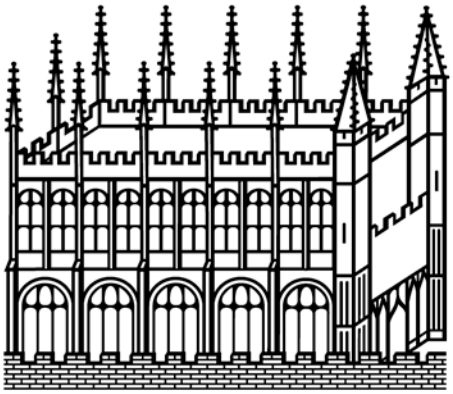

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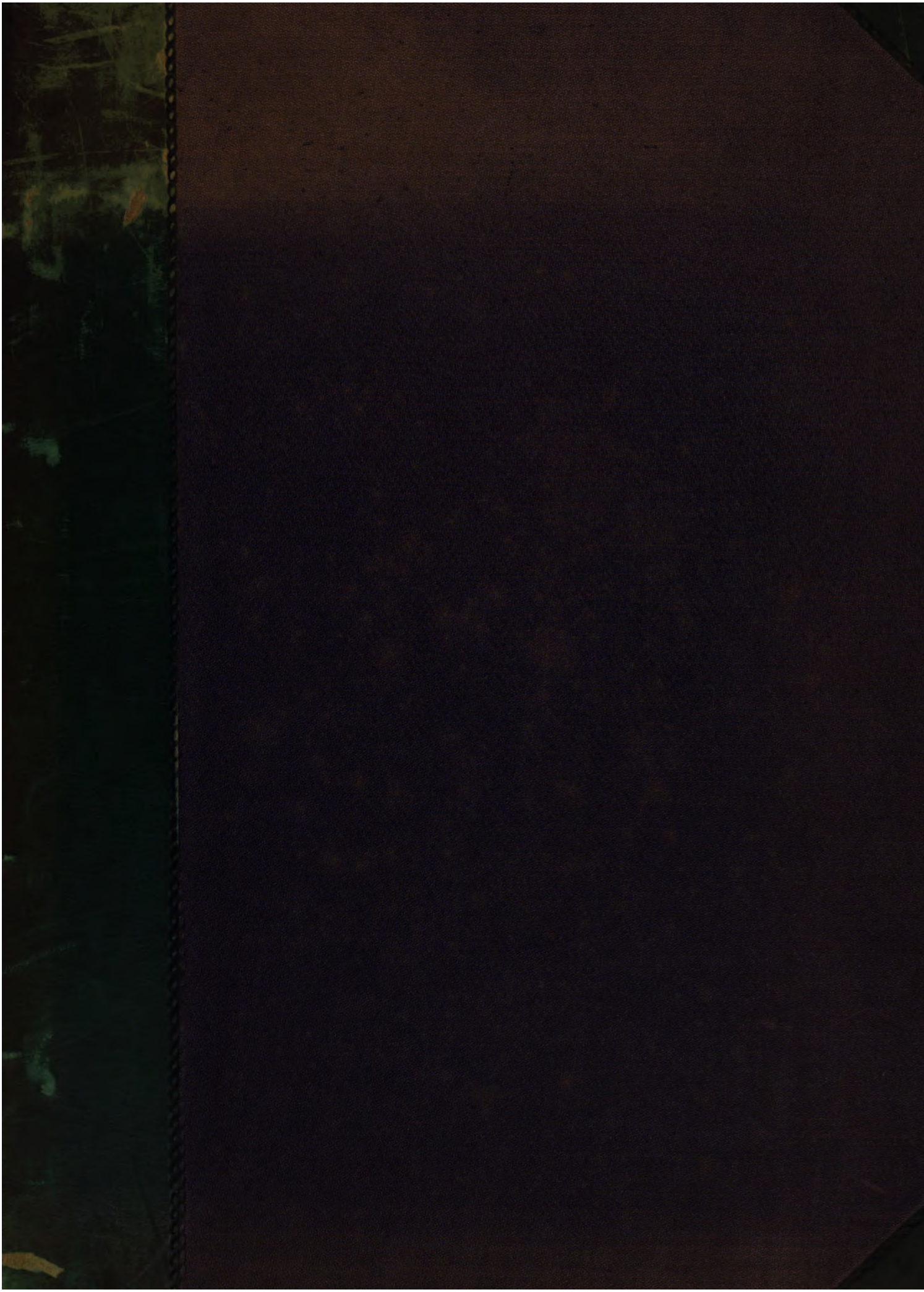


Frontispiece to Vol. 1st

The Dartford Warbler.

HARMONIA RURALIS;

OR,

AN ESSAY

TOWARDS

A NATURAL HISTORY

OF

BRITISH SONG BIRDS:

ILLUSTRATED WITH FIGURES,

THE SIZE OF LIFE,

OF THE BIRDS, MALE AND FEMALE, IN THEIR MOST NATURAL ATTITUDES;

THEIR NESTS AND EGGS,

Food, Favourite Plants, Shrubs, Trees, &c., &c., &c.

FAITHFULLY DRAWN, ENGRAVED, AND COLOURED AFTER NATURE.

BY JAMES BOLTON.

VOL. I.

A NEW EDITION, REVISED AND VERY CONSIDERABLY AUGMENTED.

LONDON:
PRINTED FOR W. SIMPKIN AND R. MARSHALL, STATIONERS'-HALL COURT.
MDCCCXXX.

189. h. 149.

PREFACE.

THE Plates of BOLTON's British Song-Birds, together with a copy of the Book, having lately fallen into the hands of the present Editor, he was induced to examine them attentively, and to compare the book with other works on the same amusing subject. The descriptions do not always agree with those given by other Ornithologists, but are upon the whole sufficiently accurate: indeed it is impossible to form descriptions, particularly in regard to plumage, which will suit every individual of a species; perhaps nothing can set this in a stronger light than the following paragraph, which appeared in the Morning Herald of the 17th June last: "At the rookery of Mr. Hemingby, near Horncastle, a couple of milk white rooks, with white bills and legs, were taken last month. There is no tinge of any other colour upon them, and they are full fledged and tame. There were others in the same rookery with wings tipped with white, but they were suffered to escape."

Though it is not intended to enter extensively into their Natural History, yet a few observations on birds in general may possibly be expected, or at least allowed, on this occasion: And first, with regard to their strength and acuteness of vision.

The sight of birds is found to be more quick, distinct, and extensive than that of quadrupeds: though outwardly the eyes appear small, yet, both taken together, they are larger than the brain; whereas the orbit of the human eye is not one twentieth part of the brain. To protect the eye and moderate its sensibility, it is possessed of a nictitating or winking membrane; with this, which is neither opaque nor entirely pellucid, birds can instantaneously cover the pupil of the eye, when the lids are open. A hawk, from a height in the sky at which it is scarcely perceptible to the human eye, perceives a lark upon the ground, and darts upon it with unerring precision.

The smell in birds, is also peculiarly acute, though M. Buffon thinks that in this respect they are inferior to some quadrupeds. The raven and vulture, however, are known to wind their prey at immense distances. In decoys, where ducks are caught, the men who attend them universally keep a burning turf near their mouths, lest the fowl should smell their breath, which would drive them away. The constancy of the practice places the usefulness of it beyond a doubt, and proves the extreme delicacy of the sense of smelling in these birds, especially when it is considered that the men invariably place themselves to leeward of the decoy.

That the sense of hearing is also very acute, is proved by their modulation in singing, and facility of learning music and speech. There have been instances of birds which had not the power of song possessing a delicate ear for music. Mrs. Piozzi relates of a tame pigeon, that it answered by gesticulation to every note of the harpsichord: whenever she began to play it hastened to the in-

strument with marks of rapturous delight: a false note produced evident tokens of displeasure, and, if frequently repeated, it lost all temper and pecked her hand.

Their powers of voice are particularly remarkable both in respect to the gifts of nature and the acquirements of art. Col. O'Kelly's famous parrot not only repeated a great number of sentences, but answered many questions, and was also able to whistle a great variety of tunes: it beat time with all the appearance of science, and so accurate was its judgment, that if by chance it mistook a note, it would revert to the bar where the error occurred, correct itself, and, still beating regular time, go through the whole with wonderful exactness. Its death was thus announced in the General Evening Post, for the 9th of October, 1802: "A few days ago died in Half Moon Street, Piccadilly, the celebrated parrot of Col. O'Kelly. This remarkable bird sang a number of songs in perfect time and tune: she would express her wants articulately, and give her orders in a manner apparently rational. Her age was not known; it was, however, more than thirty years, for previously to that period Mr. O'Kelly bought her at Bristol, for a hundred guineas. The Colonel was repeatedly offered a hundred guineas a year for the bird, by persons who wished to make a public exhibition of her; but this, out of tenderness, he constantly refused. The bird was dissected by Dr. Kennedy and Mr. Brooks, and the muscles of the larynx, which regulate the voice, were found, from the effect of practice, to be uncommonly strong."

Mr. Willoughby gives an account of a parrot which, when any

person said to it, "laugh Poll, laugh," would immediately laugh, and the instant after scream out, "what a fool to make me laugh!" Another having grown old together with its master, was accustomed to hear frequently the expression, "I am sick:" when any one asked the bird, "how d'ye do, Poll?" she would stretch herself out and reply in a melancholy tone, "I am sick, I am sick." A parrot kept by Henry VII. in a room of the Palace, at Westminster, that overlooked the Thames, learned many phrases from the boatmen and passengers. It one day fell into the water, and immediately called out, "a boat, twenty pounds for a boat!" A waterman soon took it up, and, restoring it to the king, demanded the reward promised by the parrot. Henry, with his usual parsimony, refused to pay that sum, but agreed that the parrot should decide between them, when, in the true spirit of its master, it immediately exclaimed, "give the knave a groat." There are many other surprising stories upon record respecting the docility and intelligence of these birds. One more only may suffice for the present occasion, and it well merits particular notice, from the authority on which it rests. Mr. Locke, in his Essay on the Human Understanding, has quoted an anecdote which he seems to have thought credible. During the government of Prince Maurice in Brasil, he sent for an old parrot that was highly celebrated for the rationality of its answers to common questions: When it was brought into the room where the prince was sitting in company with several Dutchmen, it immediately exclaimed in the Brasilian language, "what a company of white men are here!" It was asked, "who is that man?" pointing to

the prince. The bird answered, "some General or other." The prince then asked the bird, "from whence do you come?" it replied, "from Marignan." The prince enquired, "to whom do you belong?" the bird replied, "to a Portuguese:" he then asked, "what do you do there?" it answered, "I look after the chickens." The prince, laughing, exclaimed, "you look after the chickens!" the parrot immediately rejoined, "yes I, and I know how to do it well enough;" clucking at the same time in imitation of a hen calling her young together.

A linnet taken very young from the nest, and brought up in an apothecary's house at Kensington, learnt to articulate the words "pretty boy," as well as some other short sentences, but had neither the note, nor call of any bird whatever.

Three nestling linnets were educated, one under a skylark, another under a woodlark, and a third under a titlark; and instead of the song peculiar to their own species, they adhered invariably to that of their respective instructors.

A sparrow taken from the nest when very young, and placed near a linnet and goldfinch, adopted a song which was a mixture of those two, though in a wild state it would only have chirped.

Ravens, jackdaws, jays, magpies, starlings, thrushes, nightingales, bulfinches, linnets, and some other birds, have been taught to imitate a variety of sounds. But, after numerous experiments, naturalists have expressed a decided opinion that the peculiar notes of the different species of birds are altogether acquired, and are no more innate than language is in man. That they have, however, some innate propensities, is pretty evident, from the

construction of their nests, and from the conduct of young ducks brought up under a hen.

Respecting the attachment of birds to each other, and to those who feed and fondle them, some instances are stated under different heads in this book, which display great sagacity, affection, and gratitude. A curious instance of generous forbearance is related by Bishop Horne in his Essays. "Mr. Temple of More Park, kept an eagle in a cage, and among the animals given to him for food, was a living magpie. The following morning the servants were surprised to find the magpie still alive. The eagle appeared to be amused with his chattering, and lived in great familiarity with him." Which displayed the most humanity, the feathered or the unfeathered bipeds, who put the poor magpie into the cage?

A swallow which fell from its nest and was kindly reared by a lady, after it could fly, and was permitted to join a flight of swallows in the neighbourhood, would always answer to her call, and occasionally come and settle upon her hand, shewing great satisfaction in her caresses.

The subject of the migration of birds has always appeared particularly interesting to naturalists, but after the most careful enquiry and observation, is still involved in doubt and obscurity. The causes generally assigned for it, are a deficiency either in the quantity or variety of food, and the want of a secure and agreeable asylum for breeding. Most of our summer birds of passage are supposed to retire, on the approach of winter, to the southern parts of Europe, and some to extend their journey to Africa.

Our winter visiters, it is thought, come chiefly from Sweden, Norway, and Lapland. They generally perform their flights in large companies, and follow a leader, which is occasionally changed. The migration of swallows is, however, still a very puzzling subject. That excellent naturalist, Mr. Forster, who has so industriously collected, and so ably compared, the evidence upon the subject, is convinced that the bulk of each species betake themselves to some warmer climate, when they leave us in autumn, but to what country he has not chosen to risk an opinion, though he thinks it not improbable that swallows retire to Africa. Some idea of the swiftness of their flight may be formed from the following statement: At a Newmarket Coursing Meeting, the swiftest horse in training was found unable to pass a brace of the best greyhounds, which were never able to turn the hare; a proof that her speed was superior to theirs. Rabbits, it is well known, for the distance they go, run much faster than hares. The slowest flying hawk will strike upon a rabbit with scarcely any appearance of moving; yet this hawk flies too slow to catch a partridge, and one of still greater speed is requisite for the pursuit of a pigeon; but for a swallow, a hawk must be found that can outstrip all these competitors. Now a horse has been known to go for a short distance at the rate of a mile in a minute. If, therefore, the speed of a horse be taken as a standard at sixty miles an hour, and estimating the rest by it, we pursue the calculation from the horse to the greyhound, hare, rabbit, slow-hawk, partridge, pigeon, swallow, and hawks of the swiftest kind, we may pretty satisfactorily account for the amazing

rapidity with which some birds perform long voyages. According to Thevenot, pigeons were in his time used for expeditious communications in the East, and the practice is said to be still continued. They generally fly from Aleppo to Alexandria in Syria, in six hours, a distance of nearly ninety miles. They are sometimes sent from Babylon to Aleppo, where they generally arrive in about forty eight hours, though for a man this is a regular thirty days' journey. A carrier pigeon sent from Bury St. Edmunds arrived in London in two hours and a half, a distance of seventy-two miles. Buffon quotes a story from Sir Edmund Scot, of a hawk sent from the Canaries to the Duke of Lerma, which returned from Andalusia to the Isle of Teneriffe in sixteen hours, a space of two hundred and fifty leagues. Thirty leagues in a day is the utmost that the rein-deer or horse can travel, but a hawk or eagle, Buffon says, can traverse two hundred leagues in ten hours.

The cavity for respiration in birds is larger in proportion than in other animals. Their bones are thin and porous, lighter than in quadrupeds, filled with air instead of marrow, and often communicate directly with the lungs. Enough probably has been said to prove the strength and sagacity of birds in flight, and that they are well qualified in every respect for migration. Some birds emigrate from a country to which they never return. Thus magpies, which have been known in Ireland only about seventy years, are now as numerous there as in Scotland, from whence they most likely originally strayed. The same spirit of colonization has been remarked among woodlarks, which are now seen

where a few years since they never appeared. The skylark remains the whole year in Britain, although it is a bird of passage in Minorca. In England the snipe is migratory, while in Scotland it is stationary. Pigeons have been observed to migrate into Canada by one route and to emigrate by another; in some cases the males and females separate in migration. In Sweden a species of duck is found of which the males leave the country at the time of incubation, and do not return till the following pairing season. Of the Chaffinches in that country, however, the females emigrate in September and return in April. The female rice-birds in the Island of Cuba retire, as soon as the crop is over there, to Carolina, where the rice harvest is somewhat later. Many birds migrate from one part to another of the same country without ever leaving it. This is so well known as to require no illustration. It is worthy of remark that, out of nearly four thousand different species of birds described by Latham, not more than ten or twelve have been rendered serviceable to man by domestication. Some of those hereafter mentioned might perhaps be made useful to us, with little trouble. The sheldrake, Canadian goose, eider duck, field duck of France, hazel-hen of Germany, francolin of Italy, American wild pigeon, red-legged partridge of Spain, crested wild turkey, which generally weighs from twenty to forty pounds, the bustard, a still larger bird than the turkey, whose eggs are reckoned particularly fine, the black cock, or heath-fowl, and the capercaille, or wood grouse of Scotland, whose eggs are said to be the most delicate known. The female lays from eight to sixteen, and might by domestication probably be made as prolific as the common hen, which often pro-

duces above a hundred in a season. This bird, which is noticed with approbation in Linnæus's Lapland Tour, was, at one time, numerous in Scotland, but is now rarely seen except in the Highlands. The proposal to introduce any, or all of these birds, will create no surprise when it is recollected that we derive our peacocks, pheasants, and poultry from Asia, our turkeys from America, and our Guinea-fowls from Africa.

Many birds are considered as injurious which are in reality useful. The insectivorous birds destroy immense numbers of insects, and the granivorous vast quantities of the seeds of weeds, which, without their assistance, would be much more troublesome than they are. A single pair of sparrows have been known, during the time they have their young to feed, to destroy, on an average, upwards of three thousand three hundred caterpillars, besides many other insects, in a week. From late observations, it appears that bulfinches, in conjunction with various other species of small birds, when they are supposed to be destroying the bud, are only in pursuit of "the worm in the bud;" and are thus the means of defending the embryo fruits, and promoting their growth to maturity: for the warmth that swells the buds not only hatches the eggs of numerous tribes of insects, but brings forward a rapacious race already in a caterpillar state, that now issue from their concealments, and, making their excursions along the budding branches, would probably frustrate every hope of fruitage, but for those useful birds whose young are principally nourished by caterpillars. The titmouse, and other small birds, which are frequently seen drawing straws from the thatch of cottages and

ricks, search them for flies and other insects which they greedily devour.

According to Belon, who wrote about the year 1560, an amazing number of kites used to flock in London for the sake of the offals which were flung into the streets. It was forbidden to kill them, and they were so tame as to take their prey in the greatest crowds. The stork and some other birds in Holland and Egypt are useful in the same way. Turkey buzzards are protected by law as well as by popular favour, in the Southern parts of the United States of North America, where they frequent the large towns for the offal thrown into the streets, and destroy many animals which are noxious while alive, and would be pestilential when dead.

Professor Kalm says, that "when the little crows were driven out of Virginia, and that, at the expense of several tuns of gold, the inhabitants would willingly have brought them back again at double the price." We have the testimony of Mr. Stillingfleet, Mr. Pennant, and other accurate observers of nature, to the usefulness of rooks. The destruction of birds in a district of America produced a complete failure of crops the following year. In the Times Newspaper of the 28th Jan. 1822, it was remarked, that it is not generally known that pheasants are beneficial to the farmer. This was fully proved at Whitney Court in Hertfordshire, where Tomkins Day, Esq. lately shot a hen pheasant, which excited notice from the immense size of its craw. On being opened it was found to contain more than half a pint of that destructive insect, the wire worm. Shell snails have been found in the crop of a young pigeon; and where gardens, or even large fields, are infested

with slugs or other insects, a few ducks have often been found to remove the inconvenience in the easiest, quickest, and most effectual manner.

The number of song birds, compared with that class of animals at large, is but small, and those are all included in the passerine order. The faculty of singing, except in the instance of the bullfinch, seems to be entirely confined to the males, which sing during the season of pairing, and while the females sit, but assist in the employment of feeding the young.

The singing of the feathered race seems to be the expression of their happiness, and of their soft and agreeable emotions. With these it varies, and when they cease it is extinguished. The notes of emulation which they sometimes exhibit are merely the repetition of the most varied and energetic of their amorous strains. All birds, however, have a language of their own, and many of them are very noisy without the smallest pretensions to song.

In respect to the elegance of their shape, and the diversity and brilliancy of their colours, birds appear to be superior to any other class of the brute creation. "Where can be found," says Mr. Bolton, "a more beautiful piece of mechanism than the wing of a bird displayed, or even a single feather, when carefully examined?" That easy and elegant sweep in the outline which circumscribes a bird, and the beautiful arrangement of the feathers in every part, enforce our admiration. And there is an idea of delicacy and purity attached to birds, of which we are not sensible in relation to any other animal.

In keeping cage birds, success chiefly depends on the freshness

and sweetness of their food and water; in not giving them too large a quantity at one time, and too long neglecting them at another; in placing them in an airy and well lighted situation, and securing them from the extremes of heat and cold; in keeping them out of the reach of cats, mice, and other vermin, and taking care to have their cages, boxes, glasses, and every thing about them, at all times perfectly sweet and clean. The health comfort, and vivacity of these birds would also be promoted by providing them occasionally with their natural food, such as flies, spiders, worms, and insects of different kinds, chickweed, groundsel, plantain, and fruits in their season. The goldfinch, chaffinch, and linnet, delight in the seeds of the various species of thistle, ragwort, groundsel, and other downy seeded plants. The yellow hammer, bunting, and reed sparrow feed on grain, and the seed of grass and reeds. Thrushes on berries, worms, slugs, small snails, and beetles. The summer warblers require animal food, of which the various species of flies and spiders, brought to them alive, are the most agreeable. Parsley is said by Mr. Stillingfleet to be deadly poison to small birds. The plumage of the lark, goldfinch, bullfinch, and many other small birds becomes black by feeding on hempseed. This fact is well authenticated by the experiments of modern ornithologists. If cage birds are supplied with a proper quantity of wholesome and agreeable food, they will sing through the greatest part of the year, whereas in a wild state they do not commonly continue their song above ten weeks.

The first vocal effort of a bird is called a "*chirp*," which is a single sound repeated at short intervals; the next is a "*call*,"

which is a frequent repetition of the same note; the third attempt is called "*recording*," in which a young bird repeats his lesson in an under tone, "sotto voce," and continues this for ten or eleven months, 'till he is able to execute every part of his song; and when he is perfect in his lesson he is said to "*sing his song round.*"

In describing their nests, Mr. Bolton says, "though I have mentioned the materials which composed the individual under notice, it must not, however, be understood that the same species of bird always strictly confines itself to the same materials, though in general we find it so, for I have seen many instances to the contrary; one of which I will give, as I find it in my notes concerning birds. On the 10th of May, 1762, I observed a pair of goldfinches beginning to make their nest, in my garden; they had formed the groundwork with moss, grass, &c. as usual, but on my scattering small parcels of wool in different parts of the garden, they, in a great measure, left off the use of their own stuff, and employed the wool; afterward I gave them cotton, on which they rejected the wool, and proceeded with the cotton; the third day I supplied them with fine down, on which they forsook both the others, and finished their work with this last article. The nest, when completed, was somewhat larger than is usually made by this bird, but retained the pretty roundness of figure and neatness of workmanship which is proper to the goldfinch. The nest was completed in the space of three days, and remained unoccupied for the space of four days, the first egg not being laid 'till the seventh day from the beginning of the work."

"The various species of larks compose their nests of dried grass and hair, placing them on the ground. Linnets chuse out some low bush, and compose their nests of moss, hair, and down. Finches nestle in some prickly shrub or tree, and fabricate their nests with small sticks, moss, wool, roots, hair, and feathers. Wrens and most of the summer warblers hide their nests under brakes or bushes near the ground, in walls, or hollow trees, and make use of fern, moss, grass, hair, and feathers. But be the matter of which the nests are composed, or the place where they are found, what they may, there is in every species something peculiar to itself in the size, form, materials, and habit of the nest and eggs together, by which, every one that has well observed them, is enabled to say with certainty on sight of them to what bird they belong."

The eggs of some species are subject to variety in respect of colour. The titlark, for instance, is a perfect Proteus in this particular, not only in separate nests, but in the same individual. "I have seen," says Bolton, "nests of this bird with five or six eggs and not two of them precisely alike, either in the markings, or hue of color." The eggs of the less field lark are also variable in color. The nest of a kind of swallow in the Island of Sumatra, and on the coast of the China Seas, is considered to be one of the most delicious edible delicacies yet discoverd. It is a hemisphere about the size of a goose's egg, and in substance resembles isinglass. The Chinese gather these nests and sell them for from ten to fifteen Spanish dollars the pound, for the best sort. They dissolve in broth and make a kind of jelly of a very

exquisite flavor. The inferior sort, which is worth only about a shilling the pound, is converted into glue of an excellent kind.

The insertion of the following passage from the writings of a modern observer of the beauties of nature requires no apology. "The opening of the birch leaves is the signal for the pheasant to begin to crow, for the blackbird to whistle, and the thrush to sing: and just when the oak buds begin to look red, and not a day before, the whole tribe of finches burst forth in songs from every bough, while the lark, imitating and excelling them all, carries the joyous sounds to the sky."

As the "Divine Plato" has described the human race as "unfeathered bipeds," perhaps the introduction of the beautiful language of the amiable and accomplished Lord John Russel, in a late speech in the House of Commons, may be pardoned as applied to our treatment of feathered bipeds. "It was not," said he, "from the bars of a prison that the notes of English liberty could ever be heard; to have anything of grace and sweetness they must have something of force and wildness in their composition." "For after all, it must be admitted," says Dr. Goldsmith, "that the music of every bird in captivity produces no very pleasing sensations; it is but the mirth of a little animal insensible of its unfortunate situation. It is the landscape, the grove, the golden break of day, that give the bird's song its true relish. These united improve each other, and raise the mind to a state of the highest, yet most innocent exultation. Nothing can, under these circumstances, be more pleasing than to see and hear the lark warbling upon the wing; raising its note as it soars,

until it seems lost in the immense heights above us: the note continuing, the bird itself unseen. To see it then descending with a swell, as it comes from the clouds, yet sinking by degrees as it approaches its nest, the spot where all its affections are centered, the spot that has prompted all his joy."

If any one be so apathetic as not to feel the beauty of this description of Goldsmith's tingle through his veins, let him instantly shut this book, and turn to the pages of Cocker's Arithmetic, puzzle his pate with Euclid's Elements, sit down to a feast of doubt and dispute over a dish of Greek particles or Hebrew roots, or tickle his palate with the high seasoned ragouts of popular poetry or fashionable novels; for he is totally unfit for the study of natural history.

One of the chief objects of the present publication has been to recommend a humane and liberal treatment of birds, as well as all other animals, from a conviction that they all serve some useful purpose in the great scheme of Providence; that not a sparrow falls to the ground without the notice of its heavenly creator; that all are far more beneficial than injurious, and that in this, as well as every other instance, true happiness and duty are inseparable. Indeed, he who wantonly and needlessly deprives the meanest insect of life, cannot be considered as having any just claim either to wisdom or benevolence:

> "The poor beetle that we tread upon,
> In corporal sufferance finds a pang as great
> As when a giant dies."

It is a subject of deep lamentation that the people of this coun-

try are so frequently guilty of inhumanity to animals. The necessity of a law to restrain it, and the tardiness of the legislature to enact that law, are equally disgraceful. Hogarth's delineation of the progress of cruelty is founded upon no fiction, and the ferocious disposition so frequently displayed among us, may be easily traced to the encouragement of cruel sports, and the sanguinary character of our horrible penal laws.

The oration in defence of bull-baiting and other savage amusements, made by the late Mr. Wyndham in the House of Commons, has left a stain upon his character, and upon the reputation of those who applauded and supported him, which will never be obliterated!

Whenever it is proposed to remove or ameliorate that shocking mass of vice and folly, our penal laws, evasions and subterfuges so utterly despicable are resorted to, that they can only fill every honest and humane mind with contempt and abhorrence!

A considerable number of books have been consulted in revising this work, among which Albin, Pennant, Shaw, Buffon, Bewicke, Bingley, and the best modern Encyclopedias, have been most relied upon. The present Editor, however, appears before the public with great diffidence, and intreats the exertion of their candor and kindness in judging this production.

Possibly some few into whose hands it may fall may be induced to turn their attention to the delightful study of natural history. Some young persons may be drawn from the useless expense, the noisy inanity, and the fetid atmosphere of the ball room and the theatre, to the pure air of the fields, the rich scenery of the

woods, and the boundless objects of contemplation and enquiry which they afford. By the cultivation of virtuous propensities and pursuits they will learn to "look through Nature up to Nature's God." They will almost unavoidably turn from the page of Providence to the volume of Revelation. And thus they will unexpectedly find, what they probably did not intend to seek, the true philosopher's stone, the real and efficacious "*pabulum vitæ*," which alchemists so long, so earnestly, and so vainly sought, and which is the reward of virtue and piety alone.

" Say, who the various nations can declare
That plough with busy wing the peopled air?
These cleave the crumbling bark for insect food,
Those dip their crooked beak in kindred blood;
Some haunt the rushy moor, the lonely woods,
Some bathe their silver plumage in the floods;
Some fly to man, his household gods implore,
And gather round his hospitable door;
Wait the known call, and find protection there
From all the lesser tyrants of the air.
To claim the verse unnumbered tribes appear
That swell the music of the vernal year:
Seized with the spirit of the kindly spring,
They tune the voice and sleek the glossy wing,
With emulative strife the notes prolong,
And pour out all their little souls in song.
When winter bites upon the naked plain,
Nor food nor shelter in the groves remain,
By instinct led, a firm united band,
As marshalled by some skilful general's hand,
The congregated nations wing their way
In dusky columns o'er the trackless sea;

In clouds unnumbered annual hover o'er
The craggy Bass, or Kilda's utmost shore,
Thence spread their sails to meet the southern wind,
And leave the gathering tempest far behind;
Pursue the circling sun's indulgent ray,
Course the swift seasons, and o'ertake the day.

MRS. BARBAULD.

Starling.
1

STURNUS VULGARIS.

Linnæi Syst. Nat. 290.

THE STARLING OR STARE.

PLATE I.

THE Starling in shape resembles the common blackbird, but is inferior in size. The bill is depressed, aud broad at the tip; in the cock of a pale yellow, in the hen dusky; the tongue is hard and cloven, the irides of the eyes are brown, paler on the upper side.

The head, neck, back, throat, breast, and belly, are black, with a gloss of purple, varying into green, very bright and glistening.

The feathers are narrow and pointed, and those on the neck, back, rump, and on the thighs, in the male bird, are tipped with a brownish colour at their extreme points. In the female these spots are paler, larger, and more numerous, being extended over the whole head, neck, breast, and belly.

The first quill feathers of the wing are of a dusky black, with narrow borders of a pale brown. The second quills are of the same colour, with a shade of a darker hue near the tip. The covert feathers glisten with green, and those next the shoulder of the wing are some of them pointed with brown. The tail is shorter than that of the blackbird, a little forked, and of a dusky black; the feathers have narrow borders of a pale brown. The legs and feet are of a yellowish flesh colour; the claws horn colour, with black tips, and the middle toe is connected with the outermost as far as the first joint.

Their food is worms, beetles, and various kinds of berries, and in this part

of the kingdom they seem to be particularly fond of those of the **berry-bearing-heath, crowberries*, of which is given a figure, with its fruit, at the bottom of the plate. The flesh of these birds is so bitter as to be scarcely eatable.

There is a mark peculiar to the cock of this bird, by which he may be known from the hen while young. Under his tongue he has a black stroke, very plain to be seen on opening his mouth, which the hen has not, or at least so faint as to be scarcely visible. The first time he moults his feathers, he loses that mark, and may then be easily distinguished from the hen by his colours, in the brightness of which he much excels her.

The Starling is a very familiar bird, and in a state of captivity easily trained. Its natural voice is strong and sonorous, it whistles well and repeats the notes of the Canary admirably. It may also be taught to utter short sentences. Slitting their tongues, to make them talk the plainer, is a cruel and useless expedient, as they will soon learn to articulate, if proper pains be taken with them. They pronounce the letter R very distinctly.

These birds visit Italy in February, and migrate in October; they are, however, inhabitants of all climates, and are common in every part of England. At the approach of Spring, Starlings assemble in the fields in vast numbers, as if in consultation together, and for three or four days seem to take no nourishment. The greater part then leave this Country, but some remain and breed here. In their flights they often join birds of a different kind, fieldfares and redwings, and even owls, jackdaws, and pigeons. They sometimes enter pigeon-houses, and, it has been supposed, will occasionally suck the eggs. They have a peculiar manner of flying, which appears to be directed by a uniform and regular system of tactics. They keep constantly approaching the centre of the flock, while the rapidity of their flight invariably carries them beyond it. Thus this multitude of birds, by flying incessantly to and fro, and crossing each other in every direction, becomes a kind of agitated mass, which appears to perform a general revolution round itself. They are by this mode secured from the attacks of any bird of prey, which, being embarrassed by their numbers, incommoded by the flapping of their wings, stunned by their cries, disconcerted by their order of battle, and

* Empetrum nigrum.

judging himself too weak to penetrate their lines, which are more and more concentrated by fear, is frequently obliged to abandon the tempting booty without being able to appropriate to his use the smallest part of it. Nozeman, a dutch Ornithologist, says, it is a positive fact, that Starlings, when hard pressed by a bird of prey, adopt a mode of annoyance equally dirty and ludicrous, but with such effect as to oblige him to make a precipitate retreat.

Dr. Aikin, the most elegant and classical English writer of the present day, observes, that the mode of flight practised by Starlings when pursued by a hawk, is introduced by Homer, in the seventh book of the Iliad, as a metaphor for representing the flight of the Greeks before Hector and Æneas. This passage, Mr. Pope, who unfortunately was not much acquainted with natural history, misrepresents as a flight of cranes, to which it bears no resemblance.

Starlings chatter much morning and evening, when they assemble and disperse, but very little during the day, and at night are totally silent. In winter they assemble in myriads in the fens of Lincolnshire, and do great damage by roosting on the reeds, which they break down by their weight; for reeds, being the thatch of the country, are harvested with great care. But though Starlings commit considerable depredations on the husbandman, yet the interests of agriculture require that they should be preserved, on account of the vast numbers of pernicious insects which they consume.

