iris, very dark brown, nearly black—a light streak passes over it; head on the sides, reddish brown; on the crown, neck behind, and nape, brown in the middle of the feather, with a tinge of green, the edges being lighter yellowish brown; chin, dull white. Throat and breast, dull white, tinged on the upper part and the sides, and also the sides of the neck with yellowish brown, and the latter inclining to rufous in some specimens, and spotted with dark brown. Back, as the nape.

The wings, which are rather short, have the first four feathers very nearly equal in length, the first being slightly the longest, and the others gradually diminishing from it; the fifth is a quarter of an inch shorter than the fourth. Greater and lesser wing coverts, dark brown, buff white on the edge of the feathers; primaries, secondaries, and tertiaries, dark brown, bordered with rust-colour. The tail has the outer feather on each side dull white, with an elongated patch of brown at the base of the inner web; the next feather on each side is also dull white on part of the web, but less extensively; the three next feathers are very dark brown; the two middle ones shorter than the rest, their colour a lighter brown, and their edges also paler; upper tail coverts, as the nape; under tail coverts, as the breast. Legs, toes, and claws, light brown, with a tinge of yellowish pink; the hind claw is very long, and not much curved.

The female has less of the rufous tinge than the male.

MEADOW PIPIT.

TITLARK. PIPIT LARK. TITLING. MEADOW TITLING.
 MOSS CHEEPER. LING BIRD. GREY CHEEPER. MEADOW LARK.

Anthus pratensis,
Alauda “
 “ *trivialis*,
 “ *campestris*,

FLEMING. LATHAM. SELBY. GOULD.
 PENNANT. LATHAM.
 MONTAGU.
 LATHAM.

Anthus—Some small bird.

Pratensis—Of, or pertaining to meadows.

THE Titlark is a native of the three continents of the old world—Europe, Asia, and Africa. It occurs throughout the whole of the first-named quarter of the globe, ascending as high in the ‘scale of nations,’ as the Ferroe Islands and Iceland, the Orkneys and Shetland, Denmark, Norway, and Sweden; and even beyond the Arctic circle; in all the more temperate regions also—Holland, Dalmatia, and Sicily; and in the latter, in Egypt, Asia Minor, and Japan; and doubtless in numberless other regions. It is a very common and well-known species with us—one of our ‘hardy perennials;’ also in Ireland and Scotland the same.

Meadows and marshland, hill and dale, waste and wilderness, moorland and heath, arable and pasture land, all are the home of the sober-clad little bird before us, but especially the wilder districts. It is found on the summits of our highest mountains, and even in the lowest depths of the plain below. I have observed them in hard weather to frequent much the neighbourhood of the sea, searching and finding among the heaps of sea-weed, ‘food convenient for them;’ and indeed at all times the sandy places that are to be met with along the line of coast, are a favourite resort



MEADOW PIPIT.

of theirs. Occasionally they may be seen in the streets of towns, driven thither by stress of weather.

The late Bishop Stanley in his truly-named 'Familiar History of Birds,' mentions the fact of one of these little birds having alighted on board a vessel, in the midst of the Atlantic Ocean, thirteen hundred miles from the nearest part of America, and about nine hundred from the wild and barren island of Georgia. They move in a southerly direction in the autumn, to avoid severe weather.

This is one of the many different kinds of birds which feign being wounded, in order to entice away apparent intruders from their young, in whose safety, and even in that of the nest and eggs, they display the greatest interest. At times they may be seen wading into the water, and washing themselves with much apparent satisfaction. They are alert and nimble in all their movements, 'watchful and wary.' They are easily tamed.

Their flight is but short and unequal, that of a very homely bird of passage. They have some more immediate object in view in their movements, than to cross the ocean and visit a far distant clime. In the days of summer they hover occasionally over or about their nest, singing the while, and now and then settle on a low bush, or a rail, alighting with a sweep, or sometimes almost perpendicularly; but their mother earth is their more natural resort, and from thence 'their sober wishes seldom learn to stray.' Akin to the Wagtails, this species frequently oscillates its tail when standing on some mound of earth, or stone, or other eminence, especially on first settling, and generally perches and roosts on the ground.

