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A
HISTORY
OF
BRITISH BIRDS.

THE FIGURES ENGRAVED ON WOOD BY T. BEWICK.

PART I.
CONTAINING THE
HISTORY AND DESCRIPTION OF LAND BIRDS.

NEWCASTLE:

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P R E F A C E.

TO those who attentively consider the subject of Natural History, as displayed in the animal creation, it will appear, that though much has been done to explore the intricate paths of Nature, and follow her through all her various windings, much yet remains to be done before the great œconomy is completely developed. Notwithstanding the laborious and not unsuccessful inquiries of ingenious men in all ages, the subject is far from being exhausted. Systems have been formed and exploded, and new ones have appeared in their stead; but, like skeletons injudiciously put together, they give but an imperfect idea of that order and symmetry to which they are intended to be subservient: they have, however, their use, but it is chiefly the skilful practitioner who is enabled to profit by them; to the less informed they appear obscure and perplexing, and too frequently deter him from the great object of his pursuit.

To investigate, with any tolerable degree of success, the more retired and distant parts of the animal œconomy, is a task of no small difficulty. An enquiry so desirable and so eminently useful would require the united efforts of many to give it the desired success. Men of leisure, of all descriptions, residing in the country, could scarcely find a more delightful employment than in attempting to elucidate, from their own observations, the various branches of Natural His-

tory, and in communicating them to others. Something like a society in each county, for the purpose of collecting a variety of these observations, as well as for general correspondence, would be extremely useful. Much might be expected from a combination of this kind, extending through every part of the kingdom; a general mode of communication might be thereby established, in order to ascertain the changes which are continually taking place, particularly among the feathered tribes; the times of their appearing and disappearing would be carefully noted; the differences of age, sex, food, &c. would claim a particular degree of attention, and would be the means of correcting the errors which have crept into the works of some of the most eminent ornithologists, from an over-anxious desire of increasing the number of species: but it is reserved, perhaps, for times of greater tranquillity, when the human mind, undisturbed by public calamities, shall find leisure to employ itself, without interruption, in the pursuit of those objects which enlarge its powers and give dignity to its exertions, to carry into the fullest effect a plan for investigations of this sort.

As a naturalist no author has been more successful than the celebrated Count de Buffon: despising the restraints which methodical arrangements generally impose, he ranges at large through the various walks of Nature, and describes her with a brilliancy of colouring which only the most lively imagination could suggest. It must, however, be allowed, that in many instances this ingenious philosopher has overstepped the bounds of Nature, and, in giving the reins to his own luxuriant fancy, has been too frequently hurried into the wild paths of conjecture and romance. The late Mr White, of Selborne, has added much to the general stock of knowledge on this delightful subject, by attentively and faithfully recording whatever fell under his own observation, and by liberal communications to others.

As far as we could, consistently with the plan laid down in the following work, we have consulted, and we trust with some advantage, the works of these and other naturalists. In the arrangement of the various classes, as well as in the descriptive part, we have taken as a guide our ingenious countryman Mr Pennant, to whose elegant and useful labours the world is indebted for a fund of the most rational entertainment, and who will be remembered by every lover of Nature as long as her works have power to charm. The communications with which we have been favoured by those gentlemen who were so good as to notice our growing work, have been generally acknowledged, each in its proper place; it remains only that we be permitted to insert this testimony of our grateful sense of them.

In a few instances we have ventured to depart from the usual method of classification: by placing the hard-billed birds, or those which live chiefly on seeds, next to those of the Pie kind, there seems to be a more regular gradation downwards, since only a few anomalous birds, such as the Cuckoo, Hoopoe, Nuthatch, &c. intervene. The soft-billed birds, or those which subsist chiefly on worms, insects, and such like, are by this mode placed all together, beginning with those of the Lark kind. To this we must observe, that, by dividing the various families of birds into two grand divisions, viz. Land and Water, a number of tribes have thereby been included among the latter, which can no otherwise be denominated Water Birds than as they occasionally seek their food in moist places, by small streamlets, or on the sea-shore; such as the Curlew, Woodcock, Snipe, Sandpiper, and many others. These, with such as do not commit themselves wholly to the waters, are thrown into a separate division, under the denomination of Waders. To this class we have ventured to remove the Kingfisher, and the Water Ouzel: the former lives entirely on fish, is constantly found

on the margins of still waters, and may with greater propriety be denominated a Water Bird than many which come under that description ; the latter seems to have no connection with those birds among which it is usually classed ; it is generally found among rapid running streams, in which it chiefly delights, and from which it derives its support.

It may be proper to observe, that while one of the editors of this work was engaged in preparing the cuts, which are faithfully drawn from Nature, and engraved upon wood, the compilation of the descriptions (*of the Land Birds*) was undertaken by the other, subject, however, to the corrections of his friend, whose habits had led him to a more intimate acquaintance with this branch of Natural History : the compiler, therefore, is answerable for the defects which may be found in this part of the undertaking, concerning which he has little to say, but that it was the production of those hours which could be spared from a laborious employment, and on that account he hopes the severity of criticism will be spared, and that it will be received with that indulgence which has been already experienced on a former occasion.

Newcastle upon Tyne, September, 1797.

INTRODUCTION

TO THE

HISTORY OF BRITISH LAND BIRDS.

IN no part of the animal creation are the wisdom, the goodness, and the bounty of Providence displayed in a more lively manner than in the structure, formation, and various endowments of the feathered tribes. The symmetry and elegance discoverable in their outward appearance, although highly pleasing to the sight, are yet of much greater importance when considered with respect to their peculiar habits and modes of living, to which they are eminently subservient.

Instead of the large head and formidable jaws, the deep capacious chest, the brawny shoulders, and sinewy legs of the quadrupeds, we observe the pointed beak, the long and pliant neck, the gently-swelling shoulder, the expansive wings, the tapering tail, the light and bony feet ; which are all wisely calculated to assist and accelerate their motion through the yielding air. Every part of their frame is formed for lightness and buoyancy ; their bodies are covered with a soft and delicate plumage, so disposed as to protect them from the intense cold of the atmosphere through which they pass ; their wings are made of the lightest materials, and yet the force with which they strike the air is so great as to impel their bodies forward with astonishing rapidity, whilst the tail serves the purpose of a rudder to direct them to the different objects of their pursuit. The internal structure of birds is no less wisely adapted to the same purposes ; all the bones are light and thin, and all the muscles, except those which are appropriated to the purpose of moving the wings, are extremely delicate and light ; the lungs are placed close to the back-bone and ribs ; the air entering into them by a communication from the windpipe, passes through, and is conveyed into a number of membranous cells which lie upon the sides of the pericardium, and communicate with those of the sternum. In some birds these cells are continued down the wings, and extended even to the pinions, thigh-bones, and other parts of the body, which can be filled and distended with air at the pleasure of the animal.

The extreme singularity of this almost universal diffusion of air through the bodies of birds, has excited a strong desire to discover the intention of Nature in producing a conformation so extraordinary. The ingenious Mr Hunter imagined that it might be intended to assist the animal in the act of flying, by increasing its bulk and strength, without adding to its weight. This opinion was corroborated by

considering, that the feathers of birds, and particularly those of the wings, contain a great quantity of air. In opposition to this, he informs us that the Ostrich, which does not fly, is nevertheless provided with air-cells dispersed through its body; that the Woodcock, and some other flying birds, are not so liberally supplied with these cells; yet, he elsewhere observes, that it may be laid down as a general rule, that in birds who are enabled to take the highest and longest flights, as the Eagle, this extension or diffusion of air is carried further than in others; and, with regard to the Ostrich, though it is deprived of the power of flying, it runs with amazing rapidity, and consequently requires similar resources of air. It seems therefore to be proved, evidently, that this general diffusion of air through the bodies of birds is of infinite use to them, not only in their long and laborious flights, but likewise in preventing their respiration from being stopped or interrupted by the rapidity of their motion through a resisting medium. Were it possible for man to move with the swiftness of a Swallow, the actual resistance of the air, as he is not provided with internal reservoirs similar to those of birds, would soon suffocate him.*

Birds may be distinguished, like quadrupeds, into two kinds or classes—granivorous and carnivorous; like quadrupeds too, there are some that hold a middle nature, and partake of both. Granivorous birds are furnished with larger intestines, and proportionally longer, than those of the carnivorous kind. Their food, which consists of grain of various sorts, is conveyed whole and entire into the first stomach

* May not this universal diffusion of air through the bodies of birds account for the superior heat of this class of animals? The separation of oxygen from respirable air, and its mixture with the blood by means of the lungs, is supposed, by the ingenious Dr Crawford, to be the efficient cause of animal heat.

or craw, where it undergoes a partial dilution by a liquor secreted from the glands and spread over its surface ; it is then received into another species of stomach, where it is further diluted ; after which it is transmitted into the gizzard, or true stomach, consisting of two very strong muscles, covered externally with a tendinous substance, and lined with a thick membrane of prodigious power and strength ; in this place the food is completely triturated, and rendered fit for the operation of the gastric juices. The extraordinary powers of the gizzard in comminuting the food, so as to prepare it for digestion, would exceed all credibility, were they not supported by incontrovertible facts founded upon experiments. In order to ascertain the strength of these stomachs, the ingenious Spalanzani made the following curious and very interesting experiments :—Tin tubes, full of grain, were forced into the stomachs of Turkeys, and after remaining twenty hours, were found to be broken, compressed, and distorted in the most irregular manner.* In proceeding further the same author relates, that the stomach of a Cock, in the space of twenty-four hours, broke off the angles of a piece of rough jagged glass, and upon examining the gizzard, no wound or laceration appeared. Twelve strong needles were firmly fixed in a ball of lead, the points of which projected about a quarter of an inch from the surface ; thus armed, it was covered with a case of paper, and forced down the throat of a Turkey ; the bird retained it a day and a half, without shewing the least symptom of uneasiness ; the points of all the needles were broken off close to the surface of the ball, except two or three, of which the stumps projected a little. The same author relates another experiment, seemingly still more cruel : he fixed twelve small lancets, very sharp, in a similar ball of lead, which was given in the same

* Spalanzani's Dissertations, vol. 1, page 12.

manner to a Turkey-cock, and left eight hours in the stomach ; at the expiration of which the organ was opened, but nothing appeared except the naked ball, the twelve lancets having been broken to pieces, the stomach remaining perfectly sound and entire. From these curious and well-attested facts we may conclude, that the stones so often found in the stomachs of many of the feathered tribes, are highly useful in comminuting grain and other hard substances which constitute their food. “ The stones,” says the celebrated Mr Hunter, “ assist in grinding down the grain, and, by separating its parts, allow the gastric juices to come more readily into contact with it.” Thus far the conclusion coincides with the experiments which have just been related. We may observe still further, that stones thus taken into the stomachs of birds are seldom known to pass with the feces, but being ground down and separated by the powerful action of the gizzard, are mixed with the food, and, no doubt, contribute essentially to the health of the animal.

Granivorous birds partake much of the nature and disposition of herbivorous quadrupeds. In both, the number of their stomachs, the length and capacity of their intestines, and the quality of their food, are very similar ; they are likewise both distinguished by the gentleness of their tempers and manners. Contented with the seeds of plants, with fruits, insects, and worms, their chief attention is directed to procuring food, hatching and rearing their offspring, and avoiding the snares of men, and the attacks of birds of prey, and other rapacious animals. They are a mild and gentle race, and are in general so tractable as easily to be domesticated. Man, attentive and watchful to every thing conducive to his interest, has not failed to avail himself of these dispositions, and has judiciously selected from the numbers which every way surround him, those which are most prolific, and consequently most profitable : of these the Hen, the Goose, the Turkey,

and the Duck are the most considerable, and form an inexhaustible store of rich, wholesome, and nutritious food.

Carnivorous birds are distinguished by those endowments and powers with which they are furnished by Nature for the purpose of procuring their food: they are provided with wings of great length, the muscles which move them being proportionally large and strong, whereby they are enabled to keep long upon the wing in search of their prey; they are armed with strong hooked bills, and sharp and formidable claws; they have also large heads, short necks, strong and brawny thighs, and a sight so acute and piercing, as to enable them to view their prey from the greatest heights in the air, upon which they dart with inconceivable swiftness and undeviating aim; their stomachs are smaller than those of the granivorous kinds, and their intestines are much shorter. The analogy between the structure of rapacious birds and carnivorous quadrupeds is obvious; both of them are provided with weapons which indicate destruction and rapine; their manners are fierce and unsocial; and they seldom live together in flocks, like the inoffensive granivorous tribes. When not on the wing, rapacious birds retire to the tops of sequestered rocks, or to the depths of extensive forests, where they conceal themselves in fullen and gloomy solitude. Those which feed on carrion are endowed with a sense of smelling so exquisite, as to enable them to scent putrid carcases at astonishing distances.

Without the means of conveying themselves with great swiftness from one place to another, birds could not easily subsist: the food which Nature has so bountifully provided for them is so irregularly distributed, that they are obliged to take long journeys to distant parts in order to gain the necessary supplies: at one time it is given in great abundance; at another it is administered with a very sparing hand; and this is one cause of those migrations so peculiar to the

feathered tribes. Besides the want of food, there are two other causes of migration, viz. the want of a proper temperature of air, and a convenient situation for the great work of breeding and rearing their young. Such birds as migrate to great distances are alone denominated *birds of passage*; but most birds are, in some measure, birds of passage, although they do not migrate to places remote from their former habitations. At particular times of the year most birds remove from one country to another, or from the more inland districts toward the shores: the times of these migrations or flittings are observed with the most astonishing order and punctuality; but the secrecy of their departure, and the suddenness of their re-appearance, have involved the subject of migration in general in great difficulty. Much of this difficulty arises from our not being able to account for their means of subsistence during the long flights of many of those birds, which are obliged to cross immense tracts of water before they arrive at the places of their destination: accustomed to measure distance by the speed of those animals with which we are well acquainted, we are apt to overlook the superior velocity with which birds are carried forward in the air, and the ease with which they continue their exertions, for a much longer time than can be done by the strongest quadruped.

Our swiftest horses are supposed to go at the rate of a mile in somewhat less than two minutes; and we have one instance on record of a horse being tried, which went at the rate of nearly a mile in one minute, but that was only for the small space of a second of time.* In this and similar instances we find, that an uncommon degree of exertion is attended with its usual consequences, debility, and a total want of power to continue that exertion; but the case is very different with

* See History of Quadrupeds; page 6, 2d edition.

birds; their motions are not impeded by similar causes; they glide through the air with a quickness superior to that of the swiftest quadruped, and they can continue on the wing with equal speed for a considerable length of time. Now, if we can suppose a bird to go at the rate of only half a mile in a minute, for the space of twenty-four hours, it will have gone over, in that time, an extent of more than seven hundred miles, which is sufficient to account for almost the longest migration; but, if aided by a favourable current of air, there is reason to suppose that the same journey may be performed in a much shorter space of time. To these observations we may add, that the flight of birds is peculiarly quick and piercing; and from the advantage they possess in being raised to considerable heights in the air, they are enabled, with a sagacity peculiar to instinctive knowledge, to discover the route they are to take, from the appearance of the atmosphere, the clouds, the direction of the winds, and other causes; so that, without having recourse to improbable modes, it is easy to conceive, from the velocity of their speed alone, that most birds may transport themselves to countries lying at great distances, and across vast tracts of ocean.

The following observations from Catesby are very applicable, and will conclude our remarks on this head:—"The manner of their journeyings may vary according as the structure of their bodies enables them to support themselves in the air. Birds with short wings, such as the Redstart, Blackcap, &c. may pass by gradual and slower movements; and there seems no necessity for a precipitate passage, as every day affords an increase of warmth, and a continuance of food. It is probable these itinerants may perform their journey in the night time, in order to avoid ravenous birds, and other dangers which day-light may expose them to. The flight of the smaller birds of passage across the seas has, by many, been considered as wonderful, and especially with re-

gard to those with short wings, among which Quails seem, by their structure, little adapted for long flights; nor are they ever seen to continue on the wing for any length of time, and yet their ability for such flights cannot be doubted. The coming of these birds is certain and regular from every year's experience, but the cause and manner of their departure have not always been so happily accounted for; in short, all we know of the matter ends in this observation,—that Providence has created a great variety of birds and other animals with constitutions and inclinations adapted to their several wants and necessities, as well as to the different-degrees of heat and cold in the several climates of the world, whereby no country is destitute of inhabitants, and has given them appetites for the productions of those countries whose temperature is suited to their nature, as well as knowledge and ability to seek and find them out."

The migration of the Swallow tribe has been noticed by almost every writer on the natural history of birds, and various opinions have been formed respecting their disappearance, and the state in which they exist during that interval. Some naturalists suppose that they do not leave this island at the end of autumn, but that they lie in a torpid state, till the beginning of summer, in the banks of rivers, in the hollows of decayed trees, in holes and crevices of old buildings, in sand banks, and the like: some have even asserted that Swallows pass the winter immersed in the waters of lakes and rivers, where they have been found in clusters, mouth to mouth, wing to wing, foot to foot, and that they retire to these places in autumn, and creep down the reeds to their subaqueous retreats. In support of this opinion, Mr Klein very gravely asserts, on the credit of some countrymen, that Swallows sometimes assemble in numbers, clinging to a reed till it breaks, and sink with them to the bottom; that their immersion is preceded by a song or dirge, which lasts more

than a quarter of an hour; that sometimes they lay hold of a straw with their bills, and plunge down in society; and that others form a large mass, by clinging together by the feet, and in this manner commit themselves to the deep. It requires no great depth of reasoning to refute such palpable absurdities, or to shew the physical impossibility of a body, specifically lighter than water, employing another body lighter than itself for the purpose of immersion: but, admitting the possibility of this curious mode of immersion, it is by no means probable that Swallows, or any other animal in a torpid state, can exist for any length of time in an element to which they have never been accustomed, and for which they are totally unprovided by Nature with suitable organs.

The celebrated Mr John Hunter inform us, "that he had dissected many Swallows, but found nothing in them different from other birds as to the organs of respiration;" and therefore concludes that it is highly absurd to suppose, that terrestrial animals can remain any long time under water without being drowned. It must not, however, be denied that Swallows have been sometimes found in a torpid state during the winter months; but such instances are by no means common, and will not support the inference, that, if any of them can survive the winter in that state, the whole species is preserved in the same manner.* That other birds

* There are various instances on record, which carry with them marks of veracity, of Swallows having been taken out of water, and of their having been so far recovered by warmth as to exhibit evident signs of life, so as even to fly about for a short space of time. But whilst we admit the fact, we are not inclined to allow the conclusion generally drawn from it, viz. that Swallows, at the time of their disappearance, frequently immerse themselves in seas, lakes, and rivers, and at the proper season emerge and reassume the ordinary functions of life and animation; for, it should be observed, that in those instances which have been the best authenticated, [See Forster's Translation of Kalm's Travels into

have been found in a torpid state may be inferred from the following curious fact, which was communicated to us by a gentleman who saw the bird, and had the account from the person who found it. A few years ago, a young Cuckoo was found in the thickest part of a close furze bush; when taken up it presently discovered signs of life, but was quite destitute of feathers; being kept warm, and carefully fed, it grew and recovered its coat of feathers: in the spring following it made its escape, and in flying across the river Tyne it gave its usual call. We have observed a single Swallow so late as the latter end of October; others assert that they have often been seen till near Christmas. Mr White, in his Natural History of Selborne, mentions having seen a House Martin flying about in November, long after the general migration had taken place. Many more instances might be given of such late appearances, which, added to the well-authenticated accounts of Swallows having been actually found in a torpid state, leave us no room to doubt, that such

North America, p. 140—note.] it appears, that the Swallows so taken up were generally found entangled amongst reeds and rushes, by the sides, or in the shallowest parts, of the lakes or rivers where they happened to be discovered, and that, having been brought to life so far as to fly about, they all of them died in a few hours after. From the facts thus stated, we would infer, that at the time of the disappearance of Swallows, the reedy grounds by the sides of rivers and standing waters are generally dry, and that these birds, especially the latter hatchings, which frequent such places for the sake of food, retire to them at the proper season, and lodge themselves among the roots, or in the thickest parts of the rank grass which grows there; that during their state of torpidity they are liable to be covered with water, from the rains which follow, and are sometimes washed into the deeper parts of the lake or river where they have been accidentally taken up; and that probably the transient signs of life which they have discovered on such occasions, have given rise to a variety of vague and improbable accounts of their immersion, &c.

young birds as were late hatched, and consequently not strong enough to undertake a long voyage to the coast of Africa, are left behind, and remain concealed in hiding places till the return of spring : on the other hand, that actual migrations of the Swallow tribe do take place, has been fully proved from a variety of well-attested facts, most of which are taken from the observations of navigators who were eye-witnesses of their flights, and whose ships have sometimes afforded a resting place to the weary travellers.

To the many on record we shall add the following, which we received from a very sensible master of a vessel, who, whilst he was sailing early in the spring between the islands of Minorca and Majorca, saw great numbers of Swallows flying northward, many of which alighted on the rigging of the ship in the evening, but disappeared before morning. After all our inquiries into this branch of natural œconomy, much yet remains to be known, and we may conclude in the words of the ingenious Mr White, “ that whilst we observe with delight with how much ardour and punctuality those little birds obey the strong impulse towards migration or hiding, imprinted on their minds by their great Creator, it is with no small degree of mortification we reflect, that after all our pains and inquiries, we are not yet quite certain to what regions they do migrate, and are still farther embarrassed to find that some actually do not migrate at all.”

“ Amusive birds ! say where your hid retreat,
 “ When the frost rages, and the tempests beat ;
 “ Whence your return, by such nice instinct led,
 “ When Spring, sweet season, lifts her bloomy head ?
 “ Such baffled searches mock man’s prying pride,
 “ The GOD of NATURE is your secret guide !”

Most birds, at certain seasons, live together in pairs ; the union is formed in the spring, and generally continues whilst the united efforts of both are necessary in forming their tem-

porary habitations, and in rearing and maintaining their offspring. Eagles and other birds of prey continue their attachment for a much longer time, and sometimes for life. The nests of birds are constructed with such exquisite art, as to exceed the utmost exertion of human ingenuity to imitate them. Their mode of building, the materials they make use of, as well as the situations they select, are as various as the different kinds of birds, and are all admirably adapted to their several wants and necessities. Birds of the same species, whatever region of the globe they inhabit, collect the same materials, arrange them in the same manner, and make choice of similar situations for fixing the places of their temporary abodes. To describe minutely the different kinds of nests, the various substances of which they are composed, and the judicious choice of situations, would swell this part of our work much beyond its due bounds. Every part of the world furnishes materials for the ærial architects: leaves and small twigs, roots and dried grasses, mixed with clay, serve for the external; whilst moss, wool, fine hair, and the softest animal and vegetable downs, form the warm internal part of these commodious dwellings. The following beautiful lines from Thomson are highly descriptive of the busy scene which takes place during the time of nidification:—

- “ Some to the holly hedge,
- “ Nestling, repair, and to the thicket some;
- “ Some to the rude protection of the thorn
- “ Commit their feeble offspring: the cleft tree
- “ Offers its kind concealment to a few,
- “ Their food its insects, and its moss their nests:
- “ Others apart, far in the grassy dale
- “ Or roughening waste their humble texture weave;
- “ But most in woodland solitudes delight,
- “ In unfrequented glooms or shaggy banks,
- “ Steep, and divided by a babbling brook,
- “ Whose murmurs soothe them all the live-long day,

“ When by kind duty fix’d. Among the roots
 “ Of hazel, pendent o’er the plaintive stream,
 “ They frame the first foundation of their domes,
 “ Dry sprigs of trees, in artful fabric laid,
 “ And bound with clay together. Now ’tis nought
 “ But restless hurry through the busy air,
 “ Beat by unnumber’d wings. The Swallow sweeps
 “ The slimy pool, to build the hanging house
 “ Intent : and often from the careless back
 “ Of herds and flocks a thousand tugging bills
 “ Pluck hair and wool ; and oft, when unobserv’d,
 “ Steal from the barn a straw ; till soft and warm,
 “ Clean and complete, their habitation grows.”

After the business of incubation is over, and the young are sufficiently able to provide for themselves, the nests are always abandoned by the parents, excepting by those of the Eagle kind.

The various gifts and endowments which the great Author of Nature has so liberally bestowed upon his creatures in general, demand, in a peculiar manner, the attention of the curious Naturalist ; among the feathered tribes in particular, there is much room, in this respect, for minute and attentive investigation. In pursuing our inquiries into that system of œconomy, by which every part of Nature is upheld and preserved, we are struck with wonder in observing the havoc and destruction which every where prevail throughout the various orders of beings inhabiting the earth. Our humanity is interested in that law of Nature which devotes to destruction myriads of creatures to support and continue the existence of others ; but although it is not allowed us to unravel the mysterious workings of Nature through all her parts, or unfold her deep designs, we are, nevertheless, strongly led to the consideration of the means by which individuals, as well as species, are preserved. The weak are frequently enabled to elude the pursuits of the strong by

flight or stratagem; some are screened from the pursuits of their enemies by an arrangement of colours happily assimilated to the places which they most frequent, and where they find either food or repose: thus the Wryneck is scarcely to be distinguished from the bark of the tree on which it feeds; or the Snipe from the soft and mossy ground by the springs of water which it frequents: the Great Plover finds its chief security in stony places, to which its colours are so nicely adapted, that the most exact observer may be very easily deceived. The attentive ornithologist will not fail to discover numerous instances of this kind, such as the Partridge, Plover, Quail, &c.

Some are indebted to the brilliancy of their colours as the means of alluring their prey; of this the Kingfisher is a remarkable instance, and deserves to be particularly noticed. This beautiful bird has been observed, in some sequestered place near the edge of a rivulet, exposing the vivid colours of its breast to the full rays of the sun, and fluttering with expanded wings over the smooth surface of the water; the fish, attracted by the brightness and splendour of the appearance, are detained whilst the wily bird darts down upon them with unerring aim. We do not say that the mode of taking fish by torch-light has been derived from this practised by the Kingfisher, but every one must be struck by the similarity of the means. Others, again, derive the same advantage from the simplicity of their exterior appearance; of this the Heron will serve for an example. He may frequently be seen standing motionless by the edge of a piece of water, waiting patiently the approach of his prey, which he never fails to seize as soon as it comes within reach of his long neck; he then reassumes his former position, and continues to wait with the same patient attention as before.

Most of the smaller birds are supported, especially when young, by a profusion of caterpillars, small worms, and in-

fects; on these they feed, and thus they contribute to preserve the vegetable world from destruction. This is contrary to the commonly received opinion, that birds, particularly Sparrows, do much mischief in destroying the labours of the gardener and the husbandman. It has been observed, "that a single pair of Sparrows, during the time they are feeding their young, will destroy about four thousand caterpillars weekly; they likewise feed their young with butterflies and other winged insects, each of which, if not destroyed in this manner, would be productive of several hundreds of caterpillars." Swallows are almost continually upon the wing, and in their curious winding flights destroy immense quantities of flies and other insects, which are continually floating in the air, and which, if not destroyed by these birds, would render it unfit for the purposes of life and health.

That active little bird the Tomtit, which is generally supposed hostile to the young and tender buds that appear in the spring, when attentively observed, may be seen running up and down among the branches, and picking up the eggs of insects, or the small worms that are concealed in the blossoms, and which would effectually destroy the fruit. As the season advances, various other small birds, such as the Redbreast, Wren, Winter Fauvette or Hedge-sparrow, White-throat, Redstart, &c. are all engaged in the same useful work, and may be observed examining every leaf, and feeding upon the insects which they find beneath them. These are a few instances of that superintending providential care, which is continually exerted in preserving the various ranks and orders of beings in the scale of animated Nature; and although it is permitted that myriads of individuals should every moment be destroyed, not a single species is lost, but every link of the great chain remains unbroken.

Great Britain produces a more abundant variety of birds than most northern countries, owing to the various condition

of our lands, from the highest state of cultivation to that of the wildest, most mountainous, and woody. The great quantities of berries and other kinds of fruit produced in our hedges, heaths, and plantations, bring small birds in great numbers, and birds of prey in consequence: our shores, and the numerous little islands adjacent to them, afford shelter and protection to an infinite variety of almost all kinds of water fowl. To enumerate the various kinds of birds that visit this island annually will not, we presume, be unacceptable to our readers, nor improper in this part of our work. The following are selected chiefly from Mr White's Natural History of Selborne, and are arranged nearly in the order of their appearing.

- 1 Wryneck, Middle of March
- 2 Smallest Willow Wren, . . . Latter end of ditto
- 3 House Swallow, Middle of April
- 4 Martin, Ditto
- 5 Sand Martin, Ditto
- 6 Black-cap, Ditto
- 7 Nightingale, Beginning of April
- 8 Cuckoo, Middle of ditto
- 9 Middle Willow Wren, Ditto
- 10 Whitethroat, Ditto
- 11 Redstart, Ditto
- 12 Great Plover or Stone Curlew, End of March
- 13 Grasshopper Lark, Middle of April
- 14 Swift, Latter end of ditto
- 15 Lesser Red Sparrow,
- 16 Corn Crake or Land Rail, . .
- 17 Largest Willow Wren, End of April
- 18 Fern Owl, Latter end of May
- 19 Flycatcher, Middle of ditto.*

* This, according to Mr White, is the latest summer bird of passage but the arrival of some of the summer birds is very uncertain: those

To this list of migratory birds, some ornithologists have added the Larks, Ouzels, Thrushes, and Starlings.

Most of the soft-billed birds feed on insects, and not on grain or seeds, and therefore usually retire before winter; but the following, though they eat insects, remain with us during the whole year, viz. The Redbreast, Winter Fauvette, and Wren, which frequent out-houses and gardens, and eat spiders, small worms, crumbs, &c. The Pied, the Yellow, and the Grey Wagtail, which frequent the heads of springs, where the waters seldom freeze, and feed on the aureliæ of insects usually deposited there. Beside these, the Winchat, the Stonechat, and the Golden-crested Wren, are seen with us during the winter; the latter though the least of all the British birds, is very hardy, and can endure the utmost severity of our winters. The White-rump, though not common, sometimes stays the winter with us.—Of the winter birds of passage, the following are the principal, viz.

1. The Redwing, or Wind Thru .
2. The Fieldfare.—[Both these arrive in great numbers about Michaelmas and depart about the end of February, or beginning of March, but are sometimes detained by easterly winds till the middle of April.]
3. The Hooded, or Sea Crow, visits us in the beginning of winter, and departs with the Woodcock.
4. The Woodcock appears about Michaelmas, and leaves us about the beginning of March, but is sometimes detained till the middle of April.
5. Snipes are considered by Mr White as birds of passage, though he acknowledges that they frequently breed with us. Mr Pennant remarks, that their young are so frequently found in Britain, that it may be doubted whether they ever entirely leave this island.

which are the first in some seasons, are the last in others: this can only be determined by their song.

6. The Judcock, or Jack Snipe.

7. The Wood Pigeon.—[Of the precise time of its arrival we are not quite certain, but suppose it may be some time in April, as we have seen them in the north at that time. Some ornithologists assert that they do not migrate.]

8. The Wild Swan frequents the coasts of this island in large flocks, but is not supposed to breed with us. It has been chiefly met with in the northern parts, and is said to arrive at Lingey, one of the Hebrides, in October, and to remain there till March, when it retires more northward to breed.

9. The Wild Goose passes southward in October, and returns northward in April.

With regard to the Duck kind in general, they are mostly birds of passage. Mr Pennant says, “Of the numerous species that form this genus, we know of no more than five that breed here, viz. the Tame Swan, the Tame Goose, the Shield Duck, the Eider Duck, and a very small number of the Wild Ducks: the rest contribute to form that amazing multitude of water fowls that annually repair from most parts of Europe to the woods and lakes of Lapland and other arctic regions, there to perform the functions of incubation and nutrition in full security. They and their young quit their retreats in September, and disperse themselves over Europe. With us they make their appearance in the beginning of October, circulate first round our shores, and when compelled by severe frost, betake themselves to our lakes and rivers.”—In winter the Bernacles and Brent Geese appear in vast flocks on the north-west coast of Britain, and leave us in February, when they migrate as far as Lapland, Greenland, or Spitzbergen.

The Solan Geese or Gannets are birds of passage; their first appearance is in March, and they continue till August or September. The long-legged Plover and Sanderling

visit us in winter only; and it is worthy of remark, that every species of the Curlews, Woodcocks, Sandpipers, and Plovers, which forsake us in the spring, retire to Sweden, Poland, Russia, Norway, and Lapland, to breed, and return to us as soon as the young are able to fly; for the frosts, which set in early in those countries, deprive them totally of the means of subsistence.

Beside these, there is a great variety of birds which perform partial migrations, or flittings, from one part of the country to another. During hard winters, when the surface of the earth is covered with snow, many birds, such as Larks, Snipes, &c. withdraw from the inland parts of the country towards the sea-shores, in quest of food; others, as the Wren, the Redbreast, and a variety of small birds, quit the fields, and approach the habitations of men. The Bohemian Chatterer, the Grosbeak, and the Crossbill, are only occasional visitors, and observe no regular times in making their appearance. Great numbers of the Bohemian Chatterer were taken in the county of Northumberland in the latter end of the years 1789 and 1790, before which they had seldom been observed so far south as that county, and since that time they have rarely visited it.

The term of life varies greatly in birds, and does not seem to bear the same proportion to the time of acquiring their growth, as has been remarked with regard to quadrupeds. Most birds acquire their full dimensions in a few months, and are capable of propagation the first summer after they are hatched. In proportion to the size of their bodies, birds possess more vitality, and live longer, than either man or quadrupeds: notwithstanding the difficulties which arise in ascertaining the ages of birds, there are instances of great longevity in many of them. Geese and Swans have been known to attain to the age of seventy and upwards; Ravens are very long-lived birds, they are said

sometimes to exceed a century ; Eagles are supposed to arrive at a great age ; Pigeons are known to live more than twenty years ; and even Linnets and other small birds have been kept in cages from fifteen to twenty years.

To the practical ornithologist there arises a considerable gratification in being able to ascertain the distinguishing characters of birds as they appear at a distance, whether at rest, or during their flight ; for not only every genus has something peculiar to itself, but each species has its own appropriate marks, by which a judicious observer may discriminate almost with certainty. Of these, the various modes of flight afford the most certain and obvious means of distinction, and should be noted with the most careful attention. From the bold and lofty flight of the Eagle, to the short and sudden flittings of the Sparrow or the Wren, there is an ample field for the curious investigator of nature, on which he may dwell with inexpressible delight, tracing the various movements of the feathered nations which every where present themselves to his view. The notes, or, as it may with more propriety be called, the language, of birds, whereby they are enabled to express, in no inconsiderable degree, their various passions, wants, and feelings, must be particularly noticed.* By the great power of their voice, they can communicate their sentiments and intentions to each other, and are enabled to act by mutual concert : that of the wing, by which they can remove from place to place with inconceivable celerity and dispatch, is peculiar to the feathered tribes ; it gives them a decided superiority over every species of quadrupeds, and affords them the greatest means of security from those attacks to which their weakness would otherwise expose them. The social instinct

* White's Selborne.

among birds is peculiarly lively and interesting, and likewise proves an effectual means of preservation from the various arts which are made use of to circumvent and destroy them. Individuals may perish, and the species may suffer a diminution of its numbers ; but its instincts, habits, and œconomy remain entire.

AN
EXPLANATION
OF THE
TECHNICAL TERMS USED IN THIS WORK:

TO WHICH ARE SUBJOINED

SOME OF THOSE USED BY LINNÆUS AND OTHER ORNITHOLOGISTS,
DESCRIPTIVE OF THE PARTICULAR PARTS
PECULIAR TO SOME SPECIES.

A—AURICULARS,—feathers which cover the ears.

BB—The BASTARD WING, [*alula spuria*, Lin.] three or five quill-like feathers, placed at a small joint rising at the middle part of the wing.

CC—The LESSER COVERTS of the WINGS, [*testrices primæ*, Lin.] small feathers that lie in several rows on the bones of the wings. The UNDER COVERTS are those that line the inside of the wings.

DD—The GREATER COVERTS, [*teſtrices ſecundæ*, Lin.] the feathers that lie immediately over the quill feathers and the ſecondaries.

GG—The PRIMARIES, OR PRIMARY QUILLS, [*primores*, Lin.] the largeſt feathers of the wings: they riſe from the firſt bone.

EE—The SECONDARIES, OR SECONDARY QUILLS, [*ſecondariæ*, Lin.] thoſe that riſe from the ſecond bone.

HH—The TERTIALS. Theſe alſo take their riſe from the ſecond bone, at the *elbow joint*, forming a continuation of the ſecondaries, and ſeem to do the ſame with the ſcapulars, which lie over them. Theſe feathers are ſo long in ſome of the *Scolopax* and *Tringa* genera, that when the bird is flying they give it the appearance of having four wings.

SS—The SCAPULARS, OR SCAPULAR FEATHERS, take their riſe from the ſhoulders, and cover the ſides of the back.

P—COVERTS of the TAIL. [*uropygium*, Lin.] Theſe feathers cover it on the upper ſide, at the baſe.

V—The VENT FEATHERS, [*criffum*, Lin.] thoſe that lie from the vent, or *anus*, to the tail underneath.

IRIS, (plural IRIDES) the part which ſurrounds the pupil of the eye.

MANDIBLES,—the upper and under parts of the bill.

COMPRESSED,—flatted at the ſides vertically.

DEPRESSED,—flatted horizontally.

CUNEATED,—wedge-shaped.

Head of the Merlin Hawk.

1—The CERE, [*cera*, Lin.] the naked skin which covers the base of the bill, as in the Hawk kind.

2—The ORBITS, [*orbita*, Lin.] the skin which furrounds the eye. It is generally bare, but particularly in the Parrot and the Heron.

Head of the Great Ash-coloured Shrike.

1—When the bill is notched near the tip, as in Shrikes, Thrushes, &c. it is called by Linnæus *rostrum emarginatum*.

2—*Vibrissæ*, (Lin.) are hairs that stand forward like feelers: in some birds they are slender, as in Flycatchers, &c. and point both upwards and downwards, from both the upper and under sides of the mouth.

3—*Capistrum*,—a word used by Linnæus to express the short feathers on the forehead just above the bill. In some birds these feathers fall forward over the nostrils: they quite cover those of the Crow.

Rostrum cultratum, (Lin.) when the edges of the bill are very sharp, as in that of the Crow.

Head of the Night-jar.

1—*Vibrissæ pectinatæ*, (Lin.) These hairs in this bird are very stiff, and spread out on each side like a comb from the upper sides of the mouth only.

Foot of the Night-jar,

Shewing the middle toe claw **SERRATED** like a saw. **PECTINATED** signifies toothed like a comb.

Head of the Great-crested Grebe.

2—The **LORE**, [*Lorum*, Lin.] the space between the bill and the eye, which in this genus is bare, but in other birds is generally covered with feathers.

Foot of the Kingfisher,

Shewing the peculiar structure, in the toes being joined together from their origin to the end joints.

Foot of the Grey Phalarope.

FIN-FOOTED and SCALLOPED, [*pinnatus*, Lin.] as are also those of the Coots.

Foot of the Red-necked Grebe.

Toes furnished on their sides with broad plain membranes.
[*Pes lobatus*, Lin.]

Foot of the Corvorant,

Shewing all the four toes connected by webs.

SEMI-PALMATED, [*femi-palmatus*, Lin.] when the middle of the webs reach only about half the length of the toes.

CILIATED, [*lingua ciliata*, Lin.] when the tongue is edged with fine bristles, as in Ducks.

NOSTRILS LINEAR,—when they are extended lengthwise in a line with the bill, as in Divers, &c.

NOSTRILS PERVIOUS,—when they are open, and may be seen through from side to side, as in Gulls, &c.

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BRITISH BIRDS.

BIRDS OF PREY.

RAPACIOUS birds, or those which subsist chiefly on flesh, are much less numerous than ravenous quadrupeds; and it seems wisely provided by nature, that their powers should be equally confined and limited with their numbers; for if to the rapid flight and penetrating eye of the Eagle, were joined the strength and voracious appetite of the Lion, the Tiger, or the Glutton, no artifice could evade the one, and no speed could escape the other.

The characters of birds of the ravenous kind are particularly strong, and easily to be distinguished: the formidable talons, the large head, the strong and crooked beak, indicate their ability for rapine and carnage; their dispositions are fierce, and their nature untractable; unsociable and cruel, they avoid the haunts of civilization, and retire to the most melancholy and wild recesses of nature, where they can enjoy, in gloomy solitude, the effects of their depredatory excursions. The fierceness of their nature extends even to their young, which they drive from the nest at a very early period. The difficulty of procuring a constant supply of food for them sometimes overcomes the feelings of parental affection, and they have been known to destroy them in the fury of

disappointed' hunger. Different from all other kinds, the female of birds of prey is larger and stronger than the male: naturalists have puzzled themselves to assign the reason of this extraordinary property, but the final cause at least is obvious,—as the care of rearing her young is solely intrusted to the female, nature has furnished her with more ample powers to provide for her own wants, and those of her offspring.

This formidable tribe constitutes the first order among the genera of birds. Those of our own country consist only of two kinds, viz. the Falcon and the Owl. We shall begin with the former.

THE FALCON TRIBE.

THE numerous families of which this kind is composed, are found in almost every part of the world, from the frigid to the torrid zone: they are divided into various classes or tribes, consisting of Eagles, Kites, Buzzards, Hawks, &c. and are readily known by the following distinguishing characteristics:—

The bill is strong, sharp, and much hooked, and is furnished with a naked skin or cere situated at the base, in which are placed the nostrils; the head and neck are well cloathed with feathers, which sufficiently distinguish it from every one of the Vulture kind; the legs and feet are scaly; the claws are large and strong, much hooked, and very sharp. Birds of this species are also distinguished by their undaunted courage, and great activity. Buffon, speaking of the Eagle, compares it with the Lion, and ascribes to it the magnanimity, the strength, and the forbearance of that noble quadruped. The Eagle despises small animals, and disregards their insults; he seldom devours the whole of his prey, but, like the Lion, leaves the fragments to other animals: though famished with hunger, he disdains to feed on carrion. The eyes of the Eagle have the glare of those of the Lion, and are nearly of the same colour; the claws are of the same shape, and the cry of both is powerful and terrible: destined for war and plunder, they are equally fierce, bold, and untractable. Such is the resemblance which that ingenious and fanciful writer has pictured of these two noble animals; the characters of both are striking and prominent, and hence the Eagle is said to

extend his dominion over the birds, as the Lion over the quadrupeds.