Some of these birds are white, some black, and some a mixture of those colours. White and black Starlings are said to have been found in the same nest.

Sterne, in his well-known "Sentimental Journey," has introduced an interesting episode on the horrors of captivity, by his reflections on a starling in a cage, whose constant cry was, "I can't get out," "I can't get out!"

NEST AND EGGS OF THE STARLING.

PLATE II.

STARLINGS make their nests in old buildings, such as castles, towers, &c. and sometimes in the clefts of rocks.

The nest before me is formed of straw in the lower part, in the middle with a coarse kind of hay, and the inner coat or lining of fine soft hay, with a few feathers. The whole is a rude and loosely-compacted fabric, neither firm nor handsome.

They lay twice, and sometimes thrice, in the season; the first time, the hen is said to deposit five eggs, the second four, and the last three.

In this nest were four eggs, about the size of those of the throstle; they are of a pale bright blue, with a cast of green, and are destitute of spots.

The Starling is not valued for his own song, but for the beauty of his plumage, for his docility and aptness in learning to whistle or to speak.

Those who wish to have good birds for caging, should have them taken out of the nest at three or four days old; for if they are suffered to remain ten or twelve days in the nest, they will retain, for their whole lives, too much of their own harsh notes and disagreeable scream.

As soon as they are taken out of the nest, they may be kept in a small basket, with soft dry moss. Let them be kept reasonably warm, and fed often, giving them but little at a time. Let the moss be renewed every day, and let them at all times be kept dry and clean, for on this care depends your success. Such tunes or notes as you wish them to learn, should be played or whistled to them, from the first day you take them out of the nest.

Starling. Nest & Eggs.

Miſsel bird.

TURDUS VISCIVORUS.

Lin. Syst. Nat. 291.

THE MISSELBIRD.

PLATE III.

THIS is the largest of the British song birds, being ten inches and an half long. The figure in plate the third is a little reduced to bring it within compass. The bill is short and strong, the upper chap pretty much curved, with a small notch near the end, and of a black colour; the lower is dusky at the point, and horn-coloured at the base. The tongue is divided and jagged.

Between the bill and the eyes is a bed of white downy feathers, and several upright black bristles grow about the base of the bill. The inside of the mouth is yellow, the eyes brown, and the feathers which cover the ears are of a pale colour.

The head is of a dusky ash colour, with a strong cast of olive, the back and rump are olive colour, the latter inclining to yellow.

The tail consists of twelve feathers of the same colour as the back, except the two outmost on each side, which at the tips are clouded with white.

The lower side of the bird, from bill to tail, is white, with a dash of yellow brown on the sides of the breast, and under the wings, and all the white part is beautifully spotted with white and black spots of various shapes; those on the throat and upper part of the breast are triangular, on the lower part oval or kidney-shaped, and towards the tail lunated.

The legs and feet are yellow, the claws are black, very much curved, and sharp pointed, and the outer toe is connected with the middle by a membrane, as far as the first joint.

The wing is olive-coloured, the first and second quills having white tips. The coverts have broad white margins. It feeds on the berries of **misseltoe* when it can find them; it also eats insects, bilberries, haws, and other small

* Viscum album.

fruits, like the rest of the thrushes, but none of this genus feed upon grain; nor does this bird destroy the fruit in gardens like the other species of thrushes. In severe snowy weather, when there is a failure of their usual diet, they are observed to scratch out of the banks of hedges, the root of Arum maculatum, or Cuckoo-pint; this is remarkably warm and pungent, and therefore a provision suitable to the season.

This genus, (turdus), is one of the most numerous in Ornithology, including not fewer than a hundred and thirty-six species, of which seven are inhabitants of this country. It attracted the notice of the Antients, and among the Romans, some species of the thrush were deemed excellent food, and were kept and fattened in large aviaries, capable of containing many thousands, along with quails, ortolans, and other birds reckoned delicate eating. The ordinary price was about two shillings each, but at the time of any grand festival it far exceeded that sum. The Thrush kind were highly celebrated by Martial, who says, "Inter aves, turdus, inter quadrupes, gloria prima lepus."

Among birds the thrush, among quadrupeds the hare, is the chief delicacy.

The misselbird, called also measle-taw, and shrite, is supposed to be the largest bird, British or foreign, that sings or has any melody in its note. He begins his song, which is very fine, sitting on the summit of a high tree, very early in the spring; often with the new year, in blowing, showery weather, which induces the inhabitants of some parts of England to call him the Storm-cock. His note of anger or of fear is very harsh, between a chatter and a shriek. Though migratory in some places, this bird continues in Great Britain the whole year. The Welsh call it, Pen y llwyn, or master of the coppice, as it will drive all the lesser species of thrushes from it. M. de Montbeillard, the assistant of M. Buffon, describes the manners of the misselbird as gentle and pacific; but M. le Vaillant declares it is the most quarrelsome and petulant of birds. They fight and pursue each other with such violence that the weakest is obliged to shift his quarters; and they will attack any bird, even though much stronger than themselves, that approaches the place where they have fixed their abode. The stock-dove, ring-dove, raven, cuckoo, and butcher-bird, are all afraid of

the misselthrush. He has even the courage to attack the sparrow hawk, kestrel, and merlin; and the buzzard and kite have been seen to fly with precipitation at his approach. When the Enemy appears very formidable, these birds, laying aside their private animosity, will attack him with united force. M. le Vaillant relates, that in the vicinity of Paris, he witnessed a combat between about ten of these birds and an eagle, in which the latter was completely beaten and put to flight.

NEST AND EGGS OF THE MISSELBIRD.

PLATE IV.

THE Misselbird most commonly places her nest in an ash tree, at the projection of one of the branches, a good height from the ground. In the nest described the first lay consists of several kinds of moss, hay, stalks of dried plants, &c. which being brought in great plenty, and disposed in a very rugged manner, constitute the chief part of the fabric. Upon this follows a lay of plaster, composed of clay mixed with cow's dung, so well tempered together as to form, when dry, an hard tough shell of about half an inch thick. Upon this is laid another covering of soft dry grass, which is neatly platted both in the cavity and all round the borders of the nest. The diameter of the cavity is about four inches, the depth not fully two.

This nest was built between the triple division of an ash tree, and hung all round with the * *ashliverwort*, so as to hide it on every side. On removing it some part of the liverwort was found to grow from the tree above and round about the nest; but the greater part of it was very artfully wove in with the grass and moss on the outer margin of the brim, and left to hang loose about the sides of the nest, just as it hung on other parts of the tree. By this artifice the bird often secures her nest, concealing it from the gape of the ignorant country bumpkin, or the prying eye of the mischievous school boy. Two broods are frequently produced in one season.

She lays four eggs of a dusky flesh colour, having a cast of green, and large spots of brown or purple. The Misselbird is the earliest of our song birds. In the month of January, if the weather is mild, he sings most sweetly; his song resembles that of the throstle, but his pipe is sweeter, and his notes more mellow. According to Mr. White's Calendar, these birds begin to sing from the second to the fourteenth of January, and pair about the twenty-fourth of February.

* Lichen fraxineus.

Mifsel Bird Nest & Eggs.

Song Thrush or Throstle

TURDUS MUSICUS.

Syst. Nat.—292.

SONG THRUSH, OR THROSTLE.

PLATE V.

THE bill is an inch long, the upper mandible of a dusky colour, the lower yellow. The mouth within yellow, between the bill and eyes is a pale coloured spot, and between that and the throat a dark one. The eyes are brown, large, very bright, and piercing.

The crown of the head, the back, and whole upper side, are of a pleasing olive colour, inclining to yellow, about the lower part of the back, but more dusky about the head.

In the wings are eighteen quill feathers of a dusky olive colour, with pale coloured edges. The first and second covert feathers have white tips, the feathers under the wings are a kind of pale flame colour.

The whole underside of the bird, from bill to tail, is white, with only a faint dash of olive colour on the sides of the breast; and the throat, breast, and belly, elegantly spotted with black spots of various figures, as in the last species.

The tail consists of twelve equal feathers of a dark olive colour. The legs and feet are of a light horn colour, the toes long and slender, and the claws black.

The throstle feeds on insects and berries, and is fond of the different kinds of bilberries. The figures are of the *cranberry** in flower, and with fruit.

This bird is little more than half the size of the missel thrush, but in other respects resembles it very closely, both in its appearance and habits.

* Vaccinium oxycoccus.

In this country, according to Mr. White, the throstle begins to sing between the sixth and twenty-second of January. It is the finest of our indigenous singing birds, not only for the sweetness and variety of its notes, but for the long continuance of them, as it delights us with its song for nearly three parts of the year. Like the missel bird it pours forth its music from the top of some high tree; and this it continues to do for hours together, displaying a charming wildness and vast variety skilfully combined. Being subject to frequent returns of the amorous passion, which is the source of all the music of the grove, it is extremely prolific, producing in some countries no less than three broods in one season.

With us it changes its residence according to the variations of the year, but is not supposed to depart from the island. In long droughts, when worms and other insects are scarce, it is very useful in gardens by destroying great quantities of snails, which it carefully seeks, and, breaking the shells against a stone, feeds its young with their contents. Two specimens of an uniform buff colour, Mr. Pennant informs us, were sent to the ingenious Miss Meyrick of Beaumaris. One was found near St. Asaph, and the other near Bangor.

This species is widely diffused over Europe. It is frequent in Scotland, England, France, Germany, and Sweden. There are some districts in Poland, where such numbers are annually caught, that, according to Buffon, the inhabitants load many small vessels with them for exportation. Their flesh is esteemed wholesome, and in Silesia, where they are also very numerous, they are not only used for the immediate supply of food, but after being roasted, are preserved in vinegar till the following summer. In France and Italy this bird is migratory. In Burgundy they appear just before the vintage, in order to feed on the ripe grapes, and often intoxicate themselves with their juice. In France, therefore, they are generally called la grive de vigne.

There are several varieties of the song thrush in Europe, and three or four in America. One of these is the mocking-bird, turdus polyglottus of Linnæus, or according to Dr. Shaw, more classically, turdus Orpheus, respecting which, a few words, it is hoped, may be allowed here. The Mexicans, on account of the variety of his notes and his imitative powers, call

him "the bird of four hundred tongues." In the warmer parts of America, he sings almost incessantly from March to August, both day and night; beginning with his own compositions, and frequently finishing by borrowing from those of the whole feathered choir. He repeats his tunes with such skill and sweetness, as to excite both pleasure and surprise. His own notes are truly musical, and he can at pleasure assume the tone of every other animal in the forest, from the humming-bird to the eagle, and will frequently mimic even the wolf and the raven. One of them confined in a cage, has been heard to imitate the mewing of a cat, the barking of a dog, the chattering of a magpie, the cooing of a dove, and the creaking of the rusty hinges of a sign-post, all in rapid succession. The editor of this work once heard two of these birds in cages, in emulative strains, pour forth such varied, wild, and rich melodious music, as imagination disperses through the groves of Arcadia; the Pierian Shades of the elegant retreat of the Muses and Graces; or as Mussulman faith supplies to the ever-blooming trees which fan with perpetual fragrance the enchanting abode of the Houris. This exquisite treat was enjoyed in the State of New Jersey, and in an atmosphere laden to excess with the delicious perfume of the magnolia. How vain the attempt to describe such pleasures!

To return to the thrush. These birds have been supposed to be gregarious, but they associate only in families, and these separate as soon as the young are capable of providing for themselves. Thrushes, which so sweetly enliven the forest with their music, sing equally well in a state of captivity, and are susceptible also of strong attachment. A lady of my acquaintance, says Sonnini, had a thrush which she kept eight years. He became so familiar as to follow his mistress, and whistled a variety of tunes. He lived upon a paste, made of crumb of bread and rape-seed mixed, of which he consumed fifty two pounds in the course of the year. This is a curious observation, affording a medium of judging of the quantity of food taken by a bird, and of the depredations committed by some of the species on the produce of our fields and gardens, as well as of the benefits derived from the immense numbers of insects which they must destroy.

When educated from the nest, the thrush will readily learn the song of the woodlark, nightingale, or any other musical bird.

NEST AND EGGS OF THE SONG-THRUSH.

PLATE VI.

SONG-THRUSHES generally build their nests in some close thicket, or low bush, near the ground. The outside is formed of small sticks, withered leaves, grass, and various kinds of moss. Plenty of these materials are huddled together in a loose and negligent manner.

The inmost coat or lining is a made of a mixture of clay and rotten wood, with a few slender blades of withered grass to bind it together, and is near half an inch thick; upon this plaster the eggs are laid, no grass or soft covering being put upon it, as in that of the blackbird, misselbird, &c.

The eggs are of a beautiful pale blue, with a cast of green, and marked with a few distinct purple spots.

The cock is distinguished from the hen by the general hue of his colours being brighter and stronger, particularly by the light-coloured line which passes from the bill to the eyes being whiter in the cock, and the dark-coloured line being darker.

Thrush Nest & Eggs. 6

TURDUS MERULA.

Syst. Nat.—295.

THE BLACKBIRD, OR OUZEL.

PLATE VII.

THE bill is an inch long, in the cock of a fine bright gold colour, in the hen dusky towards the point, yellow towards the base. The inside of the mouth is yellow, the eyes are brown and very bright, the circle round them yellow.

The whole plumage of the cock, in old birds, is an intense steady black without glossiness. The hen is of a dusky black, inclining to brown; the throat and upper part of the breast excepted, which are of a dull dirty white spotted with black.

The wing is composed of eighteen feathers, of which the second order of quills are remarkably large and broad. The tail consists of twelve feathers, and when displayed is fan-shaped, the outer feathers being shorter than the middle ones. The legs and feet are black, or of a very dark horn colour.

The ouzel is a solitary bird, accompanying with his mate only in breeding time. He inhabits solitary and rocky woods near rivulets; and when surprised in his lonely haunts, flies from the presence of the intruder with an hideous loud scream. Their food is insects and berries, and they seem to delight most in the *hawthorn**. The attitudes of the cock are bold and majestic, particularly when he feeds. Stooping, displaying his tail, turning his head, and casting his eyes on every side as if to avoid a foe.

The blackbird is one of the first to proclaim the welcome spring by his shrill melodious notes, as if he were the harbinger of nature, to awaken the rest of the feathered tribes, by the sweet modulation of his tuneful accents, to prepare for the pleasures of the approaching season, even before the

* Cratægus oxycanthy.

leaves appear upon the trees, and while the frosts are yet in the fields. He begins to sing about the middle of January, according to Mr. White, and continues his music till his moulting time, at the end of summer, and resumes it in September, continuing it through the first winter months. The note of the male bird is extremely fine, but too loud for any place except the woods. That of the female is so very different, that it has sometimes been mistaken for the voice of a bird of another species.

Blackbirds are restless and timorous, easily alarmed, and difficult of access; but Buffon observes that they are more restless than cunning, and more timorous than suspicious, as they readily suffer themselves to be taken by all sorts of devices.

These birds are subject to much variety, being sometimes white, and occasionally pied in different degrees.

Like the thrushes, they destroy great numbers of insects in the fields and gardens, and thereby amply repay us for the fruit with which they make free. They are said to be found dead frequently in very cold weather, which is not the case with other birds, for if they die, they are seldom found.

In confinement blackbirds are familiar, and may be taught to whistle tunes, and to imitate the human voice, but they are never kept in aviaries: for, when shut up with other birds, they incessantly pursue and harrass their companions in slavery.

The blackbird is an inhabitant of England through the whole year, and remains also in Italy. In the southern part of Spain it is said alternately to visit Barbary, and to be numerous in both places.

Blackbird's Nest & Eggs.

NEST AND EGGS OF THE BLACKBIRD.

PLATE VIII.

THE blackbird breeds in solitary places, and conceals her nest very artfully in the bottom of some close bush near the ground.

The outside is composed of various kinds of moss, which is wove and platted together with blades of grass, dried leaves, &c. These are brought in plenty, and firmly bound together. Upon this is a coat of plaster, composed of a mixture of clay and cow's dung, well wrought and tempered together; and over this a soft covering of the dried blades of hair grass, which is neatly wove and platted together in the bottom and sides of the cavity, as well as upon the brim of the nest.

They generally lay four eggs of a dusky blue green, with numerous small points of a darker colour.

The blackbird sits concealed while he sings. In breeding time, his whistle is so loud and shrill as to make the dales re-echo. When two are singing at the same time within hearing of each other, they will contend in song like the nightingale, each keeping silence alternately till the other has repeated his song.

Blackbirds, as well as other birds of the thrush kind, when taken in traps, or otherwise, are easily reclaimed by being put in large cages with

tame birds of the same species, placing, for a few days, haws, hips, worms, &c. in the cage, still giving him fewer and fewer every day, and in the space of a fortnight he will wean himself and take the tame birds' food.

The nests of blackbirds and thrushes are frequently robbed by magpies, which sometimes destroy the old birds also, and this in some measure causes their scarcity. A blackbird built its nest twice at the bottom of a hedge, and both times had its young destroyed by cats; it built again a third time, and placed its nest in an apple tree, eight feet from the ground.

Ring or Heath Ouzle.

TURDUS TORQUATUS.

Syst. Nat. 296.

THE RING-OUZEL, OR HEATH-OUZEL.

PLATE IX.

THIS bird is generally larger than the blackbird. The bill is sometimes wholly black, but in some of a yellow ochre colour, except the point, which is dusky. The mouth is yellow within. The eyes are a dark brown. The whole upper side of the bird, from bill to tail, is black, with a cast of brown somewhat bright and shining. The head is of a fuller black than the other parts of the body. The quill feathers of the wing are the same colour as the back, except thir exterior edges, which are white. The first and second coverts also have white edges. The tail is composed of twelve black feathers, with pale coloured edges.

On the breast of the cock is a lunated mark of a clear white, terminating in a point on each side of the neck; else the whole underside of the bird is the same colour as the back. The hen differs from the cock, in that the mark is not white on the breast, but of a dusky brown. The colour of the back is duller. The feathers on the breast have grey borders, and the bill is dusky. The feet and legs in both are of a dusky horn colour.

These birds sometimes visit the mountainous parts of the West Riding of Yorkshire, where they breed. They come in April, and leave us in October; but whence they come, or whither they go, is not known. A remarkable circumstance is, that they do not visit us regularly every year. Sometimes they come in plenty, and sometimes for the space of two or three years they are not seen. They feed on fruits and insects. The flowers and fruit of the * *mountain-ash*, or *quicken tree* are here figured.

* Sorbus aucuparia.

Ring-Ouzels inhabit the Highland Hills, the North of England, and the Mountains of Wales. They are also found to breed in Dartmoor, in Devonshire, in banks on the sides of streams. They have been seen in the same situation in Wales, and are very clamorous when disturbed. They were observed by the Rev. Mr. White, of Selborn, in Hampshire, to visit his neighbourhood regularly twice a year, in flocks of twenty or thirty, about the middle of April, and again about Michaelmas. They make it only a resting place in their way to some other country. In their spring migration they only stay a week, in their autumnal a fortnight. They feed there on haws, and for want of them on yew berries. The place of their retreat is not known: those that breed in Wales and Scotland never quitting those countries.

In the last they breed on the hills, but descend to the lower parts to feed on the berries of the mountain-ash. They are seen in France late in the season: and appear in small flocks about Montbard, in Burgundy, in the beginning of October, but seldom stay above two or three weeks. They are said, however, to breed in Sologne and the Forest of Orleans. They are chiefly found in the wildest and most mountainous parts of the countries they inhabit. They are fond of grapes, and Buffon observes, that during the season of vintage they are generally fat, and are then esteemed delicious eating.

Ring Ouzle Nest & Eggs.

NEST AND EGGS OF THE RING-OUZEL.

PLATE X.

THE nest which Mr. Bolton examined was composed of small sprigs and branches of heath, mixed with moss and dry stalks of plants. These were plentifully bestowed on the bottom and sides of the nest, and with them the figure and cavity thereof was formed; within this was a coat of plaster, composed of mud mixed with small blades of grass and fibres of roots, and upon the plaster was another coat of fine soft grass, which also covered the brim of the nest, and was very neatly and smoothly laid, as in the nest of the blackbird.

The eggs were four in number. In size and colour much like those of the blackbird, but are splashed with broad spots of a red brown, by which they are at once distinguished from the egg of that bird.

The outside of the nest was quite covered with dried oaken leaves, warped or sewed to the other materials with blades of grass, fibres of roots, &c.

This nest was built on the edge of a rock, about six feet from the ground, artfully hid amongst surrounding heath, mixed with fallen oak leaves.

The cock sings sweetly in breeding-time. His voice is less loud than any of the foregoing; but is soft and mellow, and he has a pleasing variety of warbling notes.

LOXIA PYRRHULA.

Syst. Nat. 300.

THE BULFINCH, OR NOPE.

PLATE XI.

THE bill is very thick, short, hooked, and black. The eyes are brown and small. The head is of a silky black, with a gloss of purple, which colour reaches down to the nape of the neck. The back is of a bluish ash colour. The rump a pure white. The covert feathers of the tail, as well as the tail itself, are black, with a purple gloss.

The first quill feathers of the wings are of a dusky black; the second quills, a bright glossy black purple, the innermost excepted, which is red on the exterior side of the shaft: the greater coverts are black, deeply pointed with a pale ash colour; the lesser coverts the same as the back. The upper part of the throat and lower jaws are surrounded with a list of black, which unites with the black of the forehead at the eyes. The cheeks, breast, and upper part of the belly, are of a soft reddish crimson. The lower part of the belly and covert feathers under the tail, are white. The tail consists of twelve feathers of a glossy purple black.

The bulfinch is not valued for his own song, but for his beautiful plumage, and his great docility and aptness to take the song of other birds, to whistle after the pipe, and even to speak. Their food is insects and the buds of fruit trees, particularly the apple, pear and peach.

The bulfinch is much esteemed in England for beauty and song; in the former he equals most birds, and in the latter, when well taught, he excels all other birds of his size. Bulfinches have frequently been sold at from five to ten guineas each.

They, like starlings, require much pains to be taken with them in the early part of their education, and should never be fed without having their lesson repeated to them. They soon grow attentive, and generally by the time

they are three months old, will begin to record to themselves, after which a very few lessons will render them perfect. There have been instances of such wonderful docility as two bulfinches being taught to sing duets. Both male and female, if instructed, will listen attentively to any air, imitate it, and even improve it by their graceful modulation. This capacity of the female to sing, is a circumstance by which she is probably distinguished from every other bird of that sex. It is remarkable of these birds, that they never forget what they have once learned, though they may subsequently have been placed among many other birds.

The bulfinch may also be taught to speak as well as to sing, and many, thus accomplished, are brought annually from Germany to London. " He utters his little phrases," says Buffon, " with such an air of discernment and penetration, that you are apt to believe him animated by an intelligent principle."

The plumage of this species is variable, some individuals being wholly black, others white, with black spots on the back, or with the head, neck, breast, and belly, rosy. Mr. White of Selborn related to Mr. Pennant an instance of a male bulfinch which was taken with its feathers of the usual colours, and in confinement became the first year of a dull hue, deepening its colour every year, till, in the fourth year, it was quite black. In another instance mentioned by Mr. Morton, in his History of Northamptonshire, a bird which had thus changed its plumage, recovered its original colours after moulting. Birds fed entirely on hemp seed are most liable to this change.

In the Leverian Museum there was a variety of the bulfinch entirely white, and in November, 1801, a white bulfinch was shot by Mr. Spearman, of Wharton; its bill, like that of the common bulfinch, was black, as were also a few of the first quills, the bastard wing, and some slight spots about the eyes; all the other parts of the plumage were white, except being faintly blushed with red on the cheeks and breast.

The cock is equal in size to the hen, but has a flatter crown, and excels her in the beauty of his colours.

The bulfinch is susceptible of personal attachment, which is often strong and durable. Some have been known, after escaping and living a whole year in the woods, to recognise the voice of their mistress, and return to

forsake her no more. Others have died of melancholy on being removed from the first object of their attachment. The feathers of those which have been recovered from a wild state have been found much ruffled and tangled. "Thus," says Buffon, "liberty has its inconveniences, especially for an animal depraved by domestication." This, however, is a very small inconvenience to suffer for the enjoyment of such a blessing as liberty,

These birds, which are common in most parts of the Continent of Europe, as well as in England, are found also in Russia and Siberia, in which last place they are caught for the use of the table. Thunberg says they are frequent in Japan. In summer time they chiefly frequent woods and retired places, but in winter make their appearance in gardens and orchards, where they are usefully employed in destroying the worms which are lodged in the tender buds, at the very time they are suspected of doing much mischief by destroying the buds themselves. In some parts of England a reward is allowed by the parish for every bulfinch that is killed, and this may be one reason why they are less common than most other singing birds that breed with us. This reward is sometimes extended to the destruction of all small birds, and the boys in the villages receive a halfpenny each for all the heads they take to the Overseers. As there is reason to believe that the little birds do, upon the whole, much more good than harm, this cannot be a proper mode of spending the parish money.

This bird is sometimes called bulspink, alp, and hoop, and in some places monk and pope, from the appearance of his head; and in Scotland he is not improperly denominated coally-hood.

There are varieties of the bulfinch both in North and South America, some of them having very beautiful plumage.

Bullfinch Nest & Eggs.

NEST AND EGGS OF THE BULFINCH.

PLATE XII.

THE hen Bulfinch differs from the cock, as her breast is not crimson, but of a dusky red brown. The back is of a dirty ash colour, and the black of the head, tail, and wings, less bright and glossy.

She builds her nest in woods, particularly where sloe-bushes and crab-trees abound. For the ground-work she makes use of a number of small sticks broken of a proportionable length. These she places cross-wise on the divisions of a suitable branch, and upon these the nest is built of woody roots, the largest near the bottom and round the sides, the smaller within.

The inside, or lining, is made of very fine fibres of roots, without any other materials.

In the nest now described, the diameter of the cavity is upwards of two inches and a half, the depth an inch.

This nest contained five eggs of a pale blue green, with dark purple blotches, and small red spots.

Those who would bring up Bulfinches from the nest, with a view of teaching them to whistle, or to imitate the song of other birds, should take them about four days old; for if they are left to the age of ten or twelve days, they acquire some of the harsh notes of the parent, which they will never quit.

LOXIA CHLORIS.

Syst. Nat. 304.

THE GREENFINCH.

PLATE XIII.

THE bill is thick, straight, and sharp-pointed, of a horn colour, except the tip, which is dusky. The eyes are brown, the eye-lids white. The fore part of the head, and the cheeks round the bill, are yellow, with a cast of olive. The head and back are olive, with a shade of brown. The rump inclines more to yellow. The outer borders of the seven first quill feathers are of a bright yellow, as are also those of the bastard wing. The next quills are edged with a dusky green, and the last are wholly dusky. The first row of coverts are of a dusky ash colour, the second a yellowish green, brighter than the feathers on the back.

The throat and breast are a green yellow, the belly more yellow, and becomes almost white about the thighs.

The tail is a little forked, consisting of twelve feathers, the two middlemost of a dusky black, except the upper part of the exterior margins, which are olive-coloured.

All the rest are yellow, except about half an inch of the lower part, which is dusky.

The legs and feet are of a dusky horn colour, and the claws black.

The colour of the hen is in all parts more dusky and dull, and in old birds the feathers of the back and breast have brownish dashes down their shafts.

These birds, which are common in every part of Great Britain, are found throughout Europe, and have been noticed in Kamtschatka.

They do not migrate, but change their quarters according to the season of the year. They keep together in small flocks during the extremity of winter, when they draw to the shelter of villages and farm yards, and disperse to breed in the spring.

This bird is so easily tamed that it frequently eats out of the hand in five minutes after it is taken, if there is an opportunity of carrying it into the dark. The bird should then be put upon the finger, from which it will not attempt to move, not knowing, in the dark, where to fly. The finger of the other hand should then be introduced under the breast, which, making it inconvenient to stay where it was before placed, it climbs upon the second finger. When this has been nine or ten times repeated, and the bird stroked and caressed, it finds that no harm is intended, and if the light is let in by degrees, it will frequently eat any bruised seed out of the hand, and afterwards continue tame. They are much valued for their readiness in learning to ring the bells in a cage contrived for that purpose, and some of them, if brought up from the nest, will learn to pipe and whistle, and wil acquire the song of most other birds.

NEST AND EGGS OF THE GREENFINCH.

PLATE XIV.

THE greenfinch makes her nest in some close hedge or bush, more frequently in a holly than any other tree.

She lays for the foundation a number of small sticks, which cross each other every way, in the same manner as those of the bulfinch. Upon these, in the nest examined, is laid a great quantity of coarse moss, mixed with sticks, roots, and cow's hair; and upon these, immediately under the lining is a thick coat of roots firmly entangled together, and over these is a thick coat or lining of red cow's hair.

The diameter of the cavity is two inches, the depth an inch and an half. The brim of the nest is ragged and uneven, and the whole very roughly fabricated.

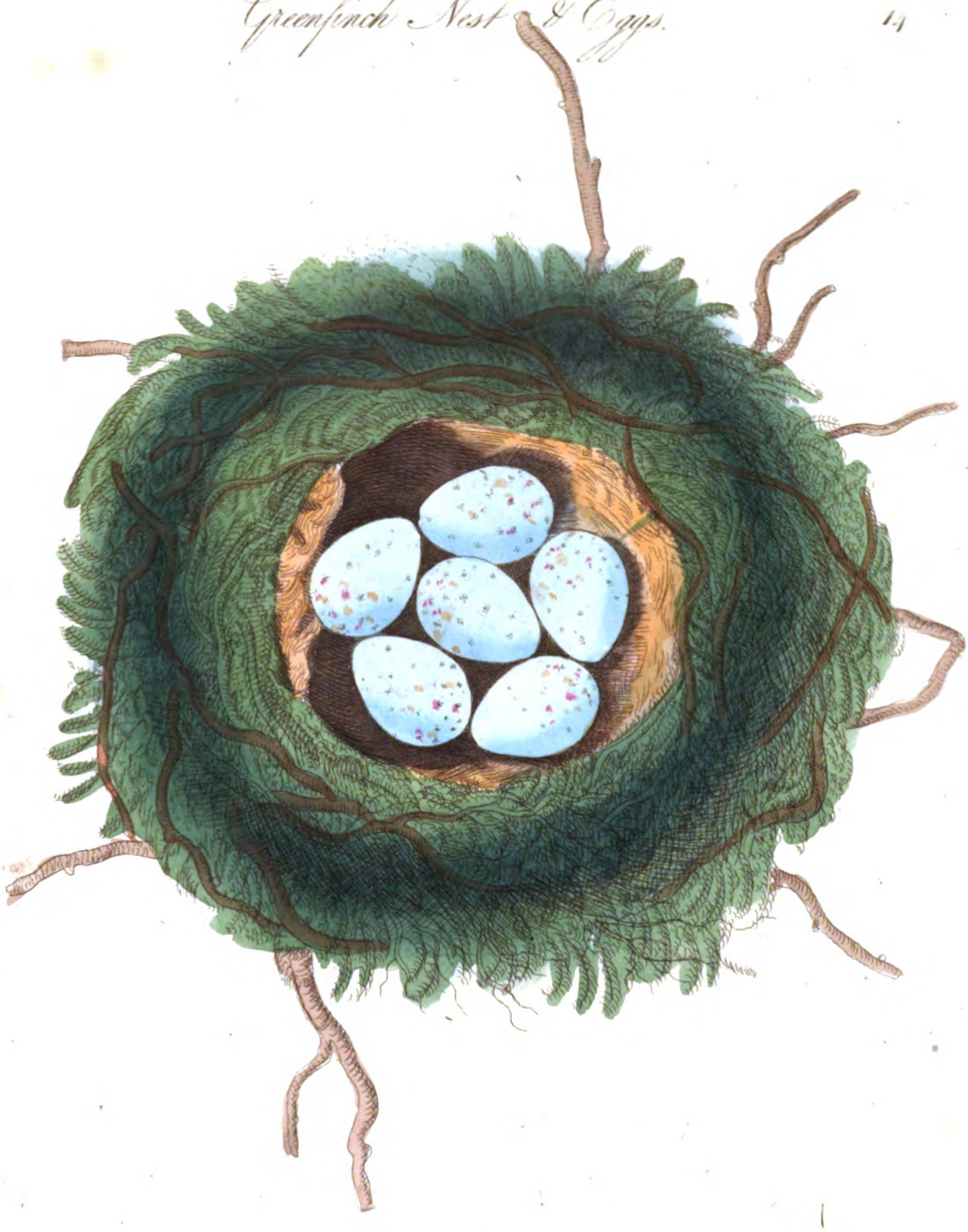
In this nest were six eggs of a pale bluish white, or milk and water colour. They are marked with brown and purple spots.

The greenfinch feeds on grain, berries, the buds of trees, and insects.

The song of the greenfinch is harsh and unpleasing; but the beautiful colours and fine shape of the cock, together with his docility and aptness to learn, render him well worthy the esteem of those who delight in this branch of natural history.

The greenfinch is a stout and hardy bird, and not subject to diseases, if kept clean.

They should be fed with rape and canary seeds, for hemp makes them grow fat and lazy.



EMBERIZA MILIARIA.

Syst. Nat. 304.

THE COMMON BUNTING.

PLATE XV.

THE bill is large, thick, sharp pointed, and of a horn colour. In the roof of the upper mandible of all this genus is a hard knob, adapted to bruise corn or other hard seeds, and Mr. Bewick says that both mandibles are moveable. The lower chap has a remarkable rising angle on the side, which rests on the outside of the upper chap when the mouth is shut. The eyes are brown, having a narrow circle of white round the eye-lids.

The head is large, covered with feathers of a dusky olive or lark colour, each having a dark-coloured line along the shaft.

The back and rump are the same colour with the head, only they are darker along the middle of the feathers.

The quill feathers of the wings are dusky, edged with a pale brown. The covert feathers are also dusky, with broad borders of a pale bright brown.

The tail is a little forked, consisting of twelve feathers of a dusky black, with pale brown edges.