The food of the Titlark consists of insects, worms, small slugs, and shells—of course with their contents. These it searches for on the ground.

Its song, which is soft and musical, though with little variety, is uttered on the wing, when watching about its nest, and also, occasionally, when perched. It is commenced generally about the middle of April, but has been known earlier, not unfrequently in March, and on one occasion so soon as the 4th. of February: it lasts till July. The ordinary note is a gentle 'peep;' from whence, probably, the name of Pipit; and, when alarmed, a 'trit, trit.'

The nest is placed either on or close to the ground, often in marshy places, among grass, near a tuft, on the branch

of a very low bush, a bank, or a wall of turf. It is composed of grass, the finer portions constituting the lining, with occasionally a little moss and hair. One has been known to be built on the end of a plank, which formed part of a heap of timber.

The eggs are from four to six in number, of a light reddish brown, or reddish white, or pale brown, or pale blue colour, mottled over, especially near the larger end, with darker brown. They vary much in depth of colouring, some being much darker than others; hardly any two sets are exactly alike in this respect.

The eggs are laid about the middle of April, and the young are abroad by the end of May. A second brood is often produced about the middle of July.

Male; weight, between four and five drachms; the length varies from six inches and about a half, to six and three quarters; bill, dusky, excepting on the edge of the upper and the base of the lower, which incline to pale yellow brown: a line of dusky spots extends from it down the side of the neck; another stretches over it; iris, dark brown. Head, crown, neck on the back, and nape, brown, the middle of the feathers being darker, and the edges much lighter: after the autumnal moult the whole assumes a tinge of rich olive; chin, throat, and sides of the neck, pale yellowish, brownish, or rufous white; breast, light rufous white, spotted with dark brown; below, dull white, tinged with brown, the whole ground-colour attaining a yellowish tint after the autumnal moult; back, as the nape.

The wings expand to the width of from ten inches to ten and three quarters: the first four feathers are nearly equal in length, the first is the most pointed, some say that it is the longest, but it is the third that is so; greater and lesser wing coverts, brown, broadly edged with light brown; primaries, brownish black, narrowly bordered with light brown, changing seasonally to olive, and at other times to ash-colour: the outer one has a white edge; secondaries and tertiaries, brownish black, edged with light brown, changing in the same way in the autumn, and at other times occasionally to ash-colour. The tail is nearly two inches and a half in length; the two middle feathers shorter than the others, and dark brown, lighter towards the edge; the outer one on each side dull white, or very light brown on the outer web, with a small patch of brown on the broad inner web; the next on each

side is dark brown, with a small patch of white at the tip of the inner web; the other six feathers are blackish brown, with olive-coloured edges in the season; the upper tail coverts, brown or olive, are long, covering more than half of the tail. Legs and toes, light brownish yellow; claws, dusky, darker in age; the hind toe is slender, slightly curved, and is as long as the toe: its tip is light-coloured, and almost transparent.

The female closely resembles the male, but is rather smaller. Length, from five inches and three quarters to six inches. The wings expand to the width of from nine inches and a half to ten inches.

The young birds of the first year have the olive and yellow tint assumed in autumn by their parents.

There is, at all events in some individuals, a partial moult in the spring, in March or April, owing possibly to their accidental loss of feathers, or the state of their health.

Mr. W. Thompson, of Belfast, describes a beautiful variety of this species as follows:—The crown of the head, beautiful rich primrose yellow, which colour also broadly edged the white feathers of the back, and those of the upper surface of the wings and tail. The throat and under side of the neck were pure white. One wing was very handsome, the four first quills being pure white, the next four of the usual dark colour, and the remainder pure white. One half of the tail feathers were wholly white, excepting the margins, which were broadly edged with primrose yellow. The lower part of the breast, and a few odd feathers here and there were of the ordinary colour. The bill and legs were paler in hue than usual.