The same writer also observes, that, in a state of nature, the Eagle never engages in a solitary chace but when the female is confined to her eggs or her young: at this season the return of the smaller birds affords plenty of prey, and he can with ease provide for the sustenance of himself and his mate; at other times they unite their exertions, and are always seen close together, or at a short distance from each other. They who have an opportunity of observing their motions, say, that the one beats the bushes, whilst the other, perched on an eminence, watches the escape of the prey. They often soar out of the reach of human sight; and, notwithstanding the immense distance, their cry is still heard, and then resembles the barking of a small dog. Though a voracious bird, the Eagle can endure the want of sustenance for a long time. A common Eagle, caught in a fox trap, is said to have passed five whole weeks without the least food, and did not appear sensibly weakened till towards the last week, when a period was put to its existence.

THE GOLDEN EAGLE.

(*Falco Chrysfetos*, Linnæus.—*Le grand Aigle*, Buffon.)

THIS is the largest of the genus ; it measures, from the point of the bill to the extremity of the toes, upwards of three feet ; and in breadth, from wing to wing, above eight ; and weighs from sixteen to eighteen pounds.

The male is smaller, and does not weigh more than twelve pounds. The bill is of a deep blue colour; the cere yellow: the eyes are large, deep sunk, and covered by a projecting brow; the iris is of a fine bright yellow, and sparkles with uncommon lustre. The general colour is deep brown, mixed with tawny on the head and neck: the quills are chocolate, with white shafts; the tail is black, spotted with ash colour: the legs are yellow, and feathered down to the toes, which are very scaly; the claws are remarkably large; the middle one is two inches in length.

This noble bird is found in various parts of Europe; it abounds most in the warmer regions, and has seldom been met with farther north than the fifty-fifth degree of latitude. It is known to breed in the mountainous parts of Ireland: it lays three, and sometimes four eggs, of which it seldom happens that more than two are prolific. Mr Pennant says there are instances, though rare, of their having bred in Snowdon Hills. Mr Wallis, in his Natural History of Northumberland, says, "it formerly had its aerie on the highest and steepest part of Cheviot. In the beginning of January, 1735, a very large one was shot near Warkworth, which measured, from point to point of its wings, eleven feet and a quarter."

THE RINGTAILED EAGLE.

(*Falco Fulvus*, Lin.—*L' Aigle, Commun.* Buff.)

THIS is the common Eagle of Buffon, and, according to that author, includes two varieties, the Brown and the Black Eagle; they are both of the same brown colour, distinguished only by a deeper shade, and are nearly

of the same size: in both, the upper part of the head and neck is mixed with rust colour, and the base of the larger feathers marked with white; the bill is of a dark horn colour; the cere of a bright yellow; the iris hazel; and between the bill and the eye there is a naked skin of a dirty brown colour: the legs are feathered to the toes, which are yellow, and the claws black: the tail is distinguished by a white ring, which covers about two-thirds of its length; the remaining part is black.

The Ringtailed Eagle is more numerous and diffused than the Golden Eagle, and prefers more northern climates. It is found in France, Germany, Switzerland, Great Britain, and in America as far north as Hudson's Bay.

THE WHITE-TAILED EAGLE.

GREAT ERNE, CINEREOUS EAGLE.

(*Falco Albiulla*, Lin.—*Le grand Pygargue*, Buff.)

OF this there appears to be three varieties, which dif-

fer chiefly in size, and consist of the following :—the Great Erne, or Cinereous Eagle, of Latham and Penant; the Small Erne, or Lesser White-tailed Eagle; and the White-headed Erne, or Bald Eagle. The first two are distinguished only by their size, and the last by the whiteness of its head and neck.

The White-tailed Eagle is inferior in size to the Golden Eagle. The beak, cere, and eyes are of a pale yellow: the space between the beak and the eye is of a bluish colour; and thinly covered with hair: the sides of the head and neck are of a pale ash colour, mixed with reddish brown: the general colour of the plumage is brown, darkest on the upper part of the head, neck, and back; the quill feathers are very dark; the breast is irregularly marked with white spots; the tail is white: the legs, which are of a bright yellow, are feathered a little below the knees; the claws are black.

This bird inhabits all the northern parts of Europe, and is found in Scotland and many parts of Great Britain. It is equal in strength and vigour to the Common Eagle, but more furious; and is said to drive its young ones from the nest, after having fed them only a very short time. It has commonly two or three young, and builds its nest upon lofty trees.

THE SEA EAGLE.

(*Falco Offifragus*, Lin.—*L'Orfraie*, Buff.)

THIS bird is nearly as large as the Golden Eagle, measuring in length three feet and a half, but its expanded wings do not reach above seven feet. Its bill is large, much hooked, and of a bluish colour: irides in

some light hazel, in others yellow: a row of strong bristly feathers hangs down from its under bill next to its throat, whence it has been termed the Bearded Eagle: the top of the head and back part of the neck are dark brown, inclining to black: the feathers on the back are variegated by a lighter brown, with dark edges; the scapulars are pale brown, the edges nearly white; the breast and belly whitish, with irregular spots of brown; the tail feathers are dark brown, the outer edges of the exterior feathers whitish; the quill feathers and thighs are dusky: the legs and feet yellow; the claws, which are large, and form a complete semicircle, are of a shining black.

It is found in various parts of Europe and America: it is said to lay only two eggs during the whole year, and frequently produces only one young bird: it is however widely dispersed, and was met with at Botany Island by Captain Cook. It lives chiefly on fish: its usual haunts are by the sea-shore; it also frequents the borders of large lakes and rivers; and is said to see so distinctly in the dark, as to be able to pursue and catch its prey during the night. The story of the Eagle, brought to the ground after a severe conflict with a cat, which it had seized and taken up into the air with its talons, is very remarkable. Mr Barlow, who was an eye-witness of the fact, made a drawing of it, which he afterwards engraved.

THE OSPREY.

BALD BUZZARD, SEA EAGLE, OR FISHING HAWK.

(*Falco Haliæetus*, Lin.—*Le Balbuzzard*, Buff.)

THE length of this bird is two feet ; its breadth, from tip to tip, above five : its bill is black, with a blue cere, and its eye yellow : the crown of its head is white, marked with oblong dusky spots ; its cheeks, and all the under parts of its body, are white, slightly spotted with brown on its breast ; from the corner of each eye a streak of brown extends down the sides of the neck towards the wing ; the upper part of the body is brown ; the two

middle feathers of the tail are the same ; the others are marked on the inner webs with alternate bars of brown and white : the legs are very short and thick, being only two inches and a quarter long, and two inches in circumference ; they are of a pale blue colour ; the claws black : the outer toe is larger than the inner one, and turns easily backward, by which means this bird can more readily secure its slippery prey.

Buffon observes that the Osprey is the most numerous of the large birds of prey, and is scattered over the extent of Europe, from Sweden to Greece, and that it is found even in Egypt and Nigritia. Its haunts are on the sea shore, and on the borders of rivers and lakes : its principal food is fish ; it darts upon its prey with great rapidity, and with undeviating aim. The Italians compare its descent upon the water to a piece of lead falling upon that element, and distinguish it by the name of *Aquila Piumbina*, or the Leaden Eagle. It builds its nest on the ground, among reeds, and lays three or four eggs, of an elliptical form, rather less than those of a Hen. The Carolina and Cayenne Ospreys are varieties of this species.

THE COMMON BUZZARD,

OR PUTTOCK.

(Falco Buteo, Lin.—La Bufe, Buff.)

M. BUFFON distinguishes the Kites and the Buzzards from the Eagles and Hawks by their habits and dispositions, which he compares to those of the Vultures, and places them after those birds. Though possessed of strength, agility, and weapons to defend themselves, they are cowardly, inactive, and slothful; they will fly before a Sparrow-hawk, and when overtaken, will suffer themselves to be beaten, and even brought to the ground, without resistance.

The Buzzard is about twenty inches in length, and in

breadth four feet and a half. Its bill is of a lead colour; eyes pale yellow: the upper parts of the body are of a dusky brown colour; the wings and tail are marked with bars of a darker hue; the under parts pale, variegated with a light reddish brown: the legs are yellow; claws black. But birds of this species are subject to greater variations than most other birds, as scarcely two are alike: some are entirely white; of others the head only is white; and others again are mottled with brown and white.

This well-known bird is of a sedentary and indolent disposition; it continues for many hours perched upon a tree or eminence, whence it darts upon the game that comes within its reach: it feeds on birds, small quadrupeds, reptiles, and insects. Its nest is constructed with small branches, lined in the inside with wool and other soft materials; it lays two or three eggs, of a whitish colour, spotted with yellow. It feeds and tends its young with great assiduity. Ray affirms, that if the female be killed during the time of incubation, the male Buzzard takes the charge of them, and patiently rears the young till they are able to provide for themselves.

The editors were favoured with one of these birds by John Trevelyan, Esq. of Wallington, in the county of Northumberland, by whom it was shot in the act of devouring its prey—a Partridge it had just killed. It had entirely separated the flesh from the bones, which, with the legs and wings, were afterwards discovered lying at a small distance from the place where the Buzzard was shot.

THE HONEY BUZZARD

(*Falco Apivorus*, Lin.—*La Bondree*, Buff.)

Is as large as the Buzzard, measuring twenty-two inches in length ; the wings extend above four feet. Its bill is black, and rather longer than that of the Buzzard ; the eyes are yellow ; the head large and flat, and of an ash colour ; upper parts of the body dark brown ; the under parts white, spotted or barred with rusty brown on the breast and belly ; tail brown, marked with three broad dusky bars, between each of which are two or three of the same colour, but narrower : the legs are stout and short, of a dull yellow colour ; claws black.

This bird builds a nest similar to that of the Buzzard, and of the same kind of materials; its eggs are of an ash colour, with small brown spots: it sometimes takes possession of the nests of other birds, and feeds its young with wasps and other insects; it is fond of field mice, frogs, lizards, and insects. It does not soar like the Kite, but flies low from tree to tree, or from bush to bush. It is found in all the northern parts of Europe, and in the open parts of Russia and Siberia, but is not so common in England as the Buzzard.

Buffon observes, that it is frequently caught in the winter, when it is fat and delicious eating.

MOOR BUZZARD.

DUCK HAWK, OR WHITE-HEADED HARPY.

(Falco Æruginosus, Lin.— Le Bufard, Buff.)

LENGTH above twenty-one inches. The bill is black; cere and eyes yellow; the whole crown of the head is of a yellowish white, lightly tinged with brown; the throat is of a light rust colour: the rest of the plumage is of a reddish brown, with pale edges; the greater wing coverts tipped with white: the legs are yellow; claws black.

Birds of this kind vary much: in some, the crown and back part of the head are yellow; and in one described by Mr Latham, the whole bird was uniformly of a chocolate brown, with a tinge of rust colour. The above figure and description were taken from a very fine living bird, sent for the use of this work by the late John Silvertop, Esq. of Minster-Acres, in the county of Northumberland, which very nearly agreed with that figured in the *Planches Enlumineés*.

The Moor Buzzard preys on rabbits, young Wild Ducks, and other water fowl; and likewise feeds on fish, frogs, reptiles, and even insects: its haunts are in hedges and bushes near pools, marshes, and rivers that abound with fish. It builds its nest a little above the surface of the ground, or in hillocks covered with thick herbage: the female lays three or four eggs of a whitish colour, irregularly sprinkled with dusky spots. Though smaller, it is more active and bolder than the Common Buzzard, and, when pursued, it faces its antagonist, and makes a vigorous defence.

THE KITE.

FORK-TAILED KYTE, OR GLEAD.

(Falco Milvus, Lin.—Le Milan Royal, Buff.)

THIS bird is easily distinguished from the Buzzard by its forked tail, which is its peculiar and distinguishing feature. Its length is about two feet: its bill is of a horn colour, furnished with bristles at the base; its eyes and cere are yellow; the feathers on the head and neck are long and narrow, of a hoary colour, streaked with brown down the middle of each; those on the body are of a reddish brown colour, the margin of each feather pale; the quills are dark brown, the legs yellow, and the claws black. It is common in England, where it continues the whole year. It is found in various parts of

Europe, in very northern latitudes, whence it retires towards Egypt before winter, in great numbers: it is said to breed there, and return in April to Europe, where it breeds a second time, contrary to the nature of rapacious birds in general. The female lays two or three eggs of a whitish colour, spotted with pale yellow, and of a roundish form. Though the Kite weighs somewhat less than three pounds, the extent of its wings is more than five feet; its flight is rapid, and it soars very high in the air, frequently beyond the reach of our sight; yet at this distance it perceives its food distinctly, and descends upon its prey with irresistible force: its attacks are confined to small animals and birds; it is particularly fond of young chickens, but the fury of their mother is generally sufficient to drive away the robber.

THE GOSHAWK.

(*Falco Palumbarius*, Lin.—*L'Autour*, Buff.)

THIS bird is somewhat longer than the Buzzard, but slenderer and more beautiful; its length is one foot ten inches: its bill is blue, tipped with black; cere green; eyes yellow; over each eye there is a whitish line: the head and all the upper parts of the body are of a deep brown colour; each side of the neck is irregularly marked with white: the breast and belly are white, with a number of wavy lines or bars of black; the tail is long, of an ash colour, and crossed with four or five dusky bars; the legs are yellow, and the claws black; the wings are much shorter than the tail. M. de Buffon, who brought up two young birds of this kind, a male and

a female, makes the following observation : “ That the Goshawk, before it has shed its feathers, that is in its first year, is marked on the breast and belly with longitudinal brown spots ; but after it has had two moultings they disappear, and their place is occupied by transverse bars, which continue during the rest of its life.” He observes further, “ that though the male was much smaller than the female, it was fiercer and more vicious. The Goshawk feeds on mice and small birds, and eagerly devours raw flesh ; it plucks the birds very neatly, and tears them into pieces before it eats them, but swallows the pieces entire ; and frequently disgorges the hair rolled up in small pellets.”

The Goshawk is found in France and Germany ; it is not very common in this country, but is more frequent in Scotland ; it is likewise common in North America, Russia, and Siberia : in Chinese Tartary there is a variety which is mottled with brown and yellow. They are said to be used by the Emperor of China in his sporting excursions, when he is usually attended by his grand falconer, and a thousand of inferior rank. Every bird has a silver plate fastened to its foot, with the name of the falconer who has the charge of it, that, in case it should be lost, it may be restored to the proper person ; but if he should not be found, the bird is delivered to another officer called the *guardian of lost birds*, who, to make his situation known, erects his standard in a conspicuous place among the army of hunters. In former times the custom of carrying a Hawk on the hand was confined to men of high distinction ; so that it was a saying among the Welsh, “ you may know a gentleman by his Hawk, horse, and greyhound.” Even the ladies in those times

were partakers of this gallant sport, and have been represented in sculpture with Hawks on their hands. At present this noble diversion is wholly laid aside in this country ; the advanced state of agriculture which every where prevails, and the consequent improvement and inclosure of lands, would but ill accord with the pursuits of the falconer, who requires a large and extensive range of country, where he may pursue his game without molestation to himself, or injury to his neighbour. The expence that attended this sport was very considerable, which confined it to princes and men of the highest rank. In the time of James I. Sir Thomas Monson is said to have given a thousand pounds for a cast of Hawks. In the reign of Edward III. it was made felony to steal a Hawk ; to take its eggs, even in a person's own ground, was punishable with imprisonment for a year and a day, together with a fine at the king's pleasure. Such was the delight our ancestors took in this royal sport, and such were the means by which they endeavoured to secure it. Besides the bird just described, there are many other kinds which were formerly in high estimation for the sports of the field ; these were principally the Jer-Falcon, the Falcon, the Lanner, the Sacre,* the Hobby, the Kestrel, and the Merlin : these are called the Long-winged Hawks, and are distinguished from the Goshawk, the Sparrowhawk, the Kite, and the Buzzard, which are of shorter wing, slower in their motions, more indolent, and less courageous than the others.

* A name implying a particular brown colour of some of the unmoulted Falcons-Gentil.

THE SPARROWHAWK.

(*Falco Nifus*, Lin.—*L'Epervier*, Buff.)

THE length of the male is twelve inches ; that of the female fifteen. Its bill is blue, furnished with bristles at the base, which overhang the nostrils ; the colour of the eye is bright orange ; the head is flat at the top, and above each eye is a strong bony projection, which seems as if intended to secure it from external injury : from this projection a few scattered spots of white form a faint line running backward towards the neck : the top of the head and all the upper parts of the body are of a dusky brown colour ; on the back part of the head there is a faint line of white ; the scapulars are marked with two spots of white on each feather ; the greater quill feathers and the tail are dusky, with four bars of a darker hue on each ; the inner edges of all the quills are marked with two or more large white spots ; the tips of the tail feathers

are white; the breast, belly, and under coverts of the wings and thighs are white, beautifully barred with brown; the throat is faintly streaked with brown: the legs and feet are yellow; claws black.

The above is the description of a female; the male differs both in size and colour: the upper part of his body is of a dark lead colour, and the bars on his breast are more numerous.

The female builds her nest in hollow trees, high rocks, or lofty ruins, sometimes in the old nest of a crow, and generally lays four or five eggs, spotted with reddish spots at the longer end.

The Sparrowhawk is very numerous in various parts of the world, from Russia to the Cape of Good Hope. It is a bold and spirited bird; but is obedient and docile, and can be easily trained to hunt Partridges and Quails; it makes great destruction among Pigeons, young poultry, and small birds of all kinds, which it will attack and carry off in the most daring manner.

THE JER-FALCON.

(*Falco Gyrfalco*, Lin. — *Le Gerfaut*, Buff.)

THIS is a very elegant species, and is larger than the Goshawk. Its bill is much hooked, and yellow; the iris is dusky; the throat white, as is likewise the general colour of the plumage, but spotted with brown; the breast and belly are marked with lines, pointing downwards; the spots on the back and wings are larger; the feathers on the thighs are very long, and of a pure white; those of the tail are barred: the legs are of a pale blue, and feathered below the knee. This bird is a native of the cold and dreary climates of the north, and is

found in Russia, Norway, and Iceland : it is never seen in warm, and seldom in temperate climates ; it is found, but rarely, in Scotland and the Orkneys. Buffon mentions three varieties of the Jer-Falcon ; the first is brown on all the upper parts of the body ; and white, spotted with brown, on the under. This is found in Iceland : the second is very similar to it ; and the third is entirely white. Next to the Eagle, it is the most formidable, the most active, and the most intrepid of all voracious birds, and is the dearest and most esteemed for falconry. It is transported from Iceland and Russia into France, Italy, and even into Persia and Turkey ; nor does the heat of these climates appear to diminish its strength, or blunt its vivacity. It boldly attacks the largest of the feathered race ; the Stork, the Heron, and the Crane are easy victims : it kills hares by darting directly upon them. The female, as in all other birds of prey, is much larger and stronger than the male, which is used in falconry only to catch the Kite, the Heron, and the Crow.

THE GENTIL-FALCON.

(*Falco Gentilis*, Lin.)

THIS bird is somewhat larger than the Goshawk. Its bill is of a lead colour ; cere and irides yellow : the head and back part of the neck are rusty, streaked with black ; the back and wings are brown ; scapulars tipped with rusty ; the quills dusky, the outer webs barred with black ; the lower part of the inner webs marked with white ; the tail is long, and marked with alternate bars of black and ash colour, and tipped with white : the legs are yellow, and the claws black : the wings extend exactly to the tip of the tail.

Naturalists enumerate a great variety of Falcons ; and in order to swell the list, they introduce the same bird at different periods of its life ; and have, not unfrequently, accounted accidental differences, produced by climate, as permanent varieties ; so that as Buffon observes with his usual acuteness, one would be apt to imagine that there were as many varieties of the Falcon as of the Pigeon, the Hen, and other domestic birds. In this way new species have been introduced, and varieties multiplied without end. An over-anxious desire of noting all the minute differences existing in this part of the works of nature has sometimes led the too curious inquirer into unnecessary distinctions, and has been the means of introducing confusion and irregularity into the systems of ornithologists. Our countryman, Latham, makes twelve varieties of the Common Falcon, of which one is a young Falcon, or yearling—another is the Haggard, or old Falcon—whilst others differ only in some unessential point, arising from age, sex, or climate. Buffon, however, reduces the whole to two kinds—the Gentil, which he supposes to be the same with the Common Falcon, differing only in season ; and the Peregrine or Passenger Falcon. This last is rarely met with in Britain, and consequently is but little known with us : it is about the size of the Common Falcon ; its bill is blue, black at the point ; cere and irides yellow ; the upper parts of the body are elegantly marked with bars of blue and black ; the breast is of a yellowish white, marked with a few small dusky lines ; the belly, thighs, and vent are of a greyish white, crossed with dusky bands ; the quills are dusky, spotted with white ; the tail is finely barred with blue and black : the legs are yellow ; the claws black.

THE HEN-HARRIER.

DOVE-COLOURED FALCON, OR BLUE HAWK.

(*Falco Cyaneus*, Lin.—*L'Oiseau St. Martin*, Buff.)

THE length seventeen inches; breadth, from tip to tip, somewhat more than three feet. The bill is black, and covered at the base with long bristly feathers; the cere, irides, and edges of the eyelids are yellow: the upper parts of the body are of a bluish grey colour, mixed with light tinges of rusty; the breast and under coverts of the wings are white, the former marked with rusty-coloured streaks, the latter with bars of the same colour; the greater quills are black, the secondaries and lesser quills ash coloured; on the latter, in some birds, a spot of black in the middle of each feather forms a bar across the wing; the two middle feathers of the tail are grey, the next three are marked on their inner webs with dusky bars, the two outermost are marked with al-

ternate bars of white and rust colour : the legs are long and slender, and of a yellow colour. These birds vary much : of several with which this work has been favoured by John Silvertop, Esq. some were perfectly white on the under parts, and of a larger size than common : probably the difference arises from the age of the bird.*

The Hen-harrier feeds on birds, lizards, and other reptiles ; it breeds annually on Cheviot, and on the shady precipices under the Roman wall by Craglake :† it flies low, skimming along the surface of the ground in search of its prey. The female makes her nest on the ground, and lays four eggs of a reddish colour, with a few white spots.

* It has been supposed that this and the following are male and female ; but the repeated instances of Hen-harriers of both sexes having been seen, leave it beyond all doubt that they constitute two distinct species.

† Wallis's Natural History of Northumberland.

THE RINGTAIL.

(*Falco Pygargus*, Lin.—*Soubuse*, Buff.)

Its length is twenty inches ; breadth three feet nine. Its bill is black ; cere and irides yellow : the upper part of the body is dusky ; the breast, belly, and thighs are of a yellowish brown, marked with oblong dusky spots ; the rump white ; from the back part of the head, behind the eyes to the throat, there is a line of whitish coloured feathers, forming a collar or wreath ; under each eye there is a white spot ; the tail is long, and marked with alternate brown and dusky bars : the legs are yellow ; claws black.

THE LANNER.

(*Falco Lanarius*, Lin.—*Le Lanier*, Buff.)

THIS bird is somewhat less than the Buzzard. Its bill is blue ; cere inclining to green ; eyes yellow ; the fea-

thers on the upper parts of the body are brown, with pale edges; above each eye there is a white line, which runs towards the hinder part of the head, and beneath it is a black streak pointing downwards towards the neck; the throat is white; the breast of a dull yellow, marked with brown spots; thighs and vent the same; the quill feathers are dusky, marked on the inner webs with oval spots, of a rust colour; the tail is spotted in the same manner: the legs are short and strong, and of a bluish colour.

The Lanner is not common in England; it breeds in Ireland, and is found in various parts of Europe. It derives its name from its mode of tearing its prey into small pieces with its bill.

THE KESTREL.

STONEGALL, STANNEL HAWK, OR WINDHOVER.

(*Falco Tinnunculus*, Lin.—*La Creffterelle*, Buff.)

THE male of this species differs so much from the female, that we have given a figure of it from one we had

in our possession, probably an old one. Its length is fourteen inches; breadth two feet three inches: its bill is blue; cere and eyelids yellow; eyes black; the forehead dull yellow; the top of the head, back part of the neck, and sides, as far as the points of the wings, are of a lead colour, faintly streaked with black; the cheeks are paler; from the corner of the mouth on each side there is a dark streak pointing downwards; the back and coverts of the wings are of a bright vinous colour, spotted with black; quill feathers dusky, with light edges; all the under part of the body is of a pale rust colour, streaked and spotted with black; thighs plain; the tail feathers are of a fine blue grey, with black shafts; towards the end there is a broad black bar both on the upper part and under sides; the tips are white: the legs are yellow, and the claws black.

The Kestrel is widely diffused throughout Europe, and is found in the more temperate parts of North America: it is a handsome bird; its sight is acute, and its flight easy and graceful: it breeds in the hollows of trees, and in the holes of rocks, towers, and ruined buildings; it lays four or five eggs, of a pale reddish colour: its food consists of small birds, field mice, and reptiles: after it has secured its prey, it plucks the feathers very dexterously from the birds, but swallows the mice entire, and discharges the hair, in the form of round balls, from its bill. This bird is frequently seen hovering in the air, and fanning with its wings by a gentle motion, or wheeling slowly round, at the same time watching for its prey, on which it shoots like an arrow. It was formerly used in Great Britain for catching small birds and young Partridges.

THE FEMALE KESTREL.

THIS beautiful bird is distinguished from every other Hawk by its variegated plumage : its bill is blue ; cere and feet yellow ; eyes dark coloured, surrounded with a yellow skin ; its head is rust coloured, streaked with black ; behind each eye there is a light spot ; the back and wing coverts are elegantly marked with numerous undulated bars of black ; the breast, belly, and thighs are of a pale reddish colour, with dusky streaks pointing downwards ; vent plain ; the tail is marked by a pretty broad black bar near the end ; a number of smaller ones, of the same colour, occupy the remaining part ; the tip is pale.

THE HOBBY.

(*Falco Subbuteo*, Lin.—*Le Hobreau*, Buff.)

THE length of the male is twelve inches; breadth about two feet. The bill is blue; cere and orbits of the eyes yellow; the irides orange; over each eye there is a light coloured streak; the top of the head, and back, are of a bluish black; the wing coverts the same, but in some edged with rust colour; the hinder part of the neck is marked with two pale yellow spots; a black mark from behind each eye, forming almost a crescent, is extended downwards on the neck; the breast and belly are pale, marked with dusky streaks; the thighs rusty, with long dusky streaks; the wings brown; the two middle feathers of the tail are of a deep dove colour, the others are barred with rusty, and tipped with white. The female is much larger, and the spots on her breast more

conspicuous than those of the male : the legs and feet are yellow.

The Hobby breeds with us, but is said to emigrate in October. It was formerly used in falconry, chiefly for Larks and other small birds, which were caught in a singular manner : when the Hawk was cast off, the Larks, fixed to the ground through fear, became an easy prey to the fowler, who drew a net over them. Buffon says, that it was used in taking Partridges and Quails.

THE MERLIN.

(*Falco Æsalon*, Lin.—*L'Emerillon*, Buff.)

THE Merlin is the smallest of all the Hawk kind, scarcely exceeding the size of a Blackbird. Its bill is blue ; cere and irides yellow : the head is of a rust colour, streaked with black ; back and wings of a deepish

brown, tinged with ash, streaked down the shafts with black, and edged with rust colour : quill feathers dark, tipped and margined on the inner webs with reddish white ; the breast and belly are of a yellowish white, with streaks of rusty brown pointing downwards ; the tail is long, and marked with alternate dusky and pale bars ; the wings, when closed, do not reach quite to the end of the tail : the legs are yellow ; claws black.

The Merlin, though small, is not inferior in courage to any of the Falcon tribe. It was used for taking Larks, Partridges, and Quails, which it would frequently kill by one blow, striking them on the breast, head, or neck. Buffon observes that this bird differs from the Falcons, and all the rapacious kind, in the male and female's being of the same size. The Merlin does not breed here, but visits us in October ; it flies low, and with great celerity and ease. It preys on small birds, and breeds in woods, laying five or six eggs.

OF THE OWL.

THE Owl is distinguished, among birds of the rapacious kind, by peculiar and striking characters: its outward appearance is not more singular than its habits and dispositions: unable to bear the brighter light of the sun, the Owl retires to some lonely retreat, where it passes the day in silence and obscurity; but at the approach of evening, when all nature is desirous of repose, and the smaller animals, which are its principal food, are seeking their nestling places, the Owl comes forth from its lurking holes in quest of its prey. Its eyes are admirably adapted for this purpose, being so formed as to distinguish objects with greater facility in the dusk than in broad day-light. Its flight is low and silent during its nocturnal excursions, and when it rests it is then only known by its frightful and reiterated cries, with which it interrupts the silence of the night. During the day, the Owl is seldom seen; but, if forced from his retreat, his flight is broken and interrupted, and he is sometimes attended by numbers of small birds of various kinds, who seeing his embarrassment, pursue him with incessant cries, and torment him with their movements: the Jay, the Thrush, the Blackbird, the Redbreast, and the Titmouse, all assemble to hurry and perplex him. During all this, the Owl remains perched upon the branch of a tree, and answers them only with aukward and insignificant gestures, turning his head, eyes,* and body, with all the appearance of mockery

* At whatever they look, they turn their heads round towards the object; for it appears that the eyes of all this tribe are fixed in their sockets, and do not move.

and affectation. All the species of Owls, however, are not alike dazzled and confused with the light of the sun; some of them being able to fly, and see distinctly in open day.

Nocturnal birds of prey are generally divided into two kinds—that which hath horns or ears, and that which is earless or without horns. These horns consist of small tufts of feathers, standing up like ears on each side of the head, which are erected or depressed at the pleasure of the animal; and in all probability are of use in directing the organs of hearing, which are very large, to their proper object. Both kinds agree in having their eyes so formed as to be able to pursue their prey with much less light than other birds. The general character of the Owl is as follows:—The eyes are large, and are surrounded with a radiated circle of feathers, of which the eye itself is the centre; the beak and talons are strong and crooked; the body very short, but thick, and well covered with a coat of the softest and most delicate plumage; the external edges of the outer quill feathers in general are finely fringed, which adds greatly to the smoothness and silence of its flight.

THE GREAT EARED OWL.

(*Strix Bubo*, Lin.—*Le grand Duc*, Buff.)

THIS bird is not much inferior in size to an Eagle. Its head is very large, and is adorned with two tufts, more than two inches long, which stand just above each eye; its bill is strong, and much hooked; the eyes large, and of a bright yellow; the whole plumage is of

a rusty brown, finely variegated with black and yellow lines, spots, and specks; its belly is ribbed with bars of a brown colour, confusedly intermixed; its tail is short, marked with dusky bars; its legs are strong, and covered to the claws with a thick close down, of a rust colour; its claws are large, much hooked, and of a dusky colour. Its nest is large, being nearly three feet in diameter; it is composed of sticks bound together by fibrous roots, and lined with leaves. It generally lays two eggs, somewhat larger than those of a Hen, and variegated like the bird itself. The young ones are very voracious, and are well supplied with various kinds of food by the parents. This bird has been found, though rarely, in Great Britain; it builds its nest in the caverns of rocks, in mountainous, and almost inaccessible places, and is seldom seen on the plain, or perched on trees: it feeds on young hares, rabbits, rats, mice, and reptiles of various kinds.

THE LONG-EARED OWL.

HORN OWL.

(*Strix Otus*, Lin.—*Le Hibou*, Buff.)

Its length is fourteen inches; breadth somewhat more than three feet. Its bill is black; irides of a bright yellow; the radiated circle round each eye is of a light cream colour, in some parts tinged with red; between the bill and the eye there is a circular streak, of a dark brown colour; another circle of a dark rusty brown entirely surrounds the face; its horns or ears consist of six feathers, closely laid together, of a dark brown colour, tipped and edged with yellow; the upper part of the body is beautifully penciled with fine streaks of white, rusty, and brown; the breast and neck are

yellow, finely marked with dusky streaks, pointing downwards; the belly, thighs, and vent feathers are of a light cream colour: upon each wing there are four or five large white spots; the quill and tail feathers are marked with dusky and reddish bars: the legs are feathered down to the claws, which are very sharp; the outer claw is moveable, and may be turned backwards.

This bird is common in various parts of Europe, as well as in this country; its usual haunts are in old ruined buildings, in rocks, and in hollow trees. M. Buffon observes, that it seldom constructs a nest of its own, but not unfrequently occupies that of the Magpie: it lays four or five eggs; the young are at first white, but acquire their natural colour in about fifteen days.

THE SHORT-EARED OWL.

{*Strix Brachyotos*, Phil. Transf. vol. 62, p. 384.)

LENGTH fourteen inches; breadth three feet. The head is small, and Hawk-like; bill dusky; the irides are of a bright yellow, and when the pupil is contracted, shine like gold: the circle round each eye is of a dirty white, with dark streaks pointing outwards; immediately round the eye there is a circle of black; the two horns or ears consist of not more than three feathers, of a pale brown or tawny colour, with a dark streak in the middle of each; the whole upper part of the body is variously marked with dark brown and tawny, the feathers are mostly edged with the latter; the breast and belly are of a pale yellow, marked with dark longitudinal

streaks which are most numerous on the breast : the legs and feet are covered with feathers of a pale yellow colour ; the claws are much hooked and black : the wings are long, and extend beyond the tail ; the quills are marked with alternate bars of a dusky and a pale brown ; the tail is likewise marked with bars of the same colours, and the middle feathers are distinguished by a dark spot in the centre of the yellow space ; the tip is white. Of several of these birds, both male and female, with which this work has been favoured, both sexes had the upright tufts or ears : in one which was alive, they were very conspicuous, and appeared more erect while the bird remained undisturbed ; but when frightened, were scarcely to be seen : in the dead birds they were hardly discernible.

Mr Pennant seems to be the first describer of this rare and beautiful species, which he supposes to be a bird of passage, as it only visits us in the latter part of the year, and disappears in the spring. It flies by day, and sometimes is seen in companies : twenty-eight were once counted in a turnip-field in November.* It is found chiefly in wooded or mountainous countries : its food is principally field mice.

* Communicated by Thomas Penrice, Esq. of Yarmouth.

THE FEMALE HORNED OWL.

THIS bird was somewhat larger than the former ; the colours and marks were the same, but much darker, and the spots on the breast larger and more numerous ; the ears were not discernible. Being a dead bird, and having not seen any other at the time, the editors supposed it to be a distinct kind ; but having since seen several, both males and females, they are convinced of the mistake.

THE WHITE OWL.

BARN OWL, CHURCH OWL, GILLIHOWLET, OR
SCREECH OWL.

(*Strix Flammea*, Lin.—*L'Effraie*, ou *la Fresaie*, Buff.)

LENGTH fourteen inches. Bill pale horn colour ; eyes dark ; the radiated circle round the eye is composed of feathers of the most delicate softness, and perfectly white ; the head, back, and wings, are of a pale chesnut, beautifully powdered with very fine grey and brown spots, intermixed with white ; the breast, belly, and thighs are white ; on the former are a few dark spots : the legs are feathered down to the toes, which are covered with short hairs ; the wings extend beyond the tail, which is short,

and marked with alternate bars of dusky and white; the claws are white. Birds of this kind vary considerably: of several which were in the hands of the editors, the differences were very conspicuous, the colours being more or less faint according to the age of the bird; the breast in some was white, without spots—in others pale yellow.

The White Owl is well known, and is often seen in the most populous towns, frequenting churches, old houses, maltings, and other uninhabited buildings, where it continues during the day, and leaves its haunts in the twilight in quest of its prey. It has obtained the name of Screech Owl from its cries, repeated at intervals, and rendered loud and frightful from the stillness of the night. During its repose it makes a blowing noise, resembling the snoring of a man. It makes no nest, but deposits its eggs in the holes of walls, and lays five or six, of a whitish colour. It feeds on mice and small birds, which it swallows whole, and afterwards emits the bones, feathers, and other indigestible parts, at its mouth, in the form of small round cakes, which are often found in the empty buildings it frequents.

THE TAWNY OWL.

COMMON BROWN IVY OWL, OR HOWLET.

(*Strix Stridula*, Lin.—*Le Chathuant*, Buff.)

THIS bird is about the size of the last. Its bill is white: eyes dark blue: the radiated feathers round the eyes are white, finely streaked with brown; the head, neck, back, wing coverts, and scapulars, are of a tawny brown colour, finely powdered and spotted with dark brown and black; on the wing coverts and scapulars, are several large white spots, regularly placed, so as to form three rows; the quill feathers are marked with alternate bars of light and dark brown; the breast and belly are of a pale yellow, marked with narrow dark streaks pointing downwards, and crossed with others of

the same colour: the legs are feathered down to the toes; the claws are large, much hooked, and white. This species is found in various parts of Europe; it frequents woods, and builds its nest in the hollows of trees.

THE LITTLE OWL.

(*Strix Passerina*, Lin.—*La Chevéche ou petite Chouette*, Buff.)

THIS is the smallest of the Owl kind, not being larger than a Blackbird. Its bill is brown at the base, and of a yellow colour at the tip; eyes pale yellow; the circular feathers on the face are white, tipped with black; the upper part of the body is of an olive brown colour; the top of the head and wing coverts are spotted with white; the breast and belly white, spotted with brown; the feathers of the tail are barred with rust colour and brown, and tipped with white; the legs are covered with down of a rusty colour mixed with white; the toes and claws are of a brownish colour. It frequents rocks, caverns, and ruined buildings, and builds its nest, which is constructed in the rudest manner, in the most retired places: it lays five eggs, spotted with white and yellow. It sees better in the day-time than other nocturnal birds, and gives chase to Swallows and other small birds on the wing; it likewise feeds on mice, which it tears in pieces with its bill and claws, and swallows them by morsels: it is said to pluck the birds which it kills before it eats them, in which it differs from all the other Owls. It is rarely met with in England: it is sometimes found in Yorkshire, Flintshire, and in the neighbourhood of London.

OF THE SHRIKE.

THE last class to be mentioned of birds of the rapacious kind, is that of the Shrike, which, as M. Buffon observes, though they are small, and of a delicate form, yet their courage, their appetite for blood, and their hooked bill, entitle them to be ranked with the boldest and the most sanguinary of the rapacious tribe. This genus has been variously placed in the systems of naturalists; sometimes it has been classed with the Falcons, sometimes with the Pies, and has even been ranked with the harmless and inoffensive tribes of the Passerine kind, to which, indeed, in outward appearance at least, it bears no small resemblance. Conformably, however, with the latest arrangements, it is here placed in the rear of those birds which live by rapine and plunder; and, like most of the connecting links in the great chain of nature, it will be found to possess a middle quality, partaking of those which are placed on each side of it, and making thereby an easy transition from the one to the other.

The Shrike genus is distinguished by the following characteristics: the bill is strong, straight at the base, and hooked or bent towards the end; the upper mandible is notched near the tip, and the base is furnished with bristles; it has no cere; the tongue is divided at the end; the outer toe is connected to the middle one as far as the first joint. To these exterior marks may be added, that it possesses the most undaunted courage, and will attack birds much larger and stronger than itself, such as the Crow, the Magpie, and most of the smaller kinds of Hawks: if any of these should fly near the place of its retreat, the Shrike darts upon it with

loud cries, attacks the invader, and drives it from its nest. The parent birds will sometimes join on such occasions; and there are few birds that will venture to abide the contest. Shrikes will chase all the small birds upon the wing, and sometimes will venture to attack Partridges, and even young hares. Thrushes, Black-birds, and such like, are their common prey; they fix on them with their talons, split the skull with their bill, and feed on them at leisure.

There are three kinds found in this kingdom, of which the following is the largest.

GREAT ASH-COLOURED SHRIKE.

MURDERING PIE, OR GREAT BUTCHER BIRD.

(*Lanius excubitor*, Lin.—*La Pie-Griſche griſe*, Buff.)

THE length about ten inches. Its bill is black, and furnished with bristles at the base: the upper parts of its plumage are of a pale blue ash colour; the under parts white; a black stripe passes through each eye; the

greater quills are black, with a large white spot at the base, forming a bar of that colour across the wing; the lesser quills are white at the top; the scapulars are white; the two middle feathers of the tail are black; the next on each side are white at the ends, gradually increasing to the outermost, which are nearly all white; the whole, when the tail is spread, forms a large oval spot of black; the legs are black. The female differs little from the male; she lays six eggs, of a dull olive green, spotted at the end with black.

This bird is rarely found in the cultivated parts of the country, preferring mountainous wilds, among furze and thorny thickets, for its residence. M. Buffon says it is common in France, where it continues all the year: it is met with likewise in Russia, and various parts of Europe; it preys on small birds, which it seizes by the throat, and, after strangling, fixes them on a sharp thorn, and tears them in pieces with its bill. Mr Pennant observes, that when kept in the cage, it sticks its food against the wires before it will eat it. It is said to imitate the notes of the smaller singing birds, thereby drawing them near its haunts, in order more securely to seize them.

The foregoing figure and description were taken from a very fine specimen, for which this work is indebted to Lieutenant H. F. Gibson, of the 4th dragoons.

THE RED-BACKED SHRIKE.

LESSER BUTCHER BIRD, OR FLUSHER.

(*Lanius Collurio*, Lin.—*L'Ecorcheur*, Buff.)

THIS bird is somewhat less than the last, being little more than seven inches long. Its bill is black; irides hazel; the head and lower part of the back are of a light grey colour; the upper part of the back and coverts of the wings are of a bright rusty red; the breast, belly, and sides of a fine pale rose or bloom colour; the throat is white; a stroke of black passes from the bill through each eye; the two middle feathers of the tail are black, the others are white at the base; the quills are of a brown colour; the legs black.

The female is somewhat larger than the male; the head is of a rust colour, mixed with grey; the breast, belly, and sides of a dirty white; the tail deep brown; the exterior web of the outer feathers white. It builds its nest in hedges or low bushes, and lays six white eggs, marked with a reddish brown circle towards the larger end.

The manners of this species are similar to those of the last : it frequently preys on young birds, which it takes in the nest ; it likewise feeds on grasshoppers, beetles, and other insects. It also imitates the notes of other birds, in order the more surely to decoy them. When sitting on the nest, the female soon discovers herself at the approach of any person, by her loud and violent outcries.

THE WOODCHAT

(*La Pie-Grièche Rouffe*, Buff.)

Is said to equal the last in point of size ; its bill is horn-coloured ; feathers round the base whitish ; head and part of the neck bright bay ; from the base of the bill a black streak passes through each eye, inclining downwards on the neck ; back dusky, under parts of a yellowish white ; quills black, near the bottom of each a white spot ; the two middle feathers of the tail are black, the outer edges and tips of the others are white ; the legs black.