The throat, breast, and belly, are of a dull white, with a dark stroke down the middle of each feather. These dark spots are more black and distinct on the throat and breast. On the belly they become narrow and faint, and disappear below the thighs.

The legs and feet are of a pale horn colour. The claws crooked, black, and sharp.

The Bunting feeds on grain, and is particularly fond of the black oat, an ear of which he will snap off with his bill, and taking it to the next wall,

will hold it with his foot, while he shells off the hull, and eats the grain. He eats also the various kinds of insects that are found in the fields and meadows.

There are about seventy-seven species of the genus Emberiza, to which this bird belongs; six of which are inhabitants of this country, where they reside the whole year, and are very common. They are scattered over the four quarters of the globe, but are chiefly found in Europe and America. In France, M. Buffon observes, the Bunting is seldom seen during the winter, but arrives soon after the swallow, and spreads through every part of Europe.

In consequence of their gregarious habits they are often shot or caught in great numbers, and from the similarity of their plumage are not unfrequently sold for larks, under the name of Bunting-Lark. Their flesh, however, is said to be bitter, and far inferior to that of the true lark.

They vary occasionally in their plumage, and Mr. Pennant says, " I received in November, 1787, a Bunting with a white head and tail; the head elegantly tinged with yellow, the back white and brown; the coverts of the wings the same, but in both the white predominated; the breast had all the usual marks of the Bunting." This description agrees pretty well with the " Ortolan jaune" of Buffon.

Here it may perhaps be permitted to notice a bird of this genus, Emberiza Hortulana, the Ortolan; well known to Greek and Roman, as well as to modern epicures. These birds are common in France and Italy, and are seen occasionally in Germany and Sweden. They sing very prettily, and are often kept for that purpose; but are chiefly caught in vast numbers on the Continent of Europe for the use of the table, for which purpose they are fed till they become a lump of fat. They are esteemed delicious eating, and are also potted and otherwise preserved, and form an article of exportation to those countries where they are less commonly found.

They have been frequently sold in France as high as nine shillings apiece.

But what is this compared with Roman luxury and extravagance? It is related of Clodius Œsopus, a contemporary of the celebrated Roscius, who lived, and it may be properly said flourished, about the 670th year of Rome, that at an entertainment he had one dish which cost above £800. sterling!

This dish, we are told, consisted of singing and speaking birds, some of which were purchased at an expence of nearly £50. each. This man, notwithstanding his extravagance, left his son above £160,000. and therefore probably set a higher value on his faculty of amusing the public than even a female singer of our own times (1822), who, according to the public papers, demanded £3000. and refused £2000. for her vocal exertions at one series of Lent oratorios!

NEST AND EGGS OF THE BUNTING.

PLATE XVI.

THE Bunting builds her nest in some clump of fern, briars, or tall grass, often near the root of some low shrub. In the nest here represented the outside is composed of straw, small sticks, broken rushes, and moss. The whole of the nest is formed of these materials, save that the lining has a few hairs mixed amongst it.

The whole is loosely and awkwardly put together; the cavity is shallow, and the brim irregular and undefined.

The eggs are large for the size of the bird. The ground colour is white, and they are beautifully blotched, spotted, and streaked with black. Some of these spots and scratches are clear and distinct, others are dimly seen, appearing as if a blue pellicle was drawn over them. This last circumstance is not peculiar to the eggs of the Bunting, but common to those of most other birds which lay spotted eggs.

In breeding time the cock perches on the tops of trees, chirping out his ditty all day long. His notes are not unpleasant, though low. They are more mellow and more varied than those of the yellow-hammer.

This is a bold and stately bird, and well deserves a place amongst other birds, either in a cage or an aviary.

The hen differs little from the cock, only the colours in general are paler and fainter.

Yellow Hammer?

EMBERIZA CITRINELLA.

Syst. Nat. 309.

YELLOW-HAMMER.

PLATE XVII.

THE bill is straight, sharp-pointed, of a pale yellow at the base, black at the tip. It has a rising angle on the lower chap, as in that of the bunting, and the rest of the genus. The eyes are brown. The tongue short and thick. The whole head, cheeks, and upper part of the neck, is of a bright yellow in the cock bird, each feather having a dash or line of black down its shaft. In some birds there are touches of orange colour amongst the yellow. The feathers on the back are a mixture of olive, green, and orange colour, with a black dash down the middle of each. The lower part of the back is of a tawny orange colour.

The first quill feathers of the wing are of a dusky black, with yellow edges. The second also are black, but with broad margins of a tawny brown.

The tail is a little forked, consisting of twelve feathers, with yellow-green edges. The two exterior feathers on each side have a large white spot on their inner webs.

The throat is yellow. The breast yellow-green, with orange stains down the feathers. The belly and covert feathers beneath the tail, are yellow.

The legs and feet are horn colour, the claws black.

The hen differs from the cock; her colours are much duller in all parts, having the head, &c. of a brown green, where the cock is yellow.

The tree on which they are perched is the hazel, corylus avellana, in blossom.

This bird, which is extremely common throughout Europe and America, is numerous in England, and in winter frequents our farmyards with other

small birds, and when the cold is intense will enter into houses. It may be seen in every lane and on every hedge, and its note, though short and not much varied, is not unpleasant, being uttered with boldness and spirit.

Mr. White says that this bird begins to sing about the twelfth of February. Though his song is insignificant, yet the beauty of his feathers and the elegance of his shape will always recommend him to notice.

These birds feed upon seeds and insects, and though they may occasionally pilfer from gardens, yet they, as well as all other small birds, do a vast deal more good than harm.

They visit Italy about the end of April and retire in October, but many winter there; and in that country, where small birds of every description are made use of for the table, these are esteemed very good eating, and are frequently fattened with ortolans for that purpose.

In North America it is generally called the American Canary. In some parts of this country it is called the yellow yowley.

Yellow Hammer Nest & Eggs

NEST AND EGGS OF THE YELLOW-HAMMER.

PLATE XVIII.

YELLOW-HAMMERS build their nests about the borders of woods, placing them on or near the ground, under the shelter of some bush or low shrub.

In the specimen now described, the outside is formed with broad blades of withered grass, fragments of leaves, dried stalks of plants, and various kinds of moss. These are well and closely compacted together, and with them the cavity is formed, and the general shape of the nest constructed. The lining consists of a thick coat of small fibres of roots, mixed with a few hairs. The diameter of the cavity is near three inches, the depth an inch and a half.

The yellow-hammer lays four or five white eggs, with blotches and scratches of a brown purple colour.

In winter they fly in flocks. They feed on insects, on grain, and the seeds of plants, and in spring are frequently seen pecking about the catkins of the *hazel-tree*, birch, alder, &c. They also devour spiders and small beetles.

EMBERIZA SCHŒNICLUS.

Syst. Nat. 311.

THE REED SPARROW.

PLATE XIX.

THE bill is straight, sharp pointed, of a dusky yellow colour, and has a rising angle on each side of the lower chap.

The eyes are brown, having a narrow circle of white downy feathers round them.

The head of the cock is black, but, at the approach of winter, changes to hoary, resuming, on the return of spring, its pristine jettyness. The cheeks brown red. Round the neck is a white ring, which takes its rise at the angles of the mouth on each side. The back is of a tawny brown, with a black line down the middle of each feather. About the rump there is a mixture of ash-colour with the brown. The quills are of a dusky brown, with rust-coloured edges. The first and second covert feathers of a dusky black, with broader edges, and tips of a rust-colour. The chin and throat in the male are black, the breast and belly white. On the sides, the middle of the feathers are dusky.

The tail is a little forked; it consists of twelve feathers, of which the middle two are black, with red edges; the three next, on each side, are dusky, with red edges; the fifth is white on the outer border, and the sixth wholly white.

The hen has no black on the head or throat, and the general hue of her feathers is paler and duller than that of the cock.

The cock sings pleasantly; his voice, as well as his notes, are much finer and more pleasing than any other bird of the same family. Like the nightingale, he sings by night as well as by day.

This bird derives its name from frequenting and nestling among reeds, and it is therefore supposed that its food is chiefly found in marshy places.

Reed Sparrow.

It is, however, frequently seen on high lands, by road sides, and sometimes in corn fields. It generally keeps near the ground, and seldom perches except among low bushes.

During the time of hatching, the male has a soft melodious warbling song, whilst he sits perched among the reeds, solacing with his music his anxious mate, which he frequently continues through the greater part of the night.

It is a watchful timorous bird, and, when in a state of captivity, sings but little, unless perfectly undisturbed.

Birds of this species are said to be migratory in France, but with us they remain the whole year, and are seldom seen in flocks of more than three or four together.

They are found throughout Europe, and in Southern Siberia. There are two other varieties; one brown, cinereous beneath, which frequents the Cape of Good Hope; the other white, with dusky wings, is an inhabitant of Astrachan.

NEST AND EGGS OF THE REED SPARROW.

PLATE XX.

THE reed sparrow makes her nest near some river, lake, or pond ; sometimes concealing it amongst sedges, fern, or rushes; rarely, she suspends it between the stalks of the common **English reed*, as in the instance before us. The nest now described was suspended between three stems of reed, the leaves of which were drawn together in such a manner as to form a slight kind of lattice-work, upon which the foundation of the nest was laid. The nest almost wholly consisted of broken pieces of dried rushes; the stronger placed near the bottom, the finer round the brim. A few sprigs of moss were mixed amongst the rushes, and the whole artfully bound together with the blades of the growing reed. The lining consisted of cow's hair. The reeds grew in a still pond, and the nest was placed about a foot above the surface of the water.

The hen lays four or five eggs of a dull white, very prettily veined, and spotted with dark purple.

The reed sparrow feeds on insects, on corn, on the seeds of grass, and reeds.

It is also called black headed bunting and reed bunting.

* Arundo Phragmitis.

Reed Sparrow. Nest & Eggs.

FRINGILLA CARDUELIS.

Syst. Nat. 318.

THE GOLDFINCH.

PLATE XXI.

THE bill is straight, sharp-pointed, and of a pale yellow, except the tip which is black. The eyes are small and brown. Round the base of the bill is a list of small downy black feathers, which on each side runs up to the eyes. The forehead, throat, lower jaws, and cheeks, are of a bright shining blood colour.

On each side of the face is a bed of white feathers extended above and below the eye. The crown of the head is black, a list of which colour falls down behind the white, on each side of the face. The back part of the head, the neck, the back, and rump, are red-brown, with a cast of chesnut. The coverts of the tail are black, with white tips and edges.

The tail consists of twelve feathers. The two middle ones have white tips. The two outmost have each a white spot on the inner web. All the rest of the tail is black.

The quill feathers are black, having white tips, and half the length of their exterior edges of a lovely yellow. The lower half of the larger covert feathers are of the same yellow. The breast is of a reddish brown. The belly and under coverts of the tail white.

The Goldfinch feeds on the seeds of aggregate flowers, particularly those of the various species of thistle. He is here figured feeding on the common * *spear thistle.* They rear their young with caterpillars and most kinds of small insects, of which they destroy great quantities.

* Carduus lanceolatus.

This is the most beautiful of our hard-billed small birds, whether we consider its colours, the elegance of its form, or the music of its song; and its docility is not less pleasing than its other agreeable qualities.

It is found in Europe, Asia, and Africa; but is most numerous in Europe, and is common in all parts of England.

There are many varieties of this species, one of which is called by the London birdcatchers a cheverel, from the manner in which it concludes its jerk. It is distinguished from the common sort by a white streak, or by two, and sometimes three, white spots under the throat. It is not, perhaps, taken above once in two or three years, and sells at a very high price. Another sort has also been seen occasionally in North Wales, considerably less than the common Goldfinch, and is called a Nicol; but whether this is a distinct species or not appears to be doubtful. A young Goldfinch, before it moults, is grey on the head, and is therefore called by the birdcatchers a grey-pate.

" Beauty of plumage," says Buffon, " melody of song, sagacity, and docility, seem all united in this charming little bird; which, were it rare and imported from a distant country, would be more highly valued."

Goldfinches begin to sing, with a very sweet note, early in the spring; Mr. White says, from the 21st of February to the 5th of April; and continue till the breeding time is over; and when kept in a cage they will sing the greater part of the year. In a state of confinement they are much attached to their keepers, and may easily be taught a variety of amusing tricks, such as to fire a cracker, and draw up small buckets containing their water and food.

Some years ago, the Sieur Roman exhibited in this country the wonderful performances of his birds. These were Goldfinches, Linnets, and Canary-birds. One appeared dead, and was held up by the tail or claw without exhibiting any signs of life. A second stood on its head with its claws in the air. A third imitated a Dutch milkmaid going to market, with pails on its shoulders. A fourth mimicked a Venetian girl looking out at a window. A fifth appeared as a soldier, and mounted guard as a sentinel. The sixth was a cannoneer, with a cap on its head, a firelock on its shoulder, and a match in its claw, and discharged a small cannon. The same bird also

acted as if it had been wounded; it was wheeled in a little barrow, to convey, it as it were, to the hospital, after which it flew away before the company. The seventh turned a kind of windmill; and the last bird stood in the midst of some fireworks which were discharged all round it, and this without its exhibiting the least signs of fear.

Goldfinches will breed with the Canary; and the intermixture succeeds best with the male Goldfinch and female Canary, whose offspring, according to Bewick, prove productive, and are said to remesble the male in the colours of the head, and the female in the rest of the body.

This bird is of so mild and gentle a nature, that soon after being caught it will begin to eat and drink. Neither is it so much frightened at the presence of mankind, nor so impatient of confinement, as most other birds are; for when it has been some time kept, it will, if liberated, not fly away, but when alarmed, retreat directly to the cage for shelter.

In solitude the goldfinch delights to view itself in a mirror, fancying, probably, that it sees another of its own species; and this attachment to society seems to equal the cravings of nature, for it is often observed to pick up the seed grain by grain, and advance to eat it at the mirror, imagining, no doubt, that it is thus feeding in company.

If a young goldfinch be educated under a canary, a woodlark, or any other fine song bird, it will acquire its notes. Mr. Albin mentions a lady who had a goldfinch which was even able to pronounce distinctly several words. The London bird-catchers prefer the Kentish goldfinches, on account of their superiority of song to any other.

This bird will occasionally vary in its color, and the rape seed with which it is chiefly fed in confinement, is supposed to darken the shades of its plumage. It is very fond of hemp seed, but if fed on that alone seldom lives long. Canary seed is the best food for it.

Goldfinches have been sometimes known to attain a great age. Willoughby mentions one that was twenty-three years old; and Albin says that they not unfrequently arrive at the age of twenty years. Towards winter they assemble in flocks, and feed on various seeds, particularly those of the thistle. They are fond of orchards and frequently build in apple and pear trees.

The goldfinch visits Italy in April, builds in rocks, and migrates in October and November. It also breeds in France and Spain, goes in flocks early in the winter to Gibraltar, and disperses in the spring: few are seen there in summer.

Dr. Russel, in his History of Aleppo, mentions it as being found there.

There are several varieties of this species, one of which has been observed in the American Islands.

NEST AND EGGS OF THE GOLDFINCH.

PLATE XXII.

GOLDFINCHES sometimes build their nest in hedge bushes; sometimes on the extreme branch of some tall tree, where they can conceal it among the leaves.

This nest was built on a branch of the greater *maple tree**, commonly called plane tree, or sycamore.

Several leaves were displayed like an umbrella over the nest; others hung down about the sides thereof. The tree was at that time in blossom.

The outside of the nest consists of various kinds of moss, very neatly platted together with small blades of dried grass, and a few small roots. The next coat consists of down gathered from the *receptacle* of the common †*dandelion*, amongst which are placed many yellow florets of the *aggregate*. The innermost coat or lining consists of very fine down, mixed with a few small fibres of roots.

The depth of the cavity is an inch, the diameter little more than two inches.

The goldfinch lays five or six eggs; they are white, marked with spots of a dark brown red, as figured on the bottom of the plate.

This bird is sometimes called thistle finch.

* Acer platanus. † Leontodon taraxacum.

FRINGILLA CŒLEBS.

Syst. Nat. 318.

THE CHAFFINCH.

PLATE XXIII.

THE bill is straight, sharp at the point, where it is black. The base is of a yellowish horn color. The eyes are brown, the eyelids pale. The forehead is black. The crown of the head and hind part of the neck of a bluish lead color, which color is extended down the sides of the neck, almost to the throat, where it terminates in a point. The upper part of the back is a red brown, with a cast of olive. The lower part towards the tail a yellow green.

The first quill feathers of the wing are black, with the extreme edges light colored. The second quills are also black, having the edges green. The tips of the larger coverts are white; the lesser wholly white, which form two elegant bars of white on the extended wing.

The throat, breast, shoulders, and cheeks, are of a red brown. The belly and coverts under the tail are white.

The two middle feathers of the tail are of a dusky ash color, with green edges; the two outmost on each side partly white; all the rest are black.

In the hen, the head and breast are of a dull olive color, and her colors in general are obscure and dull, in comparison of those of the cock.

This beautiful little bird, whose name is derived from its delighting in chaff, is a general inhabitant of Europe and Africa. It arrives in Italy in April and departs in October, but many winter there. In Sweden these birds perform a partial migration; the females collect in vast flocks at the latter end of September, and, leaving their mates, spread themselves through various parts of Europe; the males continue in Sweden, and are again

joined by their females, which return in great numbers about the beginning of April to their wonted haunts. In England both males and females remain the whole year.

Mr White, in his History of Selborne, remarks, that the hen chaffinches in Hampshire, flock from the sixth to the eleventh of January, and that the males begin to sing from the twenty-fourth of January to the fifteenth of February, He adds, that great flocks sometimes appear in that neighbourhood about Christmas, and that they are almost entirely hens. It is difficult to account for this curious circumstance: perhaps the males being more hardy and better able to endure the rigors of the northern winters, are contented to remain in the country, and pick up such fare as they can find, whilst the females seek for subsistence in more temperate regions. The separation of the males and females at the time of flight, is, however, not confined to chaffinches, for the same circumstance has been observed with the titlark and the wheatear. Experienced birdcatchers say, that such birds as breed twice a year, generally have in the first brood a majority of males, and in the second of females, which may in part account for the above curious fact.

This little bird, which entertains us with its song early in the year, towards the latter end of summer assumes a chirping note, soon after which it ceases singing altogether. Some few of them prove good, but the greater part are not worth keeping. Essex chaffinches are supposed by the London birdcatchers to excel all others in song; and five guineas have been given for a chaffinch of a peculiar note for the purpose of training others under it.

It is a lively bird, which, together with its elegant plumage, has probably given rise to the proverb, "as gay as a chaffinch." It is also hardy, and will live upon almost any kind of seeds, and is not much subject to disease, but is frequently troubled with vermin, if not sprinkled with wine two or three times in a month. Several varieties of this species have been found, and sometimes they are entirely white.

It was formerly a custom among some birdmen to blind chaffinches by burning their eyes or eyelids with a hot wire, supposing that they would then be more easily taught to sing: but this most horrible act of cruelty totally fails to produce the effect intended; and even if it were successful,

no person possessing the smallest particle of humanity could ever purchase a poor little bird so treated. All must unite in this resolution, for the purpose of making it the interest of birdmen to desist from the practice of such diabolical cruelty. It is dreadful to reflect upon the vast numbers of men in this country who are only restrained from the indulgence of the most shocking barbarity by interested motives. May not the encouragement of boxing and cock-fighting, and the various instances of cruelty to the brute creation, be traced to the vitiating effects of our cruel and sanguinary laws? But this is not the place to discuss this distressing subject and its awful consequences.

Chaffinch's Nest & Eggs.

NEST AND EGGS OF THE CHAFFINCH.

PLATE XXIV.

CHAFFINCHES build their nests in hedge bushes, most frequently in the hawthorn; but that which is here described was built in a **holly-tree.*

The outside is made of fine soft green moss, wove and platted together with wool, cotton, and spider's webs; and amongst these, here and there, a piece of the common † *grey-liverwort.* The next coat consisted of slender blades of fine dry grass, and the inmost coat or lining is made of cow's hair, with a few feathers intermixed. The diameter of the cavity is two inches, the depth an inch and half. The whole is very neatly made, and smoothly finished, round, soft, and pretty.

The eggs are five or six in number. They are of a bluish white, splashed and spotted with purple.

The Chaffinch sits on high trees while he sings. His song is short, but sprightly, and is uttered with courage and boldness.

The Chaffinch feeds on seeds and grain, assembles in large flocks, in winter mixing with the yellow-hammer and the brambling. Their haunts are stubble fields, and, in very severe weather, farm yards, where they feed among the chaff and refuse of the corn. In Yorkshire this bird is known by the name of bullspink.

Chaffinches, like the other finches, devour great numbers of caterpillars and other insects, with which also they feed their young.

* Ilex aquifolium. † Lichen perlatus.

FRINGILLA SPINUS.

Syst. Nat. 322.

THE SISKIN, OR ABERDAVINE.

PLATE XXV.

THE bill is short, straight, sharp-pointed, and yellow, except the tip, which is black. The eyes are a bright brown, the eye-lids pale. Over each eye is a narrow white line. The head and upper part of the neck are of a very dark green, with a black spot down the middle of each feather.

The middle of the back is green, but less dark than the head. The lower part of the back yellow-green. The feathers in both having black strokes down their shafts.

The first quill feathers are dusky, having their outer webs green. In the second quills, the lower half of each feather is yellow, the upper green. The greater and lesser coverts are dusky, with green edges.

The throat, breast, and belly, are yellow-green; stronger towards the head, paler near the belly; and the feathers on the sides of the breast have dusky coloured lines down their shafts.

In the tail are twelve feathers; the middle two are black, with grey tips; the upper half of all the rest are of a bright yellow; the lower half black, with grey tips.

The feet and legs of a dark horn colour, the claws black.

The hen wants the dark colour on the head. The colours are dull and faint, and the breast and belly paler and more spotted than in the cock.

These birds are common in various parts of Europe, and in most places are migratory, but do not seem to observe any regular periods, as they are sometimes seen in large, and at other times, in very small numbers. Buffon observes that the immense flights happen only once in the course of three

or four years. It visits this country in winter, and is generally supposed to come from the North of Europe. Dr. Kramer says that great numbers of the young birds are frequently seen in the forests on the banks of the Danube, yet the nests are concealed with so much art, that they are very seldom found. It is not known to breed here, though it has been suspected to build occasionally in Westmoreland. Mr. Pennant received from Mr. Lewin two of these birds, a male and female, shot in his garden in Kent, in the summer time, though it is generally seen in this country in winter, but in some years is very scarce.

In the southern countries it is generally called the Barley-bird, being seen about that seed time; and in the neighbourhood of London it is known by the name of the Aberdavine. It often mixes with the smaller linnet, and is seen picking the seeds of the alder, with its back downwards. It is a singing bird, and being rather scarce, fetches a higher price than the merit of its song deserves, though that is soft, sweet, and various. It will imitate the notes of other birds, even to the chirping of the sparrow. It is familiar, cheerful, and docile, and begins its song early in the morning. It breeds freely with the canary, and like the goldfinch, may be taught to draw up its little bucket with water and food. The latter consists chiefly of seeds. It drinks frequently, and is fond of throwing water over its feathers.

In Italy it builds its nest in the highest woods of the Alps, and migrates in flocks in October.

EGGS OF THE SISKIN, OR ABERDAVINE.

PLATE XXVI.

THE nest of this bird few have had an opportunity of examining. We are informed that the Siskin builds her nest in juniper bushes, and inhabits only those places where those bushes grow in plenty; that it feeds upon the buds or berries of that shrub, and goes away before winter.

The eggs are white, near the larger end marked with a few purple blotches, in other places with small purple spots or points.

The eggs from which are this figure and description, were brought from Berlin, and were preserved in a cabinet, and placed in a shell, as represented in the plate.

Common Linnet.

FRINGILLA LINOTA.

Linnæus.

COMMON LINNET.

PLATE XXVII.

THE bill is thick at the base, sharp at the point. The upper chap of a dusky black, the lower a yellow horn colour. The eyes are brown. The head brown, with a cast of ash colour, and a black, or very dark brown stroke down the middle of each feather.

The feathers on the back are red-brown, with a black stroke down the shaft of each.

The first quill feathers are black, with white edges; the second are also black, but with the edges brown.

The greater and lesser covert feathers are brown, with pale brown edges

The throat and upper part of the breast are white, with a few dusky touches pointing downwards.

The lower part of the breast is of a bright shining crimson colour, edged off with a cast of orange. The belly and covert feathers under the tail, are a dusky white.

The tail consists of twelve feathers, and is a little forked. The two middle feathers are shorter than the rest, and black, with red-brown edges; all the rest are bordered with white. The cock has sometimes a black stroke under his throat.

The legs and feet are a dusky black.

The hen wants the crimson colour on the breast. The white feathers in the wing and tail are less bright, and the general hue of colours more dusky than those of the cock.

The linnet feeds on downy seeds. The * *water ragwort* is figured with the birds, on plate xxvii.

Linseed, the seed of linum or flax, is the favourite food of linnets, from whence they derive their name.

These birds are common in all parts of Europe, and though not migratory, shift their quarters, breeding in one part of England, and removing with their young to another. They are sometimes met with entirely white, and there is also a variety which has the quills and tail black, edged with white.

Mr. Bewick, either through an oversight, or for some reason which he has not stated, describes this bird as the Fringilla Linaria. Other ornithologists agree in stating that to be a distinct species from the F. Linota.

In disposition the Linnet is gentle and docile, and is much admired for its song, which is lively and sweetly varied, and is generally supposed to be preferable to that of any other small bird. He is also very apt in acquiring the notes of other birds, and, as Albin says, will take the woodlark's or canary's song to perfection." There have also been some instances of his learning to pronounce words distinctly. Upwards of five guineas have been given by a birdcatcher for a call-bird Linnet.

Linnets become familiar so soon after being caught, that it is not worth while to bring them up from the nest, and they, as well as many other birds and animals, are susceptible of strong attachment, not only to each other but to those who rear and feed them.

In one of the numbers of the Monthly Magazine, an account was given by the late Dr. Lettsom, of two Linnets, both male birds, which had *not* been brought up together, forming a remarkable attachment to each other. When one sang the other joined, and at night each always slept on that side of his cage which was nearest to his friend. Their attachment was more fully ascertained, when they were set at liberty while their cages were cleaned. They then flew to each other's cage, and at length were occasionally indulged by being put together in the same cage, when they always expressed their high gratification by fluttering towards each other, joining their bills together, and each gently picking the tongue of his friend by

* Senecio aquatica.

turns. After some time one was suffered to fly abroad in the open air, whilst the cage of the other was hung on the outside of the window, as a pledge for the return of his friend. When at liberty they appeared greatly delighted with the company of the wild Linnets, with whom they would range for several hours together, but the temptations even of love and liberty could not induce this little Damon and Pythias to forsake each other. As soon as the hour of rest approached, the sportive wanderer always returned to the empty cage, which was placed by the side of that of his friend. What a lesson! May not something then be learnt even from the apparently trifling history of singing birds?

In his verses on Friendship was not Dr. Johnson rather inconsiderate, or not well informed, when he said,

> "Friendship, peculiar boon of Heaven,
> The noble mind's delight and pride;
> To men and angels only given,
> *To all the lower world denied*"?

Suppose we substitute the word *Reason*, for the word "*Friendship*," in the above stanza, shall we be much gainers in moral character by the exchange? Let us see!

Navaretta in his account of China, the greater part of which was suppressed by the Inquisition, the holy Inquisition! speaks of a bird, similar to the Linnet, which the natives rear for the purpose of fighting, after the manner of European gamecocks! Quails are also kept by them for the same purpose. Thus it appears that the Infidels of Asia are no less addicted to cruelty, *as an amusement*, than the nominal Christians of Europe, with their bull-fighting, cock-fighting, and boxing. And this is Plato's biped *without* feathers!! Ah, Reason! Reason!

NEST AND EGGS OF THE LINNET.

PLATE XXIII.

THE Linnet inhabits dry, barren, and hilly grounds, where there is plenty of heath, furze, and other low bushes, in which she makes her nest. This specimen was built in a low branch of the * *black-thorn*, or sloe- tree, which was at that time in blossom.

The outside of the nest is formed of dry stubble mixed with hay. The middle coat is formed with finer hay, mixed with hair, very firmly and neatly platted together. The inner coat or lining consists of hair, wool, and the down of the seeds of willow, over which is a layer of fine fibres of roots. The whole is a neat piece of work, round, well finished, and very handsome.

The eggs are white, with a cast of blue, spotted more or less with purple spots, four or five in number.

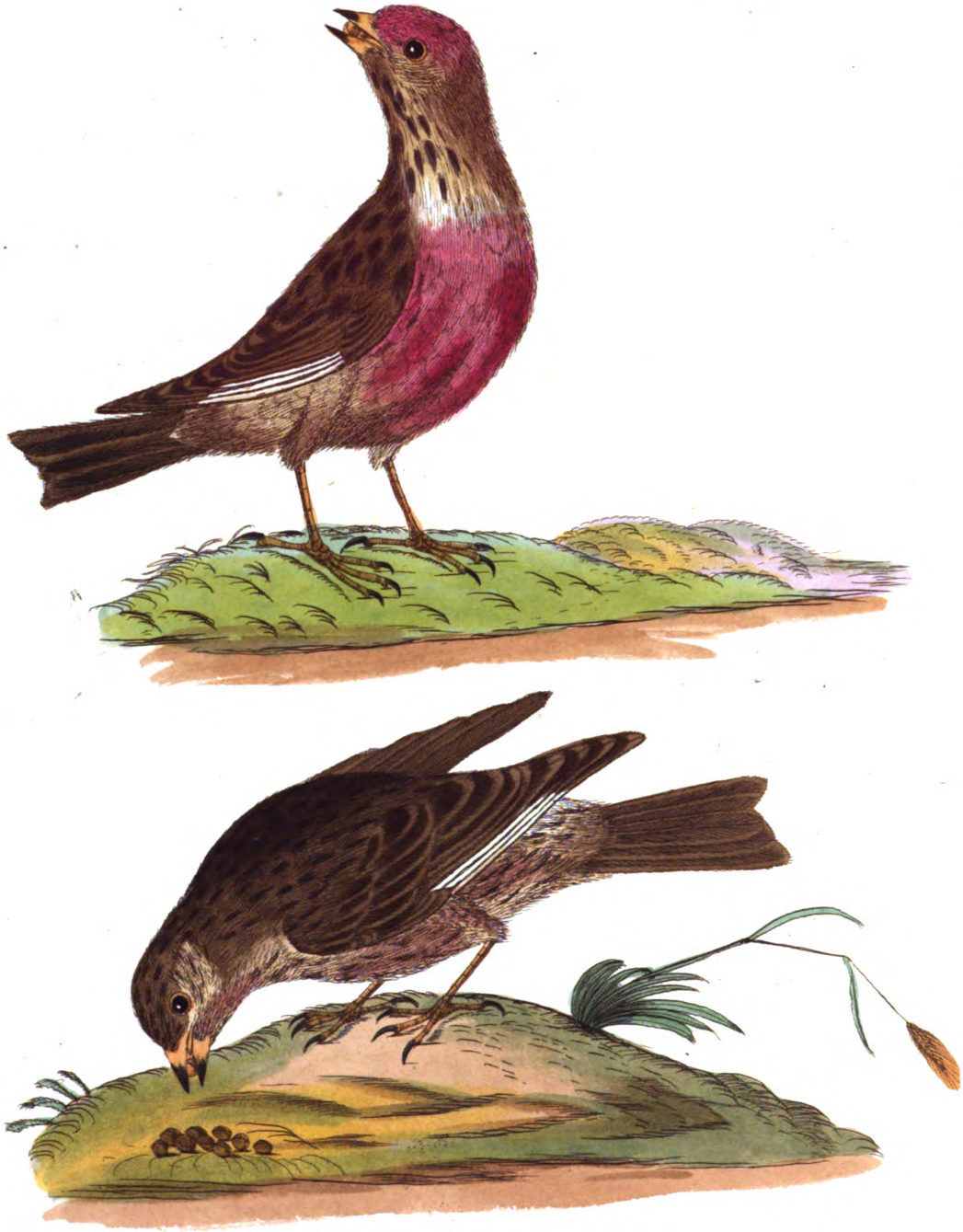
The Linnet gives place to few birds in point of song. His tone is mellow, and his notes sprightly, artfully varying into the plaintive strain, and returning again to the sprightly, with the greatest address, and most masterly execution.

The Linnet, in his wild state, feeds on the downy seeds of rag-worts, thistles, &c. When kept tame, on hemp, rape, or poppy seeds. The cock is one of the most common birds kept in cages, and the method of treating him so well known, that nothing needs be said of it here.

* Prunus spinosa.

Linnet Nest & Eggs.

Red Headed Linnet.



FRINGILLA CANNABINA.

Syst. Nat. 322.

GREATER RED-HEADED LINNET.

PLATE XXIX.

THE bill is short, thick at the base, and sharp-pointed. It is of a yellowish horn colour, except the tip, which is black. The eyes are brown.

The crown of the head is a deep shining blood-colour. The rest of the upper part of the head and neck, of a brown ash-colour. The cheeks pale brown. The back of a red-brown, with a black mark down the middle of each feather. The rump is a paler brown, and the black marks are less visible.

The first quill feathers of the wing are black, four or five of the principal having their exterior edges white. The second quills are a dusky black, with brown edges, and both the one and the other are light-coloured at the points. The coverts are brown, with pale-coloured tips and edges.

The throat and upper part of the breast are a dull white, with small dusky strokes down the feathers. The lower part of the breast is tinged with a fine blood-colour, similar to that on the head. The belly is of a dusky white and unspotted.

The hen wants the crimson on her head and breast. The white in the quill feathers is less bright, and the brown in the back and wings more dull and shady. The legs and feet are small, and of a dark horn colour; the claws black.

This bird is found both in Europe and America. It is frequent on our coasts, is often taken in flight-time near London, and is very common in the northern parts of this country, where it breeds chiefly in mountainous places.

It has not much song; but Dr. Brookes says, " it has a pretty chattering sort of a note." It is a familiar bird, and is cheerful in five minutes after being caught.