RED-THROATED PIPIT.

RED-BREASTED PIPIT.

<i>Anthus montanus</i> ,	KOCK.
“ <i>Ludovicianus</i> ,	BONAPARTE. LICHTENSTEIN.
“ “	AUDUBON.
“ <i>spinoletta</i> ,	BONAPARTE.
“ <i>aquaticus</i> ,	BECHSTEIN. TEMMINCK. MEYER.
“ “	RICHARDSON. SWAINSON.
<i>Alauda Pensylvanica</i> ,	BRISSON.
“ <i>spinoletta</i> ,	LINNÆUS.
“ <i>campestris spinoletta</i> ,	GMELIN.
“ <i>campestris</i> ,	LATHAM.
“ <i>Ludoviciana</i> ,	LATHAM. GMELIN.
“ <i>rufa</i> ,	WILSON.
“ <i>rubra</i> ,	LATHAM. GMELIN

Anthus—Some small bird.

Montanus—Of, or appertaining to mountains.

I HAVE much satisfaction in giving for the first time a figure of this bird as a British one. Robert Gray, Esq., of Southeroft, Govan, Glasgow, has written me word of its occurrence in the neighbourhood of Dunbar: two specimens were procured by himself, and one by a friend of his in a garden there; two others were obtained in the neighbourhood of Edinburgh, in May, 1824; and two others, it is thought, in the same year. W. F. W. Bird, Esq. has also rendered very valuable assistance, by a careful and accurate translation from Temminck, who, though he not only in his first volume, but in his third, which is an appendix to the first, and also in his fourth, had treated two species as one, yet, in the second part of the fourth volume, published in 1840, having fully satisfied himself that they were really distinct, described



RED-THROATED PIPIT.

them accordingly. Mr. Macgillivray has given a useful account of it in his 'Manual of British Ornithology,' the first record, that I am aware of, of this species as a British one.

This species inhabits principally the south and east of Europe. It is also found in the American and Asiatic Continents; also in Japan.

The habits of this species are myotherine, that is, allied to those of the Flycatchers, its food consisting of insects, both of land and water, and their larvæ. These are the 'spolia opima' of it and its allied species.

The nest is built in mountainous regions, and the neighbourhood of water seems to be preferred, but not the sea coast.

The eggs are four or five in number, and of a dull grey colour, covered all over with faint brown spots, more or less confluent.

Male; length, from rather more than six inches to six and a half; bill, brownish black; from its base a yellowish white line extends over the eye; head on the crown, ash-coloured brown, the centre of each feather darker than the edges, more or less distinctly according to the season of the year. Neck, whitish in the front, on the sides and lower part streaked with brown; in the spring it is tinged with rose-coloured red; chin, throat, and breast, yellowish grey, tinged in the spring with roseate red; the latter spotted and streaked more or less, especially on the sides, with greyish brown. The streaks decrease with the advance of spring, and in some specimens are totally obliterated; afterwards they again appear. Back, greyish brown, with a slight tinge of olive; the centre of each feather being of a darker shade, and those on the lower part greenish.

The wings expand to the width of eleven inches and three quarters; greater wing coverts, brown; lesser wing coverts, brown, edged with greenish yellow, and some of them tipped with brownish grey. Primaries, brown, edged with greyish white; the first four are almost equal, but the first the longest, the fourth the shortest; secondaries, brown, edged with greenish yellow. The tail, which is rather long, has the two middle feathers ash-coloured brown, the rest blackish brown; the outside feather on each side has a long oblique white patch on the inner web, and the greater part of the outer web is white; the next is similarly marked, but not so extensively, and is tipped with greyish white. Legs, toes, and claws, brownish black, with a tinge of purple.