The description of this bird seems to have been taken from a drawing by Mr Edwards, in the Sloanian Museum, and is not unlike the Least Butcher Bird of that celebrated naturalist, which it resembles in size and in the distribution of its colours. M. Buffon supposes it may be a variety of the Red-backed Shrike, as they both depart in September, and return at the same time in the spring ; the manners of both are said to be the same, and the difference of colours not very material : the female is somewhat different ; the upper parts of the plumage being of a reddish colour, transversely streaked with brown ; the under parts of a dirty white, marked in the same manner with brown ; the tail is of a reddish brown, with a dusky mark near the end, tipped with red.

BIRDS OF THE PIE KIND

CONSTITUTE the next order in the arrangement of the feathered part of the creation: they consist of a numerous and irregular tribe, widely differing from each other in their habits, appetites, and manners, as well as in their form, size, and appearance. In general they are noisy, restless, and loquacious, and of all other kinds contribute the least towards supplying the necessities or the pleasures of man. At the head of these we shall place the Crow and its affinities, well known by its sooty plumage and croaking note, from every other tribe of the feathered race. Birds of this kind are found in every part of the known world, from Greenland to the Cape of Good Hope; and though generally disliked for their disgusting and indiscriminating voracity, yet in many respects they may be said to be of great benefit to mankind, not only by devouring putrid flesh, but principally by destroying great quantities of noxious insects, worms, and reptiles. Rooks, in particular, are fond of the erucæ of the hedge-chaffer, or chesnut brown beetle,* for which they search with indefatigable pains. They are often accused of feeding

* These insects appear in hot weather, in formidable numbers, disrobing the fields and trees of their verdure, blossoms, and fruit, spreading desolation and destruction wherever they go. They appeared in great numbers in Ireland during a hot summer, and committed great ravages. In the year 1747, whole meadows and corn fields were destroyed by them in Suffolk. The decrease of rookeries in that county was thought to be the occasion of it. The many rookeries with us is in some measure the reason why we have so few of these destructive insects.

Wallis's History of Northumberland.

on the corn just after it has been sown, and various contrivances have been made both to kill and frighten them away; but, in our estimation, the advantages derived from the destruction which they make among grubs, earth-worms, and noxious insects of various kinds, greatly overpay the injury done to the future harvest, by the small quantity of corn they may destroy in searching after their favourite food. In general they are sagacious, active, and faithful to each other: they live in pairs, and their mutual attachment is constant. They are a clamourous race, mostly build in trees, and form a kind of society, in which there appears something like a regular government: a centinel watches for the general safety, to give notice on the appearance of danger. On the approach of an enemy, or of a stranger, they act in concert, and drive him away with repeated attacks. On these occasions they are as bold as they are artful and cunning in avoiding the smallest appearance of real danger; of this the disappointed fowler has frequently occasion to take notice, on seeing the birds fly away before he can draw near enough to shoot them: from this circumstance it has been said that they discover their danger by the quickness of their scent, which enables them to provide for their safety in time; but of this we have our doubts, and rather ascribe it to the quickness of their sight, by which they discover the motions of the sportsman.

The general characters of this kind are well known, and are chiefly as follows:—The bill is strong, and has a slight curvature along the top of the upper mandible; the edges are thin, and sharp or cultrated; in many of the species there is a small notch near the tip; the

nostrils are covered with bristles; tongue divided at the end; three toes forward, one behind, the middle toe connected to the outer as far as the first joint.

THE RAVEN

GREAT CORBIE CROW.

(*Corvus Corax*, Lin.—*Le Corbeau*, Buff.)

Is the largest of this kind; its length is above two feet; breadth four. Its bill is strong, and very thick at the base; it measures somewhat more than two inches and a half in length, and is covered with strong hairs or bristles, which extend above half its length, covering the nostrils: the general colour of the upper parts is a fine glossy black, reflecting a blue tint in particular lights; the under parts are duller, and of a dusky hue.

The Raven is well known in all parts of the world, and, in times of ignorance and superstition, was considered as ominous, foretelling future events by its horrid croakings, and announcing impending calamities : in those times the raven was considered as a bird of vast importance, and the various changes and modulations of its voice were studied with the most careful attention, and were made use of by artful and designing men to mislead the ignorant and credulous. It is a very long-lived bird, and is supposed sometimes to live a century or more. It is fond of carrion, which it scents at a great distance ; it is said that it will destroy rabbits, young ducks, and chickens ; it has been known to seize on young lambs which have been dropped in a weak state, and pick out their eyes while yet alive : it will suck the eggs of other birds ; it feeds also on earth-worms, reptiles, and even shell-fish when urged by hunger. It may be rendered very tame and familiar, and has been frequently taught to pronounce a variety of words : it is a crafty bird, and will frequently pick up things of value, such as rings, money, &c. and carry them to its hiding-place. It makes its nest early in the spring, and builds in trees and the holes of rocks, laying five or six eggs, of a pale bluish green colour, spotted with brown. The female sits about twenty days, and is constantly attended by the male, who not only provides her with abundance of food, but relieves her in turn, and takes her place in the nest.

The natives of Greenland eat the flesh, and make a covering for themselves with the skins of these birds, which they wear next their bodies.

THE CARRION CROW

MIDDEN CROW, OR BLACK-NEBBED CROW.

(Corvus Corone, Lin.—La Corneille, Buff.)

Is less than the Raven, but similar to it in its habits, colour, and external appearance. It is about eighteen inches in length; its breadth about three feet. Birds of this kind are more numerous and as widely spread as the Raven; they live mostly in woods, and build their nests on trees; the female lays five or six eggs much like those of a Raven. They feed on putrid flesh of all sorts; likewise on eggs, worms, insects, and various sorts of grain. They live together in pairs, and remain in England during the whole year.

THE HOODED CROW

ROYSTON CROW.

(Corvus Cornix, Lin.—Le Corneille Mantelée, Buff.)

Is somewhat larger and more bulky than the Rook,

measuring twenty-two inches in length. Its bill is black, and two inches long; the head, fore part of the neck, wings, and tail are black; the back and all the under parts are of a pale ash colour; the legs black.

These birds arrive with the Woodcock, and on their first coming frequent the shores of rivers. They depart in the spring to breed in other countries, but it is said that they do not all leave us, as they have been seen during the summer months, in the northern quarters of our island, where they frequent the mountainous parts of the country, and breed in the pines. In more northern parts of the world they continue the whole year, and subsist on sea-worms, shell-fish, and other marine productions. With us they are seen to mix with, and to feed in the same manner as the Crow. During the breeding season they live in pairs, lay six eggs, and are said to be much attached to their offspring.

THE ROOK.

(*Corvus Frugilegus*, Lin.—*Le Freux*, Buff.)

THIS bird is about the size of the Carrion Crow, and, excepting its more glossy plumage, very much resembles it. The base of the bill and nostrils, as far as the eyes, is covered with a rough scabrous skin, in which it differs from all the rest, occasioned, it is said, by thrusting its bill into the earth in search of worms; but as the same appearance has been observed in such as have been brought up tame and unaccustomed to that mode of subsistence, we are inclined to consider it as an original peculiarity. We have already had occasion to observe that they are useful in preventing a too great increase of that destructive insect the chafer or dor-beetle, and thereby make large recompence for the depredations they may occasionally commit on the corn-fields. Rooks are gre-

gamous, and fly in immense flocks at morning and evening to and from their roosting places in quest of food. During the breeding time they live together in large societies, and build their nests on trees close to each other, frequently in the midst of large and populous towns. These rookeries, however, are often the scenes of bitter contests; the new-comers are frequently driven away by the old inhabitants, their half-built nests torn in pieces, and the unfortunate couple forced to begin their work anew in some more undisturbed situation: of this we had a remarkable instance in Newcastle. In the year 1783, a pair of Rooks, after an unsuccessful attempt to establish themselves in a rookery at no great distance from the Exchange, were compelled to abandon the attempt. They took refuge on the spire of that building, and although constantly interrupted by other Rooks, built their nest on the top of the vane, and brought forth their young, undisturbed by the noise of the populace below them; the nest and its inhabitants turning about with every change of the wind. They returned and built their nest every year on the same place till 1793, soon after which the spire was taken down.

THE JACK-DAW.

(*Corvus Monedula*, Lin.—*Le Choucas*, Buff.)

THIS bird is considerably less than the Rook, being only thirteen inches in length, and about twenty-eight in breadth. Its bill is black; eyes white; the hinder part of the head and neck are of a hoary grey colour; the rest of the plumage is of a fine glossy black above; beneath it has a dusky hue: the legs are black.

The Daw is very common in England, and remains with us the whole year: in other countries, as in France and various parts of Germany, it is migratory. They frequent churches, old towers, and ruins, in great flocks, where they build their nests: the female lays five or six eggs, paler than those of the Crow, and smaller; they rarely build in trees: in Hampshire they sometimes breed in the rabbit burrows.* They are easily tamed,

* White's Natural History of Selborne.

and may be taught to pronounce several words: they will conceal part of their food, and with it small pieces of money, or toys. They feed on insects, grain, fruit, and small pieces of flesh, and are said to be fond of Partridge's eggs.

There is a variety of the Daw found in Switzerland, having a white collar round its neck. In Norway and other cold countries they have been seen perfectly white.

THE RED-LEGGED CROW.

CORNISH CHOUGH.

(*Corvus Graculus*, Lin.—*Le Coracias*, Buff.)

THIS bird is about the size of the Jackdaw. The bill is long, curved, sharp at the tip, and of a bright red colour; the iris of the eye is composed of two cir-

cles, the outer one red, the inner light blue; the eye-lids are red; the plumage is altogether of a purplish violet black: the legs are as red as the bill; the claws are large, hooked, and black.

Buffon describes the bird “as of an elegant figure, lively, restless, and turbulent, but it may be tamed to a certain degree.” It builds on high cliffs by the sea side, and chiefly frequents the coasts of Devonshire and Cornwall, and likewise many parts of Wales; a few are found on the Dover cliffs, and some in Scotland. The female lays four or five white eggs, spotted with yellow. It is a voracious, bold, and greedy bird, and feeds on insects and berries: it is said to be particularly fond of the juniper berry. Its manners are like those of a Jackdaw: it is attracted by glittering objects. Buffon says that it has been known to pull from the fire lighted pieces of wood, to the no small danger of the house.

THE MAGPIE.

PIANET.

(Corvus Pica, Lin.—La Pie, Buff.)

ITS length is about eighteen inches. Bill strong and black ; eyes hazel ; the head, neck, and breast are of a deep black, which is finely contrasted with the snowy whiteness of the under parts and scapulars ; the neck feathers are long, as are also those on the back, which extend towards the rump, leaving only a small space, of a greyish ash colour, between them and the tail coverts, which are black ; the plumage in general is glossed with green, purple, and blue, which catch the eye in different lights ; the tail is very long, and rather wedge-shaped ; the under tail-coverts, thighs, and legs, are black : on the throat and part of the neck there is a kind of feathers, mixed with the others, resembling strong whitish hairs.

This beautiful bird is every where common in Eng-

land ; it is likewise found in various parts of the Continent, but not so far north as Lapland, nor farther south than Italy : it is met with in America, but not commonly, and is migratory there. It feeds like the Crow, on almost every thing animal as well as vegetable. The female builds her nest with great art, leaving a hole in the side for her admittance, and covering the whole upper part with an interweaving of thorny twigs, closely entangled, thereby securing her retreat from the rude attacks of other birds : but it is not safety alone she consults ; the inside is furnished with a sort of mattress, composed of wool and other soft materials, on which her young repose : she lays seven or eight eggs, of a pale green colour, spotted with black.

The Magpie is crafty and familiar, and may be taught to pronounce words, and even short sentences, and will imitate any particular noise which it hears. It is addicted, like other birds of its kind, to stealing, and will hoard up its provisions. It is smaller than the Jackdaw, and its wings are shorter in proportion ; accordingly its flight is not so lofty, nor so well supported : it never undertakes long journies, but flies only from tree to tree, at moderate distances.

THE NUTCRACKER.

(*Corvus Caryocatactes*, Lin.—*Le Casse Noix*, Buff.)

THE length of this bird is thirteen inches. The bill is about two inches long, and black; the eyes are hazel; the upper part of the head and back part of the neck black; its general colour is that of a dusky brown, covered with triangular spots of white; the wings are black; greater wing coverts tipped with white; the tail is white at the tip; the rest black; rump white; legs and claws black.

There are very few instances known of this bird having been seen in England: it is common in Germany, is found also in Sweden and Denmark, and frequents the most mountainous parts of those countries. It makes its nest in holes of trees, and feeds on nuts, acorns, and the kernels of the pine apple. It is said to pierce the bark of trees with its bill, like the Woodpecker. This drawing was made from a stuffed specimen in the museum of the late George Allan, Esq.

THE JAY.

(*Corvus Glandarius*, Lin.—*Le Geai*, Buff.)

THIS beautiful bird is not more than thirteen inches in length. Its bill is black; eyes white; the feathers on the forehead are white, streaked with black, and form a tuft which it can erect and depress at pleasure; the chin is white, and from the corners of the bill on each side proceeds a broad streak of black, which passes under the eye; the hinder part of the head, the neck, and the back, are of a light cinnamon colour; the breast is of the same colour, but lighter; lesser wing coverts bay; the belly and vent almost white; the greater wing coverts are elegantly barred with black, fine pale blue and white alternately; the greater quills are black, with pale edges, the bases of some of them white; lesser quills black; those next the body chesnut; the rump is white; tail black, with pale brown edges; legs dirty pale brown.

The Jay is a very common bird in Great Britain, and is found in various parts of Europe. It is distinguished as well for the beautiful arrangement of its colours, as for its harsh, grating voice, and restless disposition. Upon seeing the sportsman, it gives, by its cries, the alarm of danger, and thereby defeats his aim and disappoints him. The Jay builds in woods, and makes an artless nest, composed of sticks, fibres, and tender twigs: the female lays five or six eggs, of a greyish ash colour, mixed with green, and faintly spotted with brown. Mr Pennant observes, that the young ones continue with their parents till the following spring, when they separate to form new pairs.

Birds of this species live on acorns, nuts, seeds, and various kinds of fruits; they will eat eggs, and sometimes destroy young birds in the absence of the old ones. When kept in a domestic state they may be rendered very familiar, and will imitate a variety of words and sounds. We have heard one imitate the sound made by the action of a saw so exactly, that though it was on a Sunday, we could hardly be persuaded that the person who kept it had not a carpenter at work in the house. Another, at the approach of cattle, had learned to hound a cur dog upon them, by whistling and calling upon him by his name: at last, during a severe frost, the dog was, by that means, excited to attack a cow big with calf, when the poor animal fell on the ice, and was much hurt: the Jay was complained of as a nuisance, and its owner was obliged to destroy it.

THE CHATTERER.

SILK TAIL, OR WAXEN CHATTERER.

(*Ampelis Garrulus*, Lin.—*Le Jaseur de Boheme*, Buff.)

THIS beautiful bird is about eight inches in length. Its bill is black, and has a small notch at the end ; its eyes, which are black and shining, are placed in a band of black, which passes from the base of the bill to the hinder part of the head ; its throat is black ; the feathers on the head are long, forming a crest ; all the upper parts of the body are of a reddish ash colour ; the breast and belly inclining to purple ; the vent and tail coverts in some, nearly white ; in others, the former reddish chesnut, and the latter ash colour : the tail feathers are black, tipped with pale yellow ; the quills are black, the third and fourth tipped on their outer edges with white, the five following with straw colour, but in some bright

yellow ; the secondaries are tipped with white, each being pointed with a flat horny substance of a bright vermillion colour. These appendages vary in different subjects ; one of those in our possession, had eight on one wing and six on the other. The legs are short and black. It is said the female is not distinguished by the little red waxen appendages at the ends of the second quills ; but this we are not able to determine from observation.

This rare bird visits our island only at uncertain intervals. In the years 1790, 1791, and 1803, several of them were taken in Northumberland and Durham as early as the month of November. Their summer residence is supposed to be the northern parts of Europe, within the arctic circle, whence they spread themselves into other countries, where they remain during winter, and return in the spring to their usual haunts. The general food of this bird is berries of various kinds ; in some countries it is said to be extremely fond of grapes : one which we saw in a state of captivity was fed chiefly with hawthorn berries, but from the difficulty of providing it with a sufficient supply of its natural food it soon died. Only this species of the Chatterer is found in Europe ; all the rest are natives of America.

THE ROLLER.

(*Coracias Garrula*, Lin.—*Le Rollier d'Europe*, Buff.)

THIS rare bird is distinguished by a plumage of most exquisite beauty ; it vies with the Parrot in an assemblage of the finest shades of blue and green, mixed with white, and heightened by the contrast of graver colours, from which perhaps it has been called the German Parrot, although in every other respect it differs from that bird, and seems rather to claim affinity with the Crow kind, to which we have made it an appendage. In size it resembles the Jay, being somewhat more than twelve inches in length. Its bill is black, beset with short bristles at the base ; the eyes are surrounded with a ring of naked skin, of a yellow colour, and behind them there is a kind of wart ; the head, neck, breast, and belly, are of a light

pea green ; the back and scapulars reddish brown ; the points of the wings and upper coverts are of a rich deep blue ; the greater coverts pale green ; the quills are of a dusky hue, inclining to black, and mixed with deep blue ; the rump is blue ; the tail is somewhat forked ; the lower parts of the feathers are of a dusky green, middle parts pale blue, tips black : the legs are short, and of a dull yellow.

This is the only species of its kind found in Europe ; it is very common in some parts of Germany, but is so rare in this country as hardly to deserve the name of a British bird. The author of the British Zoology mentions two that were shot in England, and these probably were only stragglers. The above drawing was made from a stuffed specimen in the Museum of the late Mr Tunstall, of Wycliffe.

The Roller is wilder than the Jay, and frequents the thickest woods ; it builds its nest chiefly on birch trees. Buffon says it is a bird of passage, and migrates in the months of May and September. In those countries where it is common, it is said to fly in large flocks in the autumn, and is frequently seen in cultivated grounds, with Rooks and other birds, searching for worms, small seeds, roots, &c. ; it likewise feeds on berries, caterpillars, and insects, and is said, in cases of necessity, to eat young frogs, and even carrion. The female is described by Aldrovandus as differing very much from the male ; her bill is thicker, and the head, neck, breast, and belly, are of a chesnut colour, bordering on a greyish ash. The young ones do not attain their brilliant colours till the second year.

This bird is remarkable for making a chattering kind of noise, by which it has obtained the name of *Garrulus*.

THE STARLING.

STARE.

(*Sturnus Vulgaris*, Lin.—*L'Etourneau*, Buff.)

THE length of this bird is somewhat less than nine inches. The bill is straight, sharp-pointed, and of a yellowish brown—in old birds deep yellow; the nostrils are surrounded by a prominent rim; the eyes are brown; the whole plumage is dark, glossed with green, blue, purple, and copper, but each feather is marked at the end with a pale yellow spot; the wing coverts are edged with yellowish brown; the quill and tail feathers dusky, with light edges: the legs are of a reddish brown.

From the striking similarity, both in form and manners, observable in this bird and those more immediately preceding, we have no scruple in removing it from its usual place, as it evidently forms a connecting link be-

tween them, and in a variety of points seems equally allied to both. Few birds are more generally known than the Stare, it being an inhabitant of almost every climate; and as it is a familiar bird, and easily trained in a state of captivity, its habits have been more frequently observed than those of most other birds. The female makes an artless nest in the hollows of trees, rocks, or old walls, and sometimes in cliffs overhanging the sea: she lays four or five eggs, of a pale greenish ash colour: the young birds are of a dusky brown colour till the first moult. In the winter season these birds fly in vast flocks, and may be known at a great distance by their whirling mode of flight, which Buffon compares to a sort of vortex, in which the collective body performs an uniform circular revolution, and at the same time continues to make a progressive advance. The evening is the time when the Staresh assemble in the greatest numbers, and betake themselves to the fens and marshes, where they roost among the reeds: they chatter much in the evening and morning, both when they assemble and disperse. So attached are they to society, that they not only join those of their own species, but also birds of a different kind, and are frequently seen in company with Redwings, Fieldfares, and even with Crows, Jackdaws, and Pigeons. Their principal food consists of worms, snails, and caterpillars; they likewise eat various kinds of grain, seeds, and berries, and are said to be particularly fond of cherries. In a confined state they eat small pieces of raw flesh, bread soaked in water, &c. are very docile, and may easily be taught to repeat short phrases, or whistle tunes with great exactness, and in this state acquire a warbling superior to their native song.

THE ROSE-COLOURED OUZEL

(*Turdus Roseus*, Lin.—*Le Merle Couleur de Rose*, Buff.)

Is the size of a Starling. Its bill is of a carnation colour, blackish at the tip ; irides pale ; the feathers on the head are long, forming a crest ; the head, neck, wings, and tail are black, glossed with shades of blue, purple, and green ; its back, rump, breast, belly, and lesser wing coverts pale rose colour, marked with a few irregular dark spots : legs pale red ; claws brown.

This bird has been so rarely met with in England that it will scarcely be admitted among such as are purely British. There are, however, a few instances of its being found here ; and although not a resident, it sometimes visits us, on which account it must not be passed over unnoticed. It is found in various parts of Europe and Asia, and in most places is migratory. It seems to delight chiefly in the warmer climates ; it is fond of locusts, and frequents the places where those destructive insects abound in great numbers ; on which account it is said to be held sacred by the inhabitants.

THE RING OUZEL.

(*Turdus Torquatus*, Lin.—*Le Merle à Plastron Blanc*, Buff.)

THIS bird very much resembles the Blackbird : its general colour is of a dull black or dusky hue ; each feather is margined with a greyish ash colour ; the bill is dusky ; corners of the mouth and inside yellow ; eyes hazel ; its breast is distinguished by a crescent of pure white, which almost surrounds the neck, and from which it derives its name : its legs are of a dusky brown. The female differs in having the crescent on the breast much less conspicuous, and in some birds wholly wanting, which has occasioned some authors to consider it as a different species, under the name of the Rock Ouzel.

Ring Ouzels are found in various parts of this kingdom, chiefly in the wilder and more mountainous districts of the country : their habits are similar to those of the Blackbird ; the female builds her nest in the same manner, and in similar situations, and lays four or five eggs

of the same colour: they feed on insects and berries of various kinds, are fond of grapes, and Buffon observes, during the season of vintage are generally fat, and at that time are esteemed delicious eating. The same author says, that in France they are migratory. In some parts of this kingdom they have been observed to change places, particularly in Hampshire, where they are known generally to stay not more than a fortnight at one time. The foregoing representation was taken from one killed near Bedlington, in Northumberland.

THE BLACK OUZEL.

BLACKBIRD.

(*Turdus Merula*, Lin.—*Le Merle*, Buff.)

THE length of the Blackbird is generally about ten inches. Its plumage is altogether black; the bill, inside of the mouth, and edges of the eye-lids are yellow, as are also the soles of the feet; the legs are of a dirty yel-

low. The female is mostly brown, inclining to rust colour on the breast and belly ; the bill is dusky, and the legs brown ; its song is also very different, so that it has sometimes been mistaken for a bird of a different species.

The Males, during the first year, resemble the females so much as not easily to be distinguished from them ; but after that, they assume the yellow bill, and other distinguishing marks of their kind. The Blackbird is a solitary bird, frequenting woods and thickets, chiefly of evergreens, such as holly, pines, firs, &c. especially where there are perennial springs, which together afford it both shelter and subsistence. Wild Blackbirds feed on berries, fruits, insects, and worms ; they never fly in flocks like Thrushes ; they pair early, and begin to warble nearly as soon as any other of the songsters of the grove. The female builds her nest in bushes or low trees, and lays four or five eggs, of a bluish green colour, marked irregularly with dusky spots. The young birds are easily brought up tame, and may be taught to whistle a variety of tunes, for which their clear, loud, and melodious tones are well adapted. They are restless and timorous birds, 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 caught with bird-lime, nooses, and all sorts of snares. They are never kept in aviaries ; for, when shut up with other birds, they pursue and harass their companions in slavery unceasingly, for which reason they are generally confined in cages apart. In some counties of England this bird is called simply the Ouzel.

MISSEL THRUSH.

MISSEL BIRD, OR SHRITE.

(Turdus Viscivorus, Lin.—La Drainè, Buff.)

THE length of this bird is about eleven inches. The bill is dusky, the base of the lower bill yellow ; the eyes hazel ; the head, back, and lesser coverts of the wings are of a deep olive brown, the latter tipped with white ; the lower part of the back and rump tinged with yellow ; the cheeks are of a yellowish white, spotted with brown, as are also the breast and belly, which are marked with larger spots of a dark brown colour ; the quills are brown, with pale edges ; tail feathers the same, the three outermost tipped with white : the legs are yellow ; claws black. The female builds her nest in bushes or low trees, and lays four or five eggs, of a dirty flesh colour, marked with blood red spots. Its nest is made of moss, leaves, &c. lined with dry grass, strengthened on the outside with small twigs. It begins to sing very early, often on the turn of the year in blowing showery weather, whence in some places it is called the Storm-cock. Its note of anger is very loud and harsh, between a chatter and a shriek, which accounts for some of its names. It feeds on various kinds of berries, particularly those of the misletoe, of which bird-lime is made. It was formerly believed that the plant of that name was only propagated by the seed which passed the digestive organs of this bird, whence arose the proverb "*Turdus malum sibi cat ;*" it likewise feeds on caterpillars and various kinds of insects, with which it also feeds its young.

This bird is found in various parts of Europe, and is said to be migratory in some places, but continues in England the whole year, and frequently has two broods.

THE FIELDFARE.

(*Turdus pilaris*, Lin.—*La Litorne*, ou *Tourdelle*, Buff.)

THIS is somewhat less than the Missel Thrush; its length ten inches. The bill is yellow; each corner of the mouth is furnished with a few black bristly hairs; the eye is light brown; the top of the head and back part of the neck are of a light ash colour, the former spotted with black; the back and coverts of the wings are of a deep hoary brown; the rump ash-coloured; the throat and breast are yellow, regularly spotted with black; the belly and thighs of a yellowish white; the tail brown, inclining to black; the legs dusky yellowish brown; in young birds yellow.

We have seen a variety of this bird, of which the head and neck were of a yellowish white; the rest of the body was nearly of the same colour, mixed with a few brown feathers; the spots on the breast were faint and indis-

tinct ; the quill feathers were perfectly white, except one or two on each side, which were brown ; the tail was marked in a similar manner.

The Fieldfare is only a visitant in this island, making its appearance about the beginning of October, in order to avoid the rigorous winters of the north, whence it sometimes comes in great flocks, according to the severity of the season, and leaves us about the latter end of February or the beginning of March, and retires to Russia, Sweden, Norway, and as far as Siberia and Kamtschatka. Buffon observes that they do not arrive in France till the beginning of December, that they assemble in flocks of two or three thousand, and feed on ripe cervices, of which they are extremely fond : during the winter they feed on haws and other berries ; they likewise eat worms, snails, and slugs.

Fieldfares seem of a more sociable disposition than the Thrustles or the Missels : they are sometimes seen singly, but in general form very numerous flocks, and fly in a body ; and though they often spread themselves through the fields in search of food, they seldom lose sight of each other, but, when alarmed, fly off, and collect together upon the same tree.

THE THROSTLE.

THRUSH, GREY BIRD, OR MAVIS.

(Turdus Musicus, Lin.—La Grive, Buff.)

THIS is larger than the Redwing, but much less than the Missel, to which it bears a strong resemblance both in form and colours. A small notch is observable at the end of the bill, which belongs to this and every bird of the Thrush kind: the throat is white, and the spots on the breast more regularly formed than those of the Missel Thrush, being of a conical shape; the inside of the wings and the mouth are yellow, as are also the legs; the claws are strong and black.

The Throstle is distinguished among our singing birds by the clearness and fullness of its note; it charms us not only with the sweetness, but variety of its song, which it begins early in the spring, and continues during part of the summer. This bold and pleasing songster,

from his high station, seems to command the concert of the grove, whilst in the beautiful language of the poet,

“ The Jay, the Rook, the Daw,

“ And each harsh pipe (discordant heard alone)

“ Aid the full concert, while the Stock-Dove breathes

“ A melancholy murmur through the whole.”

The female builds her nest generally in bushes; it is composed of dried grass, with a little earth or clay intermixed, and lined with rotten wood; she lays five or six eggs, of a pale blue colour, marked with dusky spots.

Although this species is not considered with us as migratory, it has, nevertheless, been observed in some places in great numbers during the spring and summer, where not one was to be seen in the winter, which has induced an opinion that they either shift their quarters entirely, or take shelter in the more retired parts of the woods. The Thrush is migratory in France: M. de Buffon says that it appears in Burgundy about the end of September, before the Redwing and Fieldfare, and that it feeds upon the ripe grapes, and sometimes does much damage to the vineyard. The females of all the the Thrush kind are very similar to the males, and differ chiefly in a less degree of brilliancy in the colours.

THE REDWING

SWINEPIPE, OR WIND THRUSH.

(Turdus Iliacus, Lin.—Le Mauvis, Buff.)

Is not more than eight inches in length. The bill is of a dark brown colour; eyes deep hazel; the plumage in general is similar to that of the Thrush, but a white streak over the eye distinguishes it from that bird; the belly is not quite so much spotted, and the sides of the body and the feathers under the wings are tinged with red, which is its particular characteristic; whence also it derives its name.

These birds make their appearance a few days before the Fieldfare,* and are generally seen with them after

* A Redwing was taken up November 7th, 1785, at six o'clock in the morning, which, on its approach to land, had flown against the light-house at Tynemouth, and was so stunned that it fell to the ground and died soon after; the light most probably had attracted its attention,

their arrival; they frequent the same places, eat the same food, and are very similar to them in manners. Like the Fieldfare, they leave us in the spring, for which reason their song is quite unknown to us, but it is said to be very pleasing. The female builds her nest in low bushes or hedges, and lays six eggs, of a greenish blue colour, spotted with black.

This and the former are delicate eating: the Romans held them in such estimation that they kept thousands of them together in aviaries, and fed them with a sort of paste made of bruised figs and flour, and various other kinds of food, to improve the delicacy and flavour of their flesh: these aviaries were so contrived as to admit light barely sufficient to direct them to their food; every object which might tend to remind them of their former liberty was carefully kept out of sight, such as the fields, the woods, the birds, or whatever might disturb the repose necessary for their improvement. Under this management these birds fattened, to the great profit of their proprietors, who sold them to Roman epicures for three denarii, or about two shillings sterling each.

THE CUCKOO.

THE GOWK.

(Cuculus Canorus, Lin.—Le Coucou, Buff.)

LENGTH fourteen inches; breadth twenty-five: its bill is black and somewhat bent; eyes yellow; inside of the mouth red; its head, neck, back, and wing coverts are of a pale blue or dove colour, which is darkest on the head and back, and palest on the fore part of the neck and rump; its breast and belly are white, elegantly crossed with wavy bars of black; the quill feathers are dusky, their inner webs marked with large oval white spots; the tail is long; the two middle feathers are black, with white tips; the others dusky, marked with alternate spots of white on each side the shaft: the legs are short and of a yellow colour; toes two forward, two backward; claws white.

The Cuckoo visits us early in the spring; its well-

known cry is generally heard about the middle of April, and ceases the latter end of June; its stay is short, the old Cuckoos being said to quit this country early in July. Cuckoos build no nest; and, what is more extraordinary, the female deposits her solitary egg in the nest of another bird, by whom it is hatched. The nest she chuses for this purpose is generally selected from the following, viz: the Hedge-sparrow's, Water-wagtail's, Titlark's, Yellow-hammer's, Green Linnet's, or the Winchat's. Of these it has been observed that she shews a much greater partiality to that of the Hedge-sparrow than to any of the rest.

We owe the following account of the economy of this singular bird in the disposal of its egg, to the accurate observations of Mr Edward Jenner, communicated to the Royal Society, and published in the 78th volume of their transactions, part 2:—He observes that during the time the Hedge-sparrow is laying her eggs, which generally takes up four or five days, the Cuckoo contrives to deposit her egg among the rest, leaving the future care of it entirely to the Hedge-sparrow. This intrusion often occasions some discomposure, for the old Hedge-sparrow at intervals, whilst she is sitting, not only throws out some of her own eggs, but sometimes injures them in such a way that they become addle, so that it frequently happens that not more than two or three of the parent bird's eggs are hatched with that of the Cuckoo; and, what is very remarkable, it has never been observed that the Hedge-sparrow has either thrown out or injured the egg of the Cuckoo. When the Hedge-sparrow has sat her usual time, and has disengaged the young Cuckoo and some of her own

offspring from the shell, her own young ones, and any of her eggs that remain unhatched, are soon turned out; the young cuckoo then remains in full possession of the nest, and is the sole object of the future care of its foster parent. The young birds are not previously killed, nor the eggs demolished, but all are left to perish together, either entangled in the bush which contains the nest, or lying on the ground under it. Mr Jenner next proceeds to account for this seemingly unnatural circumstance; and as what he has advanced is the result of his own repeated observations, we shall give it nearly in his own words:—"On the 18th June, 1787, Mr J. examined the nest of a Hedge-sparrow, which then contained a Cuckoo's and three Hedge-sparrow's eggs. On inspecting it the day following, the bird had hatched, but the nest then contained only a young Cuckoo and one young Hedge-sparrow. The nest was placed so near the extremity of a hedge, that he could distinctly see what was going forward in it; and, to his great astonishment, he saw the young Cuckoo, though so lately hatched, in the act of turning out the young Hedge-sparrow. The mode of accomplishing this was curious: the little animal, with the assistance of its rump and wings, contrived to get the bird upon its back, and making a lodgement for its burden by elevating its elbows, clambered backwards with it up the side of the nest till it reached the top, where, resting for a moment, it threw off its load with a jerk, and quite disengaged it from the nest: after remaining a short time in this situation, and feeling about with the extremities of its wings, as if to be convinced that the business was properly executed, it dropped into the nest again." Mr J. made seve-

ral experiments in different nests, by repeatedly putting in an egg to the young Cuckoo, which he always found to be disposed of in the same manner. It is very remarkable, that nature seems to have provided for the singular disposition of the Cuckoo in its formation at this period ; for, different from other newly hatched birds, its back, from the scapulæ downwards, is very broad, with a considerable depression in the middle, which seems intended by nature for the purpose of giving a more secure lodgement to the egg of the Hedge-sparrow or its young one, while the young Cuckoo is employed in removing either of them from the nest. When it is above twelve days old, this cavity is quite filled up, the back assumes the shape of nestling birds in general, and at that time the disposition for turning out its companion entirely ceases. The smallness of the Cuckoo's egg, which, in general, is less than that of the House-sparrow,* is another circumstance to be attended to in this surprising transaction, and seems to account for the parent Cuckoo's depositing it in the nests of such small birds only as have been mentioned. If she were to do this in the nest of a bird which produced a larger egg, and consequently a larger nestling, its design would probably be frustrated ; the young Cuckoo would be unequal to the task of becoming sole possessor of the nest, and might fall a sacrifice to the superior strength of its partners.

Mr Jenner observes, that it sometimes happens that two Cuckoos' eggs are deposited in the same nest, and gives the following instance of one which fell under his observation. Two Cuckoos and a Hedge-sparrow were

* The Cuckoo's eggs which have come under our observation were nearly the size of those of the Thrush.

hatched in the same nest ; one Hedge-sparrow's egg remained unhatched : in a few hours a contest began between the Cuckoos for possession of the nest, which continued undetermined till the afternoon of the following day, when one of them, which was somewhat superior in size, turned out the other, together with the young Hedge-sparrow and the unhatched egg. This contest, he adds, was very remarkable : the combatants alternately appeared to have the advantage, as each carried the other several times nearly to the top of the nest, and then sunk down again oppressed with the weight of its burthen ; till at length, after various efforts, the stronger prevailed, and was afterwards brought up by the Hedge-sparrow. It would exceed our limits to give a detail of the observations made by this ingenious enquirer ; we must therefore refer the reader to the work itself, in which he will find a variety of interesting matter respecting this singular bird, whose history has for ages been enveloped in fable, and mixed with unaccountable stories, founded in ignorance and superstition. At what period the young Cuckoos leave this country is not precisely known ; Mr Jenner supposes they go off in succession, as soon as they are capable of taking care of themselves. That some of them remain here in a torpid state, has already been observed.* Buffon mentions several instances of young Cuckoos having been kept in cages, which, probably for want of proper nutriment, did not survive the winter. We knew of one which was preserved through the winter by being fed with worms, insects, soaked bread, and small pieces of flesh. The plumage of the

* See the introduction.

Cuckoo varies greatly at different periods of its life. In young Cuckoos the bill, legs, and tail are nearly the same as those of the old ones; the eye is blue; the throat, neck, breast, and belly are elegantly barred with a dark brown on a light ground; the back is of a lead colour, mixed with brown, and faintly barred with white; the tail feathers are irregularly marked with black, light brown, and white, and tipped with white: the legs are yellow.

THE WRYNECK.

(*Jynx Torquilla*, Lin.—*Le Torcol*, Buff.)

THE principal colours which distinguish this beautiful little bird consist of different shades of brown, but so elegantly arranged as to form a picture of the most exquisite neatness: from the hinder part of the head down to

the middle of the back there runs an irregular line of dark brown inclining to black ; the rest of the back is ash-coloured, streaked and powdered with brown ; the throat and under side of the neck are of a reddish brown, crossed with fine bars of black ; the breast, belly, and thighs are of a light ash colour, marked with triangular spots, irregularly dispersed ; the larger quill feathers are marked on the outer webs with alternate spots of dark brown and rust colour, which, when the wing is closed, give it the appearance of chequered work ; the rest of the wing and scapulars are nicely freckled, and shaded with brown spots of different sizes ; the tail feathers are marked with irregular bars of black, the intervening spaces being finely freckled, and powdered with dark brown spots ; its bill is rather long, sharp pointed, and of a pale lead colour ; its eyes are light brown : but what chiefly distinguishes this singular bird is the structure of its tongue, which is of considerable length, of a cylindrical form, and capable of being pushed forwards and drawn into its bill again ; it is furnished with a horny substance at the end, with which it secures its prey, and brings it to its mouth : its legs are short and slender ; the toes placed two before and two behind ; the claws sharp, much hooked, and formed for climbing the branches of trees, on which it can run in all directions with great facility. It makes an artless nest of dry grass upon dusty rotten wood, in holes of trees, the entrance to which is so small as scarcely to admit the hand, on which account its eggs are come at with much difficulty ; according to Buffon, they are perfectly white, and from eight to ten in number.

This curious bird, though in many respects nearly re-

lated to the family of the Woodpeckers, being similar to that tribe in the formation of its bill and feet, yet never associates with them, and seems to constitute a genus of itself. It is found in various parts of Europe, and generally appears with us a few days before the Cuckoo. Its food consists chiefly of ants and other insects, of which it finds great abundance lodged in the bark and crevices of trees. The stomach of one which we opened was full of undigested parts of ants. It is said to frequent the places where ant-hills are, into which it darts its tongue, and draws out its prey. It holds itself very erect on the branch of the tree where it sits ; its body is almost bent backward, whilst it writhes its head and neck by a slow and almost involuntary motion, not unlike the waving wreaths of a serpent. It is a very solitary bird, and leads a sequestered life : it is never seen with any other society but that of its female, and this is only transitory, for as soon as the domestic union is dissolved, which is in the month of September, they retire and migrate by themselves.

THE WOODPECKERS.

OF these only three or four kinds are found in Great Britain. Their characters are striking, and their manners singular. The bill is large, strong, and fitted for its employment: the end of it is formed like a wedge, with which it pierces the bark of trees, and bores into the wood in which its food is lodged. Its neck is short and thick, and furnished with powerful muscles, which enable it to strike with such force as to be heard at a considerable distance: its tongue is long and taper; at the end of it there is a hard horny substance, which penetrates into the crevices of trees, and extracts the insects and their eggs which are lodged there: the tail consists of ten stiff, sharp-pointed feathers, bent inwards, by which it supports itself on the trunks of trees while in search of food; for this purpose its feet are short and thick, and its toes, which are placed two forward and two backward, are armed with strong hooked claws, by which it clings firmly, and creeps up and down in all directions.

M. Buffon, with his usual warmth of imagination, thus describes the seemingly dull and solitary life of the Woodpecker:—"Of all the birds which earn their subsistence by spoil, none leads a life so laborious and painful as the Woodpecker: nature has condemned it to incessant toil and slavery. While others freely employ their courage or address, and either shoot on rapid wing or lurk in close ambush, the Woodpecker is constrained to drag out an insipid existence in boring the bark and hard fibres of trees to extract its humble prey. Necessity never suffers any intermission of its labours, never grants an interval of sound repose; often during the

night it sleeps in the same painful posture as in the fatigues of the day. It never shares the sports of the other inhabitants of the air, it joins not their vocal concerts, and its wild cries and saddening tones, while they disturb the silence of the forest, express constraint and effort. Its movements are quick, its gestures full of inquietude, its looks coarse and vulgar; it shuns all society, even that of its own kind; and when it is prompted to seek a companion, its appetite is not softened by delicacy of feeling."

THE GREEN WOODPECKER.

WOODSPITE, HIGH-HOE, HEW-HOLE, OR PICK-A-TREE.*

(*Picus Viridis*, Lin.—*Le Pic Verd*, Buff.)

THIS is the largest of the British kinds, being thirteen

* Wallis, in his History of Northumberland, observes that it is called by the common people Pick-a-tree, also Rain Fowl, from its being more loud and noisy before rain. The old Romans called them *Pluvia aves* for the same reason.

inches in length. Its bill is two inches long, of a triangular shape, and of a dark horn colour; the outer circle of the eye is white, surrounding another of red; the top of the head is of a bright crimson, which extends down the hinder part of the neck, ending in a point behind; the eye is surrounded by a black space; and from each corner of the bill there is a crimson streak pointing downwards; the back and wing coverts are of an olive green; the rump yellow; the quill feathers are dusky, barred on the outer web with black and white; the bastard wing is spotted with white; the sides of the head and all the under parts of the body are white, slightly tinged with green; the tail is marked with bars like the wings; the legs are greenish. The female differs from the male in not having the red mark from the corner of the mouth; she makes her nest in the hollow of a tree, fifteen or twenty feet from the ground. Buffon observes that both male and female labour by turns in boring through the sound part of the wood, sometimes to a considerable depth, until they penetrate to that which is decayed and rotten, where she lays five or six eggs, of a greenish colour, marked with small black spots.