Dr. Latham, in the second Supplement to his Synopsis, suggests the possibility that this and the common linnet constitute only one species; the latter not completing the red on the forehead till the end of the second year at soonest, though it is capable of breeding in the first spring after it is hatched. Dr. Shaw also has expressed the same opinion. Mons. Cuvier, in his " Elements of Natural History," says, " Cet oiseau aime surtout les grains de lin et de chanvre. Il vit long-temps en cage, *mais il perd son rouge.*"

M. Buffon, also, supposing this and the linnet to be the same bird, adds that the red spots on the head and breast are equivocal marks, differing at different periods, appearing at one time and disappearing at another in the same bird.

But Mr. Bewick says, however plausible this may appear, it is not well founded. The Redpole is smaller than the Linnet; it makes its nest on the ground, while the latter builds in furze and thorn hedges. They differ likewise in the colour of their eggs, those of the Redpole being of a very pale green with rusty coloured spots.

It is said to be *a common fraud* in the bird shops in London, when a male bird is distingnished from a female by a red breast, as in the case of this bird, to stain or paint the feathers, so that the deceit is not easily discovered without close inspection. Thus, alas! *common frauds* seem to pervade every place and every employment!

Red headed Linnet Nest & Eggs.

NEST AND EGGS OF THE GREATER RED-HEADED LINNET.

PLATE XXX.

THESE birds, like the common linnet, inhabit steep, rocky, and barren grounds, where is plenty of heath, furze, broom, and such small bushes.

They build their nest near the ground, forming the outside of various kinds of moss, hay, and stalks of dried plants, adding some stout fibres of roots to strengthen the work. These materials are brought in plenty, and firmly platted together.

The lining is a thick coat, made of the down gathered from the catkins of the female willow-tree. In the nest now described were found many seeds still adhering to the down. The whole is neatly made and finished.

In the nest were six eggs of a blue-green colour, spotted with purple spots.

The song of the Red-headed Linnet is mean, but his beauty entitles him to a place in the esteem of those who are fond of pretty little birds.

In winter they are gregarious, assembling in flocks, sometimes mixing with the common linnet, goldfinch, &c.

Their food is seeds and grain, particularly the seeds of *ragwort*,* and the various species of thistles.

* Senecia Vulgaris. Common Groundsel.

FRINGILLA LINARIA.

Syst. Nat. 322.

RED-POLE, OR LESS RED-HEADED LINNET.

PLATE XXXI.

THE bill is sharp-pointed, and short. The upper chap black at the tip, all the rest of the bill yellow.

The eyes are brown and very bright. The forehead is of a bright shining crimson colour. The back part of the head, the neck, and back, quite to the tail, are of a red-brown, mixed with touches of ash-colour. The middle of each feather being brown, the edges ash-colour.

The quill feathers of the wing are of an uniform dusky black, with pale-coloured edges and tips.

The covert feathers, both greater and less, are of the same colour, with deep white tips, which make two white bars across the extended wing.

The tail is forked, consisting of twelve feathers. The two middle ones shorter than the rest, and pointed, having brown edges. All the rest black, with narrow edges of a pale brown.

The cheeks, in the male, are white; in the female, a rusty brown; in both, the throat, just under the bill, is dusky.

In the male, the lower part of the throat, and the breast, are of a fine shining crimson; in the female, of a dirty white, with a faint dash of crimson on some of the feathers. The female has sometimes a few pale crimson feathers on her forehead. The belly, in both, is of a dusky white. The legs are small, short, and of a brownish colour. The claws are sharp and black.

This bird in many parts of the kingdom is known by the name Redpoll.

This seems to be the species known about London by the name of the Stone Redpole; but there appears to have been a good deal of doubt among

Ornithologists whether this and the Twite (F. Montium) are not the same bird.

Mr. Bewick is inclined to think they are, as he says, " the differences are immaterial, and only such as might arise from age, food, or other accidental circumstances."

Mr. Willoughby, however, says it is only half the size of the Twite; and Mr. Pennant appears to coincide in opinion with him, for he describes the two birds separately and differently. And the figures given in Albin's third vol. of the less Redpole, No. 75, and the Twite, No. 74, are totally different; and he, as well as Mr. Willoughby and Dr. Brookes, notices the difference of size.

These birds are gregarious, and after breeding in the northern parts of this Country, where they are called French Linnets, large flocks of them, mixed with the Siskin and other small birds, migrate to the southern counties, where they feed on small seeds of various kinds, especially those of the alder, of which they are extremely fond.

They hang, like the titmouse, with their back downwards, upon the branches while feeding, and in this situation are so intent upon their employment that they may be easily taken with lime-twigs. Though its figure and plumage are elegant, it scarcely deserves to be reckoned among the song-birds.

It is well known all over England, and is plentiful throughout Europe, from the extreme parts of Russia to Italy. It is frequent in Greenland, and has been met with, by modern Voyagers, at Oonalashka. It is likewise an inhabitant of Asia and North America, and seems therefore to be common to all the northern parts of the globe.

Mr. Pennant relates an instance of one of these birds, whose attachment to its young was so great, that it suffered itself to be taken off its nest, and upon being set at liberty returned to it immediately.

NEST AND EGGS OF THE LESS RED-HEADED LINNET.

PLATE XXXII.

THE Redpoll, or Less Red-headed Linnet, builds her nest in heath, briers, or low bushes. The nest examined was built in a branch of * *common broom*, just at the time when the buds were swelling for leaves, as represented in the plate.

The outside of the nest consists wholly of dried stalks and blades of grass, neatly folded and interlaced together. The lining is of willow down, but between this and the outside is an intermediate coat of small roots, and a few hairs. This nest, as well as some others, are beautiful to admiration.

There were five eggs in it of a dusky green-blue, thickly spotted at the big end with small purple spots. Mr. Bewick describes them as nearly white, but this is incorrect, and more applicable to the eggs of the twite.

Our birdmen call it *chisaree*, in imitation of a particular cry it makes in breeding-time.

* Spartium scoparium.

FRINGILLA MONTIUM.

Brisson 3—142.

THE TWITE.

PLATE XXXIII.

THE bill of the male is entirely yellow, in the female dusk; it is short, straight, and sharp-pointed. The eyes are brown. The cheeks are a pale brown, which colour is continued round the eye. The feathers on the head and upper part of the back are black, with brown edges. Those of the lower part of the back are also brown, but in the middle are glossed over, as it were, with a beautiful shining scarlet or crimson colour, but not so in the female.

The three first quill feathers of the wing are wholly black, the next five have their outer edges for more than half their length white, and all the second order of quills, as well as the greater coverts, have light-coloured tips; the lesser coverts are the same colour as the back.

The tail consists of twelve feathers, all of them obliquely pointed. The two middle ones shorter than the rest, black, with red-brown edges. The three outmost on each side have their exterior borders white.

The throat and upper part of the breast are of a faint dusky red, with dark strokes down the middle of the feathers. The belly and covert feathers under the tail are white. The legs and feet are black. The claws curved and sharp at the point.

The Twite goes among our birdmen by the name Grey Linnet.

Either by accident or for some reason not stated, this bird in Mr. Pennant's British Zoology, is called Fringilla Linaria. By a reference to the

description of that bird, it will appear that there is good reason to think, with Mr. Willoughby, Mr. Albin, and others, that this bird is of a different species from the less Redpole. (F. Linaria.) Dr. Brookes also describes them distinctly from each other, and the account which he gives of the Mountain Linnet, though not exactly similar, is so much like what he says of the Twite, that they were probably two of the same species from which the description was drawn.

The modern dealers in birds speak of the less red-headed Linnet and the Twite as different birds, and agree with Mr. Willoughby that the latter is always much the larger of the two.

Mr. Bewick, speaking of the less Redpole, says, that "it agrees with the Twite, of Mr. Pennant, and most probably constitutes one species with it *and* the Mountain Linnet." Now it seems generally admitted that "Twite" and "Mountain Linnet" are only two names for the same bird, and it is called by Brisson, "Linaria Montana." Yet it should seem, from Mr. Bewick's expression, "*and*," that he intended to represent them as different, for he can scarcely allude to the Brambling, (Monti-fringilla) it is so much unlike the Twite. Perhaps "*and*" was written in haste instead of *or*.

There is also a little inaccuracy in the last edition of Rees's Cyclopedia, on this subject. In describing the greater Redpole, it is said that "in size this bird is less than the common Linnet." In the description of the less Redpole, which immediately follows, it is stated, that "this bird is considerably less than the former." The next bird described is the common Linnet, of which it is said, that "it is the same size as the last." In so extensive a work trifling errors are unavoidable, but it is rather extraordinary that in the description of the Fringilla genus, this bird (F. Montium) should have been omitted, though it is noticed, together with the three other English species, under the article, "Linnet."

The Twite is a general inhabitant of Europe, and frequents the Northern and hilly parts of this country, especially Derbyshire, where it is common, and is supposed to breed only in elevated situations. It is however taken in the flight season near London along with the other linnets, and the bird-catchers can tell at a distance whether there are any Twites among them by their twittering note, from which they derive their name.

It is a lively cheerful bird, and is often placed among other birds to provoke them, by its continual chirping, to sing, and it is familiar and more easily tamed than the common linnet.

Dr. Brookes says, "it is numerous in some parts of France, where it breeds, and its eggs are like those of the common linnet, but less."

NEST AND EGGS OF THE TWITE.

PLATE XXXIV.

THE Twite, like the rest of the linnets, inhabits low bushes and shrubs. This nest was found in a shrubbery, on a low branch of the *berry-bearing alder**.

The bottom or foundation of the nest is made of a mixture of moss, hay, and stubble, These are in plenty, and laid loose and flat. On this bottom the sides and brim of the nest are formed entirely of roots, the larger and stronger placed on the outside, the smaller and finer within. They are warped and entangled together with much labour, but being of a hard woody nature they close so ill together that the light shines through every part of the nest.

The lining consists of very fine roots, amongst which a few black hairs are mixed.

In this nest were six eggs, white, with a faint cast of blue, marked with pale red spots, and brown zigzag scratches, as figured on the plate; by this mark alone the eggs of the Twite are distinguished from those of all other linnets, all the rest being marked with spots only, these with spots and scratches.

The Twite, like the rest of the linnets, feeds on the seeds of plants, particularly those of the *aggregate* downy flowers. In winter they assemble in flocks, mixing with other small birds; and being caught, soon become tame and familiar.

* Rhamnus frangula.

Canary Bird.

FRINGILLA CANARIA.

Syst. Nat. 321.

THE CANARY BIRD.

PLATE XXXV.

THE canarybird, though not originally a British species, has so long been propagated in this kingdom, that it cannot properly be omitted in a history of British song birds. At what time they were first introduced into England is not exactly known. GESNER, who wrote in 1585, makes mention of them; and ALDROVANDUS, in his *Ornithology*, printed at FRANKFORT, in the year 1610, gives the first good description of them: vide vol. 2. p. 355.

What color they are in their original native country, is not clearly ascertained. Writers seem to concur in supposing them to be green and yellow, and to bear a near resemblance to our siskin, or aberdavine. Aldrovandus, in the place above cited, describing the canarybird from Gesner, says, "*Avis est vulgaris pari magnitudine, rostro parvo et in acutum tendente: alarum, et caudæ pennis totis viridi color*," &c. He has given a small figure, which he calls *canaria mas, table* 14, *figure* 31. It is, however probable the canarybird was not known in England till after the time of Aldrovandus, though Willoughby, in his History of birds, tells us they were common enough in his time.

But whatever they originally were, their colors are so much mingled and changed by domestication, and their number so greatly increased, that to give particular descriptions, would be an almost endless, as well as unnecessary task.

This bird, whose name points out its origin, is now so completely domes-

ticated in Europe, that, as Mr. Bolton observes, it cannot properly be omitted in an account of British song birds.

Buffon enumerates twenty-nine varieties, and many more might easily be added, were all the changes incident to a state of domestication brought into the account. The breeding and rearing of these charming birds form an amusement of the most pleasing kind, and afford a variety of scenes highly interesting to innocent minds. The canary will breed freely with the siskin and goldfinch, particularly the former; it proves prolific with the linnet, but not so readily, and unites also with the chaffinch, yellow-hammer, and even with the sparrow, but with still more difficulty. In all these instances the pairing succeeds best with the female canary and the male of the other species; but some think that with the siskin the male canary will readily associate, and this is the opinion of M. Buffon. Mr. White observes, that "birds are much influenced in their choice of food by color," and it is probable that this faculty of discrimination may also direct them in the selection of a mate.

Mr. Pennant says, that he once saw some small birds brought directly from the Canary Islands, that were said to be the genuine sort. They were of a dull green color, but as they did not sing, were suspected to be hens. Mr. Daines Barrington saw two birds which came from the Canary Islands, neither of which had any song at all, and he was informed that many others were afterwards brought from thence with the same defect. But though the birds in the Canary Islands must have a lively song, if the accounts of early navigators be correct, yet it seems to be doubtful whether the musical powers they display in Europe are natural to them. With us their song is generally composed of either the nightingale's or titlark's notes. Most of the birds imported from Tyrol have been educated under parents, the progenitors of which were instructed by a nightingale. Four Tyrolese generally bring over about sixteen hundred of these birds annually, which cost them about twenty pounds, and they sell them on an average at five shillings each.

There are two distinct species known among breeders of canarybirds, besides the varieties under each. These are, the birds which are all yellow, and those which are mottled, with a yellow crown The former, in the breeding language, are called GAY BIRDS, the latter FANCY BIRDS: the *fancy*

are esteemed the strongest, and have the boldest song. But canarybirds, owing to their lively disposition, and their constant and violent exertions in singing, are almost always lean, though the average of longevity among them extends from about fourteen to eighteen years. They are sociable and familiar, capable of recollecting kindnesses, and of some degree of attachment towards those by whom they are fed and attended. That they are capable of instruction many proofs are on record. A surprising instance was exhibited in London, a few years ago, of a canarybird that was taught to pick up the letters of the alphabet at the word of command, so as to spell the name of any person in company, and this the little animal did by motions from its master, which were imperceptible to every other spectator.

In Mr. Pratt's "Gleanings" a very interesting account is given of the performances of a canarybird at Cleves. It obeyed the directions of its master with the utmost precision, in singing faster or slower, louder or softer, beating time during the whole performance with its head and one foot. It then bowed in the most respectful manner to the company for their applause. Its next performance was going through the martial exercise at the word of command, with a straw gun, and afterwards, for the commendations bestowed, it gracefully courtsied to the ladies and bowed to the gentlemen, "head and foot corresponding," as its master ordered, and it closed the exhibition by dancing a hornpipe with activity, spirit, and accuracy, shaking its little plumes and bursting into a song of grateful exultation for the universal and vehement applause it received.

In the month of May, 1820, a Frenchman, whose name was Dujon, exhibited in London twenty-four canarybirds, many of which, he said, were from eighteen to twenty-five years of age. Some of these balanced themselves, head downwards, on their shoulders, having their legs and tail in the air. One of them taking a slender stick in its claws, placed its head between its legs, and suffered itself to be turned round as if in the act of being roasted. Another balanced itself and was swung backward and forward on a kind of slack rope. Another was drest in a military uniform, having a cap on its head, wearing a sword and pouch, and carrying a firelock in one claw; after some time, sitting upright, this bird, at the word of command, freed itself from its dress and flew away to the cage. Another bird suffered

itself to be shot at, and falling down as if dead, was put into a little wheelbarrow and wheeled away by one of its comrades; and at the close of the exhibition, several of the birds were, at the same time, placed upon a little firework, and continued there quietly and without alarm till it was discharged.

A friend to the Editor of this book lately met with an instance of great familiarity in a canarybird. His cage door was always left open, and he had the liberty of going into the garden whenever he chose. He was once absent for two days, and when he returned, tapped at the window with his bill, and shewed great satisfaction on being admitted, perching immediately on his mistress's hand.

Dr. Jortin, in his "Remarks on Ecclesiastical History," alludes to a canarybird which in his time performed great feats, and played many ingenious tricks; and this the Doctor does for the purpose of explaining the famous miracle which occurred at the coronation of Clovis, king of the Franks, A. D. 496, when a dove, at the proper time, flew into the church at Rheims, where the ceremony was performed, bringing in her bill a phial full of chrism, with which his majesty was anointed. This very phial, which was said to be sent from heaven in answer to the prayers of St. Remigius, the bishop, was preserved with the utmost care and reverence in the church, and used at the coronation of the subsequent kings of France, till the period of the late Revolution. For the truth of this, many ecclesiastics of the highest order have vouched, and certainly it is not impossible that a bird might have been trained to perform this feat.

Canary's Nest & Eggs.

NEST AND EGGS OF THE CANARYBIRD.

PLATE XXXVI.

THE nest examined was built in a green-house, on the branch of a small leafed myrtle. The general shape of the nest was the same as that of a linnet or goldfinch, round and handsome. The materials of which it was composed were such as had been brought in for the purpose by the gardener; moss, wool, feathers, &c. which were all indiscriminately blended together. And the gardener told me, that if he brought her a little down, wool, or a few feathers, after she had begun laying, she would place them on the outside, or round the brim of the nest, still increasing it till she began to sit.

Three eggs were in the nest at the time the drawing was made. They were white, spotted with small red spots.

MUSCICAPA GRISOLA.

Syst. Nat. 328.

THE SPOTTED FLY-CATCHER.

PLATE XXXVII.

THE bill is black, broad, and flat at the base, and has a rising angle along the upper chap.

The eyes are brown, the eye-lids white, the nostrils round and naked. At the angles of the mouth are a few black hair-like feathers. The head is of a perfect mouse-colour, with a small dark line down the middle of each feather. The back is mouse-coloured, a little inclining to a red-brown near the tail. The tail is composed of twelve feathers, all of an uniform dark mouse-colour.

The first quill feathers are the same colour as the tail, only the tips are a little paler.

The covert feathers are a pale mouse-colour, with brown edges.

The cheeks above and below the eyes are white. The throat and upper part of the breast are a dusky white, with brown touches down the middle of the feathers.

The sides under the wings are a pale brown-red. The belly and feathers under the tail white.

The legs, feet, and claws, small, and black.

The cock has a pretty sweet warbling song. He sits on the branch of some tree, with his wings quivering and half raised; when a fly approaches he hops off to seize it, and immediately returns to his branch and to his song.

Spotted Fly catcher.

The Spotted Fly-Catcher is known in some places by the name Beam-bird, or Postbird.

This bird is found throughout Europe, and appears in England in the Spring, breeds only once, and retires in August or September, but its retreat is not known. These, as well as most of the migratory birds, return to build in the same place year after year, and as Mr. White observes, "the withdrawing and appearance of the short-winged summer birds is a verry puzzling circumstance in natural history."

The Fly-Catcher of all our summer birds is the most mute and familiar; and why Mr. Bolton should have introduced it among our song birds is not easy to perceive, for it has little more than an inward wailing note, which can scarcely be called a song. The only evidence in its favour in this respect, is that of the Rev. Revett Sheppard, who informed Mr. Bingley that in the garden of Caius College, Cambridge, a spotted Fly-Catcher used frequently to sit on a rail, and entertain him with its notes, which he said were very pleasing, and between those of a wagtail and golden-crested wren.

It feeds on insects, which it catches on the wing, and sometimes watches for its prey sitting on a branch or post, and with a sudden spring darts upon it, and immediately returns to its station to watch for more. It is likewise said to be fond of cherries, and Mr. Latham informs us that it is known in Kent by the name of the cherry-sucker. But it is more probable that its food is entirely insects, and that it frequents cherry trees only for the sake of the flies that are attracted by the fruit.

Mr. White relates an interesting anecdote of a pair of these birds, which built every year in the vines that grew against the walls of his house at Selborne. They one year inadvertently placed their nest on a naked bough, perhaps in a shady time, not being aware of the inconvenience that followed. A hot sunny season coming on before the brood was half fledged, the reflection of the wall became insupportable, and must have inevitably destroyed the tender young ones had not affection suggested an expedient, and prompted the parent birds to hover over the nest during all the hotter hours; while, with wings expanded and mouths gaping for breath, they screened their suffering offspring from the heat.

May we not, with such a fact before us, so well authenticated, join in Mr. Pope's exclamation in reference to Reason,

> " 'Twixt this and instinct what a nice barrier,
> " For ever separate, yet for ever near!"

The Fly-Catchers are chiefly inhabitants of Australasia and Polynesia, where they are very numerous, and the whole tribe are extremely useful from the immense number of insects which they destroy.

NEST AND EGGS OF THE SPOTTED FLY-CATCHER.

PLATE XXXVIII.

THESE birds build their nests in low places, amongst trees, in fruit gardens, or near some precipice, where they are secure from wind and weather.

The nest described was built on the ledge of a rock, overhung with trees and bushes. It was placed amongst, and partly hidden by, the growing leaves of the great * *hairy wood-rush.*

The outside of the nest is composed of various kinds of moss, grass, stubble, and stalks of dried plants. The inside, or lining, is made of the same materials, but softer and finer, and mixed with a few roots and black hairs. It is a loose mean structure. The diameter of the cavity is about two inches, the depth less than an inch.

Six eggs were in this nest. They are large for the size of the bird. The ground colour is white, and they are all over splashed with spots of a pale red.

The cock ceases to sing about the end of June. His song has some resemblance to that of the blackcap, but his notes are fewer, less brisk, and less varied. The Fly-Catcher feeds on spiders, small beetles, and various kinds of small flies.

* Juncus sylvaticus.

MUSCICAPA ATRICAPILLA.

Syst. Nat. 326.

THE PIED FLY-CATCHER, OR COLDFINCH.

PLATE XXXIX.

THE bill is flat at the base, ridged along the upper chap. In the cock wholly black; that of the hen dusky near the base. The eyes are brown. At the angles of the mouth are a few black bristle-like feathers. The forehead is white. The top of the head, the upper part of the neck, and the back, are black in the male bird, but of a dusky brown in the female, which also wants the white spot on the forehead. The covert feathers of the tail have white edges and tips in the male, not so in the female. The legs are black.

The first and second quill feathers of the wing are black, with dusky edges, except four of the last, which have their outer webs white. The first coverts are of a dusky black on their upper part, the lower part a pure white.

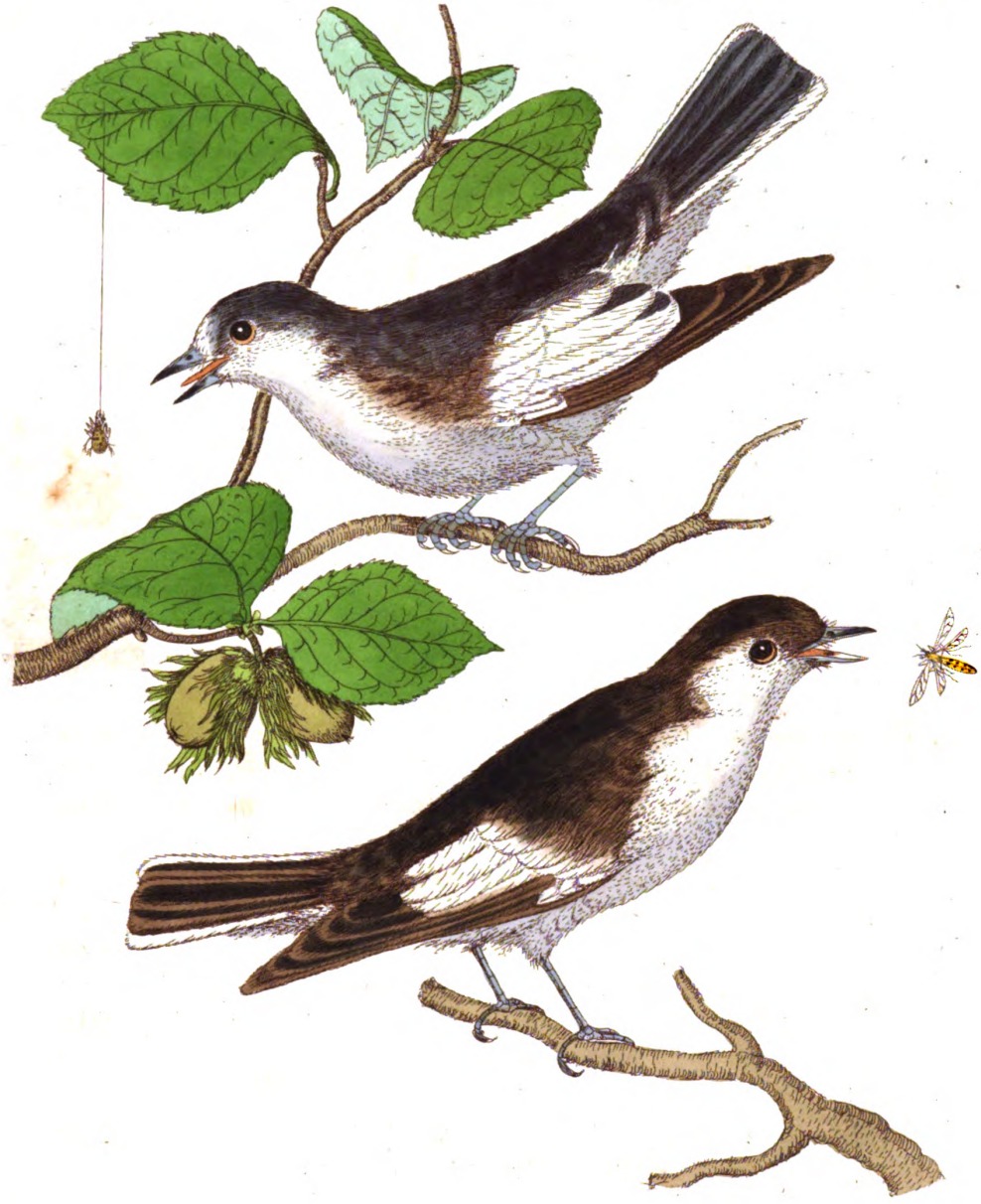
The tail is black, only three feathers on each side have their outer edges white almost to the tip.

The whole underside of the bird is a pure white in the male, in the female a dusky white. She is also much smaller than the male.

These birds are neatly figured by the late Mr. EDWARDS, in his ORNITHOLOGY, vol. I. plate 30, but he has made the wings much too short and crooked.

In these birds, the wings reach within about half an inch of the end of the tail, and are longer in the female than in the male.

FRISCH, in a NATURAL HISTORY of BIRDS published at BERLIN, has given an excellent figure of the male of this species. Vol. I. plate 24.



The character and habits of this bird are similar to those of the spotted Flycatcher before described. There are three varieties of this species, one of which is found only in India, the others are inhabitants of Europe.

Monsieur Cuvier, whose description agrees pretty well with that of Mr. Bolton, adds, "Tel est son plumage d' eté : le reste du temps il est plus gris."

This bird is no where common, but is found more frequently in Yorkshire, Lancashire, and Derbyshire, than in any other parts of Great Britain, and even there is a rare species.

Mr. Latham says that a young male was shot in the neighbourhood of Uxbridge a few years since, but that the bird has not been observed in the West of England. A pair of these birds, shot at Benton in Northumberland, were sent to Mr. Bewick. He supposed them to be male and female, as one of them wanted the white spot on the forehead, but in other respects it was similar to the male.

A nest with a great number of young ones belonging to a pair of these birds was taken in 1803, in Axwell Park. The parent birds also were captured, and became highly interesting by the assiduity and dexterity they exhibited, especially the male, in taking flies for their numerous family.

NEST AND EGGS OF THE COLDFINCH.

PLATE XL.

THE manners and haunts of these birds are similar to those of the last species. The nest examined was built in a fruit-garden, on the branch of an almond tree, where it was well concealed behind other branches then in flower.

The nest was loosely fabricated. The outside with moss, hay, small sticks, roots, &c. and lined with finer roots, hairs, and a few feathers.

Five eggs were in the nest, all over a pale bright blue colour.

The cock sings in breeding-time, perched on some branch not far from the nest. His song resembles that of the last species, but is more sprightly, and delivered with more spirit.

The Coldfinch is a very scarce bird in many parts of this kingdom. They sometimes visit us in the West Riding of Yorkshire, but not regularly every year. They come to us in April, and depart with the young in September.

In the year 1782, I sent a pair of these birds, very neatly shot, together with their nest and eggs, to Her Grace the late *Duchess Dowager of Portland.* Her Grace expressed a particular satisfaction and pleasure on receipt of them, and afforded them a place in her valuable and extensive museum.

END OF THE FIRST PART.

Coldfinch Nest & Eggs.

HARMONIA RURALIS;

OR,

AN ESSAY

TOWARDS

A NATURAL HISTORY

OF

BRITISH SONG BIRDS:

ILLUSTRATED WITH FIGURES,

THE SIZE OF LIFE,

OF THE BIRDS, MALE AND FEMALE, IN THEIR MOST NATURAL ATTITUDES;

THEIR NESTS AND EGGS,

Food, Favourite Plants, Shrubs, Trees, &c., &c., &c.

FAITHFULLY DRAWN, ENGRAVED, AND COLOURED AFTER NATURE.

BY JAMES BOLTON.

VOL. II.

A NEW EDITION, REVISED AND VERY CONSIDERABLY AUGMENTED.

LONDON:

PRINTED FOR W. SIMPKIN AND R. MARSHALL, STATIONERS'-HALL COURT.

MDCCCXXX.

MOTACILLA PROVINCIALIS.

Gm. Linn.—958.

SYLVIA DARTFORDIENSIS.

Pennant. Br. Zool.

LE PITCHOU DE PROVENCE.

Buffon.

THE DARTFORD WARBLER.

PLATE XL.

THIS species is rare in England. In Latham's General Synopsis of Birds the following description of it is given:

"This is scarcely bigger than a wren, but the tail is nearly half the length of the bird, which altogether measures about five inches. The bill is black, with a white base, and the upper mandible a little curved at the tip. Irides red; eyelids deep crimson. The upper part of the head, neck, and body, a dusky reddish brown. Breast and belly, throat and under side of the neck, deep ferruginous; middle of the belly, white. Quills, dusky, edged with white; the exterior web of the outmost tail feathers, white; the rest dusky."

"A pair of these birds were shot on Boxley Heath, near Dartford, in April, 1773, as they were sitting on a furze bush. They were feeding on flies; springing from the bush to catch those that came near them, and then returning to it again."

These birds owe their English name to their having been first noticed in the vicinity of Dartford, in Kent; they have, however, of late years been

seen near Wandsworth, in Surrey, and Mr. Montagu observed them about Falmouth, in the Month of September. They have latterly appeared in considerable numbers, and are supposed sometimes to winter in this country. M. Buffon says, " they are natives of Provence, where they frequent gardens, and feed on flies and small insects." Their propensities and habits, however, seem not to be yet well understood in this country, and no description of their nests has yet been given.

ALAUDA ARVENSIS.

Linn.—791.

L'ALOUETTE.

Buffon.

THE SKYLARK.

PLATE XLI.

The general characters of the lark genus are, that the bill is weak, straight, bending towards the point; the nostrils are covered with feathers or bristles; the toes are divided to their origin, and the back toe is armed with a long and straight claw.

The length of the skylark is about seven inches and a quarter; the breadth twelve and a half. The tongue is broad and cloven; the bill slender, the upper mandible dusky, the lower yellow. Above the eyes is a yellow spot; the crown of the head is of a reddish brown, spotted with deep black; the hind part of the head is ash colour; the chin white. The feathers on the back and coverts of the wings are dusky, edged with reddish brown, which is paler on the latter; the quill feathers dusky, the exterior web edged with white, that of the others with reddish brown; the upper part of the breast yellow, spotted with black, the lower part of the body of a pale yellow; the exterior web, and half of the interior next to the shaft of the first feather of the tail, are white; of the second, only the exterior web; the rest of those feathers dusky; the other feathers are dusky, edged with red; those in the middle deeply so, the rest very slightly; the legs dusky; the soles of the feet yellow; the hind claw very long and straight. The feathers on the crown of this bird are long, and capable of being erected in the form of an upright conical crest, as they are frequently seen at breeding time, but not at any other season of the year.

This led Aldrovandus, and many subsequent writers on birds, into the sup-

position, that the skylark and *greater crested lark* are of different species, which is indeed still the opinion of some ornithologists, but this is probably a mistake.

This and the woodlark are the only birds that sing as they fly; this raising its note as it mounts, and lowering it till it quite dies away as it descends. It begins its song before the earliest dawn, and often soars to such a height that we are charmed with the music when we have lost sight of the songster. Before the break of day it begins its delightful music, on pairing early in the spring, and continues it for several months.

Milton, in his "Allegro," most admirably expresses these circumstances; and Bishop Newton observes, that the beautiful scene which Milton exhibits of rural cheerfulness, at the same time gives us a fine picture of the regularity of his life and the innocency of his own mind. He describes himself in a situation

> "To hear the lark begin his flight,
> And singing startle the dull night
> From his watch-tower in the skies,
> Till the dappled dawn doth rise."

How exquisitely charming too is the picture drawn by Shakspeare's magic hand!

> "Hark! hark! the lark at heaven's gate sings
> And Phœbus 'gins arise,
> His steeds to water at those springs,
> In chaliced flowers that lies,
> And winking Marybuds begin
> To ope their golden eyes."

Thomson also pays his melodious tribute to this sweet bird:

> "Up springs the lark
> Shrill-voiced and loud, the messenger of morn,
> Ere yet the shadows fly, he, mounted, sings
> Amid the dawning clouds, and from their haunts
> Calls up the tuneful nations."

The verse in Gay's beautiful ballad of Black-eyed Susan deserves also to be noticed for the justness of its description:

> " So the sweet lark, high poised in air,
> Shuts close his pinions to his breast,
> If chance his mate's shrill voice he hear,
> And sinks at once into her nest."

Instead of retiring to woods and deep recesses, or lurking in thickets, the lark is sporting conspicuously abroad in the fields, chaunting on the wing, and while it soars beyond the reach of our sight, pours forth the most melodious strains which may be distinctly heard at an amazing distance. The faculty of singing is entirely confined to the males, which are larger than the females.

From the peculiar construction of the hinder claws, larks generally rest upon the ground; those which frequent trees perch only on the larger branches.