The female is more spotted on the breast. The side tail feathers are more tinged with grey.

In the young the bill is lighter, and the line over the eye is not so broad as in the adult bird. The spots on the breast are larger and more confluent; legs, toes, and claws, lighter than in the old bird.



TREE PIPIT.

TREE PIPIT.

PIPIT LARK. FIELD TITLING. FIELD LARK.
 LESSER FIELD LARK. TREE LARK. GRASSHOPPER LARK.
 LESSER CRESTED LARK. SHORT-HEELED FIELD LARK.
 MEADOW LARK.

Anthus arboreus,
 " *minor*,
Alauda trivialis,
 " *minor*,

SELBY. JENYNS.
 BEWICK.
 PENNANT. MONTAGU.
 LATHAM.

Anthus—Some small bird.

Arboreus—Of, or pertaining to trees.

THE Tree Pipit is found throughout the European continent—in Denmark, Norway, and Sweden, plentifully in France and Italy, the forests of Thuringia, and in Switzerland, and also in Madeira. It probably winters in Africa, and is found in Asia—in Japan.

It is rather a common species with us, but principally in the southern counties. In Cornwall, however, it is said to be rare, and also rather so in Wales.

In Ireland it is not certainly known to occur. In Orkney it is an occasional visitant. It is said by Clouston to have occurred in Sanday.

Wooded districts in the cultivated parts of the country are its resort, and if you

‘Know a bank whereon the wild thyme blows;
 Where oxlips and the nodding violet grows;’

There, if there are trees hard by, you will very probably meet with the Tree Pipit ‘in the season of the year.’

This species is a migratory one. It appears in England about the 20th. of April, and in Scotland in the beginning

of May, and departs again in September; sometimes a little earlier. The males arrive a week or ten days before the females.

It is solitary in its habits, and not gregarious like its kindred species just described.

The Tree Pipit will be seen to ascend upwards on quivering wings a short distance from the spray on which it has been perched, and having attained the moderate elevation to which it had aspired, it again descends, with outstretched wings and expanded tail, slowly, and with a sweep, to the same or some neighbouring spot. Over and over again is the evolution gone through by the happy little bird, which thus doubtless gives vent to the exuberance of its feelings. It rarely alights on the ground without having first halted on a tree, as a sort of 'half-way house,' which it, in like manner, makes its 'Traveller's rest,' when leaving the ground for the short flight that it may intend.

Its food consists of flies, caterpillars, grasshoppers, and worms, and also small seeds.

Like 'Annie Laurie's,' its 'voice is low and sweet,' a pretty little song, warbled while perched on the branch of a tree, or occasionally on the ground; and also, and most frequently, while descending to it in the manner already described. It begins in the spring and continues till July. It is but a monosyllabic effusion, with therefore hardly any variety—a 'tsee, tsee, tsee,' often repeated.

The nest is placed on the ground, in woods and plantations, under the shelter or secrecy of some small bush, or tuft of herbage, or perchance on the branch of some low bush, if close to the ground. It is formed of small roots and grass, with occasionally a little moss, and is lined with a few hairs. It measures about three inches across, and about an inch in thickness of construction.

The eggs are four or five in number, and are generally greyish white in colour, with a faint tinge of purple, clouded and spotted with purple brown, or purple red. They vary almost 'ad infinitum,' more so, it is said, than those of any other land bird. Some are dull bluish white, spotted with purple brown; others reddish white, entirely covered with specks of deep red; others reddish white, clouded with pale purple grey, and finely streaked and spotted with rust black; others again pale purple red, minutely marked in a net-like manner with a darker red.