The Green Woodpecker is seen more frequently on the ground than the other kinds, particularly where there are ant-hills. It inserts its long tongue into the holes through which the ants issue, and draws out those insects in abundance. Sometimes, with its feet and bill, it makes a breach in the nest, and devours them at its ease, together with their eggs. The young ones climb up and down the trees before they are able to fly: they roost very early, and repose in their holes till day.

THE GREATER SPOTTED WOODPECKER.

WITWALL.

(*Picus Major*, Lin.—*L'Epeiche*, ou le *Pic varie*, Buff.)

Its length is somewhat more than nine inches. The bill is of a dark horn colour, very strong at the base; the upper and under sides are formed by high-pointed ridges, which run along the middle of each; it is exceedingly sharp at the end; the eyes are reddish, encircled with a large white spot, which extends to the back part of the head, on which there is a spot of crimson; the forehead is buff colour; the top of the head black; on the back part of the neck there are two white spots, separated by a line of black; the scapulars and tips of the wing coverts are white; the rest of the plumage on the upper part of the body is black; the tail is black, the outer feathers marked with white spots; the throat, breast, and part of the belly are of a yellowish white;

the vent and lower part of the belly crimson; the legs and feet of a lead colour. The female has not the red spot on the back of the head.

This bird is common in England. Buffon says that it strikes against the trees with brisker and harder blows than the Green Woodpecker. It creeps with great ease in all directions upon the branches of trees, and is with difficulty seen, as it instantly avoids the sight by creeping behind a branch, where it remains concealed.

THE MIDDLE-SPOTTED WOODPECKER.

(*Picus Medius*, Lin.—*Le Pic variè a Tête Rouge*, Buff.)

THIS bird is somewhat less than the former, and differs from it chiefly in having the top of the head wholly crimson; in every other respect the colours are much the same, though more obscure. Buffon gives a figure of it in his *Planches Enluminees*, but considers it as only a variety of the former.

THE LESSER SPOTTED WOODPECKER.

HICKWALL.

(*Picus Minor*, Lin.—*Le petit Epeiche*, Buff.)

THIS is the smallest of our species, being only five inches and a half in length; weight nearly one ounce. Its general plumage is very similar to that of the larger species, but without the red under the tail, and the large white patches on the shoulders; the under parts of the body are of a dirty white; the legs lead colour. Buffon says, that in winter it draws near houses and vineyards, that it nestles like the former in holes of trees, and sometimes disputes possession with the Colemouse, which it compels to give up its lodging.

THE NUTHATCH.

NUTJOBBER, WOODCRACKER.

(*Sitta Europea*, Lin.—*La Sittelle ou le Torchepot*, Buff.)

ITS length is near six inches; the bill strong, black above, beneath almost white; the eyes hazel; a black stroke passes over each eye, from the bill, extending down the side of the neck as far as the shoulder; all the upper part of the body is of a fine blue grey colour; the cheeks and chin are white; breast and belly of a pale orange colour; sides marked with streaks of chestnut; quills dusky; its tail is short, the two middle feathers are grey, the rest dusky, three of the outermost spotted with white; the legs pale yellow; the claws large, sharp, and much bent, the back claw very strong; when extended the foot measures one inch and three quarters.

This, like the Woodpecker, frequents Woods, and is a shy and solitary bird: the female lays her eggs in holes of trees, frequently in those which have been deserted by the Woodpecker. During the time of incubation she is assiduously attended by the male, who supplies her with food; she is easily driven from her nest, but on being disturbed hisses like a snake. The Nuthatch feeds on caterpillars, beetles, and various kinds of insects; it likewise eats nuts, and is very expert in cracking them so as to come at the contents; having placed a nut fast in a chink, it takes its stand a little above, and striking it with all its force, breaks the shell and catches up the kernel. Like the Woodpecker, it moves up and down the trunks of trees, with great facility, in search of food. It does not migrate, but in the winter approaches nearer inhabited places, and is sometimes seen in orchards and gardens. The young ones are esteemed very good eating.

THE HOOPOE.

(*Upupa Epops*, Lin.—*Le Hupe ou Puput*, Buff.)

Its length is twelve inches ; breadth nineteen. The bill is about two inches long, black, slender, and somewhat curved ; the eyes hazel ; the tongue very short and triangular ; the head is ornamented with a crest, consisting of a double row of feathers, of a pale orange colour, tipped with black, the highest about two inches in length ; the neck is of a pale reddish brown ; breast and belly white, and in young birds marked with various dusky lines pointing downwards ; the back, scapulars, and wings are crossed with broad bars of black and white ; the lesser coverts of the wings light brown ; the rump is white ; the tail consists of ten feathers, each marked with white, and, when closed, assumes the form of a crescent, the horns pointing downwards : the legs are short and black.

This is the only species of its kind found in this kingdom ; and is not very common with us, being seen only at uncertain periods. The foregoing representation was taken from a very fine one, shot near Bedlington, Northumberland, and sent for this work, by the Rev. Henry Cotes. In its stomach were found the claws and other indigestible parts of insects of the beetle tribe : it was alive some time after being shot, and walked about, erecting its tail and crest in a very pleasing manner. The female is said to have two or three broods in the year ; she makes no nest, but lays her eggs, generally about four or five in number, in the hollow of a tree, and sometimes in a hole of a wall, or even on the ground. Buffon says, that he has sometimes found a soft lining of moss, wool, or feathers in the nests of these birds, and supposes that, in this case, they may have used the deserted nest of some other bird. Its food consists chiefly of insects, with the remains of which its nest is sometimes so filled as to become extremely offensive. It is a solitary bird, two of them being seldom seen together : in Egypt, where they are very common, they are seen only in small flocks. Its crest usually falls behind on its neck, except when it is surprised or irritated ; it then stands erect ; and its tail also, as well as its crest, is generally at the same time erected, and spread like a fan.

THE CREEPER.

(*Certhia familiaris*, Lin.—*Le Grimpereau*, Buff.)

ITS length is five inches and a half ; the body is about the size of that of the Wren. Its bill is long, slender, and curved, the upper mandible brown, the lower whitish ; eyes hazel ; the head, neck, back, and wing coverts are of a dark brown, variegated with streaks of a lighter hue ; the throat, breast, and belly are of a silvery white ; the rump tawny ; the quills are dusky, edged with tawny, and marked with bars of the same colour ; the tips are white ; above each eye a small dark line passes towards the neck, above which there is a line of white : the tail is long, and consists of twelve stiff feathers, of a tawny colour, pointed and forked at the end : the legs are short, and of a brown colour ; the claws are long, sharp, and much hooked, by which it is enabled to run with great facility on all sides of small branches of trees in quest of insects and their eggs, which constitute its food. Although very common, it is not seen without difficulty, from the ease with which, on the appearance of any

one, it escapes to the opposite side of the tree. It builds its nest early in the spring, in a hole of a tree: the female lays from five to seven eggs, of an ash colour, marked at the end with spots of a deeper hue.

OF THE PASSERINE ORDER.

THIS numerous class constitutes the fifth order in Mr Pennant's arrangement of British Birds, and includes a great variety of different kinds: of these we have detached the Stare, the Thrush, and the Chatterer, and have joined them to the Pies, to which they seem to have a greater affinity. Those which follow are distinguished by their lively and active dispositions, their beautiful plumage, and delightful melody. Of this order consist those amazing flocks of small birds of almost every description—those numerous families, which, universally diffused throughout every part of the known world, people the woods, the fields, and even the largest and most populous cities, in countless multitudes, and every where enliven, diversify, and adorn the face of nature. These are not less conspicuous for their usefulness, than for their numbers and variety: they are of infinite advantage in the economy of nature, in destroying myriads of noxious insects, which would otherwise teem in every part of the animal and vegetable systems, and would pervade and choke up all the avenues of life and health. Insects and their eggs, worms, berries, and seeds of almost every kind, form the varied mass from which these busy little tribes derive their support.

The characters of the Passerine order, which are as various as their habits and dispositions, will be best seen in the description of each particular species. It may be necessary, however, to observe, that they naturally divide themselves into two distinct kinds, namely, the hard-billed or seed birds, and the slender or soft-billed

birds : the former are furnished with stout bills of a conical shape, and very sharp at the point, admirably fitted for the purpose of breaking the hard external coverings of the seeds of plants from the kernels, which constitute the principal part of the food ; the latter are remarkable for the softness and delicacy of their bills : their food consists altogether of small worms, insects, the larvæ of insects, and their eggs, which they find deposited in immense profusion on the leaves and bark of trees, in chinks and crevices of stones, and even in small masses on the bare ground, so that there is hardly a portion of matter that does not contain a plentiful supply of food for this diligent race of beings.

- “ Full nature swarms with life ;
- “ The flowery leaf
- “ Wants not its soft inhabitants. Secure
- “ Within its winding citadel, the stone
- “ Holds multitudes. But chief the forest-boughs,
- “ That dance unnumber’d to the playful breeze,
- “ The downy orchard, and the melting pulp
- “ Of mellow fruit, the nameless nations feed
- “ Of evanescent insects.

OF THE GROSSBEAK.

THIS genus is not numerous in this island, and of those which we call ours, most of them are only visitors, making a short stay with us, and leaving us again to breed and rear their young in other countries. They are in general shy and solitary, living chiefly in woods at a distance from the habitations of men. Their vocal powers are not great; and as they do not add much to the general harmony of the woods which they inhabit, they are consequently not much known or sought after. Their most conspicuous character is the thickness and strength of their bills, by which they are enabled to break the stones of various kinds of fruits, and other hard substances on which they feed. Their general appearance is very similar to birds of the Finch kind, of which they may be reckoned the principal branch.

THE CROSS-BILL.

SHEL-APPLE.

(*Loxia Curvirostra*, Lin.—*Le Bec Croisé*, Buff.)

THIS bird is about the size of a Lark, being nearly seven inches in length. It is distinguished by the peculiar formation of its bill, the upper and under manibles curving in opposite directions, and crossing each other at the points : * its eyes are hazel ; its general colour is reddish,

* This singular construction of the bill is considered by M. Buffon as a defect or error in nature, rather than a permanent feature, merely because, in some subjects, the bill crosses to the left, and in others to the right, arising, as he supposes, from the way in which the bird has been accustomed to use its bill, by applying either the one side or the other to lay hold of its food. This mode of reasoning, however, proves very defective, when we consider that this peculiarity is confined to a single species, for no other bird in nature is subject to a similar variation from the general construc-

mixed with brown on the upper parts ; the under parts are considerably paler, being almost white at the belly and vent ; the wings are short, not reaching farther than the setting on of the tail, and of a brown colour ; the tail is of the same colour, and somewhat forked : the legs are black. Individuals vary in the colours of their plumage ; among a great number hardly two of them are exactly similar ; they likewise vary with the season, and according to the age of the bird. Edwards paints the male of a rose colour, and the female of a yellowish green, mixed more or less with brown. Both sexes appear very different at different times of the year.

The Cross-bill is an inhabitant of the colder climates, and has been found as far as Greenland. It breeds in Russia, Sweden, Poland, and Germany, in the mountains

tion, although there are many other birds which feed upon the same kinds of hard substances, but nevertheless, do not experience any change in the formation and structure of their bills ; neither has the argument, drawn from the supposed exuberance of growth in the bills of these birds, any better foundation, as that likewise may be applied to other birds, and the same question will occur—namely, Why is not the same effect produced ? This ingenious but fanciful writer, in the further prosecution of his argument, seems to increase the difficulties in which it is involved. He observes, “ that the bill, hooked upwards and downwards, and bent in opposite directions, seems to have been formed for the purpose of detaching the scales of the fir cones and obtaining the seeds lodged beneath them, which are the principal food of the bird. It raises each scale with its lower mandible, and breaks it with the upper.” We think there needs no stronger argument than this to prove, that Nature, in all her operations, works by various means ; and although these are not always clear to our limited understandings, the good of all her creatures is the one great end to which they are all directed.

of Switzerland, and among the Alps and Pyrenees, whence it migrates in vast flocks into other countries. It sometimes is met with in great numbers in this country, but its visits are not regular, * as in some years it is rarely to be seen. Its principal food is said to be the seeds of the pine-tree; it is observed to hold the cone in one claw like the Parrot, and when kept in a cage, has all the actions of that bird, climbing, by means of its hooked bill, from the lower to the upper bars of its cage. From its mode of scrambling, and the beauty of its colours, it has been called by some the German Parrot. The female is said to begin to build as early as January; she places her nest under the bare branches of the pine-tree, fixing it with the resinous matter which exudes from that tree, and besmearing it on the outside with the same substance, so that the melted snow or rain cannot penetrate it.

* We have met with it on the top of Blackstone-edge, between Rochdale and Halifax, in the month of August.

THE GROSBEAK.

HAWFINCH.

(Loxia Coccothraustes, Lin.—Le Gros-bec, Buff.)

LENGTH nearly seven inches. Bill of a horn colour, conical, and prodigiously thick at the base; eyes ash-coloured; the space between the bill and the eye, and thence to the chin and throat, is black; the top of the head is of a reddish chesnut, as are also the cheeks, but somewhat paler; the back part of the neck is of a greyish ash colour; the back and lesser wing coverts chesnut; the greater wing coverts are grey, in some almost white, forming a band across the wing; the quills are all black, excepting some of the secondaries nearest the body, which are brown; the four outer quills seem as if clipped off at the ends; the prime quills have each of them a spot of white about the middle of the inner web; the breast and belly are of a pale rust colour, growing almost white at the vent; the tail is black, excepting the ends, of the middle feathers, which are grey; the outer ones are

tipped with white ; the legs are pale brown. The female greatly resembles the male, but her colours are less vivid, and the space between the bill and the eye is grey instead of black. These birds vary considerably, as scarcely two of them are alike : in some the head is wholly black ; in others the whole upper part of the body is of that colour ; and others have been met with entirely white, excepting the wings.

This species is an inhabitant of the temperate climates, from Spain, Italy, and France, as far as Sweden, but visits this island only occasionally, and generally in winter, when it is probably driven over in its passage from its northern haunts to the milder climates of France and Italy. It breeds in these countries, but is no where numerous. Buffon says it is a shy and solitary bird, with little or no song ; it generally inhabits the woods during summer, and in winter resorts near the hamlets and farms. The female builds her nest in trees, of small dry roots and grass, lined with warmer materials. The eggs are roundish, of a bluish green, spotted with brown. She feeds her young with insects, chrysalids, and other soft, nutritious substances.

THE PINE GROSBEAK.

GREATEST BULLFINCH.

(*Loxia Enucleator*, Lin.—*Le Dur-bec*, Buff.)

THIS exceeds the last in size, being nine inches in length. The bill is dusky, very stout at the base, and somewhat hooked at the tip : the head, neck, breast, and rump are of a rose-coloured crimson ; the back and lesser wing coverts black, each feather edged with reddish brown ; the greater wing coverts tipped with white.

forming two bars on the wing ; the quills are black, with pale edges ; the secondaries the same, but edged with white ; the belly and vent are straw-coloured ; the tail is marked as the quills, and is somewhat forked ; the legs are brown.

This bird is found only in the northern parts of this island and of Europe ; but it is common in various parts of North America, visiting the southern settlements in the winter, and retiring northwards in the summer for the purpose of breeding : like the Cross-bill, it frequents the pine-forests, and feeds on the seeds of that tree. The female makes her nest on trees, at a small distance from the ground, and lays four white eggs, which are hatched in June.

THE GREEN GROSBEAK.

GREEN FINCH, OR GREEN LINNET.

(*Loxia Chloris*, Lin.—*Le Verdier*, Buff.)

THE bill is of a pale reddish brown, or flesh colour ; eyes dark ; the plumage in general is of a yellowish green ; the top of the head, neck, back, and lesser coverts olive green ; the greater coverts and outer edges of the secondary quills ash-coloured ; the vent and tail coverts the same, dashed with yellow ; the rump yellow.

These birds are common in every part of Great Britain. 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. The female makes her nest in hedges or low bushes ; it is composed of dry grass, and lined with hair, wool, and other warm materials ; she lays five or six eggs, of a pale greenish colour,

marked at the larger end with spots of a reddish brown ; she is so close a sitter, that she may sometimes be taken on her nest. The male is very attentive to his mate during the time of incubation, and takes his turn in sitting. Though not distinguished for its song, this bird is sometimes kept in a cage, and soon becomes familiar.

THE BULLFINCH.

ALP, OR NOPE.

(*Lexia Pyrrhula*, Lin.—*Le Bouvreuil*, Buff.)

THE bill is dusky ; eyes black ; the upper part of the head, the ring round the bill, and the origin of the neck, are of a fine glossy black ; * the back ash colour ; the breast and belly red ; wings and tail black ; the upper tail coverts and vent are white ; legs dark brown. The female is very like the male, but the colours in general are less bright, and the under parts of a reddish brown. †

* Hence in some countries it is called *Monk* or *Pope*, and in Scotland it is not improperly denominated *Coally-hood*.

† The Bullfinch sometimes changes its plumage, and becomes

This bird is common in every part of this island, as well as in most parts of Europe; its usual haunts, during summer, are in woods and thickets, but in winter it approaches nearer to cultivated grounds, and feeds on seeds, winter berries, &c.; in the spring it frequents gardens, where it is usefully busy in destroying the worms which are lodged in the tender buds. The female makes her nest in bushes; it is composed chiefly of moss; she lays five or six eggs, of a dull bluish white, marked at the larger end with dark spots. In a wild state, its note is very simple; but when kept in a cage, its song, though low, is far from being unpleasant. Both male and female may be taught to whistle a variety of tunes, and, it is said, there are instances of two Bullfinches having been taught to sing in parts; a wonderful instance of docility! They are frequently imported into this country from Germany, where they are taught to articulate, with great distinctness, several words.

wholly black during its confinement, especially when fed with hemp-seed. In the Leverian Museum there is a variety of the Bullfinch entirely white.*

* A white Bullfinch was shot in November, 1801, by Mr Robert Spearman, of Wharton. Its bill, like that of the common Bullfinch, was black, as were also a few of the first quills, the bastard wing, and a few 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.

OF THE BUNTING.

THE principal difference between this kind and the last consists in the formation of the bill, which in the Bunting is of a very singular construction. The two mandibles are moveable, and the edges of each bend inwards ; the opening of the mouth is not in a straight line as in other birds, but at the base the junction is formed by an obtuse angle in the lower mandible, nearly one-third of its length, which is received by a corresponding angle in the upper one ; in the latter there is a strong knob, of great use in breaking the harder kinds of seeds and kernels, on which it feeds. The tongue is narrow, and tapers to a point like a tooth-pick ; the first joint of the outer toe is joined to that of the middle one.

THE BUNTING.

(*Emberiza miliaria*, Lin.—*Le Proyer*, Buff.)

THE length of this bird is about seven inches and a half. The bill is brown; the irides hazel; the general colour resembles that of a lark: the throat is white, the upper parts olive brown, each feather streaked down the middle with black; the under parts are of a dirty yellowish white, streaked on the sides with dark brown, and spotted with the same colour on the breast; the quills are dusky, with yellowish edges; upper coverts tipped with white; tail feathers much the same as the wings, and somewhat forked: the legs pale brown.

This bird is very common in all parts of the country, and may be frequently observed on the highest part of a hedge or uppermost branch of a tree, uttering its harsh and dissonant cry, which it incessantly repeats at short intervals; they are heard and seen in these situations during the greater part of summer, after which they are

met with in flocks, and continue so for the most part during winter : they are often shot in great numbers, or caught in nets ; and from the similarity of their plumage, are not unfrequently sold for Larks. The female makes her nest among the thick grass, a little elevated above the ground ; she lays five or six eggs, and while she is employed in the business of incubation, her mate brings her food, and entertains her with his frequently-repeated song. Buffon observes, that in France the Bunting is seldom seen during winter, but that it arrives soon after the Swallow, and spreads itself through almost every part of Europe. Their food consists chiefly of grain ; they likewise eat the various kinds of insects which they find in the fields and meadows.

THE YELLOW BUNTING.

YELLOW HAMMER, OR YELLOW YOWLEY.

(*Emberiza citrinella*, Lin.—*Le Bruant*, Buff.)

LENGTH somewhat above six inches. Bill dusky ;

eyes hazel ; its prevailing colour is yellow, mixed with browns of various shades ; the crown of the head, in general, is bright yellow, more or less variegated with brown ; the cheeks, throat, and lower part of the belly are of a pure yellow ; the breast reddish, and the sides dashed with streaks of the same colour ; the hinder part of the neck and the back are of a greenish olive ; the greater quills are dusky, edged with pale yellow ; lesser quills and scapulars dark brown, edged with grey ; the tail is dusky, and a little forked, the feathers edged with light brown, the outermost with white ; the legs are of a yellowish brown. It is somewhat difficult to describe a species of bird of which no two are to be found perfectly similar, but its specific characters are plain, and cannot easily be mistaken. The colours of the female are less bright than those of the male, with very little yellow about the head.

This bird is common in every lane and on every hedge throughout the country, flitting before the traveller as he passes along the road, or uttering its simple and frequently repeated monotone on the hedges by the way-side. It feeds on various kinds of seeds, insects, &c. The female makes an artless nest, composed of hay, dried roots, and moss, which she lines with hair and wool : she lays four or five eggs, marked with dark irregular streaks, and frequently has more than one brood in the season. In Italy where small birds of almost every description are made use of for the table, this is esteemed very good eating, and is frequently fattened for that purpose like the Ortolan ; but with us, who are accustomed to grosser kinds of food, it is considered too insignificant to form any part of our repasts.

THE BLACK-HEADED BUNTING.

REED BUNTING, OR REED SPARROW.

(*Emberiza Schanichus*, Lin.—*L'Ortolan de Roseaux*, Buff.)

THIS bird is less than the Yellow Bunting. Its eyes are hazel ; the head, throat, fore part of the neck, and breast are black, excepting a white line from each corner of the bill, passing downward a little, and forming a border which reaches the back part of the neck ; the upper parts of the body and the wings are of a reddish brown, with a streak of black down the middle of each feather ; the under part of the body is white, with brownish streaks on the sides ; the rump and upper tail coverts bluish ash colour, mixed with brown ; the quills are dusky, edged with brown ; the two middle feathers of the tail are black, with pale brown edges ; the rest wholly black, except the two outer ones, which are almost white, the ends tipped with brown, and the bases black ; the legs and feet dusky brown. The female has no collar ; her throat is not so black, and her head is

variegated with black and rust colour ; the white on her under parts is not so pure, but is of a reddish cast.

Birds of this species frequent fens and marshy places, where there are abundance of rushes, among which they nestle. The nest is composed of dry grass, and lined with the soft down of the reed ; it is fixed with great art between four reed stalks, two on each side, almost close to each other, and about three feet above the water. The female lays four or five eggs, of a pale bluish white, veined irregularly with purple, principally at the larger end. As its chief resort is among reeds, it is supposed that the seeds of that plant are its principal food ; it is however frequently seen in the higher grounds near the roads, and sometimes in corn fields. They keep near the ground, and seldom perch except among the low bushes. The male, during the time of hatching, has a soft, melodious, warbling song, whilst he sits perched among the reeds, and is frequently heard in the night time. It is a watchful, timorous bird, and is very easily alarmed ; in a state of captivity it sings but little, and only when perfectly undisturbed.

Birds of this species are said to be migratory in France ; with us they remain the whole year, and are seldom seen in flocks of more than three or four together. That from which the foregoing figure was taken, was caught during a severe storm in the middle of winter.

THE SNOW BUNTING.

SNOWFLAKE.

(*Emberiza Nivalis*, Lin.—*L'Ortolan de Neige*, Buff.)

LENGTH nearly seven inches. Bill and eyes black ; in winter the head, neck, coverts of the wings, rump, and all the under parts of the body are as white as snow, with a light tint of rusty colour on the hinder part of the head ; the back is black ; the bastard wings and ends of the greater coverts white ; the prime quills are black, secondaries white, with a black spot on their inner webs ; middle feathers of the tail black, the three outer ones white, with a dusky spot near the ends ; legs black. Its summer dress is different, the head, neck, and under parts of the body are marked with transverse waves of a rusty colour, of various shades, but never so deep as in the female, in which this is the predominant colour ; the white likewise upon the under parts of her body is less pure than that of the male.

The hoary mountains of Spitzbergen, the Lapland Alps, the shores of Hudson's Bay, and perhaps countries still more northerly, are, during the summer months, the favourite abodes of this hardy bird. The excessive severity of these inhospitable regions changes parts of its plumage into white in winter ; and there is reason to believe that the further northward they are found, the whiter the plumage will be. It is chiefly met with in the northern parts of this island, where it is called the Snowflake ; it appears in great flocks in the snowy season, and is said to be the certain harbinger of severe weather, which drives it from its usual haunts. This bird has been caught in various parts of Yorkshire, and is frequently

met with in Northumberland; it is found in all the northern latitudes without exception, as far as our navigators have been able to penetrate. Great flocks have been seen upon the ice near the shores of Spitzbergen. They are known to breed in Greenland, where the female makes her nest in the fissures of the mountain rocks; the outside is composed of grass, within which is a layer of feathers, and the down of the arctic fox composes the lining of its comfortable little mansion: she lays five white eggs, spotted with brown. These birds do not perch, but continue always on the ground, and run about like Larks, to which they are similar in size, manners, and in the length of their hinder claws, whence they have been ranged with birds of that class by some authors, but are now with more propriety referred to the Buntings, from the peculiar structure of the bill. They are said to sing sweetly, sitting on the ground. On their first arrival in this country they are very lean; but soon grow fat, and are considered as delicious food. The Highlands of Scotland abound with them.

THE TAWNY BUNTING.

GREAT PIED MOUNTAIN FINCH, OR BRAMBLING.

THE length is somewhat above six inches. The bill is short, of a yellow colour, and blackish at the point ; the crown of the head tawny ; the forehead chesnut colour ; the hinder part of the neck and the cheeks the same, but paler ; the throat, sides of the neck, and space round the eyes are of a dirty white ; the breast dull yellow ; the under parts white, in some tinged with yellow ; the back and scapulars are black, edged with reddish brown ; the quill feathers are dusky, edged with white ; the secondaries are white on their outer edges ; the greater coverts are tipped with white, which, when the wing is closed, forms a bed of that colour upon it ; the upper tail coverts are yellow ; the tail is a little forked, the two outermost feathers white, the third black, tipped with white, the rest wholly black ; the legs are short and black ; the hinder claws

are almost as long, but more bent than those of the Lark.

The foregoing figure and description of this bird were taken from one which was caught in the high moory grounds above Shotley-Kirk, in the county of Northumberland. We are perfectly of opinion, with Mr Pennant, that this and the former are the same bird in their summer and winter dress.* Linnæus, who must have been well acquainted with this species, comprises them under one, and says that they vary, not only according to the season, but to their age: it is certain that no birds of the same species differ from each other more than they; among multitudes that are frequently taken, scarcely two are alike. Mr Pennant supposes, with great probability, that the swarms which annually visit the northern parts of our island, arrive from Lapland and Iceland, and make the isles of Ferro, Shetland and the Orkneys, their resting places during the passage. In the winter of 1778-9, they came in such multitudes into Birsa, one of the Orkney isles, as to cover the whole barony; yet, of all the numbers, it could hardly be discovered that any two of them agreed perfectly in colours. It is probable that the Mountain Bunting, or Lesser Mountain Finch of Pennant and Latham, is the same bird in a somewhat different dress: it has been sometimes found in the more southern parts of England, where the little stranger must have been noticed; and without duly attending to its distinguishing characters, it has been considered as forming a distinct kind, and adding one more to the numerous varieties of the feathered tribes. We have often had occasion to observe,

* Vide Arctic Zoology, Number 222.

how difficult it is to avoid falling into errors of this sort : the changes which frequently take place in the same bird, at different periods of its age, as well as from change of food, climate, or the like, are so considerable, as often to puzzle, and sometimes to mislead, the most experienced ornithologists ; much caution is therefore necessary to guard against these deceitful appearances, lest by multiplying the species beyond the bounds which nature has prescribed, we introduce confusion into our system, and instead of satisfying the attentive inquirer, only bewilder and perplex him in his researches into nature.

OF THE FINCH.

THE transition from the Bunting to the Finch is very easy, and the shade of difference between them, in some instances, almost imperceptible ; on which account they have been frequently confounded with each other. The principal difference consists in the beak, which, in the Finch is conical, very thick at the base, and tapering to a sharp point : in this respect it more nearly resembles the Grosbeak. Of this tribe many are distinguished as well for the liveliness of their song, as for the beauty and variety of their plumage, on which accounts they are much esteemed. They are very numerous, and assemble sometimes in immense flocks, feeding on seeds and grain of various kinds, as well as on insects and their eggs.

THE HOUSE SPARROW.

(*Fringilla domestica*, Lin.—*Le Moineau franc*, Buff.)

THE length of this bird is five inches and three quarters: the bill is dusky, eyes hazel; the top of the head and back part of the neck are of an ash colour; the throat, fore part of the neck, and space round the eyes, black; the cheeks are whitish; the breast and all the under parts are of a pale ash colour; the back, scapulars, and wing coverts are of a reddish brown, mixed with black—the latter are tipped with white, forming a light bar across the wing; the quills are dusky, with reddish edges; the tail is brown, edged with grey, and a little forked; the legs are pale brown. The female is distinguished from the male by wanting the black patch on the throat, and by having a little streak behind each eye; she is also much plainer and duller in her whole plumage.

This bird, as seen in large and smoaky towns, is generally sooty and displeasing in its appearance; but among

barns and stack-yards the cock bird exhibits a very great variety in his plumage, and is far from being the least beautiful of our British birds.

The Sparrow is subject to great varieties of plumage : in the British and Leverian Museums there are several white ones, with yellow eyes and bills, others more or less mixed with brown, and some entirely black. A pair of white Sparrows were sent to the editors of this work, by Mr Raleigh Trevelyan, of St. John's College, Cambridge.

In whatever country the Sparrow is settled, it is never found in desert places, or at a distance from the dwellings of man. It does not, like other birds, shelter itself in woods and forests, or seek its subsistence in uninhabited plains, but is a resident in towns and villages : it follows society, and lives at its expence : granaries, barns, court-yards, pigeon-houses, and in short all places where grain is scattered, are its favorite resorts. It is surely saying too much of this poor proscribed species to sum up its character in the words of the Count de Buffon : “ It is extremely destructive, its plumage is entirely useless, its flesh indifferent food, its notes grating to the ear, and its familiarity and petulance disgusting.” But let us not condemn a whole species of animals, because, in some instances, we have found them troublesome or inconvenient. Of this we are sufficiently sensible ; but the uses to which they are subservient, in the grand economical distribution of nature, we cannot so easily ascertain. We have already observed,* that, in the destruction of caterpillars, they are eminently serviceable to vegetation, and in this respect

* See Introduction.

alone, there is reason to suppose, sufficiently repay the destruction they may make in the produce of the garden or the field. The great table of nature is spread out alike to all, and is amply stored with every thing necessary for the support of the various families of the earth; it is owing to the superior intelligence and industry of man, that he is enabled to appropriate so large a portion of the best gifts of providence for his own subsistence and comfort; let him not then think it waste, that, in some instances, creatures inferior to him in rank, are permitted to partake with him, nor let him grudge their scanty pittance; but, considering them only as the tasters of his full meal, let him endeavour to imitate their chearfulness, and lift up his heart in grateful effusions to HIM “who filleth all things living with plenteousness.”

The Sparrow never leaves us, but is familiar to the eye at all times, even in the most crowded and busy parts of a town: it builds its nest under the eaves of houses, in holes of walls, and often about churches. The nest is made of hay, carelessly put together, and lined with feathers. The female lays five or six eggs, of a reddish white colour, spotted with brown; she has generally three broods in the year, whence the multiplication of the species must be very great. In autumn large flocks of them are seen every where, both in town and country. Though familiar, the Sparrow is said to be a crafty bird, easily distinguishing the snares laid to entrap it; they often mix with other birds, and not unfrequently partake with the Pigeons or the poultry, in spite of every precaution to prevent them.

THE MOUNTAIN SPARROW.

(*Fringilla Montana*, Lin.—*Le Friquet*, Buff.)

THIS bird is somewhat less than the common Sparrow. The bill is black; eyes hazel; the crown of the head and hinder part of the neck are of a chesnut colour; sides of the head white; throat black; behind each eye there is a pretty large black spot; the upper parts of the body are of a rusty brown, spotted with black; the breast and under parts dirty white; the quills are black, with reddish edges, as are also the greater coverts; the lesser are bay, edged with black, and crossed with two white bars: the tail is of a reddish brown, and even at the end; the legs are pale yellow.

This species is frequent in Yorkshire, Lancashire, and also in Lincolnshire, but has not been seen further north than those counties: it differs from the House Sparrow in making its nest in trees and not in buildings. Buffon says that it feeds on fruits, seeds, and insects. It is a lively, active little bird, and, when it alights, has a variety of motions, whirling about and jerking its tail upwards and downwards, like the Wagtail. It is found in Italy, France, Germany, and Russia, and is much more plentiful in many parts of the continent than in England.

THE CHAFFINCH.

SHILFA, SCOBBOY, SKELLY, OR SHELL-APPLE.

(Fringilla caelebs, Lin.—Le Pinçon, Buff.)

THE bill is of a pale blue, tipped with black; eyes hazel; the forehead black; the crown of the head, and the hinder part and sides of the neck are of a bluish ash colour; sides of the head, throat, fore part of the neck, and the breast are of a vinaceous red; belly, thighs, and vent white, slightly tinged with red; the back is of a reddish brown, changing to green on the rump; both greater and lesser coverts are tipped with white, forming two pretty large bars across the wing; the bastard wing and quill feathers are black, edged with yellow; the tail, which is a little forked, is black, the outermost feather edged with white; the legs are brown. The female wants the red upon the breast; her plumage in general is not so vivid, and inclines to green; in other respects it is not much unlike that of the male.

This beautiful little bird is every where well known; it begins its short and frequently-repeated song early in the spring, and continues it till about the summer solstice, after which it is no more heard. It is a lively bird, which

together with its elegant plumage, has given rise to the proverb, “*as gay as a Chaffinch.*” Its nest is very neat, and constructed with much art, of small fibres, roots, and moss, and lined with wool, hair, and feathers; the female lays generally five or six eggs, of a pale reddish colour, sprinkled with dark spots, principally at the larger end. The male is very assiduous in his attendance during the time of hatching, seldom straying far from the place, and then only to procure food. Chaffinches subsist chiefly on small seeds of various kinds; they likewise eat caterpillars and insects, with which they also feed their young. They are seldom kept in cages, as their song possesses no variety, and they are not very apt in learning the notes of other birds. The males frequently maintain obstinate combats, and fight till one of them is vanquished, and compelled to give way. In Sweden these birds perform a partial migration; the females collect in vast flocks in 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, who return in great numbers, about the beginning of April, to their wonted haunts. With us, both males and females remain the whole year. Mr White, in his history of Selborne, observes, that great flocks sometimes appear in that neighbourhood about Christmas, and that they are almost entirely hens. It is difficult to account for so singular a circumstance as the parting of the two sexes in this instance; perhaps the males, being more hardy and better able to endure the rigours of the northern winters, are content 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 MOUNTAIN FINCH.

BRAMBLING.

(*Fringilla Montifringilla*, Lin.—*Le Pinçon d'Ardennes*, Buff.)

LENGTH somewhat above six inches. Bill yellow, blackish at the tip; eyes hazel; the feathers on the head, neck, and back are black, edged with rusty brown; sides of the neck, just above the wings, blue ash; rump white; the throat, fore part of the neck, and the breast are of a pale orange; belly white; lesser wing coverts pale reddish brown, edged with white; greater coverts black, tipped with pale yellow; quills dusky, with pale yellowish edges; the tail is forked, the outermost feathers edged with white, the rest black, with whitish edges: legs pale brown.

The Mountain Finch is a native of northern climates, whence it spreads into various parts of Europe: it arrives in this country in the latter end of summer, and is the most common in the mountainous parts of our island.*

* We have seen them on the Cumberland hills in the middle of August.

Vast flocks of them sometimes come together ; they fly very close, and on that account great numbers of them are frequently killed at one shot. In France they are said to appear sometimes in such immense numbers, that the ground where they have roosted has been covered with their dung for a considerable space ; and in one year they were so numerous, that more than six hundred dozen were killed each night during the greater part of the winter.* They are said to build their nests in fir trees, at a considerable height ; it is composed of long moss, and lined with hair, wool, and feathers ; the female lays four or five eggs, white, spotted with yellow. The flesh of the Mountain Finch, though bitter, is said to be good to eat, and better than that of the Chaffinch ; but its song is much inferior, and is only a disagreeable kind of chirping. It feeds on seeds of various kinds, and is said to be particularly fond of beech mast.

* Buffon.

THE GOLDFINCH.

GOLDSPINK, OR THISTLE-FINCH.

(*Fringilla Carduelis*, Lin.—*Le Chardonneret*, Buff.)

THE bill is white, tipped with black ; the forehead and chin are of a rich scarlet colour, which is divided by a black line passing from each corner of the bill to the eyes, which are dark ; the cheeks are white ; top of the head black, which colour extends downward from the nape on each side, dividing the white on the cheeks from the white spot on the hinder part of the neck ; the back and rump are of a cinnamon brown colour ; the sides the same, but paler ; belly white ; greater wing coverts black ; quills black, marked in the middle of each feather with yellow, forming, when the wing is closed, a large patch of that colour upon it ; the tips white ; the tail feathers are black, with a white spot on each near the end ; the legs are of a pale flesh colour.

Beauty of plumage, says the lively Count de Buffon, melody of song, sagacity, and docility of disposition, seem

all united in this charming little bird, which, were it rare, and imported from a foreign country, would be more highly valued. Goldfinches begin to sing early in the spring, and continue till the time of breeding is over; 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 will learn a variety of little tricks, such as to draw up small buckets containing their water and food, to fire a cracker, and such like. They construct a very neat and compact nest, which is composed of moss, dried grass, and roots, lined with wool, hair, the down of thistles, and other soft and delicate substances. The female lays five white eggs, marked with spots of a deep purple colour at the larger end. They feed their young with caterpillars and insects; the old birds feed on various kinds of seeds, particularly those of the thistle, of which they are extremely fond.

Goldfinches breed with the Canary; this intermixture succeeds best between the cock Goldfinch and the hen Canary, whose offspring are productive, and are said to resemble the male in the shape of the bill, and in the colours of the head and wings, and the hen in the rest of the body.

THE SISKIN.

ABERDEVINE.

(*Fringilla Spinus*, Lin — *Le Tarin*, Buff.)

LENGTH nearly five inches. Bill white ; eyes black ; top of the head and throat black ; over each eye there is a pale yellow streak ; back of the neck and the back yellowish olive, faintly marked with dusky streaks down the middle of each feather ; rump yellow ; under parts greenish yellow, palest on the breast ; thighs grey, marked with dusky streaks ; greater wing coverts of a pale yellowish green, and tipped with black ; quills dusky, faintly edged with yellow, the outer web of each at the base is of a fine pale yellow, forming, when the wing is closed, an irregular bar of that colour across it ; the tail is forked, the middle feathers black, with faint edges, the outer ones yellow, with black tips : the legs pale brown ; claws white.

The foregoing figure and description were taken from one which was caught on the banks of the Tyne, and kept some years afterwards in a cage ; its song, though

not so loud as that of the Canary, was pleasing and sweetly various; it imitated the notes of other birds, even to the chirping of the Sparrow: it was familiar, docile, and cheerful, and began its song early in the morning. Like the Goldfinch, the Siskin may easily be taught to draw up its little bucket with water and food. The latter consists chiefly of seeds; it drinks frequently, and seems fond of throwing water over its feathers. It breeds freely with the Canary. When the Siskin is paired with the hen Canary, he is assiduous in his attention to his mate, carrying materials for the nest, and arranging them; and, during the time of incubation, regularly supplying the female with food.

These birds are common in various parts of Europe; they are in most places 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 those immense flights happen only once in the course of three or four years. It conceals its nest with so much art, that it is extremely difficult to discover it. Kramer says, that in the forests bordering on the Danube, thousands of young Siskins are frequently found, which have not dropt their first feathers, and yet it is rare to meet with a nest. It is not known to breed in this island, nor is it said from whence they come over to us. In some parts of the South it is called the Barley-bird, being seen about that seed time; and in the neighbourhood of London it is known by the name of the Aberdevine.

THE CANARY FINCH

(*Fringilla Canaria*, Lin.—*Le Serin des Canaries*, Buff.)

Is somewhat larger than the last, being about five inches and a half in length. The bill is of a pale flesh colour; general colour of the plumage yellow, more or less mixed with grey, and in some with brown on the upper parts; the tail is somewhat forked; legs pale flesh colour.

In a wild state they are found chiefly in the Canary islands, whence they have been brought to this country, and almost every part of Europe: they are kept in a state of captivity, and partake of all the differences attendant on that state. Buffon enumerates twenty-nine varieties, and many more might probably be added to the list, were all the changes incident to a state of domestication carefully noted and 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 and gratifying to innocent minds. In the places fitted up and accommodated to the use of the little captives, we are delighted to see the workings of nature exemplified in the choice of their mates, building their nests, hatching and rearing their young, and in the impassionate ardour exhibited by the male, whether he is engaged in assisting his faithful mate in collecting materials for her nest, in arranging them for her accommodation, in providing food for her offspring, or in chaunting his lively and amorous songs during every part of the important business. The Canary will breed freely with the Siskin and Goldfinch, particularly the former, as has been already observed; it likewise proves

prolific with the Linnet, but not so readily; and admits also the Chaffinch, Yellow Bunting, and even the Sparrow, though with still more difficulty. In all these instances, excepting the first, the pairing succeeds best when the female Canary is introduced to the male of the opposite species. According to Buffon, the Siskin is the only bird of which the male and female propagate equally with those of the male or female Canaries.

The last-mentioned author, in his History of Birds, has given a curious account of the various methods used in rearing these birds, to which the reader is referred. We have thought it necessary to say so much of a bird, which, though neither of British origin, nor a voluntary visitor, must yet be considered as ours by adoption.*

* The importation of Canaries forms a small article of commerce; great numbers are every year imported from Tyrol: four Tyrolese usually bring over to England about sixteen hundred of these birds; and though they carry them on their backs one thousand miles, and pay twenty pounds for such a number, they are enabled to sell them at five shillings a-piece.—*Phil. Trans.* vol. 62.

THE LINNET.

GREY LINNET.

(Fringilla Linaria, Lin.—La Linotte, Buff.)