By building their nests upon the ground, they are exposed to the depredations of the smaller kinds of voracious animals; such as the weasel, stoat, and others, which destroy great numbers of them. The cuckoo likewise, which makes no nest of its own, frequently substitutes its eggs in the place of theirs. Yet notwithstanding these attacks, larks in the winter assemble in vast flocks, grow very fat, and are taken in great numbers for the table. In this country, the greatest quantity are caught in the neighbourhood of Dunstable. The season begins about the middle of September, and continues till the end of February; and during that time about four thousand dozen are taken, with which the markets of the metropolis are supplied. But this bears no proportion to the immense multitudes met with in Germany, where they are subject to Excise. According to Keysler, the duty at Leipsic is a grotsch, (about two-pence halfpenny) for every sixty birds, and has been known to produce frequently twelve thousand crowns. Other parts of Germany furnish proportional numbers, and larks are every where seen on the Continent, and as far as the Cape of Good Hope, and drawings of them have been brought from India.

There are several varieties of them. White skylarks are found in Den-

mark, Sweden, and Norway, and black ones have been occasionally seen.

M. Buffon relates an interesting story of a young female skylark, which, he observes, " discovered an *instinctive attachment towards its own species* before it was capable of becoming a mother."

" In the month of May a young hen bird was brought to me which was not able to feed without assistance. She was hardly fledged when I received a nest of three or four unfledged skylarks. She took a strong liking to the new comers, which were scarcely younger than herself: She tended them night and day, cherished them beneath her wings, and fed them with her bill. Nothing could interrupt her tender offices. If the young ones were taken from her, she flew to them as soon as liberated, and would not attempt to effect her own escape, which she might have done a hundred times. Her affection grew upon her, she neglected food and drink; she now required the same support as her adopted offspring, and expired at last, consumed with maternal anxiety. None of the young ones survived her, so essential were her cares, which were equally tender and judicious."

Probably this bird, however, would have paid the same attention to the young of any other small bird, and it is not, therefore, quite clear that her tenderness was confined to her " *own species.*"

These birds are easily tamed, and become so familiar as to eat off the table, and alight on the hand; but they cannot cling by their toes, on account of the form of the hinder claw, which, Gesner affirms, he has seen above two inches long.

The common food of young skylarks is worms and insects; but after they are full grown, they live chiefly on seeds, herbage, and other vegetable substances. In severe weather they resort to watered meadows for food. They are long lived, healthy birds; and, if carefully managed, may be kept many years. Albin says, they will reach fifteen or twenty years of age. They are very imitative birds; and it is therefore peculiarly necessary, in rearing a young bird, to keep him in the hearing of good song birds alone. Larks have been known, after hearing an air on a pipe, to repeat it with accuracy and elegance; and, from this talent, Mr. Daines Barrington has been induced to call them mocking birds. A fine song bird has often been sold for five or six guineas.

Skylarks continue in England and Scotland all the year; but in Minorca, and some other places, they are migratory.

The butterfly figured on this plate is called the wood-lady, Papilio Cardamines, of Linnæus. It feeds chiefly on wild rape and lady smock; changes to a chrysalis in July, and flies the May following. It haunts rivulets, moist meadows, and shady places, and is very wild and nimble on the wing.

The subject of early rising seems to be naturally connected with the skylark; and if those who favor this book with a perusal, especially the younger part of them, would devote a few minutes to the consideration of the advantages of rising early, some, probably, would make a vigorous effort to shake off the chains of sloth and idleness, and haste

"To meet the sun upon the upland lawn."

In the morning the body is refreshed, the mind is invigorated, the spirits are revived; all around is calm, cool, and animating. The mind, being then undisturbed by those cares which every day brings with it, is more easily concentrated upon any subject; and what is then read or studied makes a stronger impression, and produces greater improvement, than it would in any subsequent part of the day. The health is at the same time improved, for there are few instances of longevity to which early rising has not contributed; and an hour stolen from bed in the morning will add some years to a life of even moderate duration. The morning of life and the opening of day, resemble the spring of the year. Then is the time to sow the seeds of virtue and knowledge; without which no golden harvests of fame, of fortune, or of usefulness, can be gathered or expected.

NEST AND EGGS OF THE SKYLARK.

PLATE XLII.

THE skylark, like the rest of the family, builds its nest on the ground, in some furrow, beneath some clod, or under a tuft of grass or weeds. The whole outside of the nest is formed with dried stalks and blades of grass; the intermediate coat, between the outside and the lining, is composed of the same materials, but thinner, finer, and softer; the lining consists of the very finest parts of the same materials, mixed with a few hairs.

The eggs are four and sometimes five in number, of a dusky gray colour, sprinkled with small dark spots, chiefly shaded at the large end. The eggs of the skylark are constantly of the same colour, not being subject to that variety of appearance which prevails in some species of this genus.

They begin to build in April, and breed twice, and sometimes thrice, in the year. They associate in pairs in the spring, but in winter assemble in flocks. The young quit the nest at an early age; if therefore they are wanted for cage birds, they should not be more than ten days old. Those who keep larks in cages, besides sweet food and pure water, would do well to give them every day a fresh turf of white or red clover; and when these plants are not to be had, give them the seeds, occasionally, along with their food.

Skylark Nest & Eggs. 42

ALAUDA ARBOREA.

Gm. Linnæus.—287.

L'ALOUETTE DE BOIS, OU LE CUJELIER,

Buffon.

WOOD-LARK.

PLATE XLIII.

THE bill is black at the tip, of a dusky colour at the base; the crown of the head is of a reddish brown, each feather having a dark stroke down the middle; at the base of the bill, on each side, arises a pale colored line, which passes over the eyes, and is extended round the head, in form of a wreath; the back part of the head, below this line, is the same colour as the crown. The feathers above and below are separated by this line; those on the crown being longer, and forming an elegant crest, at the will of the bird. In breeding time the male bird erects the crest when he sings; not only when at liberty in his natural haunts, but at the same season of the year, even when confined in a cage. "Hence," says Mr. Bolton, "has arisen that other fabled bird, the *lesser crested lark.* Frisch, in his History of birds, has contributed to the propagation of this error by giving the names Heide Larche, &c. to a most accurate figure of the woodlark. He has drawn his bird with the crest half raised, which gives so just an imitation of the woodlark in that state, that none can doubt the truth of his pencil or the error of his pen. The head of his figure is added to the bottom of the annexed plate." So far Mr. Bolton: but Mr. Montagu says, there is reason to believe that *the lesser crested* lark is merely the field-lark of Pennant.

The woodlark perches on trees, from the largest branches of which it sings by night as well as by day, so as sometimes to be mistaken for the

nightingale, with which it frequently contends for the superiority in song; and some bird fanciers prefer it to the nightingale. Like the skylark also it sings as it flies; but is inferior to that bird in size; shorter, thicker, and of a paler colour; its note is less sonorous and varied; and it is not near so numerous as the skylark. It whistles also like the blackbird, and in song resembles more the nightingale than the skylark. It has been remarked that the woodlark, as if sensible of his own melodious song, will learn from no other species, unless brought up from the nest; in which case they may be taught to imitate the pipe. The song is confined to the males, which may be distinguished from the females by their superior size. Though occasionally found on the borders of woods, this bird, like the other species of larks, more frequently ranges over large and cultivated plains. Like skylarks they assemble in considerable flocks in frosty weather. Their usual food consists of small beetles, caterpillars, and other insects, as well as of the seeds of numerous wild plants; and in the autumn they become fat, when they are esteemed excellent eating. It is a very tender and delicate bird; so that, according to Albin, it is impossible to rear the young taken out of the nest. But this is the case only in England and such cold climates, for in Italy they are commonly reared from the nest in the same manner as the nightingale, and afterwards fed upon panic and millet. A food which has been found to agree very well with these birds, has been compounded of pease-meal, honey, and butter mixed, rubbed into small granules, and dried in a dish before the fire. Enough may be made at one time to serve for two months; and if well mixed and dried, will not spoil even if kept longer. The insect is the apis longicornis, which is about six lines in length and the antennæ are about as long.

Wood Lark Nest & Eggs. 44

NEST AND EGGS OF THE WOODLARK.

PLATE XLIV.

LIKE skylarks, these birds build on the ground, make two nests a year, and produce their young very early in the spring, as soon indeed as any bird, having young ready to fly by the middle of March. The nest here delineated was built in a furrow, among stubble; under the bottom of it was a soft bed of fine green moss, which was laid of considerable thickness, but did not at all adhere to the nest when it was removed from its place. The first coat of the nest consisted of dried blades of grass and weeds; the middle coat was a finer kind of the same stuff, as was also the lining with the addition of a few hairs. They sometimes lay five eggs, but in this nest were four; the ground colour a dull brownish white, sprinkled with numerous very minute spots of a reddish hue, which gave them an appearance like red sand.

There are three times in a year that these birds are taken. First, in January, but not later, because they pair and breed very early. Second, in June and July, when the branchers are caught; and third at Michaelmas. Great numbers are taken in September, and are supposed by some to be better birds than those taken at any other season, as they will often sing eight or nine months in the year. But the general opinion is, that those taken in January are the best and strongest birds. They do not part with their last years brood till they pair in February. They are often found perched on trees near limekilns and gravel pits.

They inhabit all parts of Europe, but migrate from Italy in October. They are also frequent in the Island of Madeira, and are seen in Siberia, as far as Kamtschatka.

ALAUDA PRATENSIS.

Linn.—792.

L'ALOUETTE DE PREZ, OU LA FARLOUSE.

Buffon.

THE TITLARK.

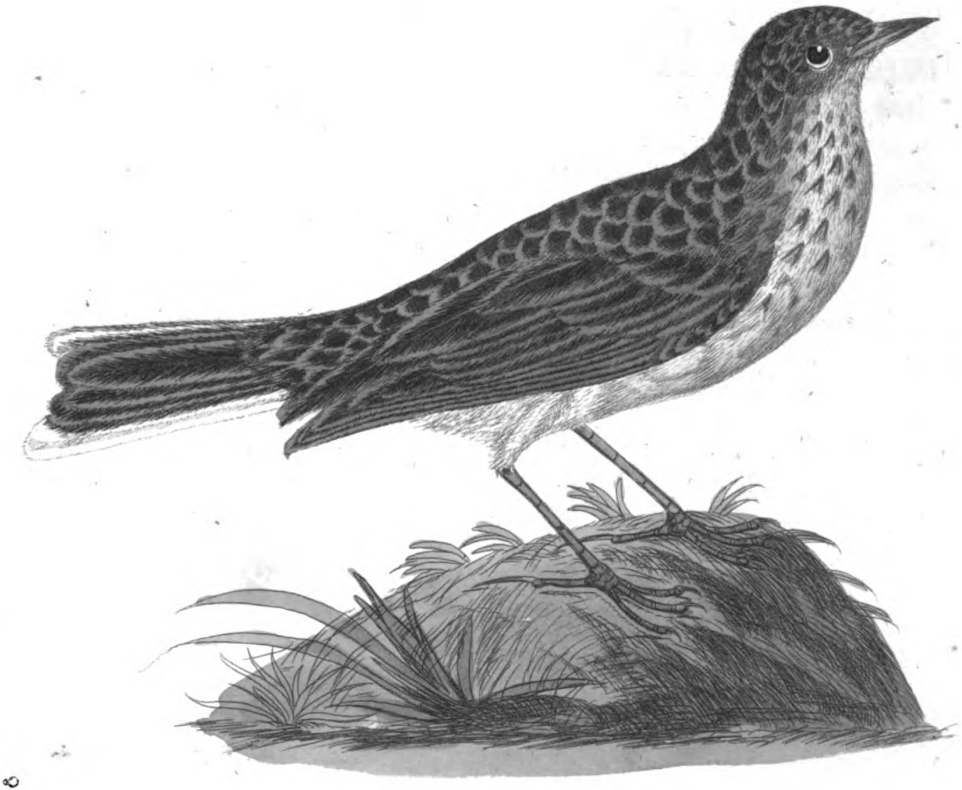
PLATE XLV.

THE bill is slender and of a dusky black; the mouth black within. The whole upper side of the bird, from bill to tail, is of a dull yellowish olive green; each feather being dark in the middle, and light round the margin. The first quills are of a dusky olive black, edged with yellow olive; the three quills next the back are broad and long, reaching to the end of the first quill feathers; the covert feathers of the wings are of the same colour, dusky in the middle and bordered with yellow olive.

The throat is a pale ochre colour, and unspotted; the breast is a little darker, having numerous dusky spots tending downward. The belly and coverts under the tail are of a dusky white. The legs and feet are yellowish; the hind claw, long, black, and very little curved. The tail is long, consisting of twelve feathers of the same colour as the back, except the two outmost, which have white margins.

His form is slender and elegant, and the display of his wings and tail while singing, together with the line which he describes in rising and falling, are very beautiful.

This bird, which is found throughout Europe, in its habits and manners resembles the thrush, blackbird, willow wren, and some others, which become silent about Midsummer and resume their notes in September. Hence, as Mr. Pennant remarks, this interval is the most mute of the year's three vocal seasons, Spring, Summer, and Autumn: perhaps they are induced



to renew their songs as the Autumnal temperature resembles the vernal. Like the woodlark this bird sits on trees, and has a remarkably fine note, singing in all situations, whether when perched, or sitting on the ground, or while it is sporting in the air, and particularly in its descent.

Monsieur Cuvier says, it perches with difficulty; and Mr. Bewick observes, that it is generally found on the ground, in low meadows and marshy grounds. It is flushed with the least noise, and darts with a rapid flight. Its note is fine but without much variety. It is further distinguished by the shake of its tail, particularly while it eats.

They should be managed in the same manner as young woodlarks and nightingales, and will soon become tame and familiar. Mr. Albin says that "in beauty few birds excel the titlark. He sings most like the canary of any bird, but his song is short and hath no variety in it. Sometimes indeed a titlark proves a fine song bird, but is very rare, and the best of them sing but four or five months in the year. He comes with the nightingale about the end of March and goes about the beginning of September."

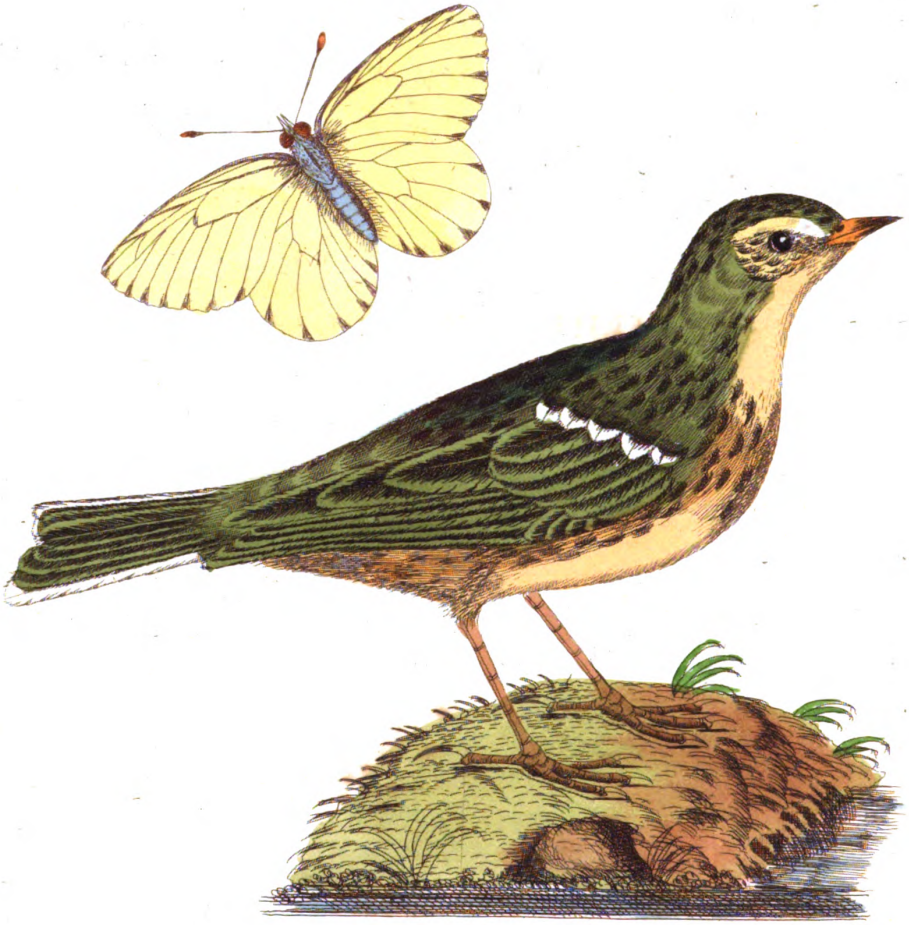
He is a hardy, long-lived bird, and, if carefully attended to, not much liable to disease.

NEST AND EGGS OF THE TITLARK.

PLATE XLVI.

THE foundation of the nest here represented, consists of a mixture of moss and dry grass, with which also the greatest part of the work is constructed; only the finest part is employed in the inside and about the lining, in which a few fine fibres of roots, and a few hairs are mixed. The number of eggs is most commonly five, sometimes six. There is probably no bird whose eggs are so variable in colour as those of the titlark. Sometimes the ground is a dirty gray, having spots of a dark, dusky colour; sometimes the ground is a dark dull brown, and the spots black. Albin saw them of a dark brown colour, and Mr. Walcot met with them of a pale green. Those exhibited on the annexed plate are a very beautiful variety.

But in all these states the species may be known by observing the spots; for they are not only larger than the spots on the eggs of any other species of lark, but they are also softened into the ground colour, like the spots on the eggs of the chaffinch, which those on the eggs of other larks are not.



ALAUDA MINOR.

Gm. Linn.—793.

LA SPIPOLETTE.

Buffon.

THE FIELD-LARK.

PLATE XLVII.

THIS bird exceeds the titlark in size, being about six inches long. The bill is slender, black at the point, of a dusky flesh colour at the base. A line of pale straw colour passes over the eyes, and the cheeks below the eyes are of the same hue, but dusky. The upper part of the bird from head to tail is a dusky olive. On the head and back each feather is dusky in the middle, the edges being lighter, but not so on the rump. The feathers of the wings are of a dusky black with olive coloured edges. The tail feathers are of a dull black, with pale brown or olive edges, except the outmost two on each side, the first whereof is white, the other partly so. The throat is a pale kind of buff colour, and destitute of spots. The breast is darker buff and marked with numerous black spots, shaded downwards. The belly is of a dusky white; the legs and feet pale brown.

This bird greatly resembles the titlark, but is distinguished from that bird by being of a shorter body and a paler colour; and especially by the hind claw, which is shorter and much more curved. The Field Lark generally sits either on walls or on the ground, and sometimes on trees, from which it ascends a little way in the air and sings. It frequents the more cultivated districts where there are trees; and Mr. Montagu, in his excellent Ornithological Dictionary says, that this bird visits England late in the Spring, and is chiefly found in Wiltshire and the southern parts of the kingdom.

The black veined white butterfly, Papilio Crategi, feeds on hawthorn, when in a caterpillar state; changes to a chrysalis in May, and appears on the wing in June and July.

Linnæus has divided the Lark genus into thirty-three species, of which several besides those mentioned in this book are good songsters. The grasshopper Lark, however, seems to deserve a few words, from the notice taken of it by Mr. White, in his History of Selborne. It is the smallest of the tribe, and has received its name from its note being so like the chirp of the grasshopper, that if we did not know, as Mr. White observes, that those insects are not hatched in the month of April, we might be easily deceived by this little bird. Its note seems close to a person though at a hundred yards distance; and when close to the ear seems scarcely louder than when a great way off. It skulks in hedges and thick bushes, and runs like a mouse through the bottom of the thorns, evading the sight. Sometimes early in the morning, when undisturbed, it sings prettily on the top of a twig, gaping and quivering with its wings. It is the Alauda trivialis of Linnæus, and l'Alouette pipi of Buffon.

Field Lark's Nest & Eggs.

NEST AND EGGS OF THE FIELD LARK.

PLATE XLVIII.

THIS bird generally makes its nest amongst high grass or green wheat. The nest is composed of dry grass, fibrous plants, and sometimes a little moss, and is lined with fine dry grass and horsehair. It lays four or five eggs of a brown mottled colour, having a kind of dull purple cast.

The nest of this bird, like those of most others, is formed at different times of different materials. Sometimes it has a thick lining composed wholly of hair, and at other times is quite destitute of that article. The nest generally has a bed of moss for its foundation, but is not attached to it.

MOTACILLA BOARULA.

Gm. Linn. 997.

BERGERONETTE JAUNE.

Buffon.

THE GREY WAGTAIL.

PLATE XLIX.

The bill and eyes are black; cheeks ash-colour; over the eye is a white line, which takes its rise at the base of the upper mandible; another white line arises at the base of the lower, is extended below the cheeks, and curved towards the back part of the neck, dividing the grey colour of the cheeks from the black of the throat. The top of the head and back are of a greyish ash-colour; the rump a dull greenish yellow. The tail is long and a little forked; the two outmost feathers on each side are white; the rest black with green edges: the first and second order of quills are black with grey edges; the last order have broad margins of a pale grey, and are very long, the third from the body reaching to the tip of the first quills, as in the lark genus. The throat in the male is black; in the female a dusky yellow. The breast, belly, and covert feathers under the tail, in both sexes are a bright yellow.

This elegant little bird, which is found throughout Europe, frequents the same places as the common pied wagtail, *metacilla alba*, being found chiefly on the borders of brooks or ponds. The cock has a pleasing song in breeding time; his voice is low, but the notes are soft and well varied. The birds of this genus are much in motion, seldom perch, are perpetually flirting their tails, scream when they fly, frequent waters, and feed on insects. They change their quarters according to the seasons, and are supposed to

remain in England all the year, resorting to the north in summer to breed, and retiring to the south to spend the winter. Mr. Couch, in a letter from Cornwall, inserted in the Imperial Magazine for August, 1822, observes, that few remain near the shores in summer, but they appear again when the winter birds return from their summer retreats.

The little dragon-fly figured on the plate, is on the wing in May. It is the libellula minus of Linnæus. Its haunts are near ponds and rivers; it is frequent among the bushes beside the river Calder, near Halifax, and Mr. Bolton says, it is, he thinks, the prettiest species of dragon-fly we have in England. Most Naturalists, however, probably entertain a different opinion; the Libellula Coluberculus, L. Aspis, and many others being far more beautiful.

NEST AND EGGS OF THE GREY WAGTAIL.

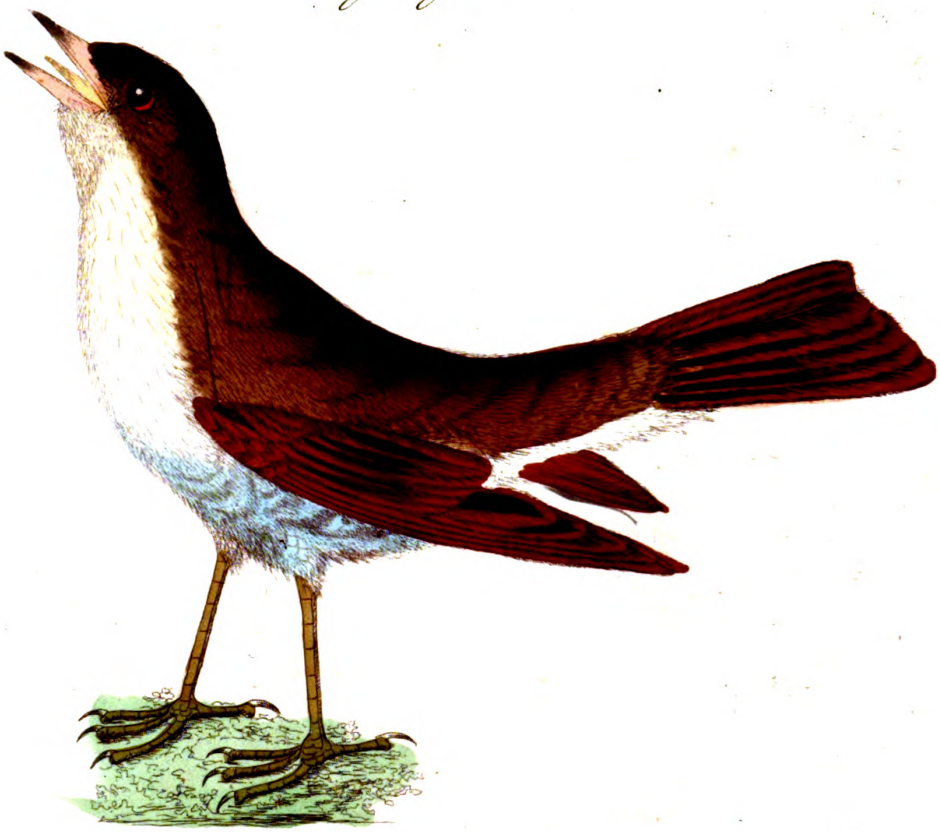
PLATE L.

The nest is generally placed on the ledge of some rock whose foot is washed by the current. The materials are dried grass, moss, and fibres of roots. The nest here described was placed on a moist overshadowed rock, about six feet from the surface of the water. The outside consists of roots, moss, and grass; the next coat consists of the same materials, but smaller and finer; the lining immediately under the eggs is a plentiful mixture of black and white hair. The nest is firm, round, and compact. The eggs are four, sometimes five; the ground colour a dead white, and speckled with small brown spots.

In Bewick's British Birds it is said, that the eggs are from *six to eight*, of a dirty white, and marked with *yellow* spots. But it is not unusual for the eggs of many small birds to vary in number and colour.

Grey Wagtail Nest & Eggs

Nightingale?



MOTACILLA LUSCINIA.

Gm. Linn.—950.

SYLVIA LUSCINIA.

Pennant. Br. Zool.

LE ROSSIGNOL.

Buffon.

THE NIGHTINGALE.

PLATE LI.

" From morn 'till eve 'tis music all around;
Nor dost thou, Philomel, disdain to join,
Even in the mid-day glare, and aid the quire.
But thy sweet song calls for an hour apart,
When solemn Night beneath his canopy,
Enrich'd with stars, by Silence and by Sleep
Attended, sits and nods, in awful state;
Or when the Moon in her refulgent car,
Triumphant rides amidst the silver clouds,
Tinging them as she passes, and with rays
Of mildest lustre gilds the scene below;
While Zephyrs bland breathe thro' the thick'ning shade,
With breath so gentle, and so soft, that e'en
The poplar's trembling leaf forgets to move,
And mimic with its sound the vernal shower,
That freshens while it patters on the leaves,
And helps the later buds to issue forth,
In mildest fragrance and soft beauty drest;
Then let me sit and listen to thy strains."

THE general description of the warblers given by Mr. Pennant, is, that the bill is slender and weak; the nostrils small and sunk; the exterior toe is joined at the under part of the last joint to the middle toe.

In length the nightingale is from six to seven inches, from the tip of the bill to the end of the tail; about equal to the skylark in size, but longer bodied and more elegantly formed.

The colours are very plain; the head and back of a plain tawney, dashed with olive; the tail is of a deep tawney red; the throat, breast, and upper part of the belly, are of a light, glossy, ash-colour; the lower part nearly white; the exterior webs of the quill feathers are of a dull reddish brown; the interior of brownish ash-colour; the irides are hazel, and the eyes remarkably large and piercing; the legs and feet of a deep ash-colour. The hen distinguished from the cock by being smaller, of a duller hue, and having a greenish shade on the back.

This bird, the most famed of the feathered tribe for the variety, duration, and sweetness of its notes, visits England the beginning of April, and leaves us in August. It is a species that does not spread itself over the island. It is not found in North Wales, or in any of the English counties north of it, except Yorkshire, where it is met with in great plenty about Doncaster. One, however, in the year 1808, was heard several times in the Earl of Lonsdale's gardens, in the city of Carlisle. It has never been noticed in Devonshire, and Mr. Couch, of Polperro, who appears to be an attentive and scientific observer of nature, in a letter inserted in the Imperial Magazine for August, 1822, says, "*it has never yet been heard wild in Cornwall.*" It has occasionally visited the neighbourhood of Shrewsbury. It is frequently heard at Hampstead and Highgate, and sometimes at Dulwich and Camberwell, near London. Nightingales are numerous in the shrubberies of Milton Park, near Peterborough, the favourite residence of the amiable and excellent Earl Fitzwilliam. A popular writer of the present day remarks, that "they are heard earlier and later in the year, in the beautiful Vale of Chilworth, near Dorking, than in any other part of England." They do not visit Ireland, and though Sibbald enumerates them among the birds that frequent Scotland, Mr. Pennant asserts, that they certainly are unknown in that part of Great Britain; probably from the scarcity of hedges there, for they visit Sweden, which is a much more severe climate. They are also found in Siberia, and are not uncommon through Germany, France, Italy, and Greece; but in all these places are migratory, as in England.

Hasselquist speaks of them as being found in Palestine, and Dr. Fryar states that they abound in Persia. They are inhabitants also of China, Kamtschatka, and Japan; at which last place they are much esteemed, and sold at high prices. Thisis the case also at Aleppo, where they are in great abundance kept tame in houses, and are let out at a small rate to such as chuse to hire them, so that in the city no entertainment is made in the spring, without a concert of these birds. They are not found in America, though several birds there bear that name. Yet that some birds of a similar kind inhabit the islands of the Southern Ocean may be gathered from the Journal of Captain Cook's first voyage, about the 20th January, 1770; where it is stated, that "an amazing number of birds usually began their melody about two o'clock in the morning, and serenaded the gentlemen till the time of their rising; the ship lying at a convenient distance from the shore to hear their music advantageously. These feathered choristers, like the English nightingale, never sing in the day time."

The winter residence of those which migrate from this country, has not been ascertained with any degree of precision; but is supposed to be in Asia, in various parts of which they are found throughout the year, and are very highly prized on account of their melodious powers.

In Persia they sing in great perfection, and an English traveller of the last century, Dr. Fryar, writing from Shiras, seems inspired by the Persian climate, where, speaking on this subject, he says, "the nightingale, sweet harbinger of the light, is the constant cheerer of the groves of Persia; charming with its warbling strains the heaviest soul into a pleasing ecstasy." But no wonder the doctor should be a little animated, when within sight of the tombs of Hafiz and Sadi!

The rose is allegorically said by the Persian poets to be the mistress of the nightingale, and the poet Jami, speaking of the nightingale and the rose, says, "you may place a hundred handfulls of fragrant herbs and flowers before the nightingale, yet he wishes not, in his constant heart, for more than the sweet breath of his beloved rose."

The excessive delight which the Persian nightingale derives from the enjoyment of the rose's fragrance, affords a thousand beautiful allusions and allegories to the Eastern poets. The celebrated Sadi, in one of his sonnets,

pays his mistress the most delicate compliment that a Persian lover could express, by saying, "should the nightingale once behold thy beauteous face, he would no longer seek his beloved rose."

To account for this allegorical passion entertained by the nightingale for the rose, which is the subject of so much beautiful imagery in Persian poetry, we must consider that the plaintive voice of that sweet bird is first heard at that season of the year in which the rose begins to blow; by a natural association of ideas, they are therefore connected as the constant and inseparable attendants of the spring. It is probable too that the nightingale's favourite retreat may be the rose-garden, and the leaves of that flower occasionally his food; but it is certain that he is delighted with its scent, and sometimes indulges in the fragrant luxury to such excess, as to fall from the branch, intoxicated and helpless to the ground. In the following couplet, the poet, Sadi, comprises three of the most favourite subjects of Persian song; the delights of spring, the charms of the rose, and the melody of the nightingale.

> "How delightful is the Spring! Where, oh! Rose,
> hast thou been! Dost thou not hear the lamentations
> of the Nightingale for thy unkind delay?"

The plaintive melody of this sweet bird is not however in the east suspended during the day, as in our colder climate; on the contrary, as its love-inspired song is heard at the first dawn, the Persians call it the ***Bulbul subiri***, or early nightingale; and give the name of ***Bulbul*** to another bird whose habits are similar in many respects to those of the nightingale. In the southern parts of Europe also, it has been remarked that the nightingale's voice is often heard by day.

A very ancient and interesting French poet, Raoul de Coucy, whose historical memoirs form one of the most romantic and affecting stories of the age of chivalry, thus begins one of his chansons;

> "La douce voix du rossignol sauvage,
> Qu' oi nuit et jour cointoier et tentir,
> Me radoucit mon cuer, et rasouage,"

"The sweet voice of the wild Nightingale,
Whom I hear by night and day amusing himself, and singing,
Soothes the anguish of my heart, and consoles me."

The refreshing western breeze, to which the rose lends its delightful odour, is equally the subject of Persian poetry; being, with the nightingale and rose, the welcome harbinger of spring.

M. Buffon speaks of the nightingale with great elegance and animation. He describes the vernal chorister as beginning his song with a low and timid voice, and by degrees opening his sound and swelling it, till it bursts with loud and vivid flashes. It then flows with smooth volubility; it faints and murmurs; it shakes with rapid and violent articulations; the soft breathings of love and joy are poured from the inmost soul, and every heart beats in unison, and melts with delicious languor; pauses occasionally occur to prevent satiety, and to give dignity and elevation; the mild silence of evening heightens the general effect, and no rival interrupts the happy and interesting scene.

The talent of this bird for speaking has been said to be equal, if not superior, to his musical powers. Gesner gravely repeats a story, which he had from a friend, of two kept by the landlord of an inn at Ratisbon, that spent whole nights in repeating various conversations that had passed in their hearing. And Pliny relates a ridiculous tale of one educated so liberally by the two sons of Claudius, that he delivered orations in Greek and Latin, studying fresh lessons every day for the amusement of his masters!!

Aristotle, with that skill for which he is so highly distinguished, in describing the coincidence of different phænomena of Nature at the same season, says that the nightingale sings continually, day and night, for fifteen days, about the time when the young leaves begin to expand and thicken the woods; he thus not only marks the time when the nightingale might be expected in Greece, but in every other country; for thus it happens in Sweden and England. But if he had said it appeared on such a day of the month, it would be true, perhaps, for that year only; and thus we find in

old calendars, days marked, very distant from each other, for the appearance of the same birds.