Male; weight, about five drachms and three quarters; length, about six inches and a quarter to six inches and a half; bill, dark brown, all the base of the lower mandible and the edges of the upper one yellow brown. It is rather flattened out at the base, and a brown streak passes backwards and downwards from it. Iris, deep brown, over it is a whitish band: there are a few short bristly feathers at the base of the bill; head on the crown, neck on the back, and nape, olive greyish brown, the centre of each feather being darker than the edge; chin and throat, pale brownish white or brownish yellow on its sides, with a tinge of rufous in the spring, as is the breast in front, on which are numerous small spots of dark brown; on the sides the spots turn into streaks, and are darker: the ground colour of the sides is olive brown, and below it is pale brown, tinged with dull white: the autumnal moult, which takes place in August, gives them a yellowish rufous tint; back, as the nape: with the autumnal moult all the upper parts assume a greenish olive tint.

The wings expand to the width of eleven inches and a quarter, and reach to within an inch and a quarter of the tip of the tail; greater wing coverts, dark brown, broadly edged with pale brown or greyish white, most apparently after the autumnal moult; lesser wing coverts, blackish brown, edged and tipped with pale brown or buff greyish white, the light-coloured ends of both forming bars across the wing, most distinctly after the moult; primaries, dark brown; the first is the longest, but all the first three are nearly equal in length, the second very nearly as long as the first, and the third as the second; secondaries, dark brown, more broadly edged with a paler tint; tertiaries, dark brown, long, also with a broad outer edge of pale brown. The tail, which is rather long, has the outside feather on each side brown; the narrow outer web, and part of the inner one, in a wedge shape, dull white tinged with brown; the next feather is also brown, with only a small patch of dull white at the end of the inner web; all the other feathers blackish brown, edged with lighter, except the two middle ones, which are greyish brown, having lighter margins than the rest; upper tail coverts, olive grey brown, without the dark markings on the centre of the feathers. Legs and toes, pale yellowish brown or grey; claws, pale dusky brown, the hind claw considerably curved, and shorter than the hind toe.

The female resembles the male in plumage, but she is

rather less in size. Length, a little over six inches. The spots on the breast are not so well defined. The wings expand to the width of eleven inches.

The young birds at first have the bill paler in colour than the old birds; the breast with more yellow; the spots on the front of the neck narrower; the back more tinged with green, and the dark marks darker, the margins light greyish yellow; the two outside tail feathers greyish white on the inner web, and the outside one pale brownish grey on the outer web. The legs, toes, and claws, very light brown.



ROCK PIPIT.

ROCK PIPIT.

ROCK LARK. SEA LARK. FIELD LARK. DUSKY LARK.
SHORE LARK. SHORE PIPIT. SEA TITLING.

<i>Anthus aquaticus</i> ,	BECHSTEIN. GOULD. SELBY.
“ <i>campestris</i> ,	BEWICK.
“ <i>rupestris</i> ,	NILLSON.
“ <i>petrosus</i> ,	FLEMING. JENYNS.
<i>Alauda campestris spinoletta</i> ,	GMELIN.
“ <i>obscura</i> ,	GMELIN. PENNANT. MONTAGU.
“ <i>petrosa</i> ,	LINNÆAN TRANSACTIONS.

Anthus—Some small bird.

Aquaticus—Aquatic—frequenting watery places.

THE Rock Lark, or Rock Pipit, is an interesting, though very common species, and another of our true ‘ab origine’ birds.

This hardy species braves the severe cold of the polar regions, to which it spreads from the temperate parts of Europe. It is well known in Norway, Denmark, Sweden, and Greenland; as also in France, Germany, Switzerland, Italy, Holland, and other more temperate parts of the continent. In Orkney and Shetland it is a very abundant species, and also is found in the Ferroe Islands.

It appears to give a preference to those parts of the coast which are rocky or hilly, but it is also found, and that in plenty, in those parts which are of an exactly opposite character.

It is stationary with us throughout the year, but it would seem to be in some small degree migratory, or rather moveable; for W. R. Fisher, Esq. has stated in his 'Natural History of Yarmouth,' that in Norfolk it arrives on the coast in the autumn, generally in the month of November.