LENGTH about five inches and a half. The bill bluish grey; eyes hazel; the upper parts of the head, the neck, and back, are of a dark reddish brown, the edges of the feathers pale; the under parts are of a dirty reddish white; the breast is deeper than the rest, and in spring becomes of a very beautiful crimson; the sides are streaked with brown; the quills are dusky, edged with white; the tail brown, likewise with white edges, except the two middle feathers, which have reddish margins; it is somewhat forked: the legs are brown. The female wants the red on the breast, instead of which it is marked with streaks of brown; she has less white on her wings, and her colours in general are less bright.

This bird is very well known, being common in every part of Europe; it builds its nest in low bushes; the outside is made up of dry grass, roots, and moss; it

is lined with hair and wool. The female lays four or five eggs, of a pale blue colour, spotted with brown at the larger end : she breeds generally twice in the year. The song of the Linnet is lively and sweetly varied ; its manners are gentle, and its disposition docile ; it easily adopts the songs of other birds, when confined with them, and in some instances it has been taught to pronounce words with great distinctness ; but this substitution of imperfect and forced accents, which have neither charms nor beauty, in the room of the free and varied modulations of uninstructed nature, is a perversion of its talents. Linnets are frequently found in flocks : during winter, they feed on various sorts of seeds, and are said to be particularly fond of lintseed, from which circumstance they derive their name.

THE GREATER REDPOLE.

(*Fringilla Cannabina*, Lin.—*Le grande Linnotte de Vignes*, Buff.)

THIS bird is somewhat less than the last, and differs principally from the Linnet in being marked on the forehead by a blood-coloured spot; the breast likewise is tinged with a fine rose colour; in other respects it resembles the Linnet so much, that Buffon supposes them to be the same, and that the red spots on the head and breast are equivocal marks, differing at different periods, and appearing at one time and disappearing at another, in the same bird. It is certain that during a state of captivity, the red marks disappear entirely; and that in the time of moulting, they are nearly obliterated, and for some time do not recover their usual lustre. But 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. The head of the female is ash-coloured, spotted with black, and of a dull yellow on the breast and sides, which are streaked with dusky lines.

Redpoles are common in the northern parts of England, where they breed chiefly in mountainous places.

THE LESSER REDPOLE.

(*Fringilla Linaria*, Lin.—*Le Sizerin*, Buff.)

LENGTH about five inches. Bill pale brown, point dusky; eyes hazel; the forehead is marked with a pretty large spot, of a deep purplish red: the breast is of the same colour, but less bright; the feathers on the back are dusky, edged with pale brown; the greater and lesser coverts tipped with dirty white, forming two light bars across the wing; the belly and thighs are of a dull white; the quills and tail dusky, edged with dirty white; the latter somewhat forked: legs dusky. In our bird the rump was somewhat reddish, in which it agrees with the Twite of Mr Pennant, and most probably constitutes one species with it and the Mountain Linnet, the differences being immaterial, and merely such as might arise from age, food, or other accidental circumstances. The female has no red on the breast or rump, and the spot on her forehead is of a saffron colour; her plumage in general is not so bright as that of the male.

This species is found in every part of Europe, from Italy to the most extreme parts of the Russian empire. In America and the northern parts of Asia it is likewise very common. They are not unfrequent in this island ; they breed chiefly in the northern parts, where they are known by the name of French Linnets. They make a shallow open nest, composed of dried grass and wool, and lined with hair and feathers : the female lays four eggs, almost white, marked with reddish spots. In the winter they mix with other birds, and migrate in flocks to the southern counties ; 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 may easily be caught with lime twigs.

OF THE LARK.

AMONG the various kinds of singing birds with which this country abounds, there is none more eminently conspicuous than those of the Lark kind. Instead of retiring to woods and deep recesses, or lurking in thickets, where it may be heard without being seen, the Lark is seen abroad in the fields; it is the only bird which chaunts 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 great poet of nature thus beautifully describes it as the leader of the general chorus :

..... " Up springs the Lark,
" Shrill-voic'd 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."

From the peculiar construction of the hinder claws, which are very long and straight, Larks generally rest upon the ground; those which frequent trees perch only on the larger branches. They all build their nests upon the ground, which exposes them to the depredations of the smaller kinds of voracious animals, such as the weasel, stoat, &c. 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. The general characters of this species are thus described:—The bill is straight and slender, bending a little towards the end, which is sharp-pointed; the nostrils are covered

with feathers and bristles ; the tongue is cloven at the end ; tail somewhat forked ; the toes divided to the origin ; claw of the hinder toe very long, and almost straight ; the fore claws very short, and slightly curved.

THE SKYLARK.

LAVROCK.

(*Alauda arvensis*, Lin.—*L'Alouette*, Buff.)

LENGTH nearly seven inches. Bill dusky, under mandible somewhat yellow ; eyes hazel ; over each eye there is a pale streak, which extends to the bill, and round the eye on the under side ; on the upper parts of the body the feathers are of a reddish brown colour, dark in the middle, with pale edges ; the fore part of the neck is of a reddish white, dashed with brown ; breast, belly, and thighs white ; the quills brown, with pale edges ; tail the same, and somewhat forked, the two middle feathers darkest, the outermost white on the outer edge ; the legs dusky. In some of our specimens the feathers on the

top of the head were long, and formed a sort of crest behind. The Lesser Crested Lark of Pennant and Latham is perhaps only a variety of this, the difference being trifling. It is said to be found in Yorkshire.

The Lark begins its song very early in the spring, and is heard chiefly in the morning; it rises in the air almost perpendicularly and by successive springs, and hovers at a vast height; its descent, on the contrary, is in an oblique direction, unless it is threatened by birds of prey, or attracted by its mate, and on these occasions it drops like a stone. It makes its nest on the ground, between two clods of earth, and lines it with dried grass and roots: the female lays four or five eggs, of a greyish brown colour, marked with darker spots; she generally has two broods in the year, and sits only about fifteen days. As soon as the young have escaped from the shell, the attachment of the parent bird seems to increase; she flutters over their heads, directs all their motions, and is ever ready to screen them from danger.

The Lark is diffused almost universally throughout Europe; it is every where extremely prolific, and in some places the prodigious numbers that are frequently caught are truly astonishing. In Germany there is an excise upon them, which has produced, according to Keysler, the sum of 6000 dollars in one year to the city of Leipsic alone. Mr Pennant says, the neighbourhood of Dunstable is famous for the great numbers of these birds found there, and that 4000 dozen have been taken between September and February, for the London markets. Yet, notwithstanding the great havoc made among these birds, they are extremely numerous. The winter is the best season for taking them, as they are then very fat,

being almost constantly on the ground, feeding in great flocks; whereas in summer they are very lean; they then always go in pairs, eat sparingly, and sing incessantly while on the wing.

THE FIELD LARK.

(*Alauda campestris*, Lin.—*La Spipolette*, Buff.)

THIS exceeds the Titlark in size, being about six inches long. Its bill is slender; the plumage on the head, neck, and back is of a dark greenish brown, streaked with black, palest on the rump; above each eye is a pale streak; quill feathers dusky brown, with pale edges; the scapulars faintly bordered with white; the throat and under parts of the body are of a dirty white; the breast is yellowish, and marked with large black spots; the sides and thighs streaked with black; the tail dusky, two outer feathers white, except a small part of the inner web; the next two tipped with white: the legs are of a yellowish brown; the hinder claws somewhat curved.

This bird is similar to the Titlark in plumage; its song is however totally different, as are also its haunts, which are chiefly near woods, and not unfrequently on trees; it builds its nest like the last, and in similar situations, on the ground, and sometimes in a low bush near the ground. The male is scarcely to be distinguished from the female in its outward appearance.

THE GRASSHOPPER LARK.

(*Alauda trivialis*, Lin.—*L'Alouette Pipi*, Buff.)

THIS is the smallest of the Lark kind, and has, though we think not with sufficient reason, been ranked among the warblers. Its bill is slender and dusky; the upper parts of the body are of a greenish colour, variegated and mixed with brown; the under parts of a yellowish white, speckled irregularly on the breast and neck; the feathers of the wings and tail are of a palish dusky brown, with light edges; the legs pale dingy brown; its hinder claws, though shorter and more crooked than those of the Skylark, sufficiently mark its kind. It builds its nest on the ground, in solitary spots, and conceals it beneath a turf: the female lays five eggs, marked with brown near the larger end.

In the spring the cock bird sometimes perches on a tall 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. In the winter its cry is said to resemble that of the grasshopper, though rather stronger and shriller: it has been called the Pipit Lark, from its small shrill cry, and in German *Pieplerche* for the same reason. Mr White observes, that its note seems close to a person, though at an 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 on the top of a twig, gaping and shivering with its wings.

We have occasionally met with another bird of the Lark kind, which we have ventured to denominate the Tree Lark : it frequents woods, and sits on the highest branches of trees, whence it rises singing to a considerable height, and descends slowly, with its wings set up and its tail spread out like a fan. Its note is full, clear, melodious, and peculiar to its kind.

THE WOODLARK.

(*Alauda arborea*, Lin.—*L'Alouette de bois*, Buff.)

THIS bird is somewhat smaller than the Field Lark : the colours of its plumage are much the same, but on the upper parts are paler, and not so distinctly defined : a white streak passes from the bill over each eye towards the nape, nearly surrounding the head like a bandage ;

the under parts are white, tinged with yellow on the throat, and red on the breast, and spotted with black. The tail is rather shorter than that of other Larks, which gives this bird a less tall and slender shape : the legs are of a dull yellow ; the hinder claw very long, and somewhat curved.

The Woodlark is generally found near the borders of woods, from which it derives its name ; it perches on trees, and sings during the night, so as sometimes to be mistaken for the Nightingale ; it likewise sings as it flies, and builds its nest on the ground, similar to that of the Skylark. The female lays five eggs, of a dusky hue, marked with brown spots. It builds very early, the young, in some seasons, being able to fly about the latter end of March. It makes two nests in the year, like the Skylark, but is not nearly so numerous as that bird. In autumn the Woodlarks are fat, and are then esteemed excellent eating.

THE TITLARK.

(*Alauda pratensis*, Lin.—*La Farlouse*, ou *L'Alouette de prez*, Buff.)

THIS bird is less than the Woodlark, being not more than five inches and a half in length. Its bill is black at the tip, and of a yellowish brown at the base; its eyes are hazel, and over each is a pale streak. In the disposition of its colours it is very similar to the Skylark, but somewhat darker on the upper parts, and inclining to a greenish brown. The breast is beautifully spotted with black on a light yellowish ground; the belly light ash colour, obscurely streaked on the sides with dusky; the tail is almost black, the two outer feathers white on the exterior edges, the outermost but one tipped with a white spot on the end: the legs are yellowish; feet and claws brown. The female differs only in that its plumage is less bright than that of the male.

The Titlark is common in this country; and, though it sometimes perches on trees, is generally found in mea-

dows and low marshy grounds. It makes its nest on the ground, lining it with hair: the female lays five or six eggs, of a deep brown colour: the young are hatched about the beginning of June. During the time of incubation, the male sits on a neighbouring tree, rising at times and singing. The Titlark is flushed with the least noise, and shoots with a rapid flight. Its note is fine, but short, and without much variety; it warbles in the air like the Skylark, and increases its song as it descends slowly to the branch on which it chuses to perch. It is further distinguished by the shake of its tail, particularly whilst it eats.

OF THE WAGTAIL.

THE species of this kind are few, and these are chiefly confined to the continent of Europe, where the individuals are numerous. They are easily distinguished by their brisk and lively motions, as well as by the great length of their tails, which they jerk up and down incessantly, from which circumstance they derive their name.* They do not hop, but run along the ground very nimbly after flies and other insects, on which they feed : they likewise feed on small worms, in search of which they are frequently seen to flutter round the husbandman whilst at his plough, and follow the flocks in search of the flies which generally surround them. They frequent the sides of pools, and pick up the insects which swarm on the surface. They seldom perch ; their flight is weak and undulating, during which they make a twittering noise.

* In almost all languages the name of this bird is descriptive of its peculiar habits. In Latin, *Motacilla* ; in French, *Motteux*, *La Lavandiere*, or *Washer* ; in England, they are sometimes called *Washers*, from their peculiar motion ; in German, *Brook-stilts* ; in Italian, *Shake-tail*, &c. &c.

THE PIED WAGTAIL.

BLACK AND WHITE WATER WAGTAIL.

(*Motacilla Alba*, Lin.—*La Lavandiere*, Buff.)

THE length of this bird is about seven inches. The bill is black; eyes hazel; hinder part of the head and neck black; the forehead, cheeks, and sides of the neck are white; the fore part of the neck and part of the breast are black, bordered by a line of white, in the form of a gorget; the back and rump are of a dark ash colour; wing coverts and secondary quills dusky, edged with light grey; prime quills black, with pale edges; lower part of the breast and belly white; the middle feathers of the tail are black, the outermost white, except at the base and tips of the inner webs, which are black: legs black. There are slight variations in these birds; some are white on the chin and throat, leaving only a crescent of black on the breast. The head of the female is brown.

This is a very common bird with us, and may be seen every where, running on the ground, and frequently leaping after flies and other insects, on which it feeds. Its usual haunts are the shallow margins of waters into

which it will sometimes wade a little in search of its food. It makes its nest on the ground, of dry grass, moss, and small roots, lined with hair and feathers: the female lays five white eggs, spotted with brown. The parent birds are very attentive to their young, and continue to feed and train them for three or four weeks after they are able to fly: they will defend them with great courage when in danger, or endeavour to draw aside the enemy by various little arts. They are very attentive to the cleanliness of the nest, and will throw out the excrement; they have been known to remove light substances, such as paper or straw, which have been laid as a mark for the nest.

The Wagtail is said by some authors to migrate into other climates about the end of October; with us it is known to change its quarters as the winter approaches, from north to south. Its note is small and insignificant, but frequently repeated, especially while on the wing.

THE GREY WAGTAIL.

(*Motacilla Boarula*, Lin.—*La Bergeronette jaune*, Buff.)

THIS bird is somewhat larger than the last, owing to the great length of its tail. Its bill is dark brown; over each eye there is a pale streak; the head, neck, and back are of a greyish ash colour; the throat and chin are black; the rump and all the under parts of the body are of a bright yellow; wing coverts and quills dark brown, the former with pale edges; the secondaries, which are almost as long as the greater quills, are white at the base, and tipped with yellow on the outer edges; the middle feathers of the tail are black, the outer ones white: legs yellowish brown.

This elegant little bird frequents the same places as the last, and feeds on the same food. It remains with us during winter, frequenting the neighbourhood of springs and running waters. The female builds her nest on the ground, and sometimes in the banks of rivulets; it is composed of nearly the same materials as that of the last:

she lays from six to eight eggs, of a dirty white, marked with yellow spots. She differs from the male in having no black on the throat.

THE YELLOW WAGTAIL.

(*Motacilla Flava*, Lin.—*La Bergeronette de printemps*, Buff.)

LENGTH six inches and a half. Bill black; eyes hazel; the head and all the upper parts of the body are of an olive green, palest on the rump; the under parts are of a bright yellow, dashed with a few dull spots on the breast and belly; over each eye there is a pale yellow streak, and beneath a dusky line, curving upwards towards the hinder part of the head; wing coverts edged with pale yellow; quills dusky; tail black, except the outer feathers, which are white: legs black; hinder claws long.

This bird is seen very early in the spring, in the meadows and fields, among the green corn, where it frequently nestles; in winter it haunts the sides of brooks and springs which never freeze. The female lays five eggs, of a pale lead colour, with dusky spots.

OF THE FLYCATCHERS.

OF the birds which constitute this class, we find only two kinds that inhabit this island, and these are not the most numerous of the various tribes with which this country abounds. The useful instincts and propensities of this little active race are chiefly confined to countries under the more immediate influence of the sun, where they are of infinite use in destroying those numerous swarms of noxious insects, engendered by heat and moisture, which are continually upon the wing. These, though weak and contemptible when individually considered, are formidable by their numbers, devouring the whole produce of vegetation, and carrying in their train the accumulated ills of pestilence and famine. Thus, to use the words of an eminent naturalist,* “we see, that all nature is balanced, and the circle of generation and destruction is perpetual ! The philosopher contemplates with melancholy this seemingly cruel system, and strives in vain to reconcile it with his ideas of benevolence ; but he is forcibly struck with the nice adjustment of the various parts, their mutual connection and subordination, and the unity of plan which pervades the whole.”

The characters of this genus with us are somewhat equivocal, and not well ascertained ; neither do we know of any common name in our language by which it is distinguished. Mr Pennant describes it thus :—“ Bill flattened at the base, almost triangular, notched at the end of the upper mandible, and beset with bristles at its base.” We have placed the Flycatcher here, as introductory to the numerous class which follows, to which it is nearly

* Buffon.

related, both in respect to form, habits, and modes of living ; the affinity between them is so great, as to occasion some confusion in the arrangement of several of the individuals of each kind, for which reason we have placed them together.

THE PIED FLYCATCHER.

COLDFINCH.

(*Muscicapa Atricapilla*, Lin.—*Le Traquet d'Angleterre*, Buff.)

LENGTH nearly five inches. Bill black ; eyes hazel ; the forehead is white ; the top of the head, the back, and tail are black ; the rump is dashed with ash colour ; the wing coverts are dusky, the greater coverts are tipped with white ; the exterior sides of the secondary quills are white, as are also the outer feathers of the tail ; all the under parts, from the bill to the tail, are white ; the legs are black. The female is much smaller, but longer tailed than the male ; she is brown where he is black ; she likewise wants the white spot on the forehead.

This bird is no where common ; it is most plentiful in

Yorkshire, Lancashire, and Derbyshire. Since the cut, which was done from a stuffed specimen, was finished, we have been favoured with a pair of these birds, shot at Benton, in Northumberland : we suppose them to be male and female, as one of them wanted the white spot on the forehead ; in other respects it was similar to the male : the upper parts in both were black, obscurely mixed with brown ; the quill feathers dark reddish brown ; tail dark brown, the exterior edge of the outer feather white : legs black.

The nest of this bird, with a very great number of young, was found in a hole of a tree, in Axwell Park, June 18, 1801 : the parent birds, but particularly the male, incessantly kept feeding them with small flies, which they were extremely expert in catching. The female, after she had fed her young, always jerked up her tail.

THE SPOTTED FLYCATCHER.

BEAM BIRD.

(*Muscicapa Grifola*, Lin.—*Le Gobe-mouche*, Buff.)

LENGTH nearly five inches and three quarters. Bill dusky, the base of it whitish, and beset with short bristles ; inside of the mouth yellow ; the head and back light brown, obscurely spotted with black ; the wings dusky, edged with white ; the breast and belly white ; the throat, and sides, under the wings, tinged with red ; the tail dusky : legs black.

Mr White observes, that the Flycatcher, of all our summer birds, is the most mute and the most familiar. It visits this island in the spring, and disappears in Sep-

tember. It builds in a vine or sweetbriar, against the wall of a house, or on the end of a beam, and sometimes close to the post of a door where people are going in and out all day long : it returns to the same place year after year. The female lays four or five eggs, closely spotted and blotched with dark rusty red. The nest is carelessly made, and consists chiefly of moss, frequently mixed with wool and strong fibres, “ so large,” says Buffon, “ that it appears surprising how so small an artificer could make use of such stubborn materials.” This bird feeds on insects, which it catches on the wing ; it sometimes watches for its prey, sitting on a branch or post, and with a sudden spring takes it as it flies, and immediately returns to its station to watch for more : it is likewise fond of cherries. Mr Latham says, it is known in Kent by the name of the Cherry-sucker. It has no song, but only a sort of inward wailing note, when it perceives any danger to itself or young. It breeds only once, and retires early. When its young are able to fly, it retires with them to the woods, where it sports with them among the higher branches, sinking and rising often, perpendicularly, among the flies which hum below.

OF THE WARBLERS.

THIS very numerous class is composed of a great variety of kinds, differing in size from the Nightingale to the Wren, and not a little in their habits and manners. They are widely dispersed over most parts of the known world; some of them remain with us during the whole year; others are migratory, and visit us annually in great numbers, forming a very considerable portion of those numerous tribes of singing birds, with which this island so plentifully abounds. Some of them are distinguished by their flying, which they perform by jerks, and in an undulating manner; others by the whirring motion of their wings. The head in general is small; the bill is weak and slender, and beset with bristles at the base; the nostrils are small and somewhat depressed; and the outer toe is joined to the middle one by a small membrane.

THE NIGHTINGALE.

(*Motacilla luscinia*, Lin.—*Le Rossignol*, Buff.)

THIS bird, so deservedly esteemed for the excellence of its song, is not remarkable for the variety or richness of its colours. It is somewhat more than six inches in length. Its bill is brown, yellow on the edges at the base; eyes hazel; the whole upper part of the body is of a rusty brown, tinged with olive; the under parts pale ash colour, almost white at the throat and vent; the quills are brown, with reddish margins: legs pale brown. The male and female are very similar.

Although the Nightingale is common in this country, it never visits the northern parts of our island, and is but seldom seen in the western counties of Devonshire and Cornwall: it leaves us some time in the month of August, and makes its regular return in the beginning of April; it is supposed, during that interval, to visit the distant regions of Asia; this is probable, as these birds do not winter in any part of France, Germany, Italy,

Greece, &c. neither does it appear that they stay in Africa, but are seen at all times in India, Persia, China, and Japan; in the latter country they are much esteemed for their song, and sell at great prices. They are spread generally throughout Europe, even as far north as Siberia and Sweden, where they are said to sing delightfully; they, however, are partial to particular places, and avoid others which seem as likely to afford them the necessary means of support. It is not improbable, however, that, by planting a colony in a well-chosen situation, these delightful songsters might be induced to haunt places where they are not at present seen; the experiment might be easily tried, and should it succeed, the reward would be great in the rich and varied song of this unrivalled bird. The following animated description of it is taken from the ingenious author of the *Histoire des Oiseaux*:—"The leader of the vernal chorus begins with a low and timid voice, and he prepares for the hymn to nature by assaying his powers and attuning his organs; by degrees the sound opens and swells, it bursts with loud and vivid flashes, it 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 his inmost soul, and every heart beats in unison, and melts with delicious langour. But this continued richness might satiate the ear. The strains are at times relieved by pauses, which bestow dignity and elevation. The mild silence of evening heightens the general effect, and not a rival interrupts the solemn scene."

Nightingales begin to build about the end of April or the beginning of May; they make their nest in the lower part of a thick bush or hedge; the female lays four

or five eggs, of a greenish brown colour. The nest is composed of dry grass and leaves, intermixed with small fibres, and lined with hair, down, and other soft and warm substances. The business of incubation is entirely performed by the female, whilst the cock, at no great distance, entertains her with his delightful melody : as soon, however, as the young are hatched, he leaves off singing, and joins her in the care of providing for the young brood. These birds make a second hatch, and sometimes a third ; and in hot countries they are said to have four.

The Nightingale is a solitary bird, and never unites in flocks like many of the smaller birds, but hides itself in the thickest parts of the bushes, and sings generally in the night : its food consists principally of insects, small worms, eggs of ants, and sometimes berries of various kinds. Nightingales, though timorous and shy, are easily caught ; snares of all sorts are laid for them, and generally succeed ; they are likewise caught on lime twigs. Young ones are sometimes brought up from the nest, and fed with great care till they are able to sing. It is with great difficulty that old birds are induced to sing after being taken ; for a considerable time they refuse to eat, but by great attention to their treatment, and avoiding every thing that might agitate them, they at length resume their song, and continue it during the greater part of the year.

THE DARTFORD WARBLER.

(*Le Pitchou de Provence*, Buff.)

THIS bird measures above five inches in length, of which the tail is about one half. Its bill is rather long and slender, and a little bent at the tip; it is of a black colour, whitish at the base; its eyes are reddish; eye-lids deep crimson; all the upper parts are of a dark rusty brown, tinged with dull yellow; the breast, part of the belly, and thighs are of a deep red, inclining to rust colour; the middle of the belly is white; the bastard wing is also white; the tail is dusky, except the exterior web of the outer feather, which is white: the legs are yellow.

It seems to be a rare bird in this country, and owes its name, with us, to the accident of a pair of them having been seen near Dartford in Kent, a few years ago; they have since been observed in great numbers, and are supposed sometimes to winter with us. Buffon says they are natives of Provence, where they frequent gardens,

and feed on flies and small insects. The foregoing representation was taken from a stuffed specimen in the Wycliffe Museum, then in the possession of Geo. Allan, Esq. of the Grange, near Darlington.

THE REDBREAST.

ROBIN-REDBREAST, OR RUDDOCK.

(*Motacilla rubecola*, Lin.—*Le Rouge Gorge*, Buff.)

THIS general favourite is too well known to need a very minute description. Its bill is slender and delicate; its eyes are large, black, and expressive, and its aspect mild; its head and all the upper parts of its body are brown, tinged with a greenish olive; its neck and breast are of a fine deep reddish orange; a spot of the same colour marks its forehead; its belly and vent are of a dull white: its legs are dusky.

During 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. Its nest is placed near the ground, by the roots of trees, in

the most concealed spot, and sometimes in old buildings ; it is constructed of moss, intermixed with hair and dried leaves, and lined with feathers : in order more effectually to conceal it, the bird covers its nest with leaves, leaving only a narrow winding entrance under the heap. The female lays from five to nine eggs, of a dull white, marked with reddish spots. During the time of incubation, the cock sits at no great distance, 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, who are as faithful as they are amorous, were lodged at the same time in the same bush.* 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 frequently happens that the caterpillar is burst, and its entrails are shaken out, leaving only the body thus cleansed from all 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.

Although the Redbreast never quits this island, it performs a partial migration. 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 man in all ages ; he haunts the dwell-

* *Unum arbustum non alit duos erithacos.*

ing of the cottager, and partakes of his humble fare; when the cold grows severe, and snow covers the ground, he approaches the house, taps at the window with his bill, as if to entreat an asylum, which is always cheerfully granted, and with a simplicity the most delightful, hops round the house, picks up crumbs, and seems to make himself one of the family. Thomson has very beautifully described the annual visits of this little guest in the following lines:—

- “ The Redbreast, sacred to the household gods,
- “ Wisely regardful of th’ embroiling 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 young Redbreast, when full feathered, may be taken for a different 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 it does not attain its full colour till the end of the following month. Redbreasts are never seen in flocks, but always singly; and, when all other birds associate together, they still retain their solitary habits. Buffon says, 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. Its general fami-

liarity has occasioned it 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-Red-breast, or Ruddock.

THE REDSTART.

RED-TAIL.

(*Motacilla Phænicurus*, Lin.—*Le Rossignol de muraille*, Buff.)

THIS bird measures rather more than five inches in length. Its bill and eyes are black ; its forehead is white ; cheeks, throat, fore part 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 ; in some subjects, probably old ones, this grey 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.

The Redstart is migratory ; it appears about the middle of April, and departs in the latter end of September, or beginning of October ; it frequents old walls and ruinous edifices, where it makes its nest, composed chiefly of moss, lined with hair and feathers. It is distinguished by a peculiar quick shake of its tail from side to side, on its 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 : it likewise builds in forests, in holes of trees, or in high and dangerous precipices. The female lays four or five eggs, not much unlike those of the Hedge-sparrow, but somewhat longer. These birds feed on flies, spiders, the eggs of ants, small berries, soft fruits, and such like.

THE FAUVETTE.

PETTICHAPS.

(Motacilla hippolais, Lin.—La Fauvette, Buff.)

LENGTH about six inches. Its bill is blackish; eyes dark hazel; the whole upper part of the body is of a dark brown or mouse colour, lightly tinged with pale brown on the edges of the wing coverts, and along the webs of the secondary quills; the larger quills are of a dusky ash colour, as are also those of the tail, excepting the outermost, which are white on the exterior sides and tips; over each eye there is a pale streak; the throat and belly are of a silvery white: legs dark brown.

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 fa-

* We have adopted the name of *Fauvette* for want of a more appropriate term in our language. We apprehend this to be the *Flycatcher* of Mr Pennant—*Br. Zool. vol. 2, p. 264, 1st. ed.*—and the *Lesser Pettichaps* of Latham, which he says, is known in York-

mily, 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, 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 synonyma of the different authors who have noticed them.

shire by the name of the Beambird ; but he does not speak from his own knowledge of the Bird. It certainly is but little known, and has no common name in this country.

THE LESSER FAUVETTE.

PASSERINE WARBLER.

(Motacilla passerina, Lin.—Le Passerinette, Buff.)

LENGTH nearly the same as the last. Bill pale brown ; upper parts of the body brown, slightly tinged with olive green ; under parts dingy white, a little inclining to brown across the breast ; quills dusky, with pale edges ; tail dusky ; over each eye there is an indistinct whitish line : legs pale brown. The male and female are much alike. The eggs are of a dull white, irregularly marked with dusky and black spots. This bird is also a mocker, but its song is not so powerful as that of the last.

THE WINTER FAUVETTE.

HEDGE WARBLER, HEDGE SPARROW, OR DUNNOCK.

(*Motacilla Modularis*, Lin.—*La Fauvette d'Hiver*, Buff.)

THE length of this well-known bird is somewhat more than five inches. Its bill is dark ; eyes hazel ; its general appearance is that of a dusky brown ; the feathers on the head, hinder part of the neck, back, wings, and tail, are edged with rusty or pale tawny brown, plain on the rump, rather clouded on the breast, and dashed on the sides with deeper shades of those colours : the chin, throat, sides of the neck, and fore part of the breast are of a dull bluish ash ; the belly is of the same colour, but lighter, and the legs are reddish brown.

This bird is frequently seen in hedges, from which circumstance it derives one of its names ; but it has no other relation to the Sparrow than in the dinginess of its colours ; in every other respect it differs entirely. It remains with us the whole year, and builds its nest near

the ground ; it is composed of moss and wool, and lined with hair. The female generally lays four or five eggs, of a uniform pale blue, without any spots : the young are hatched about the beginning of May. During the time of sitting, 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 spot to spot, and by such means allures her enemy to a safe distance. In France the Hedge-sparrow is rarely seen but in winter ; it arrives generally in October, and departs in the spring for more northern regions, where it breeds. It is supposed to brave the rigours of winter in Sweden, and that it assumes the white plumage common in those severe climates in that season. Its song is little varied, but pleasant, especially in a season when all the other warblers are silent : its usual strain is a sort of quivering, frequently repeating something like the following *tit-tit-tititit*, from which, in some places, it is called the Titling. It has already been observed that the Cuckoo frequently deposits her egg in the nest of this bird.

THE REED FAUVETTE.

SEDGE BIRD.

(*Motacilla Salicaria*, Lin.—*Le Fauvette de roseaux*, Buff.)

THIS elegant little bird is about the size of the Black-cap. Its bill is dusky; eyes hazel; the crown of the head and back are brown, marked with dusky streaks; the rump tawny; the cheeks are brown; over each eye there is a light streak; the wing coverts are dusky, edged with pale brown, as are also the quills and tail; the throat, breast, and belly are white, the latter tinged with yellow; the thighs are yellow: legs dusky; the hinder claws are long and much bent.

This bird is found in places where reeds and sedges grow, and builds its nest there, which is made of dried grass, and tender fibres of plants, lined with hair, and usually contains five eggs, of a dirty white, mottled with brown; it likewise frequents the sides of rivers and ponds, where there is covert: it sings incessantly night and day, during the breeding time, imitating by turns the notes of the Sparrow, the Swallow, the Skylark, and other birds, from which it is called the English Mock-

bird. Buffon observes, that the young ones, though tender and not yet fledged, will desert the nest if it be touched, or even if a person go too near it. This disposition, which is common to all the Fauvettes, as well as to this which breeds in watery places, seems to characterise the instinctive wildness of the whole genus.

THE BLACK-CAP.

(*Motacilla atricapilla*, Lin.—*La Fauvette à tête noire*, Buff.)

THIS bird is somewhat above five inches in length. The upper mandible is of a dark horn colour; the under one light blue, and the edges of both whitish: top of the head black; sides of the head and back of the neck ash colour; back and wings of an olive grey; the throat and breast are of a silvery grey; belly and vent white: the legs are of a bluish colour, inclining to brown; the claws black. The head of the female is of a dull rust colour.

The Black-cap visits us about the middle of April, and retires in September; it frequents gardens, and builds its nest near the ground; it is composed of dried grass, moss, and wool, and lined with hair and feathers. The

female lays five eggs, of a pale reddish brown, sprinkled with spots of a darker colour. During the time of incubation the male attends the female, and sits by turns; he likewise procures her food, such as flies, worms, and insects. 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. And 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. Black-caps feed chiefly on flies and insects, and not unfrequently on ivy and other berries.

THE WHITE-THROAT.

MUGGY.

(*Motacilla Sylva*, Lin.—*La Fauvette grise*, Buff.)

THE length of this bird is about five inches and a half. Its bill is dark brown, lighter at the base; eyes dark hazel; the upper part of the head and back are of a reddish ash colour; throat white; lesser wing coverts pale brown; the greater dusky brown, with reddish margins; breast and belly silvery white; the wings and tail are dusky brown, with pale edges, the outer feathers white: the legs pale brown. The breast and belly of the female are entirely white.

This bird arrives with the Redstart, Black-cap, &c. in the spring, and quits us in autumn about the same time as they; it frequents thickets and hedges, and feeds on insects and wild berries. It makes its nest in thick bushes, of fine dried grass, thinly lined with hair: the female lays five eggs, of a greenish white, sprinkled with darkish olive spots, which become numerous and blotched at the thicker end. It is often heard in the midst of a thick

covert to utter a pretty constant grating call of *cha, cha, cha*, which it leaves off 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.

THE YELLOW WILLOW WREN.

(*Motacilla trochilus*, Lin.—*Le Pouillot, ou le Chantre*, Buff.)

LENGTH above five inches. The bill is brown, the inside and edges yellow; eyes hazel; the upper parts of the plumage are yellow, inclining to a pale olive green; the under pale yellow; over each eye there is a whitish streak, which in young birds is very distinct; the wings and tail are of a dusky brown, with pale edges: legs yellowish brown.

There are three distinct species* of the Willow Wren, of which this is the largest; the following 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, whence it often

* The editors were so fortunate as to procure specimens of each kind, taken at the same time of the year, and had an opportunity of noticing the difference of their song. For these specimens, as well as for many others, this work is indebted to Lieut. H. F. Gibson, of the 4th dragoons.

A nest, of this species, with five young ones, was found and examined in Axwell-park, June 18, 1801: it was built in a hole on the edge of a *brae*: the entrance was long, and curiously arched over with the stems of dried grass.

risers singing; its note is rather low, and soft, but not much varied. It makes its nest in holes, at the roots of trees or in dry banks, of moss, lined with wool and hair: the eggs are of a dull white, marked with reddish spots.

THE WILLOW WREN.

(*Le Figuier brun et jaune*, Buff.)

THIS is next in size. The plumage of the upper parts is much darker than that of the last, and of a greenish olive colour; the wings are brown, with pale yellowish edges; the under parts are whitish, pretty deeply tinged with yellow on the throat, breast, and thighs: the bill is brown, inside yellowish; over each eye a light yellow line extends from the bill to the back part of the head: the legs are yellowish brown. These birds vary much in the depth of the shadings of their plumage.

The Willow Wren frequents hedges, shrubberies, and such like places; its food consists of insects, in search of which it is continually running up and down small branches of trees. It makes an artless nest, of

withered grass, moss, and the slender stems of dried plants ; it is lined with a few feathers, hair, and a little wool, and is commonly placed in a low thick bush or hedge : the female generally lays five eggs, which are white, spotted with red. We suppose this to be the *Figuier brun et jaune* of M. Buffon.

We are favoured by the ingenious Mr J. Gough, of Kendal, with the description of a bird very similar to this, which is common in Westmoreland, where it is known by the name of the Strawsmeer. It appears in the vallies in April, a few days after the Swallow, and begins to sing immediately on its arrival, and may be heard till the beginning of August.

THE LEAST WILLOW WREN.

CHIFF CHAFF.

THIS bird is about an inch less in length than the Yellow Willow Wren, and about half an inch shorter than the last. The upper parts of its plumage are darker than those of the last two, somewhat inclining to a mouse colour ; its breast is of a dull silvery white, from which, in some places, it is called the Linty-white : its legs are dark.

The song of this bird, though similar to that of the last, is still weaker : in both it consists of a single strain, frequently repeated ; and their little simple song, when poured forth from the branches of the loftiest trees, is heightened in tone only by the aid it receives from the echo.

This species visits this country among the first summer birds of passage, but from the smallness of its numbers they are thinly dispersed ; from which, together with their preferring the shades of solitary woods and coverts, they are but rarely to be seen.

THE GOLDEN-CRESTED WREN.

(*Motacilla regulus*, Lin.—*Le Roitelet*, Buff.)

THIS is supposed to be the least of all the European birds; it is certainly the smallest of the British kinds, being in length not quite three inches and a half,* and weighing only seventy-six grains. Its bill is very slender and dark; eyes hazel; on the top of its head the feathers are of a bright orange colour, bordered on each side with black, which forms an arch above its eyes, and with which it sometimes conceals the crown, by contracting the muscles of the head; the upper part of the body is of a yellowish olive green colour; all the under parts are of a pale reddish white, tinged with green on the sides; the greater coverts of the wings are of a dusky brown, edged with yellow, and tipped with white: quills dusky, edged with pale green, as are also the feathers of the tail, but lighter: the legs are of a yellowish brown. The female

* The body, when stripped of its feathers, is not quite an inch long.—*Buff.*

is distinguished by a pale yellow crown : her whole plumage is less vivid than that of the male.

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 ; in these it builds its nest, which is suspended from a branch by a kind of cordage made of the materials of which the nest is chiefly composed ; it is of an oblong form, having an aperture on one side, and is made principally of moss, lined with the softest down, mixed with slender filaments ; the female lays six or seven eggs, scarcely larger than peas, which are white, sprinkled with very small spots of a dull colour. 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. 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 sorts of seeds.

The Golden-crested Wren is diffused throughout Europe ; it has also been met with in various parts of Asia and America, and seems to bear every change of temperature, from the greatest degree of heat to that of the severest cold. It stays with us the whole year ; but Mr Pennant observes, that it crosses annually from the Orknies to the Shetland Isles, where it breeds and returns before winter—a long flight (of sixty miles) for so small a bird. Its song is said to be very melodious, but weaker than that of the Common Wren : it has besides a sharp shrill cry, somewhat like that of the Grasshopper.

THE WREN.

KITTY WREN.

(*Motacilla troglodytes*, Lin.—*Le Troglodyte*, Buff.)

LENGTH three inches and a half. The bill is slender, and a little curved ; upper mandible and tips of a brownish horn colour, the under one, and edges of both, dull yellow ; a whitish line extends from the bill over the eyes, which are dark hazel ; the upper parts of its plumage are of a clear brown, obscurely marked on the back and rump with narrow double wavy lines of pale and dark brown colours ; the belly, sides, and thighs are marked with the same colours, but more distinctly ; the throat is of a dingy white ; the cheeks and breast the same, faintly dappled with brown ; the quills and tail are marked with alternate bars of a reddish brown and black : the legs are of a pale olive brown.

This active little bird is very common in England, and braves our severest winters, which it contributes to enliven by its sprightly note. During that season it ap-

proaches near the dwellings of man, and takes shelter in the roofs of houses and barns, in hay-stacks, and holes in the walls: it continues its song till late in the evening, and not unfrequently during a fall of snow. In the spring it betakes itself to the woods, where it builds its nest near the ground, in a low bush, and sometimes on the turf, beneath the trunk of a tree, or in a hole in a wall: its nest is constructed with much art, being of an oval shape, with one small aperture in the side for an entrance: it is composed chiefly of moss, and lined within with feathers: the female lays from ten to sixteen, and sometimes eighteen eggs; they are white, thinly sprinkled with small faint reddish spots at the thicker end.

THE WHITE-RUMP.

WHEATEAR.

(*Motacilla oenanthe*, Lin.—*Le Motteux, ou le Cul blanc*, Buff.)

LENGTH five inches and a half. The bill is black; eyes hazel; from the base of the bill a black streak is extended over the eyes, cheeks, and ears, where it is

pretty broad; above this there is a line of white; the top of the head, hinder part of the neck, and the back, are of a bluish grey; the wing coverts and quills are dusky, edged with rusty white; the rump is perfectly white, as is also part of the tail; the rest is black; the under parts are of a pale buff colour, tinged with red on the breast: legs and feet black. In the female the white line above the eye is somewhat obscure, and all the black parts of the plumage incline more to brown; neither is the tail of so pure a white.

The White-rump breeds under shelter of a tuft or clod, in newly-ploughed lands, or under stones, and sometimes in old rabbit burrows: its nest, which is constructed with great care, is composed of dry grass or moss, mixed with wool, and is lined with feathers; it is defended by a sort of covert fixed to the stone or clod under which it is formed: the female generally lays five or six eggs, of a light blue, the larger end encompassed with a circle of a somewhat deeper hue.

This bird visits us about the middle of March, and from that time till some time in May is seen to arrive: it frequents new-tilled grounds, and never fails to follow the plough in search of insects and small worms, which are its principal food. In some parts of England great numbers are taken in snares made of horse hair, placed beneath a turf: near two thousand dozen are said to be taken annually in that way, in one district only, which are generally sold at sixpence per dozen * Great numbers are sent to the London markets, where they are much esteemed, being thought not inferior to the Orto-

* Pennant.

lan. They leave us in August and September, and about that time are seen in great numbers by the seashore, where, probably, they subsist some little time before they take their departure. They are extended over a large portion of the globe, even as far as the southern parts of Asia.

THE WHINCHAT.

(*Motacilla rubetra*, Lin.—*Le grand Traquet, ou le Tarier*, Buff.)

THIS bird is somewhat larger than the Stonechat. Its bill is black: eyes hazel; the feathers on the head, neck, and back are black, edged with rust colour; a streak of white passes from the bill over each eye towards the hinder part of the head; the cheeks are blackish; chin white; the breast is of a rust colour; belly, vent, and thighs pale buff; each wing is crossed by a white mark near the shoulder, and another smaller near the bastard wing; part of the tail, at the base, is white, the rest black; the two middle feathers are wholly black, as are also the legs.

The colours in general of the female are paler ; the white streak over the eye, and the spots on the wings, are much less conspicuous ; and the cheeks, instead of being black, partake of the colours of the head.

The Whinchat is a solitary bird, frequenting heaths and moors : it has no song, but only a simple unvaried note, and in manners very much resembles the Stonechat : it makes its nest very similar to that bird, and is generally seen in the same places during the summer months : the female lays five eggs, of a lightish blue, very faintly sprinkled with small rusty spots. 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. It feeds on worms, flies, and insects. About the end of summer it is very fat, and at that time is said to be scarcely inferior in delicacy to the Ortolan.