Pliny has described the warbling notes of this bird, with an elegance that bespeaks an exquisite sensibility of taste, and his words have been cited by most other writers on the same subject. Such is the beauty, and, in general, the truth of his expressions, that they cannot, says Mr. Pennant, be too much studied by all lovers of Natural History. Yet a few of his thoughts are more to be admired for their vivacity than for their strict philosophical reasoning, but these few are easily distinguishable. He says, the nightingale, that for fifteen days and nights, hid in the thickest shades, continues his note without intermission, deserves our attention and excites our wonder. How surprising that so great a voice can reside in so small a body! Such perseverance in so minute an animal! With what musical propriety are the sounds it produces modulated! The note at one time drawn out with a long breath; now stealing off into a different cadence; now interrupted by a break, then changing into a new note by an unexpected transition; now seeming to renew the same strain, then deceiving expectation! She sometimes seems to murmur within herself; full, deep, sharp, swift, drawling, trembling; now at the top, the middle, and the bottom of the scale! In short, in that little bill seems to reside all the melody which man has vainly laboured to produce from a variety of musical instruments. Some even seem to be possessed of a different song from the rest, and contend with each other with great ardor. The bird overcome is then seen only to discontinue its song with its life.

Mr. Bolton, with singular humour, observes, that "not only in the time of Pliny, but long before him, and since, down even to this day, has this poor bird been the butt of whining lovers, romancers, novellists, poets, poetasters, theatrical scribblers, and LIARS of many other denominations!! The nightingale was a favourite of Milton, who, in one place, prettily and truly says,

——————"the wakeful bird
Sings darkling; and, in shadiest covert hid,
Tunes her nocturnal note."

In another place he says,

'She all night long her amorous descant sung;'

Which is false, for she does not sing all night long."

But here Mr. Bolton is as deficient in point of accuracy, as in the former instance he is in point of politeness, for he has every writer on Natural History opposed to him. Indeed the name of this bird, as Mr. Pennant observes, is compounded of two Saxon words, *niht*, night, and *galan*, to sing.

So various, sweet, and durable, are the notes of this bird, that the songs of most of the other warblers, taken in their utmost extent, appear despicable when compared with those of the nightingale. His variety seems inexhaustible, for he never repeats the same notes a second time; or if the same bar be heard twice, it is always upon a different key, and with new embellishments. This great coryphæus of the spring, as often as he prepares to conduct the hymn of nature, begins by feeble, timid, and indecisive tones, as if to try his instrument. By degrees he assumes more confidence, becomes gradually warmer and more animated, till at last, like the ancient musicians, he captivates and overwhelms his audience by the full exertion of his astonishing powers. He begins his song in the evening, and continues it through the whole night, and perhaps somewhat of his fame is owing to this circumstance. During the "solemn stillness" of night, when all the animals are at rest, and not a breeze whispers through the newly-expanded leaves, the zephyrs themselves appearing to wait with breathless solicitude; when all the busy world is retiring to repose, and the calm current of the wakeful mind flows unruffled by the cares and vexations of the day, leaving the feelings in the highest state of susceptibility; then every sound is heard to the greatest advantage, and has, in the solemnity of darkness, the most powerful effect on the imagination.

Though the nightingale is a very small bird, his notes are heard farther than the human voice, being distinguished in a calm night at the distance of almost a mile round the bush where he sits.

Several of these birds were dissected by Mr. John Hunter, at the request of the Hon. Daines Barrington, when it appeared that the muscles of the larynx were the strongest in the best singers. This, no doubt, was the

effect of their vocal exertions; as a waterman's arms, and a porter's legs, are generally more muscular than those of other men. All attempts to ascertain the *cause* of the nightingale's excellence in song must prove as futile as the endeavours to discover the principle and seat of life. Sir Thomas Browne, in his "Treatise on Vulgar Errors," remarks, that "birds which are canorous, and whose notes we most commend, are of little throats and short necks, as nightingales, finches, linnets, canary-birds, and larks. And truly, although the weazon, throttle, and tongue, be the instruments of voice, and by their agitations do chiefly concur unto these delightful modulations, yet cannot we assign the cause unto any particular formation; and I perceive the best thereof, the nightingale, hath some disadvantage in the tongue, which is not acuminate and pointed as in the rest, but seemeth as it were cut off, which perhaps might give the hint unto the fable of Philomela, and the cutting off her tongue by Tereus."

These birds will sometimes adopt the notes of others, and will even chant the stiff airs of the nightingale-pipe. They have been instructed to sing by turns with a chorus, and to repeat their couplet at the proper time. Mr. Stackhouse of Pendarvis, has remarked, that the nightingale will modulate its voice to any given key; and if a note be whistled, the bird will immediately try, in its strain, an unison with it. Mr. Barrington once kept a fine nightingale for three years, during which time he paid particular attention to its song. Its tone was infinitely more mellow than that of any other bird, though at the same time it could be excessively brilliant. When this bird *sang its song round*, in its whole compass, he observed sixteen different beginnings and closes; at the same time that the intermediate notes were commonly varied in their succession with so much judgement as to produce a most pleasing variety. Another point of superiority in the nightingale is its continuance of song without a pause; which Mr. Barrington observes to be sometimes not less than twenty seconds. Whenever respiration, however, became necessary, it was taken with as much judgement as by an opera singer. In a wild state, the nightingale does not sing above ten weeks in the year, but in confinement will continue its song for nine or ten months; and a caged nightingale sings with infinitely more sweetness than those abroad. We may hence conclude that they do not sing

with the intention of soothing the female during the toils of incubation; but that their song is the natural aud irresistible impulse of the sexual passion, which, when extinguished, the inclination to sing subsides. From the end of June the nightingale ceases to sing, and his voice then becomes more like the croaking of a toad than the tuneful bird before described.

The continuance of their song through the whole night did not escape the notice of the ancients, among whom the slumbers of these birds became proverbial; and *not to rest as much as a nightingale*, expressed a very bad sleeper.

This was the favorite bird of the great British Poet, who omits no opportunity of introducing it, and almost constantly noting its love of solitude and night. How finely, exclaims the amiable Mr. Pennant, does it serve to compose part of the solemn scenery of his Penseroso!

> " In her saddest, sweetest plight,
> Smoothing the rugged brow of night;
> While Cynthia checks her dragon yoke,
> Gently o'er the accustom'd oak;
> Sweet bird, that shunn'st the noise of folly,
> Most musical, most melancholy!
> Thee, chantress, oft the woods among,
> I woo to hear thy evening song."

In another place he styles it the " solemn bird;" and again speaks of it as the " wakeful bird," which is repeated in his description of the approach of evening.

> " Silence accompanied; for beast and bird,
> They to their grassy couch, these to their nests
> Were slunk; all but the wakeful nightingale,
> She all night long her amorous descant sung."

When Eve passed the irksome night preceding her fall, she, in a dream, imagines herself thus reproached with losing the beauties of the night by indulging too long a repose:

" Why sleep'st thou Eve? now is the pleasant time,
The cool, the silent, save where silence yields
To the night-warbling bird, that now awake
Tunes sweetest his love-labour'd song."

The same birds sing the nuptial song in the garden of innocence, and lull the happy pair to rest. How rapturous are the following lines! says Mr. Pennant, in the true spirit of poetic fervor; how expressive of the delicate sensibility of our Milton's tender ideas!

" The earth
Gave sign of gratulation, and each hill;
Joyous the birds; fresh gales and gentle airs
Whisper'd it to the woods, and from their wings
Flung rose, flung odours from the spicy shrub,
Disporting, till the amorous bird of night
Sung spousal, and bid haste the evening star
On his hill-top to light the bridal lamp.
These, lull'd by nightingales, embracing slept;
And on their naked limbs the flowery roof
Shower'd roses, which the morn repair'd."

These quotations from the best judge of melody, are justly due to the sweetest of our feathered choristers, and we *believe*, says Mr. Pennant, he might have said, *we are sure*, no reader of taste will think them tedious.

Thomson, in his beautiful description of the various song-birds, says,

" The thrush,
And woodlark, o'er the kind contending throng
Superior heard, run through the sweetest length
Of notes, when listening Philomela deign
To let them joy; and purposes in thought
Elate, to make her night excel their day."

The plaintive notes of the nightingale have been noticed by many writers. In the Two Gentlemen of Verona, Valentine says,

" Here can I sit alone, unseen of any,
And, to the nightingale's complaining notes,
Tune my distresses and record my woes."

In Romeo and Juliet the nightingale's protracted song is noticed. Juliet says,

" It is not yet near day;
It was the nightingale, and not the lark,
That pierced the fearful hollow of thine ear;
Nightly she sings, on yon pomegranate tree."

This is probably the passage to which Dr. Goldsmith alludes, for he makes no quotation, where in his "*Animated Nature*," he says, "for weeks together, if undisturbed, they sit upon the same tree; and Shakspeare rightly describes the nightingale sitting nightly in the same place, from which I have frequently observed she seldom departs."

It is remarkable that the nightingale is rarely mentioned in Shakspeare's dramatic writings, and has not even one tribute of praise presented to it. Though his nocturnal rambles in the early part of his life must have afforded him frequent opportunities, we may safely conclude that Shakspeare never heard this delightful songster in perfection, for we may be certain, from the manner in which he has spoken of the lark, that he could not have been insensible to its merit. Possibly in his day the nightingale was not a visitor of Stratford, though now it is a regular songster in its beautiful environs, and pours many a requiem over the ashes of the bard, sweetening the murmurs of the "silver stream," as the "soft-flowing Avon" creeps along the borders of the hallowed ground in which they repose, preserving the verdure of the sacred spot, and nourishing the flowers with which it is adorned.

While Philomel affords his richest song,
And with delight inspires the jocund throng,

Here fairy dances o'er the herbage sweep,
And with light footsteps true accordance keep;
Their twinkling feet in Cynthia's pallid beam,
Sparkle like snow-flakes in the mid-day gleam;
In mazy sport the tiny elfins weave,
And on the darken'd turf their circles leave;
In various forms each fairy set combines,
And scarcely bend the spider's gauzy lines;
Like gossamer they float, when Zephyr's wing
Fans the mild breeze of sweetly-breathing spring.
But now, with measur'd step, the hallow'd ground
Where Shakspeare's ashes spread a charm around,
They pace in silence, while soft tears they shed,
That fertilize the verdure o'er him spread.
Some plant the vi'let, some the daisy there,
The harebell, cowslip, and the primrose fair;
And sweet Titania, by her fairy powers,
Breathes softest fragrance on the modest flowers.
While stately Oberon commands a spell,
To guard from goblin-sprites the sacred cell.
Now glides smooth Avon slow and silent by,
And gentlest Zephyrs scarcely breathe a sigh.
But Philomel the morn's approach perceives,
As its first streaks steal o'er the glossy leaves.
Sudden his plaintive music he suspends;
The fairies vanish, and the revel ends;
Yet mortal eye hath ne'er beheld their flight,
Th' etherial sprites dissolve in softest light.

In Beaumont and Fletcher's "Faithful Shepherdess," the nightingale's complaining notes are alluded to;

"The Nightingale among the thick-leav'd Spring,
That sits alone in sorrow, and doth sing
Whole nights away in mourning;"

And in Spenser's "Shepherd's Calendar," *August,*

> "Hence with the Nightingale will I take part,
> That blessed bird, that spends her time of sleep
> In songs and plaintive pleas."

In Virgil's fourth Georgic the same circumstance is also noticed;

> "As Philomel in poplar shades alone,
> For her lost offspring pours a mother's moan,
> Which some coarse rustic marking for his prey,
> From the warm nest, unfledg'd hath borne away,
> Perch'd on a bough, she all night long complains,
> And fills the grove with sad repeated strains."
>
> WARTON.

This metaphor is also introduced in one of Lee's tragedies. But though poets are permitted to take great liberties, it should not be forgotten that no "mother's moan" is ever heard from the nightingale, as it is the male only that sings. Quotations might still be added, but the reader probably thinks that this article has already been carried to an improper length; a short and humble tribute of admiration shall therefore close it.

> When Phœbus, peeping o'er the eastern hills,
> Tinges the groves, and gilds the rippling rills;
> Suspends the vigils of the fairy band,
> And pours increasing radaince o'er the land;
> Calls up the choristers of humbler lays
> To pay their matin songs of grateful praise;
> While Zephyrs sport along the bending corn
> Or sip the diamond dew-drop on the thorn;
> Then modest Philomel retires to rest,
> Recruits his strength, and tends the teeming nest,
> Prepares in silence to renew his strains,
> And pour unrivall'd music o'er the plains.

The tortoise-shell butterfly on the plate, *papilio urtica*, feeds on nettles in the caterpillar state, changes to a chrysalis the beginning of June, and appears on the wing about the end of the same month. There is a second brood which are in chrysalis the beginning of August, and are on the wing before September.

The shell, *helix nemoralis*, is a variety, with brown and yellow stripes, of the common land snail.

Nightingale Nest & Eggs.

NEST AND EGGS OF THE NIGHTINGALE.

PLATE LII.

THE nest figured on this plate is an exact copy from a drawing of a perfect nest in the possession of that eminent ornithologist, Dr. Latham, taken by his daughter and sent to Mr. Bolton.

There are three varieties of the nightingale; the common bird, one rather larger, and one entirely white. In every part of Europe they are migratory, and the males are said to arrive about a week before the females. They are solitary birds, never uniting even in small flocks, and two of their nests are seldom found near each other. They build in some low bush or quick-set hedge, well covered with foliage, for such only these birds frequent, and are therefore rarely seen. The nest is composed of dry leaves on the outside, mixed with grass and fibres, and lined with hair or down within, though not always alike. The female lays four or five eggs of a greenish brown colour, and she alone sits and hatches the eggs, while the male not far off regales her with his delightful song.

> "The nightingale with mutual passion blest,
> Sings to his mate, and nightly charms the nest."
>
> ADDISON.

As soon as the young are hatched, he commonly leaves off singing, and joins with the female in the task of attending and feeding them. After the young can provide for themselves, the old female prepares for a second brood, and

the song of the male recommences. They have been known to breed three times in the year, and in warm climates even four. They are partial to particular situations, and avoid others which seem as likely to afford them the necessary means of support and enjoyment. It is not improbable, however, that by planting a colony in a well-chosen spot, these charming songsters might be induced to frequent places where they are not at present seen; the experiment might be easily tried, and should it succeed, the trouble would be amply compensated. In a wild state the nightingale's food consists principally of insects, small worms, eggs of ants, and sometimes berries of various kinds. In confinement, Mr. Albin recommends sheep's hearts and boiled eggs, chopped small, with occasionally a meal worm or a spider. A little time generally reconciles them to the cage, where they may, he adds, be bred like canary-birds. If kept clean and taken great care of, they will live some years in confinement, and will generally sing from the beginning of November till Midsummer.

None but the vilest epicures, as Dr. Latham remarks, would think of eating these charming songsters; yet we are told that their flesh is equal to that of the ortolan, and that they are fattened in Gascony for the table! Every school-boy must have read of Heliogabalus feasting on nightingales' tongues; and of that famed dish of the Roman Tragedian, Æsop, which was composed of those of every singing and talking bird, and whose feast is supposed to have cost nearly seven thousand pounds of our money.

The caterpillar of the peacock butterfly, papilio io, on this plate, feeds on nettles; becomes a chrysalis the beginning of July, and appears on the wing early in August.

Redstart

MOTACILLA PHŒNICURUS.

Gm. Linn.—987.

SYLVIA PHŒNICURUS.

Penn. Br. Zool.

ROSSIGNOL DE MURAILLES.

Buffon.

THE REDSTART.

PLATE LIII.

THIS bird measures rather more than five inches in length. Its bill and eyes are black; its forehead is white; cheeks, throat, forepart and sides of the neck, black, which colour extends over each eye; the crown of the head, hinder part of the neck, and the back, are of a deep blue grey or lead colour; in some subjects, probably old ones, this colour is almost black; its breast, rump, and sides, are of a fine glowing red, inclining to orange colour, which extends to all the feathers of the tail, excepting the two middle ones, which are brown; the belly is white; feet and claws black. The female differs considerably from the male; her colours are not so vivid: the top of the head and back are of a grey ash-colour, and the chin is white. Her appearance altogether very much resembles the nightingale. Aldrovandus and Gesner mention three sorts of redstarts, one of which is the same as that now described; the second has a reddish tail; and the third which is found about Strasburgh, in Germany, has the top of the breast blue, and it is of a yellowish red at the bottom; the belly is ash-colour, and the legs are brown.

This bird appears among us only in the spring and summer; it is observed to come over nearly at the same time as the nightingale, and is seldom seen after the beginning of October. It is distinguished by a peculiar quick

shake of the tail from side to side, on alighting on a wall or other place. Though a wild and timorous bird, it is frequently found in the midst of cities, always chusing the most difficult and inaccessible places for its residence, still preserving its native wildness and timidity. It acquires neither the confidence and intimacy that distinguish the redbreast, the gaiety of the lark, nor the vivacity of the nightingale. It is found too in the most impenetrable recesses of dark woods, where it indulges, undisturbed, its solitary habits, and utters its plaintive notes. His disposition is melancholy and his manners wild. If taken when old, he refuses all food, preferring death to captivity; or, if he survive his freedom, his obstinate silence and sullen grief plainly indicate how deeply he is penetrated with the misery of his condition. Mr. Bolton, however, says that this account of his sullenness, which is given by Ray and others, he has not found, on trial, to be correct. This bird has a fine soft note and sings sweetly. It feeds on flies, spiders, the eggs of ants, small berries, soft fruits, and seeds.

It visits Italy, and departs sooner than the redbreast. It inhabits various parts of Europe, and may be traced to the Cape of Good Hope. In England it is seldom met with, Dr. Latham observes, to the west of Exeter.

The black and yellow fly on the plate, is the conops macrocephala, of Linnæus. It has no English name, but is found largely in the meadows of our country, and of Europe generally, and bears some resemblance to a wasp.

NEST AND EGGS OF THE REDSTART.

PLATE LIV.

THE redstart makes her nest in holes of walls, crevices of rocks, or hollow trees. The materials are moss, dried herbs, wool, and feathers, which are loosely bound together with dried blades and stalks of grass. The lining is of cows' hair, with a few feathers laid upon it. The eggs are five or six in number; blue with a cast of green and destitute of spots. They are very like those of the hedgesparrow, but rather paler, and more taper at the small end. This bird is so remarkably shy that it will forsake its nest if the eggs are only touched, or if the female is much disturbed. The young ones are excluded in the month of May. While the female is employed in hatching and rearing them, the male is commonly stationed, as a sentinel, upon a point of the rock, or on the top of the wall, whence he utters his uninterrupted song; which nearly resembles that of the redbreast, but is lower, and not so well varied. But its continuance is a pledge to the mother that no danger is approaching her family.

MOTACILLA RUBECULA.

Gm. Linn.—993.

SYLVIA RUBECULA.

Penn. Br. Zool.

LE ROUGE-GORGE.

Buffon.

THE REDBREAST.

PLATE LV.

THE bill is black at the tip, brown at the base; the irides of the eyes a pale brown; the pupils black; the top of the head, the back and coverts of the tail, are of a dusky olive colour. The forehead, throat, and breast, are of a dull orange colour; the belly dusky white; the legs and feet black.

"I have figured the cock, "says Mr. Bolton," in the attitude which he frequently assumes when in his summer retreats, amongst trees and bushes, where he perches himself upon a spray not far from his mistress and family, and sings delightfully; and I have figured the female as we see her in time of snow, when contracted to a ball, and shivering with cold, she stands at the back door, praying to be admitted to the warmth of the kitchen fire."

This bird, though so very petulant as to be at constant war with its own tribe, yet is remarkably sociable with mankind; in the winter it frequently makes one of the family, and takes refuge from the inclemency of the season even by our fire sides. Thomson has prettily described the annual visits of this guest:

Robin.

" The Redbreast, sacred to the household Gods,
Wisely regardful of the threat'ning sky,
In joyless fields, and thorny thickets, leaves
His shivering mates; and pays to trusted man
His annual visit. Half afraid, he first
Against the window beats; then, brisk, alights
On the warm hearth; then, hopping o'er the floor,
Eyes all the smiling family askance,
And pecks, and starts, and wonders where he is;
Till, more familiar grown, the table crumbs
Attract his slender feet."

The great excellence, says Mr. Pennant, of that celebrated poet consists in his elegant and just descriptions of the economy of animals; and the happy use he hath made of natural knowledge, in descriptive poetry, shines through almost every page of his "*Seasons.*"

The affection this bird has for mankind, is also recorded in that ancient Ballad, "*The Babes in the Wood,*" which is preserved in the third Vol. of *Reliques of ancient English Poetry;* a composition of the most beautiful and pathetic simplicity. It is one of the first trials of our humanity: the child that refrains from tears on hearing that read, gives but a bad presage of the tenderness of his future sensations.

Throughout the summer, the redbreast is rarely to be seen; it retires to woods and thickets, where, with its mate, it prepares for the accommodation of its future family. During the time of incubation the cock sits at no great distance from the nest, and makes the woods resound with his delightful warble; he keenly chases all the birds of his own species, and drives them from his little settlement; for it has never been known that two pairs of these birds, which are as faithful as they are amorous, were lodged at the same time in the same bush. In the Two Gentlemen of Verona, Speed tells his master, as a proof that he is in love, that "he relishes a love-song like a robin redbreast."

The redbreast prefers the thick shade, where there is water; it feeds on insects and worms, but never eats them alive. It takes them in its bill and beats them against the ground till they cease to move; during

this operation it generally happens that the caterpillar or worm is burst, and its entrails are shaken out, leaving the body thus cleansed from its impurities. Some ornithologists have ascribed this to the extreme delicacy of the bird in preparing its repast; others think that it is only an accidental consequence arising from the manner of putting its prey to death.

As soon as the business of incubation is over, and the young are sufficiently grown to provide for themselves, he leaves his retirement, and again draws near the habitations of mankind; his well-known familiarity has attracted the attention and secured the protection of men in all ages. Redbreasts are never seen in flocks, but always singly; and when all other birds associate together, they still retain their solitary habits. It is remarkable that a bird which remains in North Britain all the year round, where the winters are so much more severe than in France, should migrate from the latter country during the winter months. Such, however, is the case. In France the redbreast frequents the hedges and dwelling houses for a short time in autumn and spring, but regularly in the dead of winter, when the hard frost commences, disappears. In his spring visit he makes but a short stay, hasting, as he then is, to enter the forest, that he may there, amidst the verdant shades, enjoy solitude and love. M. Buffon remarks, that, as soon as the young birds have attained their full plumage, they prepare for their departure; but in thus changing their situation, they do not gather in flocks, but perform their journey singly, one after another, which is a singular circumstance in the history of this bird. They abound in Burgundy and Lorraine, where numbers are taken for the table and thought excellent. The food of the redbreast varies with the season. In spring he feeds upon insects and worms, which he pursues with address and nimbleness. In autumn he devours all kinds of seeds and fruits that are produced in the district, not excepting the apple and the grape. There is none more active, none satisfied with a smaller portion of rest, than this bird; he is the first that appears in the woods at the break of day, and the last that retires thither in the evening to enjoy repose.

This species is spread over the whole of Europe, from Norway and Sweden to the coasts of the Mediterranean. It visits Italy in April, and leaves it in September, and is found in great abundance in Spain, Gibraltar, Barbary, and Algiers, and is also introduced in Indian drawings. The

robin redbreast of North America, is our fieldfare, *turdus pilaris;* and this name is also given in that country to the redwing, *turdus iliacus.* Both these birds are more familiar there than in England; probably because, in this country, the contrast in point of population, is so great between their summer and winter residence. In America and the northern parts of Europe they are liable to little disturbance, whereas in England they are continually molested, and kept in a constant state of anxiety and alarm. The redwing in particular, in North America, as in Sweden, has a very fine song in the spring; certainly not inferior to that of our redbreast. To it the following pretty little ballad is addressed, which was written by a lady of Boston in New England, and attracted the attention of Mr. Spofforth, in this country, who set it to music in an elegant and appropriate manner.

Stay sweet enchanter of the grove,
Leave not so soon thy native tree;
Oh! warble still those notes of love,
While my fond heart responds to thee.

And soon as spring, enriched with flowers,
Comes dancing o'er the new drest plain;
Return and cheer thy natal bowers,
Sweet robin! with those notes again.

It has been often observed that the redbreast is more frequently found dead, in outhouses and under hedges, than any other small bird. Many rustic observers of nature state that the young of this species always kill the old ones, never suffering them to live beyond three years of age. Two, and sometimes three, young birds will attack an old one, and seldom leave him till he is dead, and this always happens at the latter end of the year.

There are two varieties of this species; one with the chin white; wing coverts varied with white, black and rufous; and the other entirely white.

Its general familiarity has occasioned this bird to be distinguished by a peculiar name in many countries; about Bornholm it is called Tomi Liden; in Norway, Peter Ronsmad; in Germany, it is called Thomas Gierdet; and with us Robin Redbreast, or ruddock.

The brimstone butterfly, papilio rhamni, on this plate, when a caterpillar, feeds on the leaves of buckthorn; changes to a chrysalis in May, and is on the wing in June. It frequents hedges and the borders of woods, and Mr. Bolton says, is easily taken; but there is scarcely any butterfly wilder or stronger on the wing.

Robin's Nest & Eggs.

NEST AND EGGS OF THE REDBREAST.

PLATE LVI.

REDBREASTS place their nests on or near the ground, fixing them against the root of some old tree or mossy wall, in a shady and quiet situation; and sometimes they nestle about farm yards and hayricks.

The nest here delineated is composed of a large quantity of moss, mixed with a few oak leaves and small sticks, which form the outer coat, and is bound together with blades of grass and straw. The middle coat consists of the same materials, but finer and softer, and the lining of a large quantity of cow's hair. The whole is loosely compacted, and the cavity is shallow. The female lays from five to nine eggs, of a dull white or cream colour, marked with reddish brown spots.

Redbreasts take great care to conceal their nests, and in order to do this effectually, often cover them with leaves, so that there is only a narrow winding entrance under the heap.

Young redbreasts when full feathered, may be easily mistaken for a different kind of bird, being spotted all over with rust-coloured spots on a light ground; the first appearance of the red is about the end of August, but the bird does not attain its full colour till the end of the following month.

When kept tame, the redbreast is a particularly pleasant bird, because it will sing through the winter when most others are mute.

MOTACILLA ATRICAPILLA.

Gm. Linn.—970.

SYLVIA ATRICAPILLA.

Penn. Br. Zool.

LA FAUVETTE A TETE NOIRE.

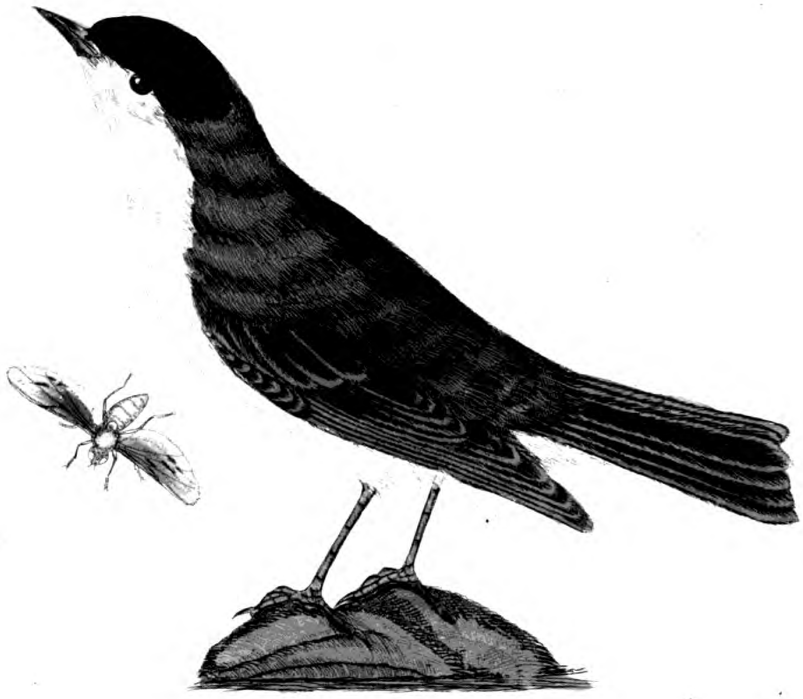
Buffon.

THE SUMMER BLACK-CAP.

PLATE LVII.

THIS bird is among the smallest of its tribe, scarcely weighing half an ounce, and is about five inches in length. The upper mandible is of a dark horn-colour, the under one light blue, the edges of both whitish, and black at the tip; the eyes are black; the crown of the head is black; the sides of the head and back of the neck are ash-colour; the back, mouse-colour, with a cast of olive, the throat and breast of a silvery grey; the belly and vent, white; the legs of a dark lead-colour, and the claws black. The female is distinguished from the male by being less, and having the spot on the head of a dull rust colour, or reddish brown, as figured on the bottom of the plate. The coverts of the wings in both are a greyish green, and the wing and tail feathers dusky edged with dull green.

This species is pretty common in England, and elsewhere in Europe, as far as Italy; in all which places it breeds, coming about the middle of April, and retiring in September. It frequents orchards, gardens, and shady woods. Its food is chiefly insects, but in defect of these it will eat the fruit of the spurge-laurel, service, and ivy; and these birds seem to be even fond of the last, as they much frequent trees overgrown with it. But these berries are their food only till the vernal sun has exerted sufficient influence to rouse the insect tribe.



The black-cap sings sweetly, and so like the nightingale that in Norfolk it is called the mock-nightingale. Buffon says, that its airs are light and easy, and consist of a succession of modulations of small compass, but sweet, flexible, and blended. Our ingenious countryman, Mr. White, observes, that it has usually a full, sweet, deep, loud, and wild pipe, yet the strain is of short continuance, and its motions desultory; but when this bird sits calmly, and in earnest engages in song, it pours forth very sweet, but inward melody, and expresses great variety of sweet and gentle modulations, superior, perhaps, to any of our warblers, the nightingale excepted; and while it warbles its throat is wonderfully distended.

Besides the one already described, there are three varieties. 1. Varied with black and white. 2. Above blackish; sides grey; chin white. 3. Greenish brown; cap blackish; neck above cinereous; eyebrows white; wings and tail blackish.

The fly on this plate is called *musca muliebris*. It has no English name. The head, thorax, abdomen, and legs, are of a pale brown. The wings are clear, having two broadish brown stripes from the point to the shoulder, one of which lies along the sector edge, the other through the middle. This pretty fly is very scarce; it shakes its wings as it walks, like the *musca vibrans*, and is not soon frighted away. The figure on the plate is magnified, the fly itself being not above two lines long.

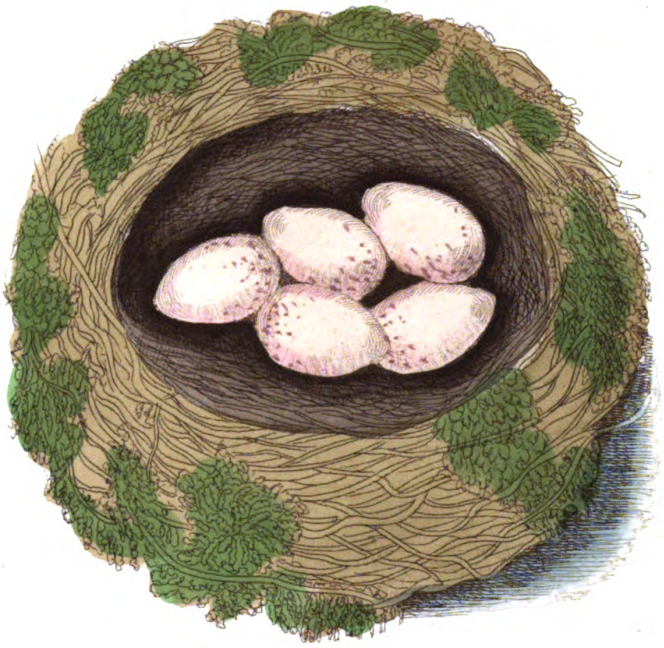
NEST AND EGGS OF THE BLACK-CAP.

PLATE LVIII.

THE black-cap builds its nest near the ground, and constructs it of dried grass, moss, and wool, and lines it with hair and feathers. But the materials are occasionally varied. The nest here delineated was made of small stalks of dried plants, having little tufts of soft moss intermixed, the middle coat consisted of a finer assortment of the same materials, and the lining of very fine fibres and black hair. The nest was built in a low bush, about two feet from the ground. Mr. Pennant mentions one that was found in a spruce fir, at about the same height. The eggs are usually five or six, of a pale reddish brown, mottled with a deeper colour, and sprinkled with a few dark spots.

During the time of incubation, the male and female sit by turns. The male also brings her food, such as flies, worms, and insects. The young very early leap out of the nest, especially if any one approaches it, and forsakes it for ever.

In Italy it builds twice in the year, but in England only once.



MOTACILLA MODULARIS.

Gm. Linn.—952.

SYLVIA MODULARIS.

Penn. Br. Zool.

LA FAUVETTE D' HIVER.

Buffon.

THE HEDGE WARBLER, OR SPARROW.

PLATE LIX.

THIS well known bird is about six inches in length, and weighs twelve drams. The bill of the specimen here given is of a dusky yellow; in some instances it is black; the eyes are brown; the head brown, with a shade of ash-colour, each feather having a black streak down the middle; the cheeks are marked with oblong spots of dirty white; the back and coverts of the wings are of an orange brown, the middle of each feather being black; the rump olive colour; the quill and tail feathers dusky, with brown edges; the throat and breast are of a dull ash-colour; the belly a dirty white; the sides, thighs, and vent-feathers, are of a pale tawny brown; the legs and feet of a dull flesh-colour.

This bird frequents low hedges, especially those of gardens. The male has a short, but very sweet plaintive note, which it begins with the first frosty mornings, and continues till a little time in the spring. Its note would be thought agreeable did it not remind us of the approach of winter. It often repeats a sound like the words *tit, tit, tit,* which has occasioned its being called *Titling* in many places.