These birds do not associate in flocks, but several are often to be seen in the same immediate neighbourhood. If disturbed it does not go far off, but flutters about in the neighbourhood, frequently repeating its note, settling in a restless and uneasy manner here and there, vibrating its body, and evidently anxious for your departure.

In general the flight of the Rock Pipit is a mere flitting from place to place; but in the summer-time they often mount up to a considerable height, uttering their wild little note with each pulsation of the wings, and then rapidly descend in a slanting manner, in silence, and with apparently closed wings.

Its food consists of small marine and other insects, small crustacea and worms, which it seeks and finds among the marine plants thrown up along the coasts, or growing on the rocks which, at low water are left uncovered by the receding tide. Macgillivray observes that it also feeds on seeds.

The note is in general a mere rather shrill 'cheep,' but I think there is a wildness in it, which invests it with an interest that it might not otherwise possess. It has also a small warble, charming no doubt in the ears of its species, but not so in ours, in comparison with that of more highly-gifted birds in this respect.

These birds commence the work of nidification early in the season—at the end of April or beginning of May, and pitch their tent either on or in the immediate neighbourhood of the sea shore, or water not far from it.

The nest is placed in holes or ledges in rocks, generally, but not always, at a low elevation, or on the ground, sheltered by some little projection or eminence. It is made of fine dry grass and marine plants, but is very loosely compacted, the inside being either not at all, or more or less lined with hair, or finer materials of any kind that it can procure.

The eggs, which have very little polish on them, and vary much in appearance, are four or five, and occasionally six in number. They are of a pale yellowish, yellowish white, or whitish grey colour, sometimes tinged with green, spotted with reddish brown, almost confluent at the larger end; some

are wholly, or almost wholly, brown, and some wholly greenish grey, with a streak surrounding the base.

The young are hatched early in the spring.

Male; weight, about seven drachms; length, six inches and three quarters, or nearly so; bill, dusky, the upper one yellowish brown, except at the tip, and both yellowish at the base; iris, deep brown; over it is a narrow yellowish white or whitish streak, not always conspicuous, sometimes tinged with green, and another beneath the hinder part of it. There are a few short bristly feathers at the base of the bill; head and crown, brown with a tinge of olive, the shafts of the feathers being a little darker; neck on the sides, greenish white, with brown streaks; on the back it is the same as the head, as is the nape. Chin, dull yellowish white, the middle of each feather by the shaft deeper coloured; throat, dull yellowish white, streaked with brown; breast, dull greenish white, with brown spots and streaks; lower down it is yellowish white, with only a few dark brown streaks, and on the sides olive brown; back, dull greenish brown, the centre of each feather dark brown.

The wings have the first quill feather the longest of the whole, the next three successively a little shorter, the fifth still shorter; greater and lesser wing coverts, dusky, edged with pale olive; primaries, secondaries, and tertiaries, the same. Tail, dusky; it is rather long, and extends nearly an inch and a half beyond the wings when closed; the outside feather has the outer web and part of the inner one dull greenish white, the tip whitish; the second feather is only edged at the end and tip with this colour, the others are fringed with light olive; there is most white on these feathers in the spring season; the two central ones are lighter coloured and shorter than the others, and the next three on each side very dark brown; upper tail coverts, dull greenish brown; under tail coverts, light brown, or pale yellowish or greenish white, changing to almost white. Legs, reddish brown; toes, the same; claws, black, and somewhat curved, the hinder one much more than the rest, and longer than the toe.

These birds are more or less tinged with grey, and less or more with the olive colour, according to the season of the year.

The female is very similar to the male in plumage, and nearly, but not quite, of equal length.

In the young, the bill is lighter coloured at the base; the head, crown, neck on the back, and nape, are tinted with

greenish ash-colour; chin and throat, dull yellowish white; breast, dull yellowish, much streaked with greenish ash-colour, more or less deep; the outside feather on each side of the tail has the edge and spot deep olive ash-colour.

END OF VOL. II.