THE STONECHAT.

STONE-SMITH, MOOR-TITLING.

(Motacilla rubecola, Lin.—Le Traquet, Buff.)

LENGTH nearly five inches. The bill is black; eyes dark hazel; the head, neck, and throat are black, faintly mixed with brown; on each side of the neck, immediately above the wings, there is a large white spot; the back and wing coverts are of a fine velvet black, margined with reddish brown; the quills are dusky, with pale brown edges, those next the body are white at the bottom, forming a spot of that colour on the wings; the breast is of a bay colour, lightest on the belly; the rump white; the tail is black, the outer feathers margined with rust colour: the legs are black. The colours of the female are duller; the white on the sides of the neck is not so conspicuous; the breast and belly are much paler, and the white spot on the rump is wanting.

This solitary little bird is chiefly to be found on wild heaths and commons, where it feeds on small worms and insects of all kinds. It builds its nest at the roots of

bushes, or underneath stones: it carefully conceals the entrance to it by a variety of little arts: it generally alights at some distance from it, and makes its approaches with great circumspection, creeping along the ground in a winding direction, so that it is a difficult matter to discover its retreat. The female breeds about the end of March, and lays five or six eggs of a greenish pale blue. The flight of the Stonechat is low: it is almost continually on the wing, flying from bush to bush, alighting only for a few seconds. It remains with us the whole year, and in winter is known to frequent moist places, in quest of food. Buffon compares its note to the word *twistrata* frequently repeated. Mr Latham observes, that it seemed to him like the clicking of two stones together, from which circumstance it probably may have derived its name.

OF THE TITMOUSE.

THIS diminutive tribe is distinguished by a peculiar degree of sprightliness and vivacity, to which may be added a degree of strength and courage which by no means agrees with its appearance. Birds of this class are perpetually in motion ; they run with great celerity along the branches of trees, searching for their food in every little cranny, where the eggs of insects are deposited, which are their favourite food. During spring they are frequently observed to be very busy among the opening buds, searching for caterpillars, and are thus actively employed in preventing the mischiefs that would arise from a too great increase of those destructive insects, whilst, at the same time, they are intent on the means of their own preservation : they likewise eat small pieces of raw meat, particularly fat, of which they are very fond. None of this kind have been observed to migrate : they sometimes make short flittings from place to place in quest of food, but never entirely leave us. They are very bold and daring, and will attack birds much larger than themselves with great intrepidity. Buffon says, “ they pursue the Owl with great fury, and that in their attacks they aim chiefly at the eyes : their actions on these occasions are attended with a swell of the feathers, and a succession of violent attitudes and rapid movements, which strongly mark the bitterness of their rage. They will sometimes attack birds smaller and weaker than themselves, which they kill, and having picked a hole in the skull, they eat out the brains.” The nests of most of this kind are constructed with the most exquisite art, and

with materials of the utmost delicacy : some species, with great sagacity, build them at the extreme end of small branches projecting over water, by which means they are effectually secured from the attacks of serpents and the smaller beasts of prey.

These birds are very widely spread over every part of the old continent, from the northern parts of Europe to the Cape of Good Hope, as well as to the farthest parts of India, China, and Japan : they are likewise found throughout the vast continent of America, and in several of the West India islands. They are every where prolific, even to a proverb, laying a great number of eggs, which they attend with great solicitude, and provide for their numerous progeny with indefatigable activity.

All the Titmice are distinguished by short bills, which are conical, a little flattened at the sides, and very sharp-pointed ; the nostrils are small and round, and are generally covered by short bristly feathers, reflected from the forehead ; the tongue seems as if cut off at the end, and terminated by short filaments ; the toes are divided to their origin ; the back toe is very large and strong.

THE GREATER TITMOUSE.

OX-EYE.

(*Parus major*, Lin.—*La Groffe Mefange*, Buff.)

THE length of this bird is about five inches. The bill is black, as are also the eyes; the head is covered apparently with a sort of hood, of a fine deep glossy black, which is extended to the middle of the neck; the cheeks are white; the belly is of a greenish yellow, divided down the middle by a line of black reaching to the vent; the back is of an olive green; rump blue grey; the quills are dusky, the greater edged with white, the lesser with pale green; the wing coverts are of a bluish ash colour; the greater coverts are tipped with white, which forms a bar across the wing; the tail is black, the exterior edge of the outer feathers is white: the legs are of a dark lead colour; claws black.

The Titmouse begins to pair early in February; the male and female consort for some time before they make their nest, which is composed of the softest and most downy materials; they build it generally in a hole of a tree: the female lays from eight to ten eggs, which are white, spotted with rust colour. Buffon says, that the

young brood continue blind for several days, after which their growth is very rapid, and they are able to fly in about fifteen days : after they have quitted the nest they return no more to it, but perch on the neighbouring trees, and incessantly call on each other ; they generally continue together till the approach of spring invites them to pair. We kept one of these birds in a cage for some time ; it was fed chiefly with hemp-seed, which, instead of breaking with its bill, like the Linnet, it held very dexterously in its claws, and pecked it till it broke the outside shell ; it likewise ate raw flesh minced small, and was extremely fond of flies, which when held to the cage, it would seize with great avidity : it was continually in motion during the day, and would, for hours together, dart backwards and forwards with astonishing activity. Its usual note was strong and simple ; it had, besides, a more varied, but very low, and not unpleasant song. During the night it rested on the bottom of the cage.

THE BLUE TITMOUSE.

TOM-TIT, BLUE-CAP, OR NUN.

(*Parus caeruleus*, Lin.—*La Mefange bleue*, Buff.)

THE length of this beautiful little bird is about four inches and a half. The bill and eyes are black; crown of the head blue, terminated behind with a line of dirty white; sides of the head white, underneath which, from the throat to the hinder part of the neck, there is a line of dark blue; from the bill, on each side, a narrow line of black passes through the eyes; the back is of a yellowish green; coverts blue, edged with white; quills black, with pale blue edges; the tail is blue, the two middle feathers longest; the under parts of the body pale yellow: legs and claws black. The female is somewhat smaller than the male, has less blue on the head, and her colours in general are not so bright.

This busy little bird is seen frequently in our gardens and orchards, where its operations are much dreaded by the over-anxious gardener, who fears, that in its pursuit

after its favourite food, which is often lodged in the tender buds, it may destroy them also, to the injury of the future harvest, not considering that it is the means of destroying a much more dangerous enemy (the caterpillar) which it finds there : it has likewise a strong propensity to flesh, and is said to pick the bones of such small birds as it can master, as clean as skeletons. The female builds her nest in holes of walls or trees, which she lines well with feathers : she lays from fourteen to twenty white eggs, spotted with red. If her eggs should be touched by any person, or one of them be broken, she immediately forsakes her nest and builds again, but otherwise makes but one hatch in the year. This bird is distinguished above all the rest of the Titmice by its rancour against the Owl.

THE COLE TITMOUSE.

(*Parus ater*, Lin.—*La petite Charbonniere*, Buff.)

THIS bird is somewhat less than the last, and weighs only two drachms ; its length is four inches. The bill is

black, as are also the head, throat, and part of the breast; from the corner of the bill, on each side, an irregular patch of white passes under the eyes, extending to the sides of the neck; a spot of the same colour occupies the hinder part of the head and neck; the back and all the upper parts are of a greenish ash colour; the wing coverts are tipped with white, which forms two bars across the wing; the under parts are of a reddish white: legs lead colour; tail somewhat forked at the end.

THE LONG-TAILED TITMOUSE.

(*Parus caudatus*, Lin.—*La Mefange a longue queue*, Buff.)

THE length of this bird is nearly five inches and a half, of which the tail itself is rather more than three inches. Its bill is very short and black; eyes hazel, the orbits red; the top of the head is white, mixed with grey; over each eye there is a broad black band, which extends backwards, and unites on the hinder part of the head, whence it passes down the back to the rump, bordered on each side with dull red; the cheeks, throat, and breast are white; the belly, sides, rump, and vent are of a dull rose colour, mixed with white; the coverts of the wings are black, those next the body white, edged

with rose colour ; the quills are dusky, with pale edges : the tail consists of feathers of very unequal lengths ; the four middle feathers are wholly black, the others are white on the exterior edge : legs and claws black.

The foregoing figure was taken from one newly shot. There was a stuffed specimen in the museum of the late Mr Tunstall, at Wycliffe, in which the black band through the eyes was wholly wanting ; the back of the neck was black ; the back, sides, and thighs were of a reddish brown, mixed with white : it probably was a female.

The nest of this bird is singularly curious and elegant, being of a long oval form, with a small hole in the side, near the top, as an entrance ; its outside is formed of moss, woven or matted together with the silken shrouds of the aurelia of insects, and covered all over with the tree and the stone lichens, fixed with fine threads of the same silken material : from this thatch the rain trickles off without penetrating it, whilst from its similarity in colour and appearance to the bark of the branch on which it is most commonly placed, it is not easily to be discovered : the inside is thickly lined with a profusion of feathers,* the soft webs of which are all laid inwards, with the quills or points stuck into the outward fabric. In this comfortable little mansion the female deposits her eggs, to the number of sixteen or seventeen, which are concealed almost entirely among the feathers : they are about the size of a large pea, and perfectly white,† but take a fine red blush from the transparency of the shell, which shews the yolk. This bird is not uncommon with

* In some places the nest is called a feather-poke.

† Eggs taken out of the same nest differ : some are delicately freckled with red spots.

us ; it frequents the same places as the other species of Titmice, feeds in the same manner, and is charged with the same misdemeanor in destroying the buds, and probably with the same reason. It flies very swiftly, and from its slender shape, and the great length of its tail, it seems like a dart shooting through the air. It is almost constantly in motion, running up and down the branches of trees with great facility. The young continue with the parents, and form little flocks through the winter : they utter a small shrill cry, only as a call, but in the spring their notes become more musical.

The Long-tailed Titmouse is found in the northern regions of Europe, and from the thickness of its coat, seems well calculated to bear the rigours of a severe climate. Mr Latham says, that it has likewise been brought from Jamaica ; and observes, that it appeared as fully clothed as in the coldest regions.

THE MARSH TITMOUSE.

BLACK-CAPPED TITMOUSE.

(*Parus palustris*, Lin.—*La Mefange de marais*, Buff.)

Its length is somewhat short of five inches. Its bill is black ; the whole crown of the head, and part of the

neck behind, are of a deep black ; a broad streak, of a yellowish white, passes from the beak, underneath the eye, backwards ; the throat is black ; the breast, belly, and sides are of a dirty white ; the back is ash-coloured ; quill feathers dusky, with pale edges : the tail is dusky ; legs dark lead colour.

The Marsh Titmouse is said to be fond of wasps, bees, and other insects : it lays up a little store of seeds against a season of want. It frequents marshy places, whence it derives its name. Its manners are similar to those of the Cole Titmouse, and it is equally prolific.

THE BEARDED-TITMOUSE.

(*Parus biarmicus*, Lin.—*La Mefange barbue*, Buff.)

LENGTH somewhat more than six inches. The bill is of an orange colour, but so delicate that it changes on the death of the bird to a dingy yellow ; the eyes are also orange ; the head and back part of the neck are of a pearl grey, or light ash colour ; on each side of the head, from the eye, there is a black mark extending down-

wards on the neck, and ending in a point, not unlike a mustachoe; the throat and fore part of the neck are of a silvery white; the back, rump, and tail are of a light rust colour, as are also the belly, sides, and thighs; the breast is of a delicate flesh colour; the vent black; the lesser coverts of the wings are dusky, the greater rust colour, with pale edges; the quills are dusky, edged with white, those next the body with rusty on the exterior web, and with white on the inner; the bastard wing is dusky, edged and tipped with white: the legs are black. The female wants the black mark on each side of the head; the crown of the head is rust colour, spotted with black; the vent feathers are not black, but of the same colour as the belly.

The Bearded Titmouse is found chiefly in the southern parts of the kingdom; it frequents marshy places where reeds grow, on the seeds of which it feeds: it is supposed to breed there, though its history is imperfectly known. It is said that they were first brought to this country from Denmark by the Countess of Albemarle, and that some of them, having made their escape, founded a colony here; but Mr Latham, with great probability, supposes that they are ours *ab origine*, and that it is owing to their frequenting the places where reeds grow, and which are not easily accessible, that so little is known of them. Mr Edwards gives a figure of this bird, and describes it under the name of the Least Butcher Bird.

OF THE SWALLOW.

OF all the various families of birds, which resort to this island for food and shelter, there is none which has occasioned so many conjectures respecting its appearance and departure as the Swallow tribe: of this we have already hazarded our opinion in the introductory part of the work, to which we refer the reader. The habits and modes of living of this tribe are perhaps more conspicuous than those of any other. From the time of their arrival to that of their departure they seem continually before our eyes. The Swallow lives habitually in the air, and performs its various functions in that element; and whether it pursues its fluttering prey, and follows the devious windings of the insects on which it feeds, or endeavours to escape the birds of prey by the quickness of its motion, it describes lines so mutable, so varied, so interwoven, and so confused, that they hardly can be pictured by words. “The Swallow tribe is of all others the most inoffensive, harmless, entertaining, and social; all, except one species, attach themselves to our houses, amuse us with their migrations, songs, and marvellous agility, and clear the air of gnats and other troublesome insects, which would otherwise much annoy and incommode us. Whoever contemplates the myriads of insects that sport in the sun-beams of a summer evening in this country, will soon be convinced to what degree our atmosphere would be choaked with them, were it not for the friendly interposition of the Swallow tribe.”*

Not many attempts have been made to preserve Swal-

* White’s Selborne.

lows alive during the winter, and of these, few have succeeded. The following experiments, by Mr James Pearson, of London, communicated to us by Sir John Trevelyan, Bart. are highly interesting, and throw great light upon the natural history of the Swallow; we shall give them nearly in Mr Pearson's own words.

Five or six of these birds were taken about the latter end of August, 1784, in a bat fowling-net, at night; they were put separately into small cages, and fed with Nightingale's food: in about a week or ten days they took food of themselves; they were then put altogether into a deep cage, four feet long, with gravel at the bottom; a broad shallow pan with water was placed in it, in which they sometimes washed themselves, and seemed much strengthened by it. One day Mr Pearson observed that they went into the water with unusual eagerness, hurrying in and out again repeatedly, with such swiftness as if they had been suddenly seized with a frenzy. Being anxious to see the result, he left them to themselves about half an hour, and on going to the cage again, found them all huddled together in a corner, apparently dead; the cage was then placed at a proper distance from the fire, when only two of them recovered, and were as healthy as before—the rest died. The two remaining ones were allowed to wash themselves occasionally for a short time only; but their feet soon after became swelled and inflamed, which Mr P. attributed to their perching, and they died about Christmas: thus the first year's experiment was in some measure lost. Not discouraged by the failure of this, Mr P. determined to make a second trial the succeeding year, from a strong desire of being convinced of the truth respecting their going into a state of

torpidity. Accordingly, the next season, having taken some more birds, he put them into the cage, and in every respect pursued the same methods as with the last ; but to guard their feet from the bad effects of the damp and cold, he covered the perches with flannel, and had the pleasure to observe that the birds throve extremely well ; they sung their song through the winter, and soon after Christmas began to moult, which they got through without any difficulty, and lived three or four years, regularly moulting every year at the usual time. On the renewal of their feathers it appeared that their tails were forked exactly the same as in those birds which return hither in the spring, and in every respect their appearance was the same. These birds, says Mr Pearson, were exhibited to the society for promoting Natural History, on the 14th day of February, 1786, at the time they were in a deep moult, during a severe frost, when the snow was on the ground. Minutes of this circumstance were entered in the books of the society. These birds died at last from neglect, during a long illness which Mr Pearson had : they died in the summer. Mr P. concludes his very interesting account in these words :—" January 20, 1797, I have now in my house, No. 21, Great Newport-street, Long-Acre, four Swallows in moult, in as perfect health as any birds every appeared to be when moulting."

The result of these experiments pretty clearly proves, that Swallows do not in any material instance differ from other birds in their nature and propensities ; but that they leave us, like many other birds, when this country can no longer furnish them with a supply of their proper and natural food, and that consequently they seek it in other places, where they meet with that support which enables them to throw off their feathers.

Swallows are found in every country of the known world, but seldom remain the whole year in the same climate ; the times of their appearance and departure in this country are well known : they are the constant harbingers of spring, and on their arrival all nature assumes a more chearful aspect. The bill of this genus is short, very broad at the base, and a little bent ; the head is flat, and the neck scarcely visible ; the tongue is short, broad, and cloven ; tail mostly forked ; wings long ; legs short.

THE CHIMNEY SWALLOW.

HOUSE SWALLOW.

(*Hirundo rustica*, Lin.—*L'Hirondelle domestique*, Buff.)

LENGTH somewhat more than six inches. Its bill is black ; eyes hazel ; the forehead and chin are red, inclining to chesnut ; the whole upper part of the body is black, reflected with a purplish blue on the top of the head and scapulars ; the quills of the wings, according to their different positions, are sometimes of a bluish black, and sometimes of a greenish brown, whilst those of the

tail are black, with green reflections ; the fore part of the breast is black, and the rest of the breast and belly white ; the inside and corners of the mouth are yellow ; the tail is much forked, each feather, except the middle ones, is marked with an oval white spot on the inner web : the legs are very short, delicately fine, and blackish.

The Common Swallow makes its appearance with us soon after the vernal equinox, and leaves us again about the end of September : it builds its nest generally in chimnies, in the inside, within a few feet of the top, or under the eaves of houses : it is curiously constructed, of a cylindrical shape, plaistered with mud, mixed with straw and hair, and lined with feathers : it is attached to the sides or corners of the chimney, and is sometimes a foot in height, open at the top. The female lays five or six eggs, white, speckled with red. Swallows return to the same haunts : they build annually a new nest, and fix it, if the place admit, above that occupied the preceding year.* We are favoured by Sir John Trevelyan, Bart. with the following curious fact :—At Camerton Hall, near Bath, a pair of Swallows built their nest on the upper part of the frame of an old picture over the chimney, coming through a broken pane in the window of the room. They came three years successively, and in all probability would have continued to do so if the room had not been put into repair, which prevented their access to it. Both this bird and the Martin have generally two broods in the year ; the first in June, the other in August, or perhaps later. We have seen a young Swallow, which was shot on the 26th of September ; its length was scarcely five inches ; its tail was short, and not forked ;

the feathers were black, but wanted the white spots ; its breast was tinged with red. Swallows frequently roost at night, after they begin to congregate, by the sides of rivers and pools of water, from which circumstance it has been supposed that they retire into that element.

Swallows soon become familiar* after they have been caught ; that from which the foregoing figure was taken

* The following remarkable proof of this property, is extracted from a letter written to the editors, by the Rev. Walter Trevelyan, dated Long-Witton, Northumberland, September 10, 1800 :—

“ About nine weeks ago, a Swallow fell down one of our chimnies, nearly fledged, and was able to fly in two or three days. The children desired they might try to rear him, (to which I agreed, fearing the old ones would desert him) and as he was not the least shy, they succeeded without any difficulty, for he opened his mouth for flies as fast as they could supply them, and was regularly fed to a whistle. In a few days (perhaps a week) they used to take him into the fields with them, and as each child found a fly, and whistled, the little bird flew for his prey, from one to another : at other times he would fly round above them in the air, but always descended at the first call, in spite of the constant endeavours of the wild Swallows to seduce him away, for which purpose several of them at once would fly about him in all directions, striving to drive him away when they saw him about to settle on one of the children’s hands, extended with the food. He would very often alight on the children, uncalled, when they were walking several fields distant from home.

“ Our little inmate was never made a prisoner, by being put into a cage, but always ranged about the room at large, wherever the children were, and they never went out of doors without taking him with them. Sometimes he would sit on their hands or heads, and catch flies for himself, which he soon did with great dexterity. At length, finding it take up too much of their time to supply him with food enough to satisfy his appetite, (for I have no doubt he ate from seven hundred to a thousand flies a-day) they used to turn him out of the house, shutting the window to

had been slightly wounded in the wing, so as to prevent its flying away. It sat on the bench while the cut was engraved, and from its having been fed by the hand with flies, when sitting for its portrait, watched every motion, and at every look of the eye, when pointedly directed towards it, ran close up to the graver, in expectation of a fresh supply of food.

prevent his return, for two or three hours together, in hopes he would learn to cater for himself, which he soon did, but still was no less tame, always answering their call, and coming in at the window to them (of his own accord) frequently, every day, and always roosting in their room, which he has regularly done from the first till within a week or ten days past. He constantly roosted on one of the children's heads till their bed-time; nor was he disturbed by the child moving about, or even walking, but would remain perfectly quiet, with his head under his wing, till he was put away for the night in some warm corner: for he liked much warmth.

“ It is now four days since he came in to roost in the house, and though he did not then shew any symptoms of shyness, yet he is evidently becoming less tame, as the whistle will not now bring him to the hand, nor does he visit us as formerly, but he always acknowledges it when within hearing, by a chirp, and by flying near. Nothing could exceed his tameness for about six weeks, and I have no doubt it would have continued the same, had we not left him to himself as much as we could, fearing he would be so perfectly domesticated that he would be left behind at the time of migration, and of course be starved in the winter, from cold or hunger.

“ One thing I have observed, which perhaps is not much known, which is, that these birds *cast* like the Hawk tribe.”

THE SAND MARTIN.

BANK MARTIN, OR SAND SWALLOW.

(*Hirundo riparia*, Lin.—*L'Hirondelle de rivage*, Buff.)

LENGTH about four inches and three quarters. The bill is of a dark horn colour ; the head, neck, breast, and back are of a mouse colour ; over each eye there is a light streak ; the throat and fore part of the neck are white, as are also the belly and vent ; the wings and tail are brown : the feet are smooth and dark brown.

This is the smallest of all our Swallows, as well as the least numerous of them. It frequents the steep sandy banks in the neighbourhood of rivers, in the sides of which it makes deep holes, and places the nest at the end ; it is carelessly constructed of straw, dry grass, and feathers : the female lays five or six white eggs, almost transparent, and is said to have only one brood in the year.

THE MARTIN.

MARTLET, MARTINET, OR WINDOW SWALLOW.

(*Hirundo urbica*, Lin.—*L'Hirondelle à cul blanc*, Buff.)

LENGTH about five inches and a half. The bill is black; eyes dark hazel; inside of the mouth yellow; the top of the head, the wings, and tail are of a dusky brown; the back is black, glossed with blue; the rump and all the under parts of the body, from the chin to the vent, are of a pure white: the ends of the secondary quill feathers are finely edged with white; the legs are covered with white downy feathers down to the claws, which are white also, and are very sharp and much hooked; the middle toe is much longer than the others, and is connected with the inner one as far as the first joint.

This bird visits us in great numbers: it has generally two broods, sometimes three, in the year: it builds its nest most frequently upon the crags of precipices near the sea, or by the sides of lakes, and not unfrequently under the eaves of houses, or close by the sides of the windows: it is made of mud and straw on the outside, and lined with feathers: the first hatch the female lays five eggs, which are white, inclining to dusky at the

larger end : the second time she lays three or four ; and the third (when that takes place) she only lays two or three. During the time the young birds are confined to the nest, the old one feeds them, adhering by the claws to the outside ; but as soon as they are able to fly, they receive their nourishment on the wing, by a motion quick and almost imperceptible to those who are not accustomed to observe it.

The Martin arrives somewhat later than the Swallow, and does not leave us so soon : they have been observed in the neighbourhood of London as late as the middle of October. Mr White, in his *Natural History of Selborne*, has made some very judicious remarks on these birds, with a view to illustrate the time and manner of their annual migrations. The following quotation is very apposite, and serves to confirm the idea that the greater part of them quit this island in search of warmer climates. “ As the summer declines, the congregating flocks increase in numbers daily, by the constant accession of the second broods, till at last they swarm in myriads round the villages on the Thames, darkening the face of the sky as they frequent the islets of that river, where they roost. They retire in vast flocks together, about the beginning of October.” He adds, “ that they appeared of late years in considerable numbers, in the neighbourhood of Selborne, for one day or two, as late as November the 3d and 6th, after they were supposed to have been gone for more than a fortnight.” He concludes with this observation :—“ Unless these birds are very short-lived indeed, or unless they do not return to the district where they have been bred, they must undergo vast devastations somehow and somewhere ; for the birds that return yearly bear no manner of proportion to those that retire.”

THE SWIFT.

BLACK MARTIN, DEVILING, OR SCREAMER.

(Hirundo apus, Lin.—Le Martinet noir, Buff.)

LENGTH nearly eight inches. Bill black ; eyes hazel ; its general colour is that of a sooty black, with greenish reflections ; the throat is white ; the wings are long, measuring, from tip to tip, about eighteen inches ; the tail is much forked ; the legs are of a dark brown colour, and very short ; the toes stand two and two on each side of the foot, and consist of two phalanges or joints only, which is a conformation peculiar to this bird. The female is rather less than the male ; her plumage inclines more to brown, and the white on the throat is less distinct.

The Swift arrives later, and departs sooner than any of the tribe, from which it is probable that it has a longer journey to take than the others : it is larger, stronger, and its flight is more rapid than that of any of its kindred tribes, and it has but one brood in the year, so that the young ones have time to gain strength enough to accompany the parent birds in their distant excursions. They have been noticed at the Cape of Good Hope, and probably visit the more remote regions of Asia. Swifts are almost continually on the wing ; they fly higher, and

wheel with bolder wing than the Swallows, with which they never intermingle. The life of the Swift seems to be divided into two extremes; the one of the most violent exertion, the other of perfect inaction; they must either shoot through the air, or remain close in their holes. They are seldom seen to alight; but if by any accident they should fall upon a piece of even ground, it is with difficulty they can recover themselves, owing to the shortness of their feet, and the great length of their wings. They are said to avoid heat, and for this reason pass the middle of the day in their holes; in the morning and evening they go out in quest of provision; they then are seen in flocks, describing an endless series of circles upon circles, sometimes in close ranks, pursuing the direction of a street, and sometimes whirling round a large edifice, all screaming together: they often glide along without stirring their wings, and on a sudden they move them with frequent and quickly repeated strokes. Swifts build their nests in elevated places; lofty steeples and high towers are generally preferred: sometimes they build under the arches of bridges, which, though their elevation is not great, are difficult of access: the nest is composed of a variety of materials, such as dry grass, moss, hemp, bits of cord, threads of silk and linen, small shreds of gauze, of muslin, feathers, and other light substances which they chance to find in the sweepings of towns.* It is difficult to conceive how these birds, which are never seen to alight on the ground, gather these materials; some have supposed that they catch them in the air as they are carried up by the wind; others, that they raise them by glancing

* Buffon.

along the surface of the ground; while others assert, with more probability, that they often rob the Sparrow of its little hoard, and frequently occupy the same hole, after driving out the former possessor. The female lays five white eggs, rather pointed and spindle-shaped: the young ones are hatched about the latter end of May; they begin to fly about the middle of June, and shortly after abandon their nests, after which the parents seem no more to regard them.

Swifts begin to assemble, previously to their departure, early in July: their numbers daily increase, and large bodies of them appear together: they soar higher in the air, with shriller cries, and fly differently from their usual mode. These meetings continue till towards the middle of August, after which they disappear.

THE NIGHT-JAR.

GOAT-SUCKER, DOR-HAWK, OR FERN OWL.

(*Caprimulgus Europæus*, Lin.—*L'Engoulivent*, Buff.)

THE length of this bird is about ten inches and a half. The bill is small, flat, and somewhat hooked at the tip,

and is furnished on each side of the upper mandible with several strong bristles, whereby it secures its prey; the lower jaw is edged with a white stripe, which extends backward towards the head; the eyes are large, full, and black; the plumage is beautifully freckled and powdered with browns of various hues, mixed with rust colour and white, but so diversified as to exceed all description. The male is distinguished by an oval spot of white on the inner webs of the first three quill feathers, and at the ends of the two outermost feathers of the tail: the legs are short, rough, and scaly, and feathered below the knee; the toes are connected by a membrane as far as the first joint; the middle one is considerably larger than the rest, and the claw is serrated on one side.

To avoid perpetuating error, as much as possible, we have dropped the term Goat-sucker, which has no foundation but in ignorance and superstition, and have adopted one, which, though not universally known, bears some analogy to the nature and qualities of the bird to which it relates, both with respect to the time of its appearance, which is always in the dusk of the evening, in search of its prey, as well as to the jarring noise which it utters whilst at rest perched on a tree, and by which it is peculiarly distinguished.

The Night-jar is found in every part of the old continent, from Siberia to Greece, Africa, and India; it arrives in this country about the latter end of May, being one of our latest birds of passage, and departs some time in the latter end of August or the beginning of September: it is nowhere numerous, and never appears in flocks. Like the Owl, it is seldom seen in the day-time, unless disturbed, or in dark and gloomy days, when its eyes are

not dazzled by the bright rays of the sun. It feeds on insects, which it catches on the wing: it is a great destroyer of the cock-chafer or dor-beetle, from which circumstance, in some places, it is called the Dor-hawk. Six of these insects were found in the stomach of one of these birds, besides four or five large-bodied moths. Mr White supposes that its foot is useful in taking its prey, as he observed that it frequently, whilst on the wing, put forth its leg, with which it seemed to convey something to its mouth. These birds frequent moors and wild heathy tracts abounding with ferns: they make no nest, but the female deposits her eggs on the ground; she lays only two or three, which are of a dull white, spotted with brown. They are seen most frequently towards autumn: their motions are irregular and rapid, sometimes wheeling in quick succession round a tree or other object, diving at intervals as if to catch their prey, and then rising again as suddenly. When perched, the Night-jar sits usually on a bare twig, its head lower than its tail, and in this attitude utters its jarring note: it is likewise distinguished by a sort of buzzing which it makes while on the wing, and which has been compared to the noise caused by the quick rotation of a spinning-wheel, from which, in some places, it is called the Wheel-bird: sometimes it utters a small plaintive note or squeak, which it repeats four or five times in succession: the latter, probably, is its note of call to invite the female, as it has been observed to utter it when in pursuit of her. Buffon says, that it does not perch like other birds, sitting across the branch, but lengthwise. It is a solitary bird, and is generally seen alone; two are seldom found together, but sitting at a little distance from each other.

OF THE DOVE KIND.

THE various families which constitute this beautiful genus are distinguished by shades and gradations so minute, as to exceed all description. Of these by much the larger portion are the willing attendants on man, and depend on his bounty, seldom leaving the dwellings provided for them, and only roaming abroad to seek amusement, or to procure subsistence ; but when we consider the lightness of their bodies, the great strength of their wings, and the amazing rapidity of their flight, it is a matter of wonder that they should submit even to a partial kind of domestication, or occupy those tenements fitted up for the purpose of breeding and rearing their young. It must be observed, however, that in these they live rather as voluntary captives, or transient guests, than permanent or settled inhabitants, enjoying a considerable portion of that liberty they so much delight in : on the slightest molestation they will sometimes abandon their mansion with all its conveniences, and seek a solitary lodgment in the holes of old walls or unfrequented towers ; and some ornithologists assert, that they will even take refuge in the woods, where, impelled by instinct, they resume their native manners.

Of these the varieties and intermixtures are innumerable, and partake of all those varied hues which are the constant result of domestication. The manners of Pigeons are well known, few species being more universally diffused ; and having a very powerful wing, they are enabled to perform very distant journies ; accordingly wild and tame Pigeons occur in every climate, and although they thrive best in warm countries, yet with care

they succeed also in very northern latitudes. Every where their manners are gentle and lively; they are fond of society, and the very emblem of connubial attachment; they are faithful to their mates, whom they solicit with the softest cooings, the tenderest caresses, and the most graceful movements. The exterior form of the Pigeon is beautiful and elegant: the bill is weak, straight and slender, and has a soft protuberance at the base, in which the nostrils are placed: the legs are short and red, and the toes divided to the origin.

THE WILD PIGEON.

STOCK DOVE.

(*Columba anas*, Lin.—*Le Bifet*, Buff.)

LENGTH fourteen inches. Bill pale red; the head, neck, and upper part of the back are of a deep blue grey colour, reflected on the sides of the neck with glossy

green and gold ; the breast is of a pale reddish purple, or vinous colour ; the lower part of the back and the rump light grey or ash colour, as are also the belly, thighs, and under tail coverts ; the primary quill feathers are dusky, edged with white, the others grey, marked with two black spots on the exterior webs, forming two bars across each wing ; the tail is ash colour, tipped with black ; the lower half of the two outermost feathers is white : the legs are red ; claws black. The Stock Dove, Rock Pigeon, and Wood Pigeon, with some small differences, may be included under the same denomination, and are probably the origin of most of those beautiful varieties, which, in a state of domestication, are dependent upon man for food.

Wild Pigeons are said to migrate in large flocks into England, at the approach of winter, from the northern regions, and return in the spring ; many of them, however, remain in this country, only changing their quarters for the purpose of procuring food. They build their nests in the hollows of decayed trees, and commonly have two broods in the year. In a state of domestication their increase is prodigious ; and, though they never lay more than two eggs at a time, yet, allowing them to breed nine times in the year, the produce of a single pair, at the expiration of four years, may amount to the enormous number of 14,762.* The male and female perform the office of incubation by turns, and feed their young by casting up the provisions out of their stomachs into the mouths of the young ones.

To describe the numerous varieties of the domestic Pigeon would exceed the limits of our work ; we shall

* Stillingfleet's Tracts.

therefore barely mention the names of the most noted among them, such as Tumblers, Carriers, Jacobines, Croppers, Powters, Runts, Turbits, Shakers, Smiters, Owls, Nuns, &c. Of these the Carrier Pigeon is the most remarkably deserving of notice, having been made use of, from very early times, to convey intelligence on the most important occasions, and it never fails to execute its commission with unequalled expedition and certainty.* The Pigeon used on these occasions is taken from the place to which the advices are to be communicated, and the letter being tied under its wing, the bird is let loose, and in spite of surrounding armies and every obstacle that would have effectually prevented any other means of conveyance, guided by instinct alone, it returns directly home, where the intelligence is so much wanted. There are various instances on record of these birds having been employed during a siege, to convey an account of its progress, of the situation of the besieged, and of the probable means of relief: sometimes they have been the peaceful bearers of glad tidings to the anxious lover, and to the merchant of the no less welcome news of the safe arrival of his vessel at the desired port.

* In Asia Pigeons are still used to convey intelligence.

THE RING DOVE.

CUSHAT, OR QUEEST.

(Columba palumbus, Lin.—Le Pigeon ramier, Buff.)

THIS is the largest of all the pigeon tribe, and measures above seventeen inches in length. The bill is of a pale red colour; the nostrils are covered with a mealy red fleshy membrane: the eyes are pale yellow; the upper parts of the body are of a bluish ash colour, deepest on the upper part of the back, the lower part of which, the rump, and fore part of the neck and the head, are of a pale ash colour; the lower part of the neck and breast are of a vinous ash colour; the belly, thighs, and vent are of a dull white; on the hinder part of the neck there is a semicircular line of white (whence its name) above and beneath which, the feathers are glossy, and of a changeable hue in different lights; the greater quills are dusky, and all of them excepting the outermost, edged with white; from the point of the wing a white line ex-

tends downwards, passing above the bastard wing ; the tail is ash colour, tipped with black : the legs are red, and partly covered with feathers ; the claws black.

The Ring Dove is very generally diffused throughout Europe : it is said to be migratory, but that it does not leave us entirely we are well convinced, as we have frequently seen them during the winter on the banks of the Tyne, where they constantly breed in the spring. The nest is composed of small twigs, so loosely put together, that the eggs may be seen through it from below. The female lays two white eggs, and is generally supposed to have two broods in the year. They feed on wild fruits, herbs, and grain of all kinds ; they likewise are very fond of the roots of the pernicious weeds so well known to farmers under the denomination of *whickens*, of which the *Triticum repens*, or couch-grass, is the principal one : their flesh is very delicious when they have fed upon these, but it soon acquires an unpleasant flavour when they have lived upon turnips, which, from necessity, they are driven to eat in severe winters. The Ring Dove has a louder and more plaintive sort of cooing than the common Pigeon, but is not heard except in pairing time, or during fine weather.

THE TURTLE DOVE.

(*Columba turtur*, Lin.—*La Tourterelle*, Buff.)

LENGTH somewhat more than twelve inches. The bill is brown; eyes yellow, encompassed with a crimson circle; the top of the head is ash colour, mixed with olive; each side of the neck is marked with a spot of black feathers, tipped with white; the back is ash colour, each feather margined with reddish brown; wing coverts and scapulars reddish brown, spotted with black; quill feathers dusky, with pale edges; the fore part of the neck and the breast are of a light purplish red; the belly, thighs, and vent white; the two middle feathers of the tail are brown, the others dusky, tipped with white, the two outermost also edged with the same: the legs are red. One of these birds, which was sent us by the Rev. Henry Ridley, was shot out of a flock at Prestwick-Carr, in Northumberland, in the month of September, 1794; it agreed in every respect with the Common Turtle, ex-

cepting the mark on each side of the neck, which was wholly wanting: we suppose it to have been a young bird.

The note of the Turtle Dove is singularly tender and plaintive: in addressing his mate, the male makes use of a variety of winning attitudes, cooing at the same time in the most gentle and soothing accents; on which account the Turtle Dove has been represented, in all ages, as the most perfect emblem of connubial attachment and constancy. The Turtle arrives late in the spring, and departs about the latter end of August: it frequents the thickest and most sheltered parts of the woods, where it builds its nest on the highest trees: the female lays two eggs, and has only one brood in this country, but in warmer climates it is supposed to breed several times in the year. Turtles are pretty common in Kent, where they are sometimes seen in flocks of twenty or more, frequenting the pea fields, and are said to do much damage. Their stay with us seldom exceeds more than four or five months, during which time they pair, build their nests, breed, and rear their young, which are strong enough to join them in their retreat.

OF THE GALLINACEOUS KIND.

WE are now to speak of a very numerous and useful class of birds, which, by the bountiful disposition of providence, is diffused throughout every country of the world, affording every where a plentiful and grateful supply of the most delicate, wholesome, and nutritious food. A large portion of these seem to have left their native woods to crowd around the dwellings of man, where, subservient to his purpose, they subsist upon the pickings of the farm-yard, the stable, or the dunghill; a chearful, active race, which enliven and adorn the rural scene, and require no other care than the fostering hand of the housewife to shelter and protect them. Some kinds, such as the Partridge, the Pheasant, and the like, are found only in cultivated places, at no great distance from the habitations of men; and, although they have not submitted to his dominion, they are nevertheless subject to his controlling power, and are the objects of his keenest pursuit: whilst others, taking a wider range, find food and shelter in the deepest recesses of the woods and forests, sometimes subsisting upon wild and heathy mountains, or among rocks and precipices the most difficult of access.

The characters of the gallinaceous genus are generally well known: most of the species are distinguished above all others for the whiteness of their flesh; their bodies are large and bulky, and their heads comparatively small; the bill in all of them is short, strong, and somewhat curved; their wings are short and concave, and scarcely able to support their bodies, on which account they sel-

dom make long excursions : their legs are strong, and are furnished with a spur or a knob behind.

Birds of this kind are extremely prolific, and lay a great number of eggs : the young follow the mother as soon as hatched, and immediately learn to pick up the food which she is most assiduous in shewing them ; on this account she generally makes her nest on the ground, or in places easy of access to her young brood.

Our gallant Chanticleer holds a distinguished rank in this class of birds, and stands foremost in the list of our domestic tribes ; on which account we shall place him at the head.

THE DOMESTIC COCK.

(*Phasianus Gallus*, Lin.—*Le Coq*, Buff.)

THE Cock, like the Dog, in his present state of domestication, differs so widely from his wild original, as to render it a difficult matter to trace him back to his primitive stock; however it is generally agreed that he is to be found in a state of nature in the forests of India, and in most of the islands of the Indian seas. The varieties of this species are endless, every country, and almost every district of each country, producing a different kind. From Asia, where they are supposed to have originated,

they have been diffused over every part of the inhabited world. America was the last to receive them. It has been said that they were first introduced into Brazil by the Spaniards : they are now as common in all the inhabited parts of that vast continent as with us. Of those which have been selected for domestic purposes in this country, the principal are—

1. The Crested Cock, of which there are several varieties, such as the white-crested black ones ; the black-crested white ones ; the gold and silver ones, &c.

2. The Hamburgh Cock, named also Velvet Breeches, because its thighs and belly are of a soft black.* This is a very large kind, and much used for the table.

3. The Bantam, or Dwarf Cock, a diminutive but very spirited breed : its legs are furnished with long feathers, which reach to the ground behind ; it is very courageous, and will fight with one much stronger than itself.

4. The Frizzled Cock. The feathers in this are so curled up that they seem reversed, and to stand in opposite directions : they are originally from the southern parts of Asia, and when young are extremely sensible of cold. They have a disordered and unpleasant appearance, but are in much esteem for the table.

5. The Silk Fowls, whose skin and bones are black.

6. A kind which has no rump, and consequently no tail feathers.

We shall finish our list with the English Game-Cock, which stands unrivalled by those of any other nation for its invincible courage, and on that account is made use of as the instrument of the cruel sport of cock-fighting. To trace this custom to its origin we must look back into

* Buffon.

barbarous times, and lament that it still continues the disgrace of an enlightened and philosophic age. The Athenians allotted one day in the year to cock-fighting; the Romans are said to have learned it from them; and by that warlike people it was first introduced into this island. Henry VIII. was so attached to the sport, that he caused a commodious house to be erected for that purpose, which, though it is now applied to a very different use, still retains the name of the Cock-pit. The Chinese and many of the nations of India are so extravagantly fond of this unmanly sport, that, during the paroxysms of their phrensy, they will sometimes risk not only the whole of their property, but their wives and children, on the issue of a battle.