Its food in general are insects and worms, but when, in frosty weather, these are difficult to be found, it will pick up crumbs of bread, and small

seeds, and seems to prefer situations near the habitations of man. Though called hedge-sparrow, it has no other relation to the sparrow than the dinginess of its colours; in every other respect it differs entirely. It remains with us the whole year, and is supposed to brave the rigours of winter in Sweden, and to assume there the white plumage so frequent in severe climates in that season.

In France, however, the hedge-sparrow is rarely seen but in winter; it arrives generally in October, and departs in spring for more northern regions, where it breeds.

"This is the *motacilla modularis*, of Linnæus, as Mr. Pennant observes; the bird which he supposes to be our hedge-sparrow, and describes under the title of *motacilla curruca*, differs in colours of plumage, as well as eggs."

It is known in Yorkshire and some other parts of this country, by the name of dunnock.

The hen differs from the cock in being smaller, and having the feathers on the back of a duller colour.

The caterpillar of the large tyger-moth, *phalæna caja*, feeds on nettles and grass; changes to a chrysalis the beginning of June, and is on the wing in July. It frequents meadows, and is frequently found among new hay.

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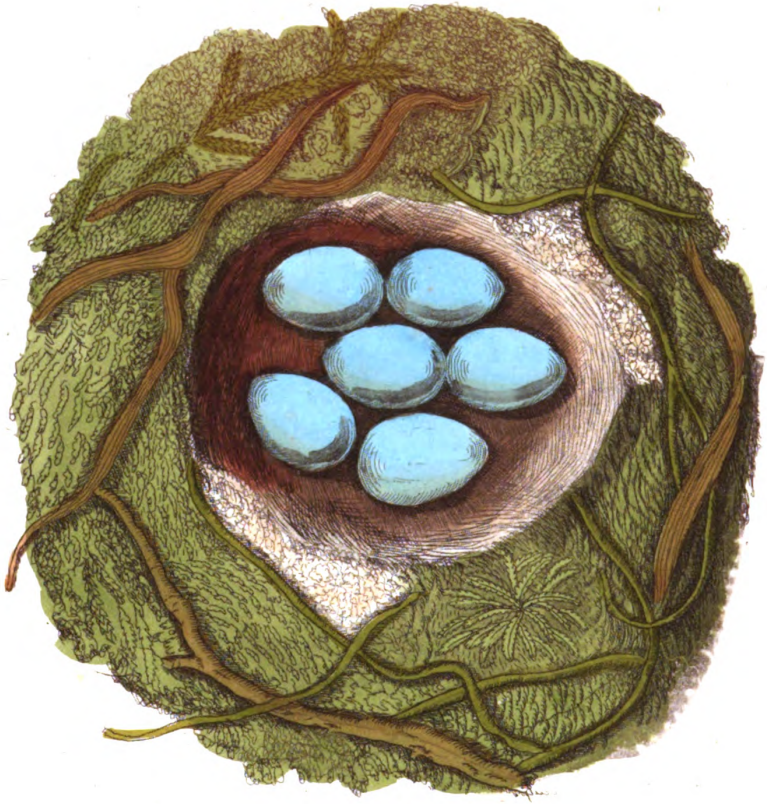


NEST AND EGGS OF THE HEDGE-SPARROW.

PLATE LX.

THIS bird makes its nest in some small bush, frequently a holly, or some other evergreen shrub, and lays five or six eggs, of a fine pale blue colour, with a cast of green. The nest is sometimes placed on piles of faggots or pea-sticks. It is generally made in the month of March, and is composed of moss and wool, and lined with hair.

The nest here delineated was made of coarse green moss, mixed with wool and small sticks, and loosely fastened together with long blades of coarse grass. The lining consisted of red cows' hair in abundance, very rudely intermixed. The cavity was shallow, and the whole but loosely and awkwardly fabricated. The nest is made in March, and the young are generally hatched in May. During the breeding season, these birds have a remarkable flirt with their wings; and while they sit, if a cat, or other voracious animal, should happen to come near the nest, the mother endeavours to divert it from the spot, by a stratagem similar to that by which the partridge misleads the dog; she springs up, flutters from branch to branch, and by such means allures her enemy to a safe distance.

The cuckoo frequently lays her eggs in the hedge-sparrow's nest.

MOTACILLA HIPPOLAIS.

Gm. Linn.—954.

SYLVIA HIPPOLAIS.

Penn. Br. Zool.

LA FAUVETTE.

Buffon.

THE LESSER PETTYCHAPS.

PLATE LXI.

THIS bird is about five inches long, somewhat less than a linnet. The bill is slender, black at the point and yellowish at the base; the mouth is yellow within. A yellow line passes over the eye, and there is a slight touch of the same colour below the eye; and between the base of the bill and the eye is a dark coloured line. The eyes themselves are dark hazel. The head, back, wings, and tail, are of a dusky mouse colour with a shade of olive. On the angle of the wing is a yellow spot; the throat and upper part of the breast are a dusky white, with a few touches of pale yellow; the lower part of the breast is white; the belly and coverts under the tail pale yellow; the legs a dusky blue or lead colour. The colours of the cock are a little stronger than those of the hen, and he is the larger bird of the two. These birds are not common, and the descriptions of them by different naturalists vary in several particulars. Possibly individuals of the same species, as is frequently the case among small birds, may vary considerably in plumage. But the accounts given of its song also by different writers are very dissimilar. Mr. Bolton says, he sings mounted on some high tree, his song consists of few notes, but it is loud, cheerful, and repeated with

frequency, and great spirit. Some writers say he has only two notes, which seem to express *chip, chop*. But in the descriptions attached to Mr. Bewick's beautiful delineations of British birds, are the following observations on this subject: "This bird frequents thickets, and is seldom to be seen out of covert; it secretes itself in the thickest parts of the bushes, where it may be heard but not seen. It is truly a mocking bird, imitating the notes of various kinds, generally beginning with those of the swallow, and ending with the full song of the blackbird. We have often watched with the utmost attention whilst it was singing delightfully in the midst of a bush close at hand, but have seldom been able to obtain a sight of it, and could never procure more than one specimen. Its appearance with us does not seem to be regular, as we have frequently been disappointed in not finding it in its usual haunts. We suppose this to be the same with the *fauvette* of M. Buffon, which he places at the head of a numerous family, consisting of ten distinct species, many of which visit this island in the spring, and leave it again in autumn."

"These pretty warblers," says he, "arrive when the trees put forth their leaves, and begin to expand their blossoms; they are dispersed through the whole extent of our plains; some inhabit our gardens, others prefer the clumps and avenues; some conceal themselves among the reeds, and many retire to the midst of the woods." But, continues the description in Mr. Bewick's book, notwithstanding their numbers, this genus is confessedly the most obscure and indetermined in the whole of ornithology. We have taken much pains to gain a competent knowledge of the various kinds which visit our island, and have procured specimens of most, if not all of them, but confess that we have been much puzzled in reconciling their provincial names with the synonima of the different authors who have noticed them. In a note it is added that "it certainly is but little known, and has no common name in this country."

This is said to be one of the earliest of the tribe, which comes to pass the warmer season in England; it has been seen before the 20th of March, and remains till the end of October. It resembles the yellow warbler in its plumage, but is inferior in size, and its legs are of a much darker hue. It has also been confounded with the wood wren, but a striking distinction

occurs in the tail coverts, which in the latter are of a pure white, while those of this species are tinged with yellow. Nothing is said in the British Zoology of the vocal powers of this bird, but the greater pettychaps, *sylvia hortensis*, is spoken of as " a charming songster."

The fly on the plate, is the *pullata parvus*. It is black; and the wings appear a little smoky, especially near the sector edge, where there is a small spot or cloud.

NEST AND EGGS OF THE LESSER PETTYCHAPS.

PLATE LXII.

"THIS little warbler," says Mr. Bolton, "makes its nest near the root of a tree or on some sunny bank, under a furze bush, or tuft of grass. The nest from which the annexed drawing was taken, consisted wholly of the stalks of dried grass, the coarse on the outside, the finer within, a few black hairs also were mixed in the lining. It was placed on the steep side of a hillock, under a tuft of fern. The form of the nest was a little odd; the fore part and sides of the brim were narrow, the back broader and raised, but not properly arched, as is the nest of the green wren. The eggs are from eight to twelve in number, of a pure white, and spotted with small red spots."

In this part also of the description there are variations among the different statements. Mr. Montague, and some other naturalists, say, that the outside of the nest is covered with dried leaves, and the inside lined with feathers, and that the eggs are five or six in number, and the form of the nest is oval, with a small hole near the top. During the time of incubation it is particularly active in the pursuit of insects, but it is always busy and restless.

In Yorkshire this bird is called Strawsmall, or beam-bird, and in Dorsetshire is known by the name of the hay-bird.

MOTACILLA TROCHILUS.

Gm. Linn.—987.

SYLVIA TROCHILUS.

Penn. Br. Zool.

LE POUILLOT, OU LE CHANTRE.

Buffon.

THE YELLOW WREN.

PLATE LXIII.

THIS bird is about four inches and a half long, and weighs about two drams. The bill is horn colour, with a black tip; the eyes black; the inside of the mouth yellow. Over the eyes is a yellow line; the head and back are green, with an olive shade; the rump more yellow. The wings and tail are a dusky olive, the feathers of both edged with a paler olive; the throat, breast, and belly, are of a bright yellow in the male, but the belly of the female is of a dusky white. The covert feathers under the tail, in both male and female, are of a pale buff colour. On the angle of the wing, in both sexes, is a spot of a beautiful yellow.

This bird has been frequently mistaken for the lesser pettychaps, just described, which it very much resembles; it has also been confounded with the wood wren, *sylvia sylvicola*. But this can create no surprise, as the birds of this genus vary much in colour; the bright yellow of some being in others almost white.

The song of this little bird, says Mr. Bolton, is loud and shrill, and his notes sprightly and pleasant; he perches on the branch of some tall tree, and with mouth wide, wings half raised and shaking, and bill erect, he makes the woods re-echo. His cry, when disturbed or in distress, is

not unlike that of the grasshopper warbler, re, re, re, often repeated, and accompanied by a restless motion, continually hopping from spray to spray, but he will not be driven far from the place of his residence.

Mr. Pennant observes, that "it has a low plaintive note, and is perpetually creeping up and down the bodies and boughs of trees." It is then, no doubt, searching for the insects on which it preys. In Mr. Bewick's book it is stated, that there are three distinct species of the willow wren, of which this is the largest; the other two differ in their size as well as note; their form and manners are, however, very similar. This species is rather scarce here. It is sometimes seen on the tops of trees, from whence it often rises singing; its note is rather low and soft, and not much varied. One of these species, which is common in Westmoreland, is called the Strawsmeer. From the similarity of this name to that which is stated by Mr. Bolton, in the last article, to be given to the pettychaps, it is easy to perceive how these two birds may have been mistaken for each other. To shew the sagacity of this bird, an anecdote is related by Mr. White, of one that had built in the bank of a field near Selborne. A friend and himself observed the bird as she sat in her nest, but they were particularly careful not to disturb her, though she eyed them with some degree of jealousy. Some days afterwards as they passed the same way, they were desirous to see how the brood went on; but no nest could be found, till Mr. White happened to take up a large bundle of long green moss, which had been thrown carelessly, as it were, over the nest, in order to mislead the eye of any impertinent obtruder.

The willow-wren, it has been said, may justly be termed the nightingale of the northern snowy countries of Europe. It settles on the loftiest branches of the birch-trees, and makes the air resound with its bold and melodious song.

The fly figured on this plate is the *sphex perturbator*. The head is black, the eyes black and glossy; the thorax and legs black; the abdomen is of an orange colour, except the end, which is black; the wings are of a dusky brown. It frequents dry banks, and burrows in the sand to make a lodging for its young. It is an insect of prey, feeding on very small flies, caterpillars, &c.

NEST AND EGGS OF THE YELLOW WREN.

PLATE LXIV.

THE manners of this bird greatly resemble those of the pettychaps, particularly in regard to nesting. The nest exhibited on this plate was built among moss, under a bilberry-bush. The first coat consisted of a few sprigs of moss, with a great many stalks of dry grass. The nest was pretty deep, and, to the north side, arched over with windlestraws, and other dried stalks of plants; so that the bird enters by one side, as does the brown wren. The lining consisted of soft bents and feathers. In this nest were eight eggs, white, and thickly covered near the big end with blood-red spots.

It sometimes makes its nest in holes, at the roots of trees, or in dry banks; and several writers on Natural History limit the number of its eggs to five.

Green Wren's Nest & Eggs. 64

MOTACILLA REGULUS.

Gm. Linn. 995.

SYLVIA REGULUS.

Penn. Br. Zool.

LE POUL, OU SOUCI, OU ROITELET HUPE.

Buffon.

THE GOLDEN CRESTED WREN.

PLATE LXV.

THIS is the smallest of the British birds, being less than four inches long and weighing about seventy-six grains. The bill is black at the point, flesh colour at the base, from whence arises a white line that runs over the eye. The sides of the head, immediately above this line, are green, above which, on each side, is a narrow list of black feathers; and on the crown of the head, above these black lists, is a little tuft or crest of soft silky feathers; in the male, of a bright orange colour; in the female, yellow. The bird has the power of erecting this crest at will, and also of hiding it entirely by contracting the skin of the crown, and drawing together the two black lists, between which the crest is placed.

The back is green with a shade of olive; the quills and tail feathers are dusky, with green edges; the first row of coverts are green, with tips of a pale buff colour; the quills are black near the root, which make a remarkable black spot on the wing. One or two of the last quills have their outer borders white in the male bird; the throat, breast, and belly, are of a pale buff or cream colour; the legs and feet dusky; the claws black and long.

This curious little bird delights in the largest trees, such as oaks, elms, tall pines, and firs, particularly the first, in which it finds both food and

shelter. These birds are very agile, and are almost continually in motion, fluttering from branch to branch, creeping on all sides of the trees, clinging to them in every situation, and often hanging, like the titmouse, with their backs downwards. Their food consists chiefly of the smallest insects, which they find in the crevices of the bark of trees, or catch nimbly on the wing; they also eat the eggs of insects, small worms, and various kinds of seeds. We have observed this bird, says Mr. Pennant, suspended in the air for a considerable time over a bush in flower, whilst it sung very melodiously. The note does not much differ from that of the common wren, but is very weak. Its song, however, is extremely delicate and pleasing. It may easily be known in winter by its shrill squeak, somewhat resembling the crinking of a grasshopper. Except in the frosts, it continues its song during the whole year.

This is a beautiful but rather rare bird. It is not uncommon in the woods about Oxford, and is also found in Warwickshire, and some other parts of England, and has been observed in Wales and the southern counties of Scotland. Mr. Pennant states that they cross annually from the Orkneys to the Shetland Isles, where they breed, and from which they return before winter. This is a long flight, sixty miles, for so minute and delicate a bird. They are diffused throughout Europe, and have been met with in Asia and America, particularly in Pennsylvania, and seem to bear every change of temperature, from the greatest degree of heat to the severest cold. They remain in England the whole year.

The fly is the *musca demano*. It measures five lines. The thorax is of an iron grey; the abdomen of an orange-brown colour, having a black line down the middle to the end, which is also black. It is found in May and June about stagnant waters.

Golden Crowned Wren's Nest & Eggs. 66

NEST AND EGGS OF THE GOLDEN-CRESTED WREN.

PLATE LXVI.

THE nest here described was artfully hid in a close bunch of ivy, which hung down from the side of an old hazel-tree, about ten feet from the ground. It is nearly of a globular figure, and was placed so as that the mouth leaned a little to the sun; the outside was formed of soft green moss, wove and platted together with wool, spiders' webs, and the white down which grows on the catkins of the willow-tree. The lining consisted of willow down, and a great number of small soft feathers. The whole was a beautiful little structure, well suited to its inhabitant. With the nest, the ivy branch in which it was suspended, is also figured on the plate. There were eight eggs in the nest, of a kind of cream-coloured brown, and destitute of spots; and not larger than they are represented in the figure.

The nest of the golden-crested wren, says Mr. Bingley, is an interesting fabric. It somewhat resembles that of the chaffinch; and is frequently formed amongst the leaves at the tip of the branch of a fir-tree, where it swings about, in high winds, like a pendulum. It is oval, very deep, and has a small hole near the middle, for the ingress and egress of the bird. The materials composing its exterior are different species of moss; and within, it is lined with wool, hair, and feathers. The female lays from ten to eighteen eggs, and not unusually brings up as many young ones. The eggs are in size scarcely larger than peas, of a white colour, and sprinkled with small dull spots.

The nest is sometimes suspended from a branch, by a kind of cordage made of the materials of which the nest is chiefly composed.

There are in India birds which build pendulous nests, and the following singular fact in natural history, is recorded in a letter said to be written by Dr. Buchanan to his friend Mr. Brown, in Calcutta, dated "Borders of Travancore," 18th of October, 1806. "Tell H. who gets all my Natural History and Political Remarks, that I write this at the foot of the lofty mountain called Cape Comorin, whose rocky head seems to overhang its base. The birds which build the pendulous nests are here numerous. At night each of their little habitations is lighted up as if to receive company. The sagacious bird fastens a little bit of clay to the top of the nest, and then picks up a fire-fly and sticks it on the clay, to illuminate the dwelling, which consists of two rooms. Sometimes there are three or four flies fixed to one nest, and their blaze of light in the little cell dazzles the eyes of the bats, which often kill the young of these birds!"

This letter is inserted in the Imperial Magazine, for March, 1822, and, if it be authentic, certainly affords one of the most extraordinary facts ever exhibited in natural history.

Possibly the doctor might be misinformed as to the placing of the clay on the nests, and sticking the flies on it. It is more probable that the fire-flies, which are numerous in the warmer parts of India, might in their flights settle on the nests as places of rest; and that instinct might draw them, under the direction of a kind providence, to frequent the haunts of these birds, and thereby to assist in the protection of their young from the bats.

MOTACILLA TROGLODYTES.

Gm. Linn.—993.

SYLVIA TROGLODYTES.

Penn. Br. Zool.

LE ROITELET LE TROGLODYTE.

Buffon.

THE BROWN WREN.

PLATE LXVII.

THIS little bird measures about three inches and a half in length, and weighs about three drams. The bill is slender, black at the point, dusky at the base. The iris is narrow, and of a pale brown; the pupil black. Over the eye is a line of pale brown; the head, back, wings, and tail, are of a full tawny brown, the feathers being checkered or barred across with black; which barring is most conspicuous on the wings and tail. The throat, breast, and belly, are of a pale dusky buff colour; the last faintly crossed with small brown bars. The legs and feet are of a pale brown. It generally carries the tail erect, and is very active, commonly creeping about hedges and holes, and making but short flights, and when flying moves its wings with such rapidity, that they become invisible. It often appears on the top of heaps of firewood, or by the sides of old walls, whence it disappears in a moment by making its way into some small hole. It seldom, however, remains long concealed, but starts up again, hopping about full of life and spirit, even in the midst of winter, expressing, towards evening, its happiness in cheerful and well-toned notes; and is well known about farm houses and country villages.

This bird, slender as it is in form, is almost the only one that remains

with us during the most severe winter; and it is the only one of the whole feathered creation, which continues its warbling in a season, in which the universal silence of the woods and groves is interrupted only by the croaking of ravens. During a fall of snow it is still better heard, for then it enters the court-yards, the door of the stable, or dairy, seeking among the rubbish for the dead bodies of insects, and partaking at that time of almost any kind of food.

The song of the wren is much admired, being an agreeable soft warble, but louder than could be expected from the size of the bird; and this is continued without intermission through the year. These birds also sing very late in the evening, but not, like the nightingale, after dark.

They are birds of great spirit, and Mr. St. John relates the following story of the bravery and selfishness of a wren. "Three birds had built their nests almost contiguous to each other. A swallow had affixed hers in the corner of a piazza next his house; a bird, called Phœbe, in the other corner; and a wren possessed a little box which I had made on purpose and hung between. These were all quite tame. The wren had for some time shewn signs of dislike to the box which had been given to it. At length it resolved, small as it was, to drive the swallow from its habitation, and, astonishing to say, it succeeded. Impudence overcomes modesty; and this exploit was no sooner performed, than the wren removed every material to its own box with the most admirable dexterity. The signs of triumph appeared very visible; it fluttered its wings with uncommon velocity; and an extravagant joy was perceptible in all its movements. The peaceable swallow, like the passive quaker, sat meekly at a small distance, and never offered the least resistance. But no sooner was the plunder carried away, than the injured bird went to work with unabated ardor, and in a few days the depredations were repaired. To prevent any repetition of the same violence, the wren's box was removed to another part of the house."

This bird is found throughout Europe, and is very common in this country. It is also an inhabitant of Asia.

The ancients gave this bird the name of troglodyte, from a fancied resemblance between its manners and those of a race of men who were said to inhabit dens and caves of the earth.

There is some difference among naturalists in classing and distinguishing the tribe of wrens; a circumstance that might be expected in subjects so minute, and so slightly discriminated by nature.

The fly in the plate is the *musca levidus*. The larger eyes are of a red brown; the thorax of an iron grey, dappled with strokes of black. The scutulum is brownish. The abdomen is blue, having whitish glares, and being tessellated with black, like the vomatoria. The legs are black, and the wings clear. These flies are found in woods, sitting on the bark of trees.

NEST AND EGGS OF THE BROWN WREN.

PLATE LXVIII.

THE wren builds twice a year, in April and June. The nest is a curious fabric, constructed on the outside chiefly of moss, having dried leaves and branches of fern fastened on it with blades of grass. Within this is a coating of wool and fine soft moss, and the lining consists of wool, with which a large quantity of feathers are invariably intermixed. The shape is an oval, smallest at the upper end, with only one small entrance. This nest is generally found in some corner of an out-house, stack of wood, or hole in a wall, near our habitations; but when the wren builds in woods, the nest is generally placed in some bush near the ground, on the stump of a tree, or even on the ground. The materials are generally adapted to the place where it is built: if against a hay-rick, its exterior is composed of hay; if against the side of a tree, covered with lichens, or with green moss; or if it is placed in a bank, its exterior always corresponds with the adjoining surface. The wren does not, as is usual with most other birds, begin the bottom of its nest first. When against a tree, its primary operation is, to trace upon the bark, the outline, and then to fasten it with equal strength to all parts. It closes, in succession, the sides and top, leaving only a small hole for entrance. The female lays from ten to eighteen eggs of a roundish figure; white, and spotted near the larger end, with a slight sprinkling of small, faint, red spots. It frequently brings up as many young as it lays eggs.

An English ornithologist, remarks, that " is strange to admiration, that so small a bird should cover so great a number of eggs; and more strange, that it should feed such a company of young and not miss one, and that in the

dark too." And Mr. Ray says, "it may be ranked among those daily miracles, of which we take no notice, that this bird should feed so great a number of young, without neglecting one, and that also in utter darkness."

Mr. Bolton censures these observations, and says they betray "a strange want of thought. Any one who thinks about it, and compares the dimensions of the window, with the dimensions of the house, within, will instantly perceive, that a wren's nest is more strongly lighted than any gentleman's palace in the kingdom."

But Mr. Bolton does not seem to recollect, that when the wren feeds her young, she stands in the aperture of the nest, which is but just large enough to admit her, and that therefore her operations must be performed in nearly "utter darkness."

In some places this bird is called Kitty Wren.

MOTACILLA SALICARIA.

Gm. Linn. 955.

SYLVIA SALICARIA.

Penn. Br. Zool.

LA FAUVETTE DE ROSEAUX.

Buffon.

SEDGE WARBLER, OR WILLOW LARK.

PLATE LXIX.

THIS elegant little bird is about the size of the Black-cap. The bill is black; the head brown, marked with dusky streaks down the middle of the feathers; over each eye is a white line, and over that a black one; the cheeks brown; the throat a light yellow; the breast white; the belly and covert feathers beneath the tail, pale buff. The hind part of the neck and back, olive-brown, shaded with dark spots; the coverts of the tail and wings dusky edged with olive-brown; the wing and tail feathers brown; the tail fan-shaped, the middle feathers being longest, and these towards the sides gradually shortening, so that the end is circular when spread. The thighs are yellow, the legs dusky, and the hinder claws long and much bent.

This bird inhabits watery places, where the sedges, rushes, and reeds abound. It also frequents the sides of rivers and ponds where there are any kind of covert, and sculks like the Grasshopper-Warbler, so that it is not often seen. The song of this species has sometimes been ascribed to the Reed-Bunting, a mistake which has originated from the circumstance of both species breeding in the same places, and the Reed-Bunting being conspicuous on the upper branches of a tree, while the Warbler, concealed in the thickest part, is heard aloud. It has been remarked, that if it be silent, a stone thrown

into the bush will cause it to sing immediately, and that it will also sing during a moonlight night. It sometimes sings all night, and so melodiously that it has often been mistaken for the Nightingale. Its pipe is loud and clear, and it is so expert at imitating the notes of other birds, and particularly those of the sparrow, swallow, and sky-lark, that it is often called the English Mocking-bird. It executes its imitations rather in a hurried, but very pleasing, manner.

These birds are common in England, and are found in most parts of Europe. It is migratory, coming to this Country in April and leaving again in September.

The caterpillar of the admirable butterfly *papilio atalanta*, figured on the annexed plate, feeds on nettles, changes to a chrysalis in July and to a butterfly in August. It frequents woods and gardens, and is common in the neighbourhood of London. On being disturbed or pursued, it flies high, and alights near the tops of trees.

The small fly is the *musca pervenio*. It is about five lines in length; the thorax is of a brownish green, the abdomen of a fine glossy blue, and the legs black.

NEST AND EGGS OF THE SEDGE WARBLER.

PLATE LXX.

THE sedge warbler, or willow lark, which is also called sedge-bird, and reed fauvette, makes a pretty round nest, among sedges or rushes, and sometimes on the trunk of a low willow, beside still rivers and ponds. The nest is generally composed of straw and dried fibres, bound with the stalks of plants and flowery panicles of grass; the middle consists of wool, moss, and cows' hair, and the lining is a mixture of black and white hairs, with a few fine fibres of roots intermixed. The eggs are five or six in number, of a dirty white, mottled but not spotted with dull olive-brown; and having sometimes one or two black lines near the big end.

M. Buffon observes that the young ones, though tender and not yet fledged, will desert the nest if touched, or if a person go too near it. This disposition, which is common to all the fauvettes, seems to characterise the instinctive wildness of the whole genus.

Sedge Bird Nest & Eggs. 70

Reed Warbler.

MOTACILLA ARUNDINACEA.

Gm. Linn. 992.

SYLVIA ARUNDINACIA.

Penn. Br. Zool.

LESSER REED SPARROW.

Will. Orn. 144?—*Raii. Syn. Av.* 47?

REED WARBLER.

PLATE LXXI.

THE bill is black at the point, flesh-colored at the base; the eyes are brown; the inside of the mouth orange colour; from the bill to the eye is a pale line or stripe of tawny white feathers; the whole upper side of the bird is of a dusky olive-brown, the wings and tail of the same colour, but rather darker; the tail when spread is fan-shaped; the throat is white, and the breast and belly of a pale buff colour; the feathers under the tail white; the legs and feet a light olive.

"An account of this bird was communicated to the Royal Society, as a new British species, by the late Rev. Mr. Lightfoot, in 1785, and was published in the Philosophycal Transactions, vol. 75, part the 1st. Mr. Lightfoot, firstd iscovered it on the banks of the river Colne, near Uxbridge. He very properly conjectures, that the bird was not confined to that place alone; for, says Mr. Bolton, it was known to me long before that time, though I knew no name for it. Its haunts in Yorkshire, are rushy places near rivulets, and its actions greatly resemble those of the white-throat. These birds have also been sent to me from Lancashire, shot on the river Roch."

"The cock as a sweet song; his notespartake of those of the white-throat, and those of the black-cap, and are often repeated with a shaking of the

wings and tail, while he is perched on some low bush not far from the ground."

Mr. Montagu has found this species along the coasts of Kent and Sussex, from Sandwich to Arundel, among the reedy pools and ditches, especially on Romney Marsh. He says it makes its appearance in April, or the beginning of May, and departs in September; and that it is distinguishable from the sedge-warbler by the base of the bill being broader; in having no white stroke over the eye, and in the whole upper parts being of one plain colour. Its note is simple and plaintive.

The butterfly figured on this plate, is called the small garden white, *papilio rapæ;* the caterpillar feeds on cabbage, changes to a chrysalis in September, and flies the following May. A the male, B the female.

Reed Warbler Nest & Eggs 7?

NEST AND EGGS OF THE REED WARBLER.

PLATE LXXII.

THE nest of this bird is sometimes placed among the reeds which it frequents, but that here delineated was built in a low hazel-tree; the outside is composed of weeds and moss, woven together with stalks of plants and blades of grass; the middle coat is made of the same stuff, but softer and finer, and the lining consists of willow-down and black hairs. The whole is loosely wound about, not with packthread, as in Mr. Lightfoot's nest, but with stout double-twined woollen yarn, such as the poor people make stockings of. Among several nests of this bird which I have seen, says Mr. Bolton, this is the only one where any kind of twined bandage was made use of. The eggs are five or six in number, of a dusky white, spotted with dark spots.

SYLVIA LOCUSTELLA.

Penn. Br. Zool.

THE GRASSHOPPER LARK, OR WARBLER.

PLATE LXXIII.

THE annexed plate was copied from a drawing made by that eminent ornithologist, Dr. Latham, and sent by him to Mr. Bolton. The following description is also taken from the fourth volume of his general Synopsis of birds. "Size small; length between five and six inches; bill dusky; "between the bill and eyes white; the color of the upper parts of the "body, greenish brown, each feather dusky in the middle. Under parts, "yellowish white, with a dusky tinge on the breast; tail wedge-sha-"ped, rather long, the outer tips of the feathers pale; legs dusky yellow; "the hind claw short, and sufficiently crooked to prove that it does "not belong to the lark genus, among which it has been placed by "all authors before Mr. Pennant." This is the bird described by Mr. Ray as having the note of the grasshopper, but louder and shriller. It is a very artful bird, will sculk in the middle and thickest part of the hedge, and keep running along for a hundred yards together, nor can it be forced out but with the greatest difficulty; it is from this covert that it emits its note, which so much resembles that of the insect from which it derives its name, as generally to be mistaken for it. In the height of summer it chirps the whole night, and its note is observed to cease about the latter end of July. This bird has been considered by recent ornithologists as *la locustelle* of M. Buffon, but his description of that bird corresponds with the sedge-warbler, and is in fact merely a translation from the *British Zoology*,

to which he refers. Mr. Montagu, in the *Ornithological Dictionary*, gives a reference in this instance, as he does in that of the pipit lark, to the *alauda trivialis* of *linnæus*, but it seems evident that neither the illustrious Swede, nor his editor, *Gmelin*, were acquainted with the species. Notwithstanding the respect due to Mr Montagu, it has therefore been thought most proper on the present occasion to omit the reference to Linnæus given by Mr. Bolton, and to rely on the accurate discrimination of Dr. Latham and Mr. Pennant. In Bewick's *British Birds* the former arrangement is retained, and it is very remarkable that in the 5th edition of Mr. Bingley's Animal Biography, published in 1820, 12mo, vol. 2, p. 133, the description of this bird is closed with the following sentence: "Although these birds are able to "perch on small twigs, yet their hinder claw, as in most of the other species, "is of considerable length." This is in direct opposition to the statements both of Dr. Latham and Mr. Pennant, who say that "the hind claw is short and crooked."

In the spring the cock bird sometimes perches on a lofty branch, singing with much emotion; at intervals he rises to a considerable height, hovers a few seconds, and drops almost on the same spot, continuing to sing all the time; his tones are soft, clear, and melodious. Nothing, says the Rev. Mr. White, can be more amusing than the sibilous whisper of this little bird, which seems to be close by, though it may be a hundred yards distant; and when close at your ear, is scarcely any louder than when a great way off. The grasshopper lark usually begins its note about the middle of April, and did we not know that the grasshopper insects are not yet hatched, it would not be easy to persuade one's self that the note uttered was in reality that of a bird.

During the season of love, the male has great delight in uttering its song from some bush adjacent to its nest. Its warbling is extremely simple, but at the same time is sweet, and by no means inharmonious. These birds also sing during their flight.

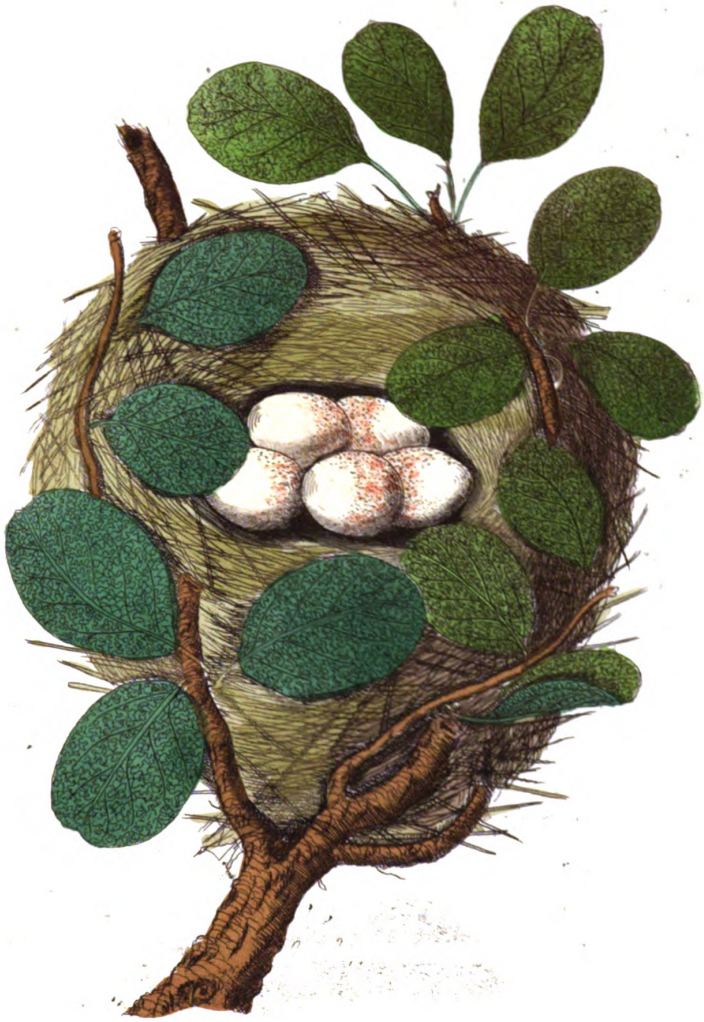
In the *Catalogus Avium* of Mr. Edward Foster, Junr. the arrangement of this bird by Dr. Latham and Mr. Pennant is followed.

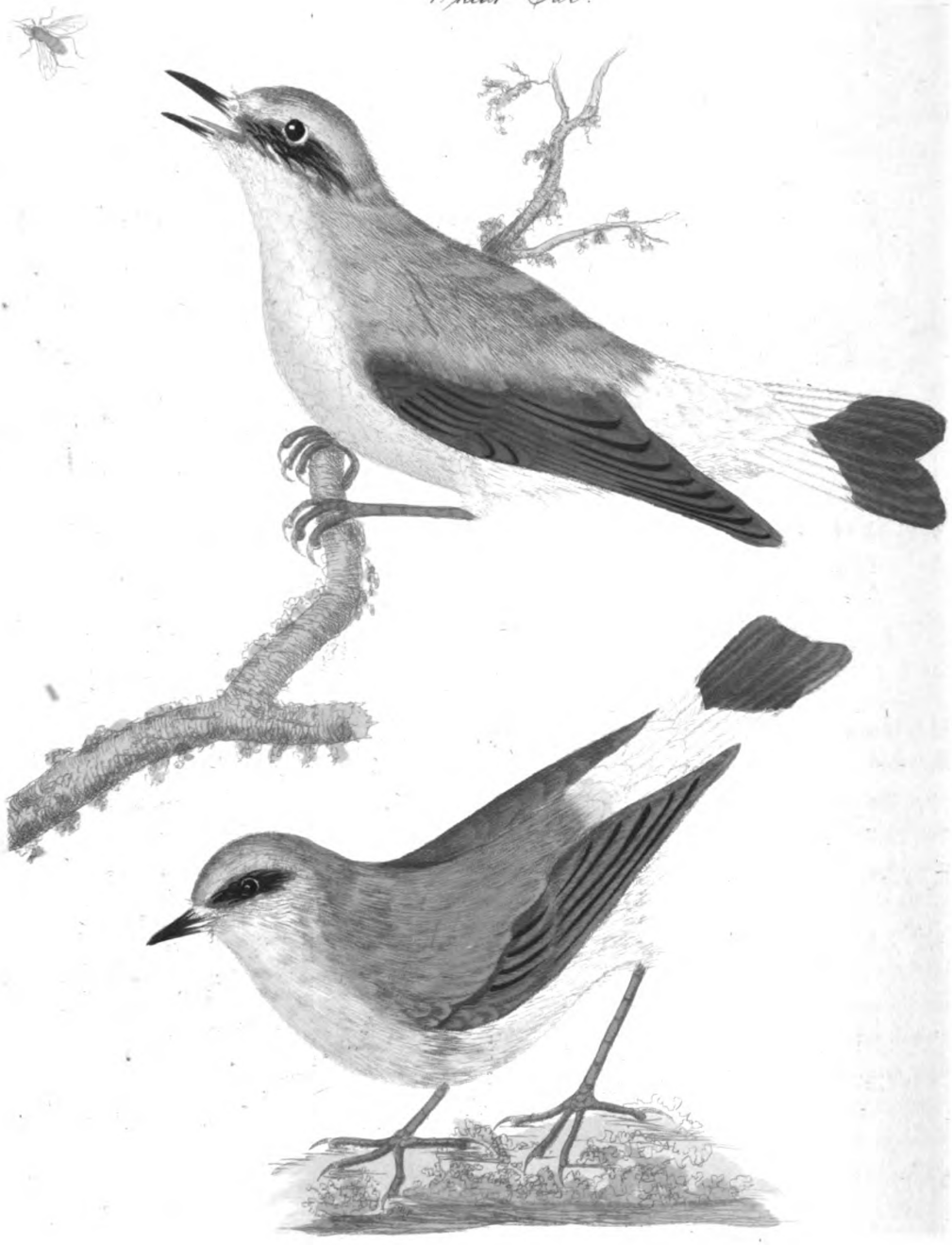
NEST AND EGGS OF THE GRASSHOPPER WARBLER.

PLATE LXXIV.

THE nest of this bird is found in some solitary place, and generally concealed under a green turf. That from which the annexed plate is given was placed in a branch of the round-leafed willow, which grew near, and rested on the ground, in a very shady situation; the outside consisted wholly of small stems of dried grass and other plants; the next coat was of the same materials, selected softer and finer; and in the lining a few fine fibres of roots, and a few hairs were mixed. The eggs in this nest, as is generally the case, were five; of a dull white, with a tinge of green, and marked at the larger end with brown-red spots. This nest, like the bird to which it belongs, is so artfully concealed as to be very rarely seen. The young ones are not unfrequently devoured by snakes.

Grass hopper Lark's Nest & Eggs. 71





MOTACILLA ÆNANTHE.

Gm. Linn. 966.

SYLVIA ÆNANTHE.

Penn. Br. Zool.

LE MOTTEAUX, OU LE CUL-BLANC.

Buffon.

THE WHEATEAR, WHITE-RUMP, OR FALLOWSMICH.

PLATE LXXV.

THE bill, eyes, and inside of the mouth, are black; the brow, just above the bill, white; the white is continued in a line over the eyes, and terminates above the ears; immediately below this is a broad black stroke passing across each eye to the hind part of the head; the top of the head and back are of a greyish lead colour; the rump a pure white. The tail consists of twelve feathers; the two middlemost are black, except about half an inch of white towards the root; all the others are white with black tips. The throat, sides of the neck, and upper part of the breast, are of a very pale brown; and in the male birds when they first arrive here, a pretty blush of crimson covers these parts, but it fades in the course of the summer; the wings are black; and the legs and feet, long, slender, and black. In the female, the white line over the bill and eyes is wanting; the black line in which the eyes are placed is narrow, and not extended over the ears; the head and back are dusky brown, and the wings of a darker brown. But these birds are liable to great variation in colour.

The cock, in breeding time, has a pleasing soft song.

The wheatear begins to visit us in the middle of March, and continues coming till the middle of May. The females arrive about a fortnight before the males. They frequent warrens, downs, and the edges of hills, especially such as are fenced with stone walls.

These birds are met with as far North as Greenland, and as far East as India; and inhabit most parts of Europe. They disappear in September from the northern parts of this Kingdom, but remain in Hampshire and Sussex through the winter. Their food is insects and small worms, in search of which they frequent new-tilled grounds, and are assiduous in following the plough. They are always fatter in rainy weather than in dry, on account of the greater number of earth worms which then make their appearance. They generally, however, grow very fat in Autumn and are esteemed a great delicacy. Their chief autumnal rendezvous in Sussex is about Eastbourn, where they are taken by the shepherds in great numbers, by snares made of horsehair placed under a long turf; being very timid birds, the motion of a cloud, or the appearance of a hawk, will drive them for shelter into those traps. An instance is on record of a shepherd once taking eighty-four dozen in a day. The traps are first set every year on the twenty-fifth of July; soon after which they are caught in astonishing numbers, considering they are not gregarious, and that more than two or three are scarcely ever seen flying together. The number annually ensnared in the district of Eastbourn alone, is said to amount to nearly two thousand dozen. The birds caught are chiefly young ones, and they are invariably found in the greatest number when an easterly wind prevails; they always come against the wind. Great quantities of these birds are eaten on the spot by the inhabitants; others are sent to the London poulterers, and many are potted, being as much esteemed in England as the ortolans are on the continent. They are generally roasted wrapped up in vine leaves, on account of the great tenderness of the flesh, insomuch that it is difficult to pluck without bruising them. They are usually sold at sixpence per dozen, and though so many are taken, it is extraordinary that the numbers which return the following year do not appear to be at all lessened. The quantity taken, however, depends, in some measure, upon the warmth of

the months of July and August. The reason of their being so numerous in the neighbourhood of Eastbourn is, in Mr. Pennant's opinion, that the adjacent hills are covered with wild thyme, (*thymus acinos*), to which a certain fly resorts, not only for food but to deposit its eggs, and in pursuit of those insects the wheatear repairs to those hills.

After the return of the wheatear in Sweden there is seldom any severe frost, and therefore the peasants in Upland have this proverb; *when you see the white wagtail you may turn your sheep into the fields, and when you see the wheatear you may sow your grain.* In Sweden the sheep are housed all winter.

Near Uxbridge, the following variety was shot. The crown and back were of a tawny brown; the under side of the neck of a dull brownish yellow; from the bill to the eye passed an obscure dusky line; the quill feathers and secondaries were black, edged with tawny and white; the tail like that of the common wheatear, but the edges marked with pale tawny. There are ten or eleven varieties of this genus.

Mr. Couch, of Pelperro, states, that, in some parts of Cornwall, the wheatear is called a knacker; that these birds arrive there about the middle of March, usually between nine o'clock A. M. and the middle of the day; which, as they do not fly swiftly, leads to the conclusion that they take wing early in the morning. From the exhausted state they are in when they arrive, many probably perish in the sea. The south of France is supposed to be their winter residence.

The little fly on the plate is the *musca vagus*; it measures three lines in length; the antennæ are long; the head, thorax, and abdomen, are of a reddish brown colour; and it has a small speck in the middle of each wing.

NEST AND EGGS OF THE WHEATEAR.

PLATE LXXVI.

THE wheatear builds under shelter of a tuft or clod, sometimes on newly ploughed lands, or under stones, or old timber, in cliffs, rabbet-burrows, or in a wall facing the south, and sheltered on the north side. The nest is large and carefully constructed. It is composed of various substances; straw, grass, rushes, moss, wool, and rabbets' fur, and lined with feathers intermixed with horsehair. It is nearly flat, having but a very shallow cavity. The eggs are from five to eight in number, of a light blue colour, having the larger end encompassed with a circle of a somewhat deeper hue, but without spots.

The young are generally hatched about the middle of May. The birds when fullgrown are from five to six inches in length, and weigh rather more than an ounce. They are known in different parts of the country by a great variety of names. In addition to the three already mentioned, they are called clodhopper, shepherd's bird, fallowfinch, chicel, or snorter.

Wheat Ear Nest & Eggs.

MOTACILLA RUBETRA.

Gm. Linn.—967.

SYLVIA RUBETRA.

Penn. Br. Zool.

LE GRAND TRAQUET, OU LE TARIER.

Buffon.

THE WHINCHAT OR EUTICK.

PLATE LXXVII.

THE bill and eyes are black; over each eye is a narrow white stroke, beneath that a broad bed of black, which extends from the bill to the hind part of the head; the head and back are of a pale reddish brown, regularly spotted with black; the rump and covert feathers of the tail are tawny. The tail consists of twelve feathers; their bottoms are white, the rest black; as are also the wing feathers, except the margins, which are a dusky brown. The first wing coverts are mixed with white and black; the second are wholly white, which make a conspicuous white mark on the extended wing; the throat is white; the breast of a tawny brown; the belly and under coverts of the tail, white; the legs and feet are long, slender, and black. The colours of the female are far less pleasing; in lieu of the white and black marks on the cheeks, is one of broad pale brown; and the white on the wings is in far less quantity than on those of the male.

They inhabit meadows, and sit on a wall, or some little hillock, frequently stooping, raising the tail, and repeating a cry like the word, *eutick*. The male mounts a tree to sing; his song is agreeable, and the notes well varied; and his voice is astonishingly loud and shrill, considering the smallness of the organ.

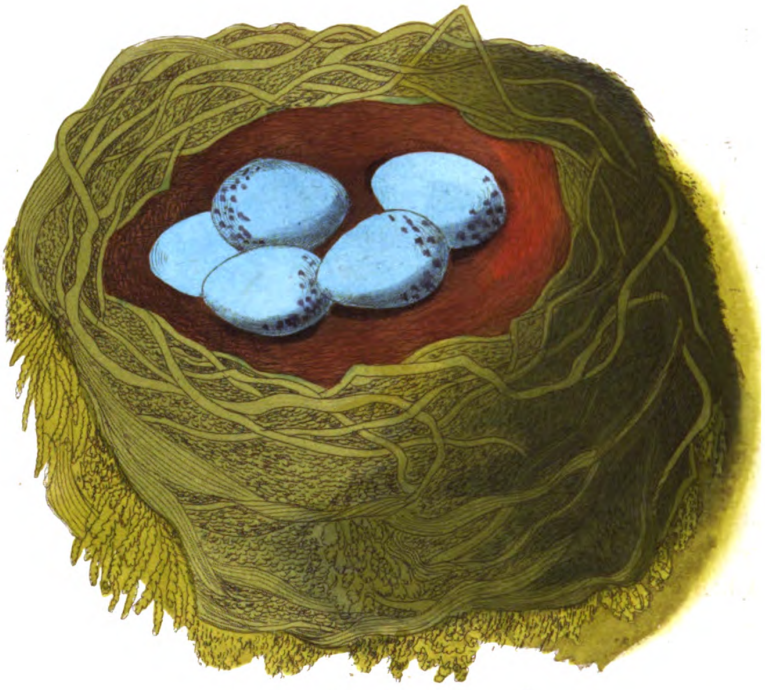
They are also frequently found on heaths and moors, and delight to perch on the whin, gorse, or furze, as their name betokens. When Linnæus was in England, and first saw this beautiful shrub, the Furze, covered with its rich, golden yellow blossoms, he clasped his hands, and dropped on his knees, overcome with wonder and delight.

The whinchat is a solitary bird. It feeds on worms, flies, and small insects.

In the northern parts of England it disappears in winter, but its migration is only partial, as it is seen in some of the southern Counties at that season. Many, however, winter in Italy, where they are common, as they are also in France, Germany, and the temperate parts of Russia; but they are less numerous there, as well as in England, than the stonechat. About the end of summer these birds are very fat, and are then said to be scarcely inferior in delicacy to the Ortolan.

There are several varieties of this genus.

Whinchat . Nest & Eggs. 78



NEST AND EGGS OF THE WHINCHAT.

PLATE LXXVIII.

THIS bird makes its nest in a field or meadow, and not unfrequently on heaths, under the shelter of some tuft of grass or weeds, much in the same manner as the larks. It is composed of dry grass, and cow's hair, placed in layers one over another. The first or outer coat is dry grass, the next hair, then another of finer grass, and upon that the lining, which is wholly hair. The diameter of the cavity is three inches, the depth not quite one inch. This bird seems very indifferent with regard to the beauty of her nest, the materials being hurried together in a very careless and negligent manner, and, apparently, with great dispatch. The eggs are five or six, of a glossy blue, and sometimes have a few dark rusty spots near the larger end. The winchats produces two or three broods in a year.

MOTACILLA SYLVIA.

Gm. Linn. 956.

SYLVIA CINEREA.

Penn. Br. Zool.

LA FAUVETTE GRISE, OU LA GRISETTE.

Buffon.

THE WHITE THROAT.

PLATE LXXIX.

THE bill of this bird is black at the point and horn-color at the base; the mouth orange-colour; the iris of the eyes, brown; the pupil large and black; the cheeks are olive brown; the head of a brownish ash-color; the throat white; the breast and belly white tinged with red; (in the female wholly white;) the back is of a red brown; the feathers of the tail are dusky with red-brown edges, except the two outmost feathers on each side, which have their outer webs white; the quill and covert feathers of the wings are dusky with red-brown edges, except the first quill, which has its outer border white; the thighs are white; the legs and feet of a dull orange color, and the inner fore toe adheres to the middle one. It is about five inches and a half long.

There is a variety which is reddish ash-color above, and reddish white beneath, with the white; the outmost tail feathers, on the upper part of the inner side, and the whole of the outer side, white.

This bird arrives with the redstart, blackcap, and other spring birds, about the middle of April, and quits us in Autumn, at the same time with them. In summer they frequent gardens to feast on cherries and currants; but when they first arrive they are found among the thickets and hedges feeding

Whitethroat.

Museum Leverian.

on insects and the various wild berries. It is often heard in the midst of a thick covert to utter a pretty constant grating call of *cha, cha, cha,* which it discontinues as soon as it is disturbed, flitting before the passenger from bush to bush, singing as it flies along, and sometimes mounting up a little height into the air, as if it were attempting to imitate the lark, both in its motions and song; but in these it falls greatly short, and its frequently repeated notes have but little melody. His singing is attended with odd gesticulations of the wings, while seated on some low bush, with head erect, mouth wide open, and throat distended, he pours out his notes, which, though harsh, are uttered with great boldness and spirit. The power of song is confined to the male bird, and is exerted only in breeding time. Mr. Couch remarks, that it arrives in Cornwall about the same time as the swallow, and that it differs from most of our summer birds of passage, in not being attached to any one place, so that it may be questioned if any thing but accident brings it to the same district in two following years.

In Mr. Stillingfleet's Calendar of Flora its return hither is noticed on the 28th of April, 1755. In Mr. White's Naturalist's Calendar it is placed between the 14th of April and the 14th of May.

It is a shy and wild bird, avoiding the haunts of man; and seems of a pugnacious disposition, singing with an erected crest, and in attitudes of defiance. It is very common in the inclosed parts of the country, as well as throughout Europe.

There is another bird of this kind named by Dr. Latham and Mr. Pennant, the lesser white-throat, *sylvia sylviella;* it is rather less than the preceding species; the plumage is nearly similar, but the tail is of the same color with the back, rather longer than in the former, and slightly forked. It appears in May and June about Bulstrode in Buckinghamshire, and builds in brambles and small bushes. It was first noticed by the Rev. John Lightfoot. Mr. Montagu conjectures that this species is confined to Gloucestershire, Wiltshire, and the eastern part of the kingdom, and is not found in Devonshire or Cornwall. Its bill is shorter than that of the common whitethroat, the legs are darker, and the whole under parts of the plumage whiter; and the upper parts are of a pale cinereous brown.

The butterfly on this plate is the *dark clouded yellow papilio electra;* it

frequents meadows in the month of August, but is very rare in most parts of this kingdom.

The small fly, *musca deduco*, is about four lines in length; the larger eyes are of a brown red; the thorax is of an orange-dun color, having two black spots in the middle; the abdomen is of an orange-clay color, having four round spots thereon, and two small specks between; the legs are brown, and the wings clear.

White Throat Nest & Egg.

NEST AND EGGS OF THE WHITE-THROAT.

PLATE LXXX.

THE white-throat builds its nest in some low bush or briar, two or three feet from the ground, or among nettles or other luxuriantly-growing plants. The materials of the nest here delineated were chiefly the dried stems of woodroof and goose-grass, mixed with other small stalks, and bound together with spiders' webs. A thin coat of these substances served for the whole nest, there being only a few hairs put upon it for a lining; so that the whole, when finished, if held up against the light, appeared like a piece of indifferent netting; but by reason of the roughness of the goose-grass, and the tenacity of the spiders' webs, the nest retained its figure after handling, much better than many others which are of a heavier construction. But the materials are not always alike. The white-throat lays five or six eggs of a dull green-gray, thickly marked with dark-brown spots, so numerous at the larger end as to appear in blotches.

TO CONCLUDE; there are many persons who will not deign to bestow even a look upon a work of this kind, being engaged in the more important avocations of the toilet or the table, the theatre or the ball-room, the card-party or the Exchange. Some are so eager to rush into the contents of a book, that they invariably neglect all prefaces; and may be compared to a hungry glutton at a feast, who seizes on the first dish within his reach, without stopping to see that his napkin is properly adjusted, and his other requisites in such order as may enable him to pursue his gratification with celerity and success. Others may be found who will condescend to *dip*, as it is called, into such a book, attracted perhaps by the pictures, but would as soon think of eating the covers as reading the preface. When a bird-catcher sets his lime-twigs he disperses them in various places; so here, it is possible that those who never alight upon a preface, may be caught by a conclusion. Some persons are so superlatively wise, and their pursuits are chosen with such profound skill, that a book upon Natural History excites the same kind of contemptuous ridicule that was bestowed by Dr. Samuel Johnson upon a gentleman who entertained a party one evening, where Johnson was present, by relating the natural history of the mouse. As soon as the gentleman took his leave, the doctor exclaimed, "I wonder what he would have said if he had seen a lion!" His wonder would probably have been less excited if the gentleman had described a brute of another kind, called a bear! If these very wise folks were asked one very simple

question they would be sadly puzzled for an answer. What is the proper distinction between the three kingdoms of nature, the animal, vegetable and mineral? "Nothing, says Mr. Smellie, in his Philosophy of Natural History, "is apparently more easy than to distinguish an animal from a plant; and yet the proper distinction has puzzled the most acute inquiries, and perhaps exceeds the limits of human capacity." Even the great Linnæus broke his shins against this stumbling block.

Pursuits of this kind are often snubbed by the common question, of what use are they? one mode of reply is to ask another question. When the air-balloon was first invented, some one sneeringly asked Dr. Franklin, what is the use of this? To which he replied, what is the use of a new-born infant? It may become a man!

When electrical experiments first began to make a noise in the world, Samuel Klingenstierna was sent for by a northern court to shew and explain some of the electrical phœnomena. When the exhibition was over, one of the spectators, a man of high rank, said with a sneer, pray Mr. Klingenstierna what is the use of all this? to which he replied, with some sharpness, Sir, this very objection was made to me by J. C. This man, J. C. was a very rich, ignorant citizen, whose chief delight, next to amazing wealth, was probably paddling in turtle-soup or pawing a haunch of venison. Such men as these resemble more the brute creation than rational creatures. To them, whatever is curious is disgusting, and inquiries into nature are mere folly. And yet such men, in this great enlighted nation, are sometimes selected as legislators!!! When John Bartscius arrived at Surinam, where he went by the recommendation of Linnæus, to make observations in natural history, he was despised for looking after plants and insects. The inhabitants there thought nothing worth minding but what belonged to sugar and coffee plantations. Professor Kalm, in Canada, and Dr. Hasselquist, at Cairo, met with the same kind of people. When Linnæus was gathering and describing the rein-deer-fly on the Lapland mountains, the inhabitants wondered and laughed at him for troubling his head about catching insects; and he and his companions were stared at as a spectacle in their journey through Oeland.

Linnæus was in the habit of enlivening his lectures by the introduction of anecdotes and fables, and in reading upon insects to his pupils he engaged their attention by the following Apologue. "Once upon a time the seven "wise men of Greece were met together at Athens, and it was proposed that "every one of them should mention what he thought the greatest wonder in "the creation. One of them, of higher conceptions than the rest, proposed "the opinion of some of the astronomers about the fixed stars, which they "believed to be so many suns, that had each their planets rolling about them, "and were stored with planets and animals like this earth. Fixed with this "thought they agreed to supplicate Jupiter, that he would at least permit "them to take a journey to the moon, and stay there three days, in order "to see the wonders of that place, and give an account of them at their re-"turn. Jupiter consented, and ordered them to assemble on a high moun-"tain where there should be a cloud ready to convey them to the place they "desired to see. They selected proper companions to assist them in de-"scribing and painting the objects they should meet with. At length they "arrived at the moon, and found a palace there well fitted up for their recep-"tion. The next day, being very much fatigued with their journey, they "kept quiet at home till noon; and, being still faint, they refreshed them-"selves with a most delicious entertainment, which they relished so well, "that it overcame their curiosity. This day they only saw through the "windows that delightful spot, adorned with the most beautiful flowers, to "which the beams of the sun gave an uncommon lustre, and heard the sing-"ing of most melodious birds till evening came on. The next day they "rose very early, in order to begin their observations; but some very beau-"tiful young ladies of the country, coming to make them a visit, advised "them first to recruit their strength before they exposed themselves to the "laborious task they were about to undertake.

"The delicate meats, the rich wines, and the beauty of the damsels, pre-"vailed over the resolution of the strangers. A fine concert of music is in-"troduced, the young ones begin to dance, and all is turned to jollity; so "that this whole day was spent in gallantry, till some of the neighbouring in-"habitants, growing envious of their mirth, rushed in with drawn swords. "The elder part of the company tried to appease the younger, promising the

"very next day they would bring the rioters to justice. This they per-
"formed, and the third day the cause was heard; and, what with accusations,
"pleadings, exceptions, and the judgment itself, the whole day was taken up
"on which the term set by Jupiter expired. On their return to Greece all
"the country flocked in upon them to hear the wonders of the moon des-
"cribed; but all they could tell was, for that was all they knew, that the
"ground was covered with green, intermixed with flowers, and that the birds
"sang amongst the branches of the trees; but what kinds of flowers they saw,
"or what kinds of birds they heard, they were totally ignorant. Upon which
"they were treated every where with contempt!" If we apply this fable to men of the present age, we shall perceive a very just similitude. By the three days the fable denotes the three ages of man. First, *youth*, in which we are too feeble in every respect to look into the works of the Creator: all that season is given up to idleness, luxury, and pastime. Secondly, *manhood*, in which men are employed in settling, marrying, educating children, providing fortunes for them, and raising a family. Thirdly, *old age*, in which, after having made their fortunes, they are overwhelmed with lawsuits, and proceedings relating to their estates.

Thus it frequently happens that men never consider to what end they were destined, and why they were brought into the world.

It is but by the two books of Creation and Revelation that we can acquire any knowledge of the Creator; and it is not less a pleasure than a duty to study them with the deepest care and attention. Let us, then, uninfluenced by the sneers of those who think that Life ought to be employed in an insatiable pursuit of wealth, a perpetual grin, or a noisy roar of mirth; let us assiduously turn over those volumes, leaf by leaf, and make ourselves as thoroughly acquainted with their contents as our limited faculties will admit. In this employment our hearts will be purified, our understandings elevated, and we shall be better fitted to enjoy and glorify God both here and hereafter. Those who have been most eminent in these pursuits have been most remarkable for their deep reverence for the greatest and best of Beings. Newton never mentioned the name of God with his hat on, or without a sensible pause in his conversation. Haller, Euler, Boyle, and Locke, were equally serious and devout. Some of the most distinguished

attributes of the mind of Liunæus were his religious sentiments, and his profound adoration of the Deity. Whenever he had an opportunity of expatiating on the greatness, the providence, and omnipotence of God, which frequently happened in his lectures and botanical excursions, his heart glowed with a celestial fire, and his mouth poured forth torrents of admirable eloquence. Over the door of the hall in which he delivered his lectures, was the following inscription: "Innocui vivite! Numen adest!" Live guiltless! God observes you!

This world abounds with wonders, and those who pass by them with neglect or indifference, deserve to enjoy none of the pleasures and advantages which they afford. Have the flowers no beauty, no fragrance? the birds no elegance, no music? Are not all our senses supplied through them with the highest gratifications? We are under frequent obligations even to insects for our clothing and its colors. Silk and cochineal, independent of their mercantile value, are articles of importance to some among us. The Tyrian dye was obtained from a muscle, and is said by some writers to have been discovered by a dog eating one of those fish on the seashore, by which his mouth was so stained as to attract the notice of his master.

Birds, even singing birds, might be made useful to us in the construction of a Natural Calendar. The times of the arrival and departure of migratory birds, if they were accurately observed, would instruct us to do many things in the fields and gardens at the most proper time. Peter the great, of Muscovy, did not think it beneath his attention to endeavour to enliven his new seat of empire by sending for colonies of birds from other parts, as they were scarce where he resided. Though Mr. Daines Barrington, in his essay on the singing of birds, has expressed some doubt of the truth of this statement, yet it is generally believed, and is very probable.

Birds were held in great respect by the Ancients. The appearance of the kite in Greece was looked upon as the sign of spring. When the Cuckoo appeared in Egypt and Phœnicia it is said to have pointed out to the inhabitants the proper time for wheat and barley harvest. In the Comedy of the *Birds*, by Aristophanes, one of them says, "the greatest blessings that can happen to you mortals are derived from us. We shew you the seasons. The crane points out the time for sowing, when she flies with her warning

notes into Egypt; she bids the sailor hang up his rudder and take his rest, and every prudent man provide himself with winter garments. Next the kite appearing, proclaims that it is time to shear your sheep. Then the swallow informs you that it is proper to put on summer clothes. Birds gained a wonderful authority among mankind, till at last no affair of consequence, either public or private, was undertaken without consulting them. They were looked upon as the interpreters of the Gods, and when men considered the wonderful migration of birds, how they disappeared, and appeared again at stated times, and could give no guess where they went, it was almost natural to suppose, that they retired somewhere out of the sphere of this earth, and perhaps approached the etherial regions, where they might hear the converse of the Gods, and thence be enabled to predict events. The use of a Natural calendar, if accurately made, would doubtless be great, for those predictions which have some natural cause have a necessary effect. It is astonishing to observe the conformity between vegetation and the arrival of certain birds of passage. Linnæus says, that the *wood anemone* blows from the arrival of the *swallow*. In Mr. Stillingfleet's diary for the year 1755, it is stated, that the *swallow* appeared on the 6th of April, and the *wood anemone* was in blow the 10th. Linnæus says, that the *marsh marygold* blows when the *cuckoo* sings, and such is the case always in this country. In the Greek language the same word signifies a *cuckoo* and *a young fig*, and the reason given for this, is, that in Greece both appeared at the same time. In this country the arrival of the *cuckoo* is the signal for many flowers coming into blow. Hesiod says, that if it should happen to rain for three days together when the *cuckoo* sings, then late sowing will be as good as early sowing: that, when *snails* begin to creep out of their holes, and to climb up plants, you must leave off digging about *vines*, and take to pruning. In Norfolk, some husbandmen have remarked that when *oak catkins* begin to shed their seed it is a proper time to sow *barley*. The prudent gardener, says Mr. Stillingfleet, never ventures to put his house plants out, till the mulberry leaf is of a certain growth. In the description of the *wheatear*, in the foregoing pages, a useful proverb, current among the Swedish peasantry, is given. In the Isle of Man the fishermen depend upon the *herring gull, larus fuscus*, to point out the shoals of herrings as soon as they arrive, which they

always do; and there is consequently in that Island a penalty upon shooting gulls. Numerous similar observations might be added, were it proper to extend this valedictory address. Many of the foregoing facts and remarks are extracted from Stillingfleet's *Miscellaneous Tracts on Natural History*, and are introduced here in the hope of awakening a disposition to observe the appearances of natural objects, and thereby to furnish an amusing, instructing, and purifying exercise for the mind. One more extract, which has already been made use of by Mr. Pennant, but which can scarcely be too often repeated, shall close these Volumes.

"From a partial consideration of things, we are very apt to criticise what we ought to admire; to look upon as useless what perhaps we should own to be of infinite advantage to us, did we see a little farther; to be peevish where we ought to give thanks, and at the same time to ridicule those who employ their time and thoughts in examining what we were, what, indeed, some of us assuredly were; created and appointed to study. In short, we are too apt to treat the Almighty worse than a rational man would treat a good mechanic; whose works he would either thoroughly examine, or be ashamed to find any fault with them. This is the effect of a partial consideration of nature; but he who has candour of mind and leisure to look farther will be inclined to cry out:

"How wond'rous is this scene! where all is form'd
With number, weight, and measure! all designed
For some great end! where not alone the plant
Of stately growth; the herb of glorious hue,
Or food-full substance; not the lab'ring steed,
The herd, and flock that feed us; not the mine
That yields us stores for elegance and use;
The sea that loads our table, and conveys
The wanderer, man, from clime to clime; with all
Those rolling spheres, that from on high shed down
Their kindly influence; not these alone,
Which strike ev'n eyes incurious, but each moss,
Each shell, each crawling insect, holds a rank
Important in the plan of Him who framed
This scale of beings; holds a rank, which lost,

Would break the chain, and leave behind a gap
Which Nature's self would rue. Almighty Being!
Cause and support of all things! Can I view
These objects of my wonder; can I feel
These fine sensations, and not think of Thee?
Thou who dost through the lengthen'd round of time;
Dost through th' immensity of space exist
Alone; shalt Thou alone excluded be
From this thy universe? Shall feeble man
Think it beneath his proud philosophy
To call for Thy assistance, and pretend
To frame a world, who cannot frame a clod!
Not to know Thee, is not to know ourselves—
Is to know nothing—nothing worth the care
Of man's exalted spirit,—all becomes,
Without Thy ray divine, one dreary gloom;
Where lurk the monsters of phantastic brains;
Order bereft of thought, uncaus'd effects,
Fate freely acting, and unerring chance!
Where meanless matter to a chaos sinks,
Or something lower still, for without Thee
It crumbles into atoms void of force,
Void of resistance—it eludes our thought.
Where laws eternal to the varying code
Of self-love dwindle. Interest, passion, whim,
Take place of right and wrong; the golden chain
Of beings melts away, and the mind's eye
Sees nothing but the present. All beyond
Is visionary guess—is dream—is death!"

FINIS.

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Although there may be some difference of opinion respecting the following scale of merit among Singing Birds, constructed by Mr. Daines Barrington, it is introduced here as a curious and ingenious calculation.

This Table is designed to exhibit the comparative merit of the British Singing Birds; in which 20 is supposed to be the point of absolute perfection.	Mellowness of Tone	Sprightly Notes	Plaintive Notes	Compass.	Execution.
Nightingale	19	14	19	19	19
Skylark	4	19	4	18	18
Woodlark	18	4	17	12	8
Titlark	12	12	12	12	12
Linnet	12	16	12	16	18
Goldfinch	4	19	4	12	12
Chaffinch	4	12	4	8	8
Greenfinch	4	4	4	4	6
Hedge-Sparrow	6		6	4	4
Aberdavine, or Siskin	2	4		4	4
Red-Poll		4		4	4
Thrush	4	4	4	4	4
Blackbird	4	4		2	2
Robin	6	16	12	12	12
Wren		12		4	4
Reed-Sparrow		4		2	2
Black Cap, or Norfolk Mock Nightingale	14	12	12	14	14