The appearance of the Game-cock, when in his full plumage and not mutilated for the purpose of fighting, is strikingly beautiful and animated: his head, which is small, is adorned with a beautiful red comb and wattles; his eyes sparkle with fire, and his whole demeanor bespeaks boldness and freedom. The feathers on his neck are long, and fall gracefully down upon his body, which is thick, firm, and compact; his tail is long, and forms a beautiful arch behind, which gives a grace to all his motions: his legs are strong, and are armed with sharp spurs, with which he defends himself and attacks his adversary. When surrounded by his females, his whole aspect is full of animation; he allows of no competitor, but on the approach of a rival, he rushes forward to instant combat, and either drives him from the field, or perishes in the attempt. The Cock is very attentive to his females, hardly ever losing sight of them; he leads, defends, and cherishes them, collects them together when they strag-

gle, and seems to eat unwillingly till he sees them feeding around him : when he loses them he utters his griefs, and from the different inflections of his voice, and the various significant gestures which he makes, one would be led to conclude that it is a species of language which serves to communicate his sentiments. The fecundity of the hen is great ; she lays generally two eggs in three days, and continues to lay through the greater part of the year, excepting the time of moulting, which lasts about two months. After having laid about ten or twelve eggs, she prepares for the anxious task of incubation, and gives the most certain indications of her wants by her cries and the violence of her emotions. Should she be deprived of her own eggs, which is frequently the case, she will cover those of any other kind, or even fictitious ones of stone or chalk, by which means she wastes herself in fruitless efforts. A sitting hen is a lively emblem of the most affectionate solicitude and attention ; she covers her eggs with her wings, fosters them with a genial warmth, and changes them gently, that all parts may be properly heated : she seems to perceive the importance of her employment, and is so intent on her occupation, that she neglects, in some measure, the necessary supplies of food and drink : she omits no care, overlooks no precaution, to complete the existence of the little incipient beings, and to guard against the dangers that threaten them. Buffon, with his usual elegance, observes, “ that the condition of a sitting hen, however insipid it may appear to us, is perhaps not a tedious situation, but a state of continual joy ; so much has Nature connected raptures with whatever relates to the multiplication of her creatures !”

For a curious account of the progress of incubation, in

the developement of the chick, we refer our readers to the above-mentioned author, who has given a minute detail of the several appearances which take place, at different stated periods, till the young chick is ready to break the shell and come forth.

The Egyptians have a method of hatching eggs without the assistance of the hen, and that in great numbers at once, by means of artificial heat, corresponding with the warmth of the hen : the eggs are placed in ovens, to which an equal and moderate degree of heat is applied, and every kind of moisture or pernicious exhalation carefully avoided ; by which means, and by turning the eggs so that every part may enjoy alike the requisite heat, hundreds of chickens are produced at the same time.

THE PHEASANT

(*Phasianus Colchicus*, Lin.—*Le Faisan*, Buff.)

Is rather less than the Common Cock. The bill is of a pale horn colour ; the nostrils are hid under an arched covering ; the eyes are yellow, and surrounded by a space, in appearance like beautiful scarlet cloth, finely spotted with black ; immediately under each eye there is a small patch of short feathers of a dark glossy purple ; the upper parts of the head and neck are of a deep purple, varying to glossy green and blue ; the lower parts of the

neck and the breast are of a reddish chesnut, with black indented edges ; the sides and lower part of the breast are of the same colour, with pretty large tips of black to each feather, which in different lights vary to a glossy purple ; the belly and vent are dusky ; the back and scapulars are beautifully variegated with black and white, or cream colour speckled with black, and mixed with deep orange, all the feathers are edged with black ; on the lower part of the back there is a mixture of green ; the quills are dusky, freckled with white ; wing coverts brown, glossed with green, and edged with white ; rump plain reddish brown ; the two middle feathers of the tail are about twenty inches long, the shortest on each side less than five, of a reddish brown colour, marked with transverse bars of black : the legs are dusky, with a short blunt spur on each, but in some old birds the spurs are as sharp as needles ; between the toes there is a strong membrane.

The female is less, and does not exhibit that variety and brilliancy of colours which distinguish the male : the general colours are light and dark brown, mixed with black, the breast and belly finely freckled with small black spots on a light ground ; the tail is short, and barred somewhat like that of the male ; the space round the eye is covered with feathers.*

* The hen Pheasant is sometimes known, when she has done breeding, to assume the garb of the male. The late ingenious Mr John Hunter, F. R. S. in a paper read before the Royal Society, and published in the philosophical transactions for 1780, says—“ It is remarked by those who are conversant with this bird, when wild, that there appears now and then a hen Pheasant with the feathers of the cock ; and all that they have decided on this subject is, that this animal does not breed, and that its spurs do

The Ring Pheasant is a fine variety of this species ; its principal difference consists in a white ring, which encircles the lower part of the neck ; the colours of the plumage in general are likewise more distinct and vivid. A fine specimen of this bird was sent us by the Rev. William Turner, of Newcastle, from which the figure was engraven. They are sometimes met with in the neighbourhood of Alnwick, whither they were brought by his Grace the Duke of Northumberland. That they intermix with the common breed is very obvious, as in some we have seen, the ring was hardly visible, and in others a few feathers only, marked with white, appeared on each side of the neck, forming a white spot. It is much to be regretted that this beautiful breed is likely soon to be destroyed, by those who pursue every species of game with an avaricious and indiscriminating rapacity.

There are many varieties of Pheasants, of extraordinary beauty and brilliancy of colours : in many gentlemen's woods there is a kind as white as snow, which will intermix with the common ones. Many of the gold and silver kinds, brought from China, are also kept in aviaries in this kingdom : the Common Pheasant is likewise a native of the east, and is the only one of its kind that has

not grow." He further notices, that in two of these birds which he dissected, he found them perfectly feminine, having " both the ovaria and the ovi-duct." A Pheasant exhibiting the same kind of plumage as those mentioned by Mr Hunter, was shot in January, 1805, by Sir Thomas Frankland, Bart. and presented to this work. This bird was of the size of the common hen Pheasant, its tail nearly the same ; it was without spurs, and had no scarlet around the eyes, and in rising its cry was that of the hen : in other respects its plumage was nearly like that of the male, only not quite so brilliant in colour.

multiplied in our island. Pheasants are generally found in low woody places, on the borders of plains, where they delight to sport: during the night they perch on the branches of trees. They are very shy birds, and do not associate together, except during the months of March and April, when the male seeks the female; they are then easily discoverable by the noise which they make in crowing and clapping their wings, which may be heard at some distance. The hen breeds on the ground, like the Partridge, and lays from twelve to fifteen eggs, which are smaller than those of the Common Hen: the young follow the mother as soon as they are freed from the shell. During the breeding season the cocks will sometimes intermix with the Common Hen, and produce a hybrid breed, of which we have known several instances.

THE TURKEY.

(*Meleagris Gallopavo*, Lin.—*Le Dindon*, Buff.)

It seems to be generally allowed that this bird was originally brought from America, and that in its wild state it is considerably larger than our domestic Turkeys. Its general colour is black, variegated with bronze and bright glossy green, in some parts changing to purple; the quills are green gold, black towards the ends, and tipped with white; the tail consists of eighteen feathers, of a brown colour, mottled and tipped with black; the tail coverts are waved with black and white; on the breast there is a tuft of black hairs, eight inches in length: in other respects it resembles the domestic Turkey, especially in having a bare red carunculated head and neck, a fleshy dilatable appendage hanging over the bill, and a short blunt spur or knob at the back part of the leg.

Tame Turkies, like every other animal in a state of domestication, are of various colours ; of these the prevailing one is dark grey, inclining to black, with a little white towards the end of the feathers ; some are perfectly white ; others black and white : there is also a beautiful variety of a fine deep copper colour, with the greater quills pure white ; the tail of a dirty white : in all of them the tuft of black hair on the breast is prevalent. Turkies are bred in great numbers in Norfolk, Suffolk, and other counties, whence they are driven to the London markets in flocks of several hundreds. The drivers manage them with great facility, by means of a bit of red rag tied to a long rod, which, from the antipathy these birds bear to that colour, effectually drives them forward.

The motions of the Turkey, when agitated with desire, or enflamed with rage, are very similar to those of the Peacock : he erects his train, and spreads it like a fan, whilst his wings droop and trail on the ground, and he utters at the same time a dull hollow sound ; he struts round and round with a solemn pace, assumes all the dignity of the most majestic of birds, and thus expresses his attachment to his females, or his resentment to those objects which have excited his indignation. The hen Turkey begins to lay early in the spring : she is very attentive to the business of incubation, and will produce fifteen or sixteen chicks at one time, but seldom has more than one hatch in a season in this climate. Young Turkies, after their extrication from the shell, are very tender, and require great attention in rearing, being subject to a variety of diseases, from cold, rain, and dews ; even the sun itself, when they are exposed to its more powerful rays, is said to occasion almost immediate death. As soon as they

are sufficiently strong, they are abandoned by the mother, and are then capable of enduring the utmost rigour of our winters.

THE PEACOCK.

(*Pavo cristatus*, Lin.—*Le Paon*, Buff.)

To describe the inimitable beauties of this elegant bird, in adequate terms, would be a task of no small difficulty.

“ Its matchless plumage,” says Buffon, “ seems to combine all that delights the eye in the soft and delicate tints of the finest flowers, all that dazzles it in the sparkling lustre of the gems, and all that astonishes it in the grand display of the rainbow.” Its head is adorned with a tuft, consisting of twenty-four feathers, whose slender shafts are furnished with webs only at the ends, painted with the most exquisite green, mixed with gold : the head, throat, neck, and breast, are of a deep blue, glossed with green and gold ; the back of the same, tinged with bronze ; the scapulars and lesser wing coverts are of a reddish cream colour, variegated with black ; the middle coverts deep blue, glossed with green and gold ; the greater coverts and bastard wing are of a reddish brown, as are also the quills, some of which are variegated with black and green ; the belly and vent are black, with a greenish hue : but the distinguishing character of this singular bird is its train, which rises just above the tail, and, when erected, forms a fan of the most resplendent hues : the two middle feathers are sometimes four feet and a half long, the others gradually diminishing on each side ; the shafts, which are white, are furnished from their origin nearly to the end with parted filaments of varying colours ending in a flat vane, which is decorated with what is called *the eye*. “ This is a brilliant spot, enamelled with the most enchanting colours ; yellow, gilded with various shades ; green, running into blue and bright violet, varying according to its different positions ; the whole receiving additional lustre from the colour of the centre, which is a fine velvet black.” When pleased or delighted, and in sight of his females, the Peacock erects his tail, and displays all the majesty of his beauty :

all his movements are full of dignity ; his head and neck bend nobly back ; his pace is slow and solemn, and he frequently turns slowly and gracefully round, as if to catch the sun-beams in every direction, and produce new colours of inconceivable richness and beauty, accompanied at the same time with a hollow murmuring voice expressive of desire. The cry of the Peacock, at other times, is often repeated, and is very disagreeable.

The Peahen is somewhat less than the cock, and though furnished both with a train and crest, is destitute of those dazzling beauties which distinguish the male. She lays five or six eggs, of a whitish colour : for this purpose she chuses some secret spot, where she can conceal them from the male, who is apt to break them : she sits from twenty-five to thirty days, according to the temperature of the climate, and the warmth of the season.

Peacocks were originally brought from the distant provinces of India, and thence have been diffused over every part of the world. The first notice taken of them is to be found in holy writ,* where we are told they made part of the cargoes of the rich and valuable fleet which every three years imported the treasures of the East to Solomon's court. They are sometimes found in a wild state in many parts of Asia and Africa : the largest and finest are said to be met with in the neighbourhood of the Ganges, and on the fertile plains of India, where they grow to a great size : under the influence of that luxuriant climate this beautiful bird exhibits its dazzling colours, which seem to vie with the gems and precious

* 2d Chron. ix. 21.

stones produced in those delightful regions. In colder climates they require great care in rearing, and do not obtain their full plumage till the third year. In former times they were considered as a delicacy, and made a part of the luxurious entertainment of the Roman voluptuaries.

The females of this species, like the Pheasant, have been known to assume the appearance of the male, by a total change of colour; this is said to take place after they have done laying. A bird of this kind is preserved in the Leverian Museum.

White Peacocks are not uncommon in England; the eyes of the train are barely visible, and may be traced by a different undulation of shade upon the pure white of the tail.

THE PINTADO.

GUINEA HEN, OR PEARLED HEN.

(*Numidia Meleagris*, Lin.—*La Pintade*, Buff.)

THIS bird is somewhat larger than the common Hen.

Its head is bare of feathers, and covered with a naked skin, of a bluish colour; on the top is a callous protuberance, of a conical form; at the base of the upper bill, on each side, there hangs a loose wattle, which in the female is red, and in the male of a bluish colour; the upper part of the neck is almost naked, being very thinly furnished with a few straggling hairy feathers; the skin is of a light ash colour; the lower part of the neck is covered with feathers of a purple hue; the general colour of the plumage is a dark bluish grey, sprinkled with round white spots of different sizes, resembling pearls, from which it has been called the Pearled Hen; its wings are short, and its tail pendulous, like that of the Partridge: its legs are of a dark colour.

This species, which is now very common in this country, was originally brought from Africa, whence it has been diffused over every part of Europe, the West Indies, and America: it formed a part of the Roman banquets, and is now much esteemed as a delicacy, especially when young. The female lays a great number of eggs, which she frequently secretes till she has produced her young brood: the egg is smaller than that of a common Hen, and of a rounder shape; it is very delicious eating.

The Pintado is a restless and a very clamorous bird; it has a harsh creaking note, which is very grating and unpleasant: it scrapes the ground like the Hen, and rolls in the dust to free itself from insects. During the night it perches on high places; if disturbed, it alarms every thing within hearing by its unceasing cry. In its natural state of freedom it is said to prefer marshy places.

THE WOOD GROUSE.

COCK OF THE WOOD, OR CAPERCAILE.

(*Tetrao urogallus*, Lin.—*Le grand Coq de Bruyere*, Buff.)

THIS bird is as large as the Turkey, is about two feet nine inches in length, and weighs from twelve to fifteen pounds. The bill is very strong, convex, and of a horn colour; over each eye there is a naked skin, of a bright red colour: the eyes are hazel; the nostrils are small, and almost hid under a covering of short feathers, which extend under the throat, and are there much longer than the rest, and of a black colour; the head and neck are elegantly marked with small transverse lines of black and

grey, as are also the back and wings, but more irregularly; the breast is black, richly glossed with green on the upper part, and mixed with a few white feathers on the belly and thighs; the sides are marked like the neck; the tail consists of eighteen feathers, which are black, those on the sides are marked with a few white spots; the legs are very stout, and covered with brown feathers; the toes are furnished on each side with a strong pectinated membrane. The female is considerably less than the male, and differs from him greatly in her colours: her throat is red; the transverse bars on the head, neck, and back are red and black; the breast is of a pale orange colour; belly barred with orange and black, the top of each feather white; the back and wings are mottled with reddish brown and black; the scapulars tipped with white; the tail is of a deep rust colour, barred with black, and tipped with white.

This beautiful kind is found chiefly in high mountainous regions, and is very rare in Great Britain. Mr Pennant mentions one, as an uncommon instance, which was shot near Inverness. It was formerly met with in Ireland, but is now supposed to be extinct there. In Russia, Sweden, and other northern countries, it is very common: it lives in the forests of pine, with which those countries abound, and feeds on the cones of the fir trees, which, at some seasons, give an unpleasant flavour to its flesh, so as to render it unfit for the table; it likewise eats various kinds of plants and berries, particularly the juniper. Early in the spring the season for pairing commences: during this period, the cock places himself on an eminence, where he displays a variety of pleasing attitudes; the feathers on his head stand erect, his neck

swells, his tail is displayed, and his wings trail almost on the ground, his eyes sparkle, and the scarlet patch on each side of his head assumes a deeper dye ; at the same time he utters his well-known cry, which has been compared to the sound produced by the whetting of a scythe : it may be heard at a considerable distance, and never fails to draw around him his faithful mates. The female lays from eight to sixteen eggs, which are white, spotted with yellow, and larger than those of the Common Hen : for this purpose she chooses some secret spot, where she can sit in security : she covers her eggs carefully over with leaves ; when she is under the necessity of leaving them in search of food. The young follow the hen as soon as they are hatched, sometimes with part of the shell attached to them.

THE BLACK GROUSE.

BLACK GAME, OR BLACK COCK.

(*Tetrao Tetrix*, Lin.—*Le Coq de Bruyere a queue fourchue*, Buff.)

THIS bird, though not larger than the common hen, weighs nearly four pounds : its length is about one foot ten inches, breadth two feet nine. The bill is black ; the eyes dark blue ; below each eye there is a spot of a dirty white colour, and above a larger one, of a bright scarlet, which extends almost to the top of the head ; the general colour of the plumage is a deep black, richly glossed with blue on the neck and rump ; the lesser wing coverts are dusky brown ; the greater are white, which extends to the ridge of the wing, forming a spot of that colour on the shoulder when the wing is closed ; the quills are brown, the lower parts and tips of the secondaries are white, forming a bar of white across the wing ;

there is likewise a spot of white on the bastard wing ; the feathers of the tail are almost square at the ends, and, when spread out, form a curve on each side ; the under tail coverts are of a pure white : the legs and thighs are of a dark brown colour, mottled with white ; the toes are toothed on the edges like those of the former species. In some of our specimens the nostrils were thickly covered with feathers, whilst in others they were quite bare, probably owing to the different ages of the birds.

These birds, like the former, are found chiefly in high and wooded situations in the northern parts of our island ; they are common in Russia, Siberia, and other northern countries : they feed on various kinds of berries and other fruits, the produce of wild and mountainous places : in summer they frequently come down from their lofty situations for the sake of feeding on corn. They do not pair, but on the return of spring the males assemble in great numbers at their accustomed resorts, on the tops of high and heathy mountains, when the contest for superiority commences, and continues with great bitterness till the vanquished are put to flight : the victors being left in possession of the field, place themselves on an eminence, clap their wings, and with loud cries give notice to their females, who immediately resort to the spot. It is said that each cock has two or three hens, which seem particularly attached to him. The female is about one-third less than the male, and differs from him considerably in colour ; her tail is likewise much less forked. She makes an artless nest on the ground, where she lays six or eight eggs, of a yellowish colour, with freckles and spots of a rusty brown. The young cocks at first resemble the mother, and do not acquire their male garb till

towards the end of autumn, when the plumage gradually changes to a deeper colour, and assumes that of a bluish black, which it afterwards retains.

RED GROUSE.

RED GAME, GORCOCK, OR MOORCOCK.

(*Tetrao Scoticus*, Lin.—*L' Attagas*, Buff.)

THE length of this bird is fifteen inches; the weight about nineteen ounces. The bill is black; the eyes hazel; the nostrils shaded with small red and black feathers; at the base of the lower bill there is a white spot on each side; the throat is red; each eye is arched with a large naked spot, of a bright scarlet colour; the whole upper part of the body is beautifully mottled with deep red and black, which gives it the appearance of tortoise-shell; the breast and belly are of a purplish hue, crossed with small dusky lines; the tail consists of sixteen feathers, of equal lengths, the four middlemost barred with red, the

others black ; the quills are dusky ; the legs are cloathed with soft white feathers down to the claws, which are strong, and of a light colour. The female is somewhat less ; the naked skin above each eye is not so conspicuous, and the colours of her plumage in general are much lighter than those of the male.

This bird is found in great plenty in the wild, heathy, and mountainous tracts in the northern counties of England ; it is likewise common in Wales, and in the Highlands of Scotland. Mr Pennant supposes it to be peculiar to Britain ; those found in the mountainous parts of France, Spain, Italy, and elsewhere, as mentioned by M. Buffon, are probably varieties of this kind, and no doubt would breed with it. It is to be wished that attempts were more frequently made to introduce a greater variety of these useful birds into this country, to stock our waste and barren moors with a rich fund of delicate and wholesome food ; but till the legislature shall alter or abrogate our very unequal and injudicious game laws, there hardly remains a single hope for the preservation of such birds of this species as we now have.

Red Grouse pair in the spring : the female lays eight or ten eggs on the ground. The young ones follow the hen the whole summer : as soon as they have attained their full size, they unite in flocks of forty or fifty, and are then exceedingly shy and wild.

WHITE GROUSE.

WHITE GAME, OR PTARMIGAN.

(Tetrao lagopus, Lin.—Le Lagopède, Buff.)

THIS bird is nearly the same size as the Red Grouse. Its bill is black ; the upper parts of its body are of a pale brown or ash colour, mottled with small dusky spots and bars ; the bars on the head and neck are somewhat broader, and are mixed with white ; the under parts are white, as are also the wings, excepting the shafts of the quills, which are black. This is its summer dress, which in winter is changed to a pure white, excepting that in the male there is a black line between the bill and the eye : the tail consists of sixteen feathers ; the two middle ones are ash-coloured in summer, and white in winter, the next two are slightly marked with white near the ends, the rest are wholly black ; the upper tail coverts are long, and almost cover the tail.

The White Grouse is fond of lofty situations, where

it braves the severest cold : it is found in most of the northern parts of Europe, even as far as Greenland ; in this country it is only to be met with on the summits of some of our highest hills, chiefly in the Highlands of Scotland, in the Hebrides and Orkneys, and sometimes, but rarely, on the lofty hills of Cumberland and Wales. Buffon, speaking of this bird, says, that it avoids the solar heat, and prefers the biting frosts on the tops of mountains ; for as the snow melts on the sides of the mountains, it constantly ascends, till it gains the summit, where it forms holes, and burrows in the snow. They pair at the same time as the Red Grouse : the female lays eight or ten eggs, which are white, spotted with brown : she makes no nest, but deposits them on the ground. In winter they fly in flocks, and are so little accustomed to the sight of man, that they are easily shot or taken in a snare. They feed on the wild productions of the hills, which sometimes give the flesh, a bitter, but not unpalatable taste : it is dark coloured, and, according to M. Buffon, has somewhat the flavour of the hare.

THE PARTRIDGE.

(*Tetrao Perdix*, Lin.—*Le Perdrix Grise*, Buff.)

THE length of this bird is about thirteen inches. The bill is light brown ; eyes hazel ; the general colour of its plumage is brown and ash, elegantly mixed with black ; each feather is streaked down the middle with buff colour ; the sides of the head are tawny ; under each eye there is a small saffron-coloured spot, which has a granulated appearance, and between the eye and the ear a naked skin of a bright scarlet, which is not very conspicuous but in old birds ; on the breast there is a crescent of a deep chesnut colour : the tail is short : the legs are of a greenish white, and are furnished with a small knob behind. The female has no crescent on the breast, and her colours in general are not so distinct and bright as those of the male.

Partridges are found chiefly in temperate climates ; the extremes of heat and cold are equally unfavourable to them : they are no where in greater plenty than in this island, where, in their season, they contribute to our most

elegant entertainments. It is much to be lamented, however, that the means taken to preserve this valuable bird should, in a variety of instances, prove its destruction : the proper guardians of the eggs and young ones, tied down by ungenerous restrictions, are led to consider them as a growing evil, and not only connive at their destruction, but too frequently assist in it.

Partridges pair early in the spring : the female lays from fourteen to eighteen or twenty eggs, making her nest of dry leaves and grass upon the ground. The young birds learn to run as soon as hatched, frequently encumbered with part of the shell sticking to them. It is no uncommon thing to introduce Partridge's eggs under the Common Hen, who hatches and rears them as her own : in this case the young birds require to be fed with ants' eggs, which are their favourite food, and without which it is almost impossible to bring them up ; they likewise eat insects, and when full grown, feed on all kinds of grain and young plants. The affection of the Partridge for her young is peculiarly strong and lively ; she is greatly assisted in the care of rearing them by her mate : they lead them out in common, call them together, point out to them their proper food, and assist them in finding it by scratching the ground with their feet ; they frequently sit close by each other, covering the chickens with their wings, like the Hen. In this situation they are not easily flushed ; the sportsman, who is attentive to the preservation of his game, will carefully avoid giving any disturbance to a scene so truly interesting ; but should the pointer come too near, or unfortunately run in upon them, there are few who are ignorant of the confusion that follows : the male first gives

the signal of alarm by a peculiar cry of distress, throwing himself at the same moment more immediately into the way of danger, in order to deceive or mislead the enemy ; he flies, or rather runs, along the ground, hanging his wings, and exhibiting every symptom of debility, whereby the dog is decoyed, in the too eager expectation of an easy prey, to a distance from the covey ; the female flies off in a contrary direction, and to a greater distance, but returning soon after by secret ways, she finds her scattered brood closely squatted among the grass, and collecting them with haste, she leads them from the danger, before the dog has had time to return from his pursuit.

THE QUAIL.

(*Tetrao coturnix*, Lin.—*Le Caille*, Buff.)

THE length seven inches and a half. Bill dusky ; eyes hazel ; the colours of the head, neck, and back are a mixture of brown, ash colour, and black ; over each eye there is a yellowish streak, and another of the same colour down the middle of the forehead ; a dark line passes from each corner of the bill, forming a kind of gorget above the breast ; the scapular feathers are marked by a

light yellowish streak down the middle of each; the quills are of a lightish brown, with small rust-coloured bands on the exterior edges of the feathers; the breast is of a pale rust colour, spotted with black, and streaked with pale yellow; the tail consists of twelve feathers, barred like the wings; the belly and thighs are of a yellowish white: legs pale brown. The female wants the black spots on the breast, and is easily distinguished by a less vivid plumage.

Quails are almost universally diffused throughout Europe, Asia, and Africa; they are birds of passage, and are seen in immense flocks traversing the Mediterranean sea, from Europe to the shores of Africa, in the autumn, and returning again in the spring, frequently alighting in their passage on many of the islands of the Archipelago, which they almost cover with their numbers. On the western coasts of the kingdom of Naples such prodigious numbers have appeared, that an hundred thousand have been taken in a day within the space of four or five miles. From these circumstances it appears highly probable, that the Quails which supplied the Israelites with food, during their journey through the wilderness, were sent thither on their passage to the north, by a wind from the south-west, sweeping over Egypt and Ethiopia towards the shores of the Red Sea. Quails are not very numerous here; they breed with us, and many of them are said to remain throughout the year, changing their quarters from the interior counties to the sea-coast. The female makes her nest like the Partridge, and lays to the number of six or seven* eggs of a greyish colour, speckled

* In France they are said to lay fifteen or twenty. *Buff.*

They are sometimes seen in a bevy of fifteen together, in this country. They fly quick and near the ground.

with brown. The young birds follow the mother as soon as hatched, but do not continue long together ; they are scarcely grown up before they separate ; or, if kept together, they fight obstinately with each other, their quarrels frequently terminating in each other's destruction. From this quarrelsome disposition in the Quail it was that they were formerly made use of by the Greeks and Romans as we use Game-cocks, for the purpose of fighting. We are told that Augustus punished a prefect of Egypt with death, for bringing to his table one of these birds which had acquired celebrity by its victories. At this time the Chinese are much addicted to the amusement of fighting Quails, and in some parts of Italy it is said likewise to be no unusual practice. After feeding two Quails very highly, they place them opposite to each other, and throw in a few grains of seed between them ; the birds rush upon each other with the utmost fury, striking with their bills and heels till one of them yields.

THE CORN-CRAKE.

LAND RAIL, OR DAKER HEN.

(Rallus-Crex, Lin.—Le Rale de Genet, Buff.)

LENGTH rather more than nine inches. The bill is light brown ; the eyes hazel ; all the feathers on the upper parts of the plumage are of a dark brown, edged with pale rust colour ; both wing coverts and quills are of a deep chesnut ; the fore part of the neck and the breast are of a pale ash colour ; a streak of the same colour extends over each eye from the bill to the side of the neck ; the belly is of a yellowish white ; the sides, thighs, and vent are marked with faint rusty-coloured bars : the legs are of a pale flesh colour.

We have ventured to remove this bird from the usual place assigned to it among those to which it seems to have little or no analogy, and have placed it among others, to which, in most respects, it bears a strong affinity. It makes its appearance about the same time as the Quail, and frequents the same places, whence it is called, in some countries, the King of the Quails. Its well-known cry is first heard as soon as the grass becomes

long enough to shelter it, and continues till the grass is cut ; but the bird is seldom seen, for it constantly skulks among the thickest part of the herbage, and runs so nimbly through it, winding and doubling in every direction, that it is difficult to come near it : when hard pushed by the dog, it sometimes stops short and squats down, by which means its too eager pursuer overshoots the spot, and loses the trace. It seldom springs but when driven to extremity, and generally flies with its legs hanging down, but never to a great distance : as soon as it alights, it runs off, and before the fowler has reached the spot, the bird is at a considerable distance.

The Corn-crake leaves this island before the winter, and repairs to other countries in search of its food, which consists principally of slugs, of which it destroys prodigious numbers ; it likewise feeds on worms and insects, as well as on seeds of various kinds. It is very common in Ireland, and is seen in great numbers in the island of Anglesea in its passage to that country. On its first arrival in England, it is so lean as to weigh less than six ounces, from which one would conclude that it must have come from distant parts ; before its departure, however, it has been known to exceed eight ounces, and is then very delicious eating. The female lays ten or twelve eggs, on a nest made of a little moss or dry grass carelessly put together : they are of a pale ash colour, marked with rust-coloured spots. The young Crakes are covered with a black down ; they soon find the use of their legs, for they follow the mother immediately after they have burst the shell.

The foregoing figure was made from a living bird, for which the work is indebted to Lieut. H. F. Gibson.

GREAT BUSTARD.

(*Otis tarda*, Lin.—*L'Outarde*, Buff.)

THIS very singular bird, which is the largest of our land birds, is about four feet long, and weighs from twenty-five to thirty pounds; its characters are peculiar, and with such as connect it with birds of the gallinaceous kind, it has others which seem to belong to the Ostrich.

and the Cassowary. Its bill is strong, and rather convex; its eyes red; on each side of the lower bill there is a tuft of feathers about nine inches long; its head and neck are ash-coloured. In the one described by Edwards, there were on each side of the neck two naked spots, of a violet colour, but which appeared to be covered with feathers when the neck was much extended. The back is barred transversely with black and bright rust colour on a pale reddish ground; the quills are black; the belly white: the tail consists of twenty feathers; the middle ones are rust colour, barred with black; those on each side are white, with a bar or two of black near the ends: the legs are long, naked above the knees, and dusky; it has no hind toe; its nails are short, strong, and convex both above and below; the bottom of the foot is furnished with a callous prominence, which serves instead of a heel. The female is not much more than half the size of the male: the top of her head is of a deep orange, the rest of the head brown; her colours are not so bright as those of the male, and she has no tuft on each side of the head. There is likewise another very essential difference between the male and the female: the former is furnished with a sack or pouch, situated in the fore part of the neck, and capable of containing about two quarts; the entrance to it is immediately under the tongue.* This singular reservoir was first discovered by Dr Douglas, who supposes that the bird fills it with water as a supply in the midst of those dreary plains where it is accustomed to wander;† it like-

* Barrington's Mis. p. 553.

† One of these birds, which was kept in a caravan, among other animals, as a show, lived without drinking. It was fed with the leaves of cabbages and other greens, and also with flesh and bread,

wise makes a further use of it in defending itself against the attacks of birds of prey ; on such occasions it throws out the water with such violence as not unfrequently to baffle the pursuit of its enemy.

Bustards were formerly more common in this island than at present ; they are now found only in the open countries of the South and East, in the plains of Wiltshire, Dorsetshire, and in some parts of Yorkshire ; they were formerly met with in Scotland, but are now supposed to be extinct there. They are slow in taking wing, but run with great rapidity, and when young are sometimes taken with greyhounds, which pursue them with great avidity : the chase is said to afford excellent diversion. The Great Bustard is granivorous, but feeds chiefly on herbs of various kinds ; it is also fond of those worms which are seen to come out of the ground in great numbers before sun-rise in the summer ; in winter it frequently feeds on the bark of trees : like the Ostrich, it swallows small stones,* bits of metal, and the like. The female builds no nest, but making a hole on the ground, drops two eggs, about the size of those of a Goose, of a pale olive brown, with dark spots. She sometimes leaves her eggs in quest of food ; and if, during her absence, any one should handle, or even breathe upon them, she immediately abandons them.

Bustards are found in various parts of Europe, Asia, and Africa, but have not hitherto been discovered on the new continent.

* In the stomach of one which was opened by the academicians there were found, besides small stones, to the number of ninety doubloons, all worn and polished by the attrition of the stomach.

—*Buff.*

THE LITTLE BUSTARD.

(*Otis Tetrax*, Lin.—*La petite Outarde*, Buff.)

LENGTH only seventeen inches. The bill is pale brown; irides red; the top of the head is black, spotted with pale rust colour; the sides of the head, the chin, and throat, are of a reddish white, marked with a few dark spots; the whole neck is black, encircled with an irregular band of white near the top and bottom; the back and wings are rust colour, mottled with brown, and crossed with fine irregular black lines; the under parts of the body, and outer edges of the wings, are white: the tail consists of eighteen feathers; the middle ones are tawny, barred with black, the others are white, marked with a few irregular bands of black: the legs are grey. The female is smaller, and has not the black collar on the neck; in other respects she nearly resembles the male.

This bird is very uncommon in this country ; and we have seen only two of them, both females. The figure was drawn from one sent by W. Trevelyan, Esq. which was taken on the edge of Newmarket Heath, and kept alive about three weeks in a kitchen, where it was fed with bread and other things, such as poultry eat. It is very common in France, where it is taken in nets like the Partridge. It is a very shy and cunning bird ; if disturbed, it flies two or three hundred paces, not far from the ground, and then runs away much faster than any one can follow on foot. The female lays her eggs in June, to the number of three or four, of a glossy green colour : as soon as the young are hatched, she leads them about as the Hen does her chickens : they begin to fly about the middle of August.

Both this and the Great Bustard are excellent eating, and, we should imagine, would well repay the trouble of domestication : indeed it seems surprising that we should suffer these fine birds to run wild, and be in danger of total extinction, which, if properly cultivated, might afford as excellent a repast as our own domestic poultry, or even as the Turkey, for which we are indebted to distant countries.

OF THE PLOVER.

THIS genus is distinguished by a large full eye; the bill is straight, short, and rather swollen towards the tip; the head is large; the legs are naked above the knee; and most of the species are without the hind toe.

Although the Plover has generally been classed with those birds whose business is wholly among waters, we cannot help considering the greater part of them as partaking entirely of the nature of land birds. Many of them breed upon our loftiest mountains, and though they are frequently seen upon the sea-coasts, feeding with birds of the water kind, yet it must be observed that they are no more water birds than many of our small birds which repair thither for the same purpose. The Long-legged Plover and the Sanderling are waders, and belong more immediately to the water birds, to which we refer them: the Great Plover and the Lapwing we consider as entirely connected with birds of the Plover kind; the former has usually been classed with the Bustard, the latter with the Sandpiper; but they differ very materially from both, and seem to agree in more essential points with this kind: we have therefore given them a place in this part of our work, where, with the rest of the Plovers, they may be considered as connecting the two great divisions of land and water birds, to both of which they are in some degree allied.

THE GREAT PLOVER.

THICK-KNEE'D BUSTARD, STONE CURLEW, NORFOLK
PLOVER.

(*Charadrius Oedichnemus*, Lin.—*Le grand Pluvier*, Buff.)

THE length of this bird is about sixteen inches. Its bill is long, yellowish at the base, and black at the tip; its irides and eye-lids are pale yellow; above each eye there is a pale streak, and beneath one of the same colour extends to the bill; the throat is white; the head, neck, and all the upper parts of the body are of a pale tawny brown; down the middle of each feather there is a dark streak; the fore part of the neck and the breast are nearly of the same colour, but much paler; the belly, thighs, and vent are of a pale yellowish white; the quills are black; the tail is short and rounded, and a dark band

crosses the middle of each feather; the tips are black, the rest white: the legs are yellow, and naked above the knees, which are very thick, as if swollen, hence its name; the claws are black.

This bird is found in great plenty in Norfolk and several of the southern counties, but is nowhere to be met with in the northern parts of our island; it prefers dry and stony places, on the sides of sloping banks. It makes no nest: the female lays two or three eggs on the bare ground, sheltered by a stone, or in a small hole formed in the sand; they are of a dirty white, marked with spots of a deep reddish colour, mixed with slight streaks. Although this bird has great power of wing, and flies with great strength, it is seldom seen during the day, except surprised, when it springs to some distance, and generally escapes before the sportsman comes within gun-shot; it likewise runs on the ground almost as swiftly as a dog; after running some time it stops short, holding its head and body still, and on the least noise, squats close on the ground. In the evening it comes out in quest of food, and may then be heard at a great distance: its cry is singular, resembling a hoarse kind of whistle three or four times repeated, and has been compared to the turning of a rusty handle. Buffon endeavours to express it by the words *turrlui, turrlui*, and says it resembles the sound of a third flute, dwelling on three or four tones from a flat to a sharp. Its food consists chiefly of worms. It is said to be good eating when young; the flesh of the old ones is hard, black, and dry. Mr White mentions them as frequenting the district of Selborne, in Hampshire. He says, that the young run immediately from the nest, almost as soon as they are excluded, like Partridges; that

the dam leads them to some stony field, where they bask, skulking among the stones, which they resemble so nearly in colour, as not easily to be discovered.

Birds of this kind are migratory ; they arrive in April, live with us all the spring and summer, and at the beginning of autumn prepare to take leave by getting together in flocks : it is supposed that they retire to Spain, and frequent the sheep-walks with which that country abounds.

THE PEE-WIT.

LAPWING, BASTARD PLOVER, OR TE-WIT.

(*Tringa vanellus*, Lin.—*Le Vanneau*, Buff.)

THIS bird is about the size of a Pigeon. Its bill is black ; eyes large and hazel ; the top of the head is black, glossed with green ; a tuft of long narrow feathers issues from the back part of the head, and turns upwards

at the end ; some of them are four inches in length : the sides of the head and neck are white, which is interrupted by a blackish streak above and below the eye ; the back part of the neck is of a very pale brown ; the fore part, as far as the breast, is black ; the back and the wing coverts are of a dark green, glossed with purple and blue reflections ; the quills are black, the first four tipped with white ; the breast and belly are of a pure white ; the upper tail coverts and vent pale chesnut ; the tail is white at the base, the rest of it is black, with pale tips, the outer feathers almost wholly white : the legs are red ; claws black ; hind claw very short.

This bird is a constant inhabitant of this country ; but as it subsists chiefly on worms, it is forced to change its place in quest of food, and is frequently seen in great numbers by the sea-shores, where it finds an abundant supply. It is every where well known by its loud and incessant cries, which it repeats without intermission whilst on the wing, and from which, in most languages, a name has been given to it, imitative of the sound. The Pee-wit is a lively, active bird, almost continually in motion ; it sports and frolics in the air in all directions, and assumes a variety of attitudes ; it remains long upon the wing, and sometimes rises to a considerable height ; it runs along the ground very nimbly, and springs and bounds from spot to spot with great agility. The female lays four eggs, of a dirty olive, spotted with black : she makes no nest, but deposits them upon a little dry grass hastily scraped together : the young birds run very soon after they are hatched : during this period the old ones are very assiduous in their attention to their charge ; on the approach of any person to the place of their deposit,

they flutter round his head with cries of the greatest inquietude, which increase as he draws nearer the spot where the brood are squatted ; in case of extremity, and as a last resource, they run along the ground as if lame, in order to draw off the attention of the fowler from any further pursuit. The young Lapwings are first covered with a blackish down interspersed with long white hairs, which they gradually lose, and about the latter end of July they acquire their beautiful plumage. At this time they assemble in flocks, which hover in the air, saunter in the meadows, and after rain, disperse among the ploughed fields. In October the Lapwings are very fat, and are then said to be excellent eating. Their eggs are considered as a great delicacy, and are sold in London at three shillings a dozen.

The following anecdote communicated by the late Rev. J. Carlyle, is worthy of notice, as it shews the domestic nature of this bird, as well as the art with which it conciliates the regard of animals differing from itself in nature, and generally considered as hostile to every species of the feathered tribe. Two of these birds, given to Mr Carlyle, were put into a garden, where one of them soon died ; the other continued to pick up such food as the place afforded, till winter deprived it of its usual supply : necessity soon compelled it to draw nearer the house, by which it gradually became familiarised to occasional interruptions from the family. At length one of the servants, when she had occasion to go into the back-kitchen with a light, observed that the Lapwing always uttered his cry '*pee-wit*' to obtain admittance. He soon grew more familiar ; as the winter advanced, he approached as far as the kitchen, but with

much caution, as that part of the house was generally occupied by a dog and a cat, whose friendship the Lapwing at length conciliated so entirely, that it was his regular custom to resort to the fire-side as soon as it grew dark, and spend the evening and night with his two associates, sitting close by them, and partaking of the comforts of a warm fire-side. As soon as spring appeared, he left off coming to the house, and betook himself to the garden; but on the approach of winter, he had recourse to his old shelter and his old friends, who received him very cordially. Security was productive of insolence; what was at first obtained with caution, was afterwards taken without reserve: he frequently amused himself with washing in the bowl which was set for the dog to drink out of, and while he was thus employed, he shewed marks of the greatest indignation if either of his companions presumed to interrupt him. He died in the asylum he had chosen, being choaked with something he had picked up from the floor. During his confinement, crumbs of wheaten bread were his principal food, which he preferred to any thing else.

THE GOLDEN PLOVER.

YELLOW PLOVER.

(*Charadrius Pluvialis*, Lin.—*Le Pluvier doré*, Buff.)

THE size of the Turtle. Bill dusky; eyes dark; all the upper parts of the plumage are marked with bright yellow spots upon a dark brown ground; the fore part of the neck and the breast are the same, but much paler; the belly is almost white; the quills are dusky; the tail is marked with dusky and yellow bars; the legs are black. Birds of this species vary much from each other; in some which we have had, the breast was marked with black and white; in others, it was almost black; but whether this difference arose from age or sex, we are at a loss to determine.

The Golden Plover is common in this country and all the northern parts of Europe; it is very numerous in various parts of America, from Hudson's Bay as far as Ca-

rolina, migrating from one place to another, according to the seasons: it breeds on high and heathy mountains: the female lays four eggs, of a pale olive colour, variegated with blackish spots. They fly in small flocks, and make a shrill whistling noise, by an imitation of which they are sometimes enticed within gun-shot. The male and female do not differ from each other. In young birds the yellow spots are not very distinguishable, as the plumage inclines more to grey.

THE GREY PLOVER.

(*Tringa Squatarola*, Lin.—*Le Vanneau Pluvier*, Buff.)

THE length of this bird is about twelve inches. Its bill is black; the head, back, and wing coverts are of a dusky brown, edged with greenish ash colour, and some with white; the cheeks and throat are white, marked with oblong dusky spots; the belly, thighs, and rump are white; the sides are marked with a few dusky spots; the outer webs of the quills are black, the lower parts of the inner webs of the first four are white; the tail is marked with alternate bars of black and white: the legs are of a dull green; the hind toe is small. In the *Planches Enluminees* this bird is represented with eyes of an orange colour; there is likewise a dusky line extending from the bill underneath each eye, and a white one above it.

We have placed this bird with the Plovers, as agreeing with them in every other respect but that of having a very small hind toe; but this is so slight a difference as not to render it necessary to exclude it from a place in the Plover family, to which it evidently belongs. The Grey

Plover is not very common in Britain; it appears sometimes in small flocks on the sea-coasts: it is somewhat larger than the Golden Plover. Its flesh is said to be very delicate.

THE DOTTEREL.

(*Charadrius Morinellus*, Lin.—*Le Guignard*, Buff.)

THE length of this bird is about nine inches. Its bill is black; eyes dark, large, and full; its forehead is mottled with brown and white; top of the head black; over each eye an arched line of white passes to the hinder part of the neck; the cheeks and throat are white; the back and wings are of a light brown, inclining to olive, each feather margined with pale rust colour; the quills are brown; the fore part of the neck is surrounded by a broad band of a light olive colour, bordered on the under side with white; the breast is of a pale dull orange; middle of the belly black; the rest of the belly, thighs, and vent, are of a reddish white; the tail is of an olive

brown, black near the end, and tipped with white, the outer feathers are margined with white : the legs are of a dark olive colour.

The Dotterel is common in various parts of Great Britain, though in some places it is scarcely known. They are supposed to breed in the mountains of Cumberland and Westmorland, where they are sometimes seen in the month of May, during the breeding season ; they likewise breed on several of the Highland hills : they are very common in Cambridgeshire, Lincolnshire, and Derbyshire, appearing in small flocks on the heaths and moors of those counties during the months of May and June, and are then very fat, and much esteemed for the table. It is said that the Dotterel is so very stupid a bird, as to be taken with the most simple artifice, and that it was formerly the custom to decoy them into the net by stretching out a leg or an arm, which caught the attention of the birds, so that they returned it by a similar motion of a leg or a wing, and were not aware till the net dropped and covered the whole flock. At present the more sure method of the gun has superseded this artifice.

THE RING DOTTEREL.

RING PLOVER, OR SEA LARK.

(*Charadrius Hiaticula*, Lin.—*Le petit Pluvier à collier*, Buff.)

THE length is rather more than seven inches. The bill is of an orange colour, tipped with black; the eyes are dark hazel; a black line passes from the bill, underneath each eye, and spreads over the cheeks; above this a line of white extends across the forehead to the eyes; this is bounded above by a black fillet across the head; a gorget of black encircles the neck, very broad on the fore part, but growing narrow behind, above which, to the chin, is white; the top of the head is of a light brown ash colour, as are also the back, scapulars, and coverts; the greater coverts are tipped with white; the breast and all the under parts are white; the quills are dusky, with an oval white spot about the middle of each feather, which forms, when the wings are closed, a stroke of white down each; the tail is of a dark brown, tipped with white, the two outer feathers almost white: the

legs are of an orange colour ; claws black. In the female, the white on the forehead is less ; there is more white on the wings, and the plumage inclines more to ash colour.

These birds are common in all the northern countries ; they migrate into Britain in the spring, and depart in autumn : they frequent the sea-shores during summer, and run nimbly along the sands, sometimes taking short flights, accompanied with loud twitterings, then alight and run again : if disturbed they fly quite off. They are said to make no nest : the female lays four eggs, of a pale ash colour, spotted with black, which she deposits on the ground.

A
HISTORY
OF
BRITISH BIRDS.

THE FIGURES ENGRAVED ON WOOD BY T. BEWICK.

PART II.
CONTAINING THE
HISTORY AND DESCRIPTION OF WATER BIRDS.

NEWCASTLE:

PRINTED BY EDWARD WALKER, FOR T. BEWICK: SOLD BY HIM, AND
LONGMAN AND CO. LONDON.

1809.

THE PREFACE.

To point out the paths which lead to happiness, however remote they may lie from common observation, and at the same time to forewarn the inexperienced stranger against approaching those which terminate in vice and misery, is a task worthy of the most enlightened understanding. The learned in every age have laboured for these ends: they have set up their works, like beacons and guide-posts, to direct their fellow travellers in the journey of life. These are their marks, left behind them to witness their having lived; and although, like other more vain human monuments, they remain but for a while—since, in the great scale of time, every work of man, like an inscription on the sea-sand, is washed away by the return of the ceaseless wave—yet let not this reflection, so mortifying to human vanity, damp the ardour of doing good; for however temporary the efforts may be, they are not only valuable in themselves, (being records of usefulness laid up for the benefit of mankind) but are incitements also to the emulation of good example, whereby incalculable advantages may be derived to thousands yet unborn. The generality of men, indeed, are little affected by observations of this sort: regardless of the voice of reason, and lost to a sense of duty, they neither know nor enquire why

they were sent upon the stage of life ; they stumble on still in darkness and error, and waste their days without a single effort to be useful to the community in which they live : they see not the wonders which the universe presents to stimulate them to reflect on the wisdom, the power, and the goodness, which planned and support the whole. Despairing of their improvement, whose minds have thus been suffered to grow up into maturity uncultivated, we should rather direct our attention to the sowing of the seeds of knowledge in the minds of youth.

The great work of forming the man cannot be begun too early ; and, agreeably with this sentiment, how many writers are there who spend their lives in contributing, in various ways, to turn the streams of instruction through their proper channels, into this most improveable soil ! Taking children by the hand, from their leading-strings and go-carts, they direct their steps, like guardian-angels, in the outset of life, to prevent their floundering on in ignorance to the end. In these undertakings the instructors of youth are often assisted by the fertile genius of the artist, who supplies their works with such embellishments as serve to relieve the lengthened sameness of the way. Among the many approved branches of instruction, the study of Natural History holds a distinguished rank. To enlarge upon the advantages which are derivable from a knowledge of the creation, is surely not necessary ; to become initiated into this knowledge, is to become enamoured of its charms ; to attain the object in view requires but little previous study or labour ; the road which leads to it soon becomes strewed with flowers, and ceases to fatigue ; a flow is given to the imagination which banishes early prejudices and expands the ideas ; and an endless fund of the most rational entertainment is spread out, which captivates the attention and exalts the mind. For the attainment of this science, in any of its various departments,

PREFACE.

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the foundation may be laid, insensibly, in youth, whereon a goodly superstructure of useful knowledge can easily be raised at a more advanced period. In whatever way, indeed, the varied objects of this beautiful world are viewed, they are readily understood by the contemplative mind, for they are found alike to be the visible words of God. “The Creator, doubtless, did not bestow so much curiosity and exquisite workmanship and skill upon his creatures, to be looked upon with a careless, incurious eye.”* Could mankind be prevailed upon to read a few lessons from the great book of Nature, so amply spread out before them, they would clearly see the hand of Providence in every page; and would they consider the faculty of reason as the distinguishing gift to the human race, and use it as the guide of their lives, they would find their reward in a cheerful resignation of mind, in peace and happiness, under the conscious persuasion, that a good naturalist cannot be a bad man.

In ideas congenial with these, originated the first incitements, which drew forth the *Histories of Quadrupeds and British Birds*. From these humble attempts—for every attempt to depicture nature must fall short of the original—it is hoped that some useful instruction may be gathered, and at the same time a stimulus excited to further enquiry. But however this may prove, “innocently to amuse the imagination in this dream of life, is wisdom; and nothing is useless which, by furnishing mental employment, keeps us for a while in oblivion of those stronger appetites that lead to evil.”† To the rising generation these efforts to instruct and please are principally directed, and are sent forth with an ardent wish, that they may be found to deserve the notice of youth, and contribute to amuse and to inform them. May

* Derham's *Physico-theology*, Book xi. chap. 2.

† Goldsmith.

the reader, impressed with sentiments of humanity, on viewing the portraits, spare and protect the originals : and when these books shall become obsolete, or be lost in the revolution of time, may some other more able naturalist arise, equally inclined to produce better to supply their place.

Thomas Bewick

Newcastle upon Tyne, December, 1805.

INTRODUCTION

TO THE

HISTORY OF BRITISH WATER BIRDS.

IN the preceding volume of British Land Birds, the characters of that part of the first great division of the feathered tribes, the beautiful tenants of the air, the woods, and the fields, have been described, and their figures faithfully delineated. Amongst these were enumerated not only the carnivorous and rapacious kinds, which by the accuracy of their scent, discover putrid bodies at a vast distance, and those which, endowed with piercing sight, soar aloft in search of their living prey, and dart upon it from an immeasurable height, with the rapidity of an arrow; but also the various other kinds of land birds, which, although less noticed, are eminently useful to man, by clearing the earth and the atmosphere of myriads of insects, in every stage of their progressive growth, from the invisible egg to the period when they are enabled to flutter on the wing. These, together

with the other branches of this great family, whose lives may be said to be spent more innocently than those of the rapacious kinds, all contribute their services to man, by clearing the earth of the seeds of noxious plants, as well as the trees of innumerable destructive insects, with which they feed their young, and claim for themselves, meanwhile, but a small return of the produce of the fields and gardens, which too often is ungratefully begrudged them.

Nearly the whole of this amusing group appear to relieve each other, and are, in succession, the constant neighbours, or attendants on the habitations of men. They are the subtenants of the cultivated world, and most of them, especially those that are granivorous, may well be termed wild poultry, and are the valued property of the sportsman. Some of these also, uniting with others of the soft-billed tribe, form the husbandman's cheerful band of choristers, whose comings and goings proclaim the seasons; while, by their notes poured forth from every tree, and vale, and woody glen, they enliven the face of nature. But having described this division of birds in the former volume, we must now bid them adieu, with this testimony of their usefulness—that they are the industrious regulating little messengers of Providence, without whose assistance the plough and the spade would often find their labours bestowed in vain; and, weak as these instruments may appear, without their aid, instead of a land of overflowing plenty, adorned with flowers and fruits, and trees and woods, in rich luxuriance, and in all their varied beauty, where every grove is made vocal with responsive praises, we should too frequently meet with nothing but the barrenness, and the silence, and the dreariness of a desert.

Leaving those denizens* of nature to enjoy their own native woods, the sheltering coppice, or extended plain, the task

* “Behold the fowls of the air, for they sow not, neither do they reap, nor gather into barns, yet your heavenly father feedeth them.”—See *Matt.* vi. 26.

now assigned us is to delineate the figures, and to describe the characters of the other two divisions of this numerous family—the *waders* and the *swimmers*: these are generally found far removed from the cultivated world. In exploring the track which leads us, step by step, to an acquaintance with them, we must travel through reeds and rushes, with doubtful feet, over the moss-covered faithless quagmire, amidst oozing rills, and stagnant pools. The former division of these inhabitants of the marsh are called *waders*. All the genera, and the different species, of this division have divided toes: they are apparently fitted for living on land, but are furnished with propensities and appetites which direct them chiefly to seek their food in moist and watery places, or on the margins of lakes and rivers, and yet they avoid those depths, where it might seem to be found in the greatest abundance. Most of them have long bills, formed to perforate the soft mud and moist earth, and long legs, bare above the knees, whereby they are enabled to wade through shallow waters in search of food, without wetting their plumage. Others have shorter legs, feathered down to the knees, and bills of varied length: whence it may appear that these are more limited in their powers, and pick up only such insects or grasses, seeds or roots of aquatic plants, as are to be met with near the surface of the ground, or in shallow pools; whilst others again are known to plunge into the water, and by partial swimmings to extricate themselves from it, after they have seized their prey, whether fishes or insects. Some of this class, in the warmer and temperate climates, breed and rear their young in the fens, where they remain throughout the year: others again, but these are few, after the business of incubation is over, disappear, and are supposed to direct their flight northward; while others, and these by much the greater number, are known invariably to leave the north, and to migrate southward on the approach of the winter months,

and to return northward in the spring. It must be observed that the swamps and inland waters of temperate climes, are also stocked with a numerous set of inhabitants of the second class—the *swimmers*. Some of these, likewise, after having reared their young, migrate much in the same way as the *waders*.

The ornithologist, who does not content himself with bare names and appearance, in examining the economy of the various kinds of birds, and the structure of their several parts, will find ample room for the exercise of his labours in the most minute investigation; and although he can scarcely overlook the slow, and almost imperceptible degrees, by which nature has removed one class of beings from another, yet in his attempts to trace the relationship, or affinity, which one bears to another, he will, with his utmost care, find himself at a loss to ascertain that precise link in the chain, where the doubtful crossing line is drawn, and by which the various genera and species are to be separated. But, however, after he shall have examined a few gradations, upwards or downwards, he will more readily discover the modes of life which the several kinds are destined to pursue; and their ability to perform the various evolutions necessary for the procuring of their food in that exactitude to which the Author of nature hath formed them. In some of those which run on the surface of the soft mud, and can occasionally take the water, the indications of their ability for swimming are furnished very sparingly: these indications first appear in the breadth of the under sides of the toes, with the two outer toes joined by a small web. The scalloped membranes attached to the sides of the toes form the next advance: some are webbed to the nails, with deep indentations in the middle, between each toe; others have only three toes, all placed forwards, and fully united by webbed membranes: some have the addition of back toes, either plain, or with webbed appendages

to each ; and others again have the four toes fully webbed together. The thighs, in the most expert divers, are placed very far back ; their legs are almost as flat and thin as a knife ; and they are enabled to fold up their toes so closely, that the least possible resistance is made while they are drawing them forwards to repeat their strokes in the water. Many of these divers are provided internally with a receptacle, seated about the windpipe, for a stock of air, which serves the purpose of respiration, whilst they remain under water : and the whole of the tribe of swimmers have their feathers bedded upon a soft, close, warm down ; and are furnished with a natural oil, supplied from a gland in the rump. This oil they press out with their bills from a kind of nipple, and with it preen and dress their plumage, which is thereby rendered impenetrable to the water, and, in a great degree, to the most extreme cold.

Of the number of these birds, both waders and swimmers, a great proportion may not improperly be termed fresh-water birds, as they rear their young, and spend the greater part of their time inland. In this class are the *Ardea*, *Scolopax*, and *Tringa*, with divided toes,—the *Fulica*, *Phalaropus*, and *Podiceps*, with finned feet ; together with others of the web-footed kinds, chiefly of the genera of the *Mergus* and *Anas*. Among these various kinds, some species are found, which only occasionally visit the sea-shore : others have not been noticed there at all ; while others are seen there frequently, feeding on the beach : some, like little boats, keep within bays and creeks, near the shores ; others, meanwhile, adventure into the ocean, and sport amidst its waves. To particularize these, with their various places of abode, and the times of their migrations, would here be tedious and unnecessary : they are noticed in the description of each bird.

The northern extremities of the earth seem as if they were set apart for the nations of the feathered race, as their pecu-

liar heritage—a possession which they have held coeval with creation. There, amidst lakes and endless swamps, where the human foot never trod, and where, excepting their own cries, nothing is heard but the winds, they find an asylum where they can rear their young in safety, unmolested, and surrounded by a profusion of plenty. This ample provision consists chiefly of the larvæ of gnats and other insects, with which the atmosphere must be loaded in that region, during the summer months. The eggs of these insects being deposited in the mud, and hatched by the influence of the unsetting summer's sun, they arise like exhalations, in multiplied myriads, and, as we may conceive, afford a never-failing supply of food to the feathered tribes. An equal abundance of food is also provided for the young of those kinds of birds, which seek it from the waters, in the spawn of fishes, or the small fry, which fearlessly sport in their native element, undisturbed by the angler or the fisherman. In these retirements they remain, or only change their haunts from one lake or misty bog to another, to procure food, or to mix with their kind; and thus they pass the long enlightened season. As soon as the sun begins, in shortened peeps, to quit his horizontal course, the falling snows, and the hollow blasts foretell the change, and are the signals for their departure: then it is, that the widely-spreading winged host, having gathered together, in separate tribes, their plump well-fledged families, directed by instinctive knowledge, leave their native wilds, the arctic regions, that prolific source, whence these multiplied migrators, in flocks innumerable, and in directions like radii from the centre of a circle, are poured forth to replenish the more southern quarters of the globe. In their route, they are impelled forwards, or stop short, in greater or less numbers, according to the severity or mildness of the season, and are thus more equally distributed over the cultivated world; where man, habituated to consider every thing in the creation

as subservient to his use, and ever watchful to seize all within his grasp, makes them feel the full force of his power. Wherever they settle under his dominion, these pretty wanderers afford a supply to the wants of some, pamper the luxury of others, and keep the eager sportsman in constant employment.

Leaving the lakes and inland watery wastes, to pursue his researches by the brooks and the rivers, in their lengthened course to the estuaries and to the sea, the ornithologist is delighted with the view of the various clean-feathered inhabitants, feeding or preening themselves on the shores, swimming or diving in the current, or wheeling aloft on the wing. Many of these divide their time between the fresh and the salt waters, and serve as aerial guides, to direct his sight over the vast expanse to other classes of birds that almost entirely commit themselves to the ocean; and with whose tribes, at certain seasons, these associate. This multifarious host, thus assembled in distinct families, is sometimes seen to cover the surface of the water to a vast extent: and of all these various families, those of the *Anas* genus, which keep much at sea, form the most considerable, amounting in the whole to ninety-eight species, besides varieties,* a number exceeding that of any other kind. And, when we consider that each family of this genus is often seen in considerable flocks, and add them to those which may more properly be called sea-fowl—beginning with the *Alca*, and ending with the *Pelicanus*—consisting of nine distinct British genera and their species, we shall find the aggregate far to exceed in number the whole of the birds that are supported on the land. Whilst these fishers, in their flying squadrons, are viewed from the cliffs

* It is very probable that many of these varieties, as well perhaps as others that are accounted distinct species, may be a mixed breed, the produce of a kind somewhat different; and that this may also be the case with the varieties of other genera of birds.

and shores of the sea, soaring aloft, or resting secure on the lowering precipice, the ear is often pierced with their harsh shrill cries, screamed forth in mingled discord with the roaring of the surge. Grating as their cries are, these birds are often hailed by the mariner, as his only pilots, while he is tossed to and fro, amidst solitary rocks and isles inhabited only by the sea-fowl.

Although it is not certainly known to what places some of these kinds retire to breed, yet it is ascertained that the greater part of them hatch and rear their young on the rocky promontories and inlets of the sea, and on the innumerable little isles with which the extensive coast of Norway is studded, from its southern extremity—the Lindsnes, or Naze, to the North Cape, that opposes itself to the Frozen Ocean. The Hebrides, or Western Scottish Isles, are also well known to be a principal rendezvous to sea-fowl, and celebrated as such by Thomson:

- “ Or where the northern ocean, in vast whirls,
- “ Boils round the naked melancholy isles
- “ Of farthest *Thule*; and the Atlantic surge
- “ Pours in among the stormy *Hebrides* :
- “ Who can recount what transmigrations there
- “ Are annual made? what nations come and go?
- “ And how the living clouds on clouds arise?
- “ Infinite wings! till all the plume-dark air,
- “ And rude resounding shore are one wild cry.”

Other parts of the world—the bleak shores and isles of Lapland, Siberia, Spitzbergen, Nova Zembla, Iceland, Greenland, &c. with the vast sweep of the Arctic Zone, are also enlivened in their seasons by swarms of sea-fowl, which range the intervening open parts of the seas to the shoreless frozen ocean. There a barrier is put to further enquiry, beyond which the prying eye of man must not look, and there his imagination only must take the view, to supply the place of reality. In these forlorn regions of *unknowable* dreary space,

this reservoir of frost and snow, where firm fields of ice, the accumulations of centuries of winters, glazed in Alpine heights above heights, surround the pole, and concentrate the multiplied rigours of extreme cold ; even here, so far as human intelligence has been able to penetrate, there appears to subsist an abundance of animals in the air, and in the waters : and, perhaps, it may not be carrying conjecture too far to suppose, that every region of the earth, air, and water, however ungenial the clime may appear to us, is replete with animals, suited, each kind, to the place assigned to it.

Certain it is, however, that the deeps of the frozen zone are the great receptacle whence the finny tribes issue, in so wonderful a profusion, to restock all the watery world of the northern hemisphere ; and that this immense icy protuberance of the globe, this gathering together, this hoard of congealed waters, is periodically diminished by the influence of the unsetting summer's sun, whose rays being perpetually, though obliquely, shed, during that season, on the widely extended rim of the frozen continent, gradually dissolve its margin, which is thus crumbled into innumerable floating isles, that are driven southward to replenish the seas of warmer climates.*

Amidst these drifts of ice, and following this widely spreading current, teeming with life, the whole host of sea-fowl find in the waters an inexhaustible supply of food : for the great movement, the immense southward migration of fishes is then begun, and shoal after shoal, probably as the removal of their dark icy canopy unveils them to the sun, are invited forth, and, guided by its light and heat, poured forward in thousands of myriads, in multitudes which set all calculation at defiance. The flocks of sea birds, for their numbers, baffle

* The same happens in the southern hemisphere, by the melting of the ice at the south pole.

the power of figures ;* but the swarms of fishes, as if engendered in the clouds, and showered down like the rain, are multiplied in an incomprehensible degree ; they may indeed be called infinite, if infinity were applicable to any thing created. Of all these various tribes of fishes, thus pressing forward on their southern route, that of the Herring is the most numerous. Closely embodied in resplendent columns of many miles in length and breadth, and in depth from the surface to the bottom of the sea, the shoals of this tribe peacefully glide along, and glittering like a huge reflected rainbow, or Aurora Borealis, attract the eyes of all their attendant foes. Other kinds of fishes, in duller garbs, keep also together in bodies, but change their movements as may best suit their different modes of attack or defence, in preying upon, or escaping from each other as they pass along.† All these various tribes of fishes, but particularly that of the Herring, are in their turns encountered and preyed upon by the whole hosts of sea-fowl, which continually watch all their motions. Some are seen to hover over the shoals of fishes, and to wheel about in quick and glancing evolutions, and then to dart down like

* A bird may lay ten eggs and hatch them ; but the roe of a herring is said to contain ten thousand.

† “ Fishes are the most voracious animals in nature. Many species prey indiscriminately on every thing digestible that comes in their way, and devour not only other species of fishes, but even their own. As a counterbalance to this voracity they are amazingly prolific. Some bring forth their young alive ; others produce eggs. The viviparous *Blenny* brings forth 200 or 300 live fishes at a time. Those which produce eggs are all much more prolific, and seem to proportion their stock to the danger of consumption. Lewenhock affirms that the Cod spawns above nine millions in a season. The Flounder produces above one million, and the Mackarel above 500,000. Scarcely one in a hundred of these eggs, however, is supposed to come to maturity ; but two wise purposes are answered by this amazing increase ; it preserves the species in the midst of numberless enemies, and serves to furnish the rest with a sustenance adapted to their nature.”—*Encycl. Britan.*

a falling plummet upon the selected object, which is gliding near the surface of the water, and instantly to rise, and devour the living victim on the wing. Others, equally alert and rapid in their pursuit, plunge and dive after their prey to greater depths ; while the less active birds seem content to devour only such of the fishes as have been killed or wounded, and cast out on the flanks, or left in the rear of the main body.

In this great, this wonderful emigration of birds and fishes, it is evident that they are amply provided on their way with an abundance of food, which they derive from each other ; and that the shoals of fishes which the sea-fowl attend, are impelled southward by instinct, aided by currents, for the accomplishment of their mission. The birds also, in their progress to fulfil the same high purpose, are by these enticed forwards, as it were, to follow the seasons, and to wing their way to the posts assigned them in climes adapted to the fulfilling of the great duties of rearing their young, and of leading them forth to pursue the unalterable course of nature : and thus they spend out the varied year in the same ceaseless traversings on the globe.

Notwithstanding the prodigious multitudes of the inhabitants of the ocean, which are thus destroyed by each other, and by their winged enemies, yet, like a small toll, or like a measure of sand taken from the beach, there is no visible diminution of them ; for although many divisions of the larger kinds, by keeping in the mid-sea deeps, escape notice, and are dispersed like the fowl that follow to feed on them ; yet others are mixed with the smaller sorts, and form part of those vast shoals which yearly present themselves to man, filling every creek and inlet of the northern shores, particularly those of the British isles ; where this wonderful influx appears as if offered to give employment to thousands, and to supply an inexhaustible source of commerce : but this, like other overflowing bounties of Providence, seems to be too little regard-

ed: the waste, indeed, in this instance, is sufficient to feed half the human race.

It is a melancholy reflection, that, from man, downwards, to the smallest living creature, all are found to prey upon and devour each other. The philosophic mind, however, sees this waste of animal life again and again repaired by fresh stores, ever ready to supply the void, and the great work of generation and destruction perpetually going on, and to this dispensation of an all-wise Providence, so interesting to humanity, bows in awful silence.

In returning from these digressions to the subject of the present enquiry, let the imagination picture to itself countless multitudes of birds, wafted like the clouds, around the globe, which in ceaseless revolutions turns its convexities to and from the sun, causing thereby a perpetual succession of day and night, summer and winter, and these migrators will be seen to follow its course, and to traverse both hemispheres from pole to pole. To those, who, contemplating this world of wonders, extend their views beyond the common gropings of mankind, it will appear, that Nature, ever provident that no part of her empire should be unoccupied, has peopled it with creatures of various kinds, and filled every corner of it with animation. To follow her into all her recesses would be an endless task; but so far as these have been explored, every step is marked with pleasantness: and while the reflecting mind, habituated to move in its proper sphere, breaks through the trammels of pride, and removes the film of ignorance, it soars with clearer views towards perfection, and adores that Infinite Wisdom which appointed and governs the unerring course of all things.

..... " Thus the men,
 " Whom Nature's works can charm, with God himself
 " Hold converse; grow familiar day by day
 " With his conceptions; act upon his plan,
 " And form to his the relish of their souls."

Akenside's Pleasures of Imagination, Book 3, l. 630.

BRITISH BIRDS.

THE SANDERLING.

TOWILLEE, OR CURWILLET.

(*Charadrius Calidris*, Lin.—*Maubeche*, Buff.)

THIS bird weighs almost two ounces; is about eight inches in length, and fifteen in breadth, from tip to tip. The bill is an inch long, slender, black and grooved on the sides nearly from the tip to the nostril; the brow to the eyes white; the rest of the head pale ash colour, mottled in brown streaks from the forehead to the hinder part of the neck, and on each side of the upper part of the breast; back, scapulars, and greater coverts,

brownish ash, edged with dull white, and irregularly marked with dark brown spots. The pinions, lesser coverts, and bastard wings, dark brown; the quills, which extend beyond the tail, are of the same colour on their exterior webs and points, except four of the middle ones, which are white on the outer webs, forming, when the wing is closed, a sharp wedge-shaped spot; inner webs brownish ash; the secondary quills are brown, tipped with white; the rump and tail coverts are also brown, edged with dirty white; the tail feathers brownish ash, edged with a lighter colour, the two middle ones much darker than the rest; the throat, fore part of the neck, the breast, belly, thighs and vent, are white; the toes and legs black, and bare a little above the knees. This bird is of a slender form, and its plumage has a hoary appearance among the Stints, with which it associates on the sea-shore, in various parts of Great Great Britain. It wants the hinder toe, and has, in other respects, the look of the Plover and Dotterel, to which family it belongs.

Latham says, this bird, like the Purre, and some others, varies considerably, either from age or the season; for those he received in August, had the upper parts dark ash coloured, and the feathers deeply edged with a ferruginous colour; but others sent him in January were of a plain dove-coloured grey; they differed also in some other trifling particulars. *

* The specimen from which this drawing and description were taken, was furnished by the Rev. H. Cotes, of Bedlington; and it is the only one which the author has had an opportunity of examining.

THE LONG-LEGGED PLOVER.

LONG SHANKS, OR LONG LEG.

(*Charadrius himantopus*, Lin.—*L'Echasse*, Buff.)

ITS slender black bill is two inches and a half long, from the tip of which to the end of the tail it measures only about thirteen inches ; but to the toes a foot and a half. The wings are long, measuring, from tip to tip, twenty-nine inches ; irides red ; the crown of the head, the back and wings, of a glossy black ; tail light grey, except the two outside feathers, which are white ; as are all the other parts of its plumage, except a few dusky spots on the back of the neck. Its long, weak, and disproportionate legs are of a blood red, and measure, from the foot to the upper naked part of the thigh, about eight inches ; the toes are short, and the outer and middle ones are connected by a membrane at the base.

Ornithologists mention only a few instances of this

singularly-looking species having been met with in Great Britain; * but it is common in other countries.

Latham says, “ it is common in Egypt, † being found there in the marshes in October; its food is said to consist principally of flies. It is likewise plentiful about the Salt Lakes, and often seen on the shores of the Caspian Sea, as well as by the rivers which empty themselves into it; and in the southern deserts of Independent Tartary: we have also seen it in Chinese paintings; and it is known at Madras, in the East Indies.” It is also often met with in the warmer parts of America; is sometimes seen as far north as Connecticut, and also in Jamaica.

* Sir Robert Sibbald makes mention of two that were shot in Scotland—Pennant of one that was shot near Oxford—and of five others which were shot in Frinham pond in Surrey.

† Pliny says it is a native of Egypt.

OF THE OYSTER-CATCHER.

ITS bill is long, compressed and cuneated at the end; nostrils linear; tongue scarcely a third of the length of the bill; toes, three in number, all placed forwards, the exteriors united to the middle by a strong membrane, as far as the first joint.

This separate and single genus of birds, though nowhere numerous, is widely dispersed over the globe, being met with in every country which travellers have visited.

THE OYSTER-CATCHER.

PIED OYSTER-CATCHER, SEA-PIE, OR OLIVE.

(*Haematopus ostralegus*, Lin.—*L'Hutrier*, Buff.)

THE Oyster-catcher generally weighs about sixteen ounces, measures seventeen inches in length, and is two feet eight inches in breadth. The bill is of a bright

scarlet, about three inches long, wide at the nostrils, and grooved beyond them nearly half its length; thence to the tip it is vertically compressed on the sides, and ends obtusely: with this instrument, which, in its shape and structure, is peculiar to this bird, it easily disengages the limpets from the rocks, and plucks out the oysters from their half-opened shells: on these it feeds, as well as on other kind of shell-fish, sea-worms and insects. The irides are of a lake-coloured red; orbits orange; under eye-lids white, and (in many specimens) a crescent-shaped stroke of this colour crosses the throat; the head, neck, upper part of the back, the scapulars, lesser coverts of the wings and end of the tail are black; the quills, in some, are of a dark brown, striped less or more in the middle and in the inner webs with white; the secondary quills are white towards their base, and the uncovered points black, narrowly edged with white; the breast, belly, vent, upper half of the tail, lower part of the back and the greater wing coverts are white: the legs and feet are of a pale red, short and strong; the toes, three in number, are each surrounded with a membranous edge, and covered with a hard scaly skin, which enables the bird to climb and traverse the rough and sharp shell-covered rocks, in quest of prey, without injury.

Although the Oyster-catcher is not provided with powers fitted for an expert swimmer, yet it does not shew any aversion to taking the water, upon which it may be said to float rather than swim. These birds are the constant inhabitants of the sea-shores, and are seldom found inland. In winter they assemble in flocks, are then shy and wild, and are seen in pairs only in the breeding-season and in the summer. The female deposits her eggs in

an open and dry situation, out of tide mark, sheltered merely by a tuft of bent grass, without any other nest than the bare sand and fragments of shells, blown thither by the wind. She lays four or five eggs of a greenish grey colour, spotted with black, which she leaves during the day exposed to the influence of the sun, and is careful to sit upon them herself only during the night and in bad weather. The young ones may easily be tamed, and will associate with domestic poultry.

THE WATER CRAKE.

SPOTTED RAIL, LESSER SPOTTED WATER RAIL, SKITTY,
OR SPOTTED GALLINULE.

(*Rallus Porzana*, Lin.—*La Marouette*, Buff.)

THIS bird weighs above four ounces, and measures nearly nine inches in length, and about fifteen in breadth. The bill is of a greenish yellow, and not more than three quarters of an inch long. The top of the head to the nape is dusky, slightly streaked with rusty brown; a brown and

white mottled stripe passes from the bill over and behind the eyes; the cheeks and throat are of a freckled dull grey. The neck and breast are olive, marked with small white spots; the sides dusky and olive, crossed with bars of white, and the under parts are a mixture of cinereous dirty white and yellow. The colour of the plumage of all the upper parts is dusky and olive brown, spotted, edged, barred or streaked with white; the spots on the wing coverts are surrounded with black, which gives them a studded or pearly appearance; and the white bars and streaks on the scapulars and tertials form a beautiful contrast to the black ground of the feathers on these parts. The legs are of a yellowish green. The Water Crake in its figure and general appearance, though much less, is extremely like the Corn Crake or Land Rail; but its manners and habits are very different. Its common abode is in low swampy grounds, in which are pools or streamlets, overgrown with willows, reeds, and rushes, where it lurks and hides itself with great circumspection: it is wild, solitary, and shy, and will swim, dive, or skulk under any cover; and, it is said, will sometimes suffer itself to be knocked on the head, rather than rise before the sportsman and his dog. The species is very scarce in Great Britain, and from its extreme vigilance it is rarely to be seen. It is supposed to be migratory here, as well as in France and Italy, where it is found early in the spring; it is also met with in other parts of Europe, but no where in great numbers. The conformation of its nest is curious: it is made of rushes and other light buoyant materials, woven and matted together, so as to float on, and to rise or fall with the ebbing or flowing of the water, like a boat; and to prevent its being swept

away by floods, it is moored or fastened to the pendant stalk of one of the reeds, by which it is skreened from the sight, and sheltered from the weather. The female lays from six to eight eggs. The young brood do not long require the fostering care of the mother, but as soon as they are hatched, the whole of the little black shapeless family scramble away from her, take to the water, separate from each other, and shift for themselves. The flesh is said to have a fine and delicate flavour, and is esteemed by epicures a delicious morsel.

THE WATER RAIL.

BILCOCK, VELVET RUNNER, OR BROOK OUZEL.

(*Rallus aquaticus*, Lin.—*Le Rale d'Eau*, Buff.)

THIS bird, though a distinct genus of itself, has many traits in its character very similar to both the Corn Crake and the Water Crake : it is migratory, like the former, to which it also bears some resemblance in its size, in its long shape, and in the flatness of its body ; its haunts and manner of living are nearly the same as those of the latter ; but it differs from both in the length of its bill, and in its plumage. It weighs about four ounces and a half, and measures twelve inches in length and sixteen in breadth. The bill is slightly curved, and one inch and three quarters long ; the upper mandible is dusky, edged with red ; the under reddish orange ; the irides red. The top of the head, hinder part of the neck, the back, scapulars, coverts of the wings, and tail, are black, edged with dingy brown ; the ridge of the wings is white, the bastard wing barred with white, the inside barred

with brown and white, and the quills and secondaries dusky; the side feathers are beautifully crossed with black and white, and slightly tipped with pale reddish brown. The inner side of the thighs, the belly, and the vent are pale brown, and in some specimens, speckled with bluish ash. The sides of the head, the chin, fore part of the neck, and the breast, are of a dark hoary lead colour, slightly tinged with pale rufous. The tail consists of twelve short black feathers, edged and tipped with dirty red; some of those on the under side barred with black and white. The legs, which are placed far behind, are a dull dirty red; the toes long, and without any connecting membrane. Latham says, "the eggs are more than an inch and a half long, of a pale yellowish colour, marked all over with dusky brown spots, nearly equal in size, but irregular."

The Water Rail is a shy and solitary bird. Its constant abode is in low wet places, much overgrown with sedges, reeds, and other coarse herbage, among which it finds shelter, and feeds in hidden security. It runs, occasionally flirting up its tail, through its tracts, with the same swiftness as the Corn Crake runs through the meadows and corn fields, shews as great an aversion to take flight as that bird, and has more of the means in its power of disappointing the sportsman. It generally exhausts his patience, and distracts and misleads his dog, by the length of time to which it can protract its taking wing; and it seldom rises until it has crossed every pool, and run through every avenue within the circuit of its retreats. It is, however, easily shot when once flushed, for it flies but indifferently, with its legs dangling down while on the wing. This bird is not very common in Great Britain, but is said to be numerous in the marshes

of the northern countries of Europe, whence, partially and irregularly, it migrates southward, even into Africa, during the severity of the winter season. Buffon says “they pass Malta in the spring and autumn,” and to confirm this, adds, “that the Viscount de Querhoënt saw a flight of them at the distance of fifty leagues from the coasts of Portugal on the 17th of April, some of which were so fatigued that they suffered themselves to be caught by the hand.” The flesh of the Water Rail is not so generally esteemed as that of the Land Rail, and yet by many it is thought rich and delicious eating.

THE WATER OUZEL.

WATER CROW, DIPPER, OR WATER PIOT.

(*Sturnus Cinclus*, Lin.—*Le Merle d'Eau*, Buff.)

THE length of the Water Ouzel is about seven inches and a half from the point of the beak to the end of its tail, which is very short, and gives the bird a thick and

stumpy appearance. The mouth is wide ; the bill black, about three quarters of an inch long ; the upper mandible rather hollow in the middle, and bent a little downwards at the point ; the eye-lids are white, and the irides hazel. The upper parts of the head and of the neck are deepish rusty brown ; the back, rump, scapulars, wing coverts, belly, vent, and tail are black ; but each feather on these parts is distinctly edged with a hoary grey colour. The breast, fore part of the neck and throat are of a snowy white ; and the black and white on the belly and breast are separated by a rusty brown. The legs and toes are short and strong, the scales pale blue, the hinder part and joints brown ; the claws are curved, and the toes are distinctly parted, without any membranous substance between to join them.

This solitary species is removed from the place it has hitherto holden, in all systems, among the land birds : it ought not to be classed any longer with the Ouzels and Thrushes, to which it bears no affinity. Its manners and habits are also different from those birds, and are peculiar to itself. It is chiefly found in the high and mountainous parts of the country, and always by the sides of brooks and rocky rivers, but particularly where they fall in cascades, or run with great rapidity among stones and fragments of broken rocks ; there it may be seen perched on the top of a stone in the midst of the torrent, in a continual dipping motion, or short courtesy often repeated, whilst it is watching for its food, which consists of small fishes and insects. The feathers of this bird, like those of the Duck tribe, are impervious to water, whereby it is enabled to continue a long time in that fluid without sustaining the least injury. But the most singular trait in

its character, (and it is well authenticated) is that of its possessing the power of walking, in quest of its prey, on the pebbly bottom of a river, in the same way, and with the same ease, as if it were on dry land. The female makes her nest in the banks of the rivulet, of the same kind of materials, and nearly of the same form, as that of the common Wren, and lays four or five eggs, which are white, lightly blushed with red.

THE KINGFISHER.

(*Alcedo ispida*, Lin.—*Le Martin-pêcheur*, Buff.)

THIS splendid little bird is of rather a clumsy shape, the head being large in proportion to the size of the body, and the legs and feet very small. In length it is only seven inches, in breadth eleven; and its weight is about two ounces and a quarter. The bill, measured from the corners of the mouth, is two inches long, vertically compressed on the sides, strong, straight, and tapering to a sharp point: the upper mandible is black, fading into a red colour towards the base; the under one, as well as the inside of the mouth, is of a reddish orange: the irides are hazel, inclining to red. A broad stripe passes from the bill over the eye to the hinder part of the neck, of a bright orange colour, but margined on the side of the mouth, and crossed below the eye, by a narrow black stroke, and it is terminated behind the auriculars with a slanting wedge-shaped white spot. The throat is white;

the rest of the head, and the wing coverts are of a deep shining green, spotted with bright light blue : the scapulars and exterior webs of the quills are of the same colour, but without spots. The middle of the back, the rump, and coverts of the tail are of a most resplendent azure : the tail, which consists of twelve short feathers, is of a rich deep blue, and the whole under part of the body of a bright orange. The legs and toes are of a red colour, and are peculiar in their shape and conformation, the three forward toes being unconnected from the claws to the first joints, from whence they appear as if grown into each other ; and the inner and hinder ones are placed in a line on the inside of the foot, whereby the heel is widened, and seems pressed out.

It is difficult to conceive why ornithologists have classed the Kingfisher with land birds, as its habits and manner of living are wholly confined to the waters, on the margins of which it will sit for hours together on a projecting twig, or a stone ; at one while fluttering its wings and exposing its brilliant plumage to the sun ; at another, hovering in the air, like the Kestrel, it waits the moment when it may seize its prey, on which it darts almost unerringly : often it remains for several seconds under the water, before it has gained the object of its pursuit, then brings up the little fish, which it carries to the land, beats to death and swallows.

The female commonly makes her nest by the sides of rivers or brooks, in a hole made by the mole, or the water-rat : this she enlarges or contracts to suit her purpose ; and it is conjectured, from the difficulty of finding the nest, that frequently the hole which leads to it is under water.

The author was favoured with a stuffed specimen of this bird, together with its nest and six eggs, by G. W. Wentworth, of Wolley-Hall, near Wakefield, Esq. In the compactness of its form, the nest resembled that of the Chaffinch: it was made entirely of small fish bones, cemented together with a brown glutinous substance. The eggs were of a clear white.

To take notice of the many strange and contradictory accounts of this bird, as well as of its nest, transmitted to us by the ancients,* and to enumerate the properties ascribed to it by the superstitious in all ages, would occupy too large a portion of this work: but the following modern instance seems worthy of notice:—

Dr Heysham, of Carlisle, in his Catalogue of Cumberland Animals, says, “On the 7th of May a boy from Upperby brought me a Kingfisher alive, which he had taken when sitting on her eggs the night before: from him I received the following information:—Having often this spring observed these birds frequent a bank upon the river Peteril, he watched them carefully, and saw them go into a small hole in the bank. The hole was too small to admit his hand, but as it was made in the soft

* Their nests are wonderful—of the figure of a ball rather elevated, with a very narrow mouth; they look like a large sponge: they cannot be cut with a knife, but may be broken with a smart stroke: they have the appearance of petrified sea-froth. It is not discovered of what they are formed; some think of Prickly-back bones, since they live upon fish. *Pliny*.

Aristotle compares the nest to a gourd, and its substance and texture to those sea-balls or lumps of interwoven filaments which are cut with difficulty; but, when dried, become friable.

Ælian and *Plutarch* describe it as being made to float on the placid face of the ocean.

mould, he easily enlarged it. It was upwards of half a yard long; at the end of it the eggs, which were six in number, were placed upon the bare mould, there being not the smallest appearance of a nest." If the boy was correct in his relation to Dr Heysham, it may be concluded that these birds sometimes, from necessity perhaps, build a nest, and sometimes make the dry mould answer that purpose.

Kingfishers are not so numerous as might be expected from the number of eggs found in their nests, owing probably to the young being destroyed by the floods, which must often rise above the level of the holes where they are bred.

Except in the breeding season, this bird is usually seen alone, flying near the surface of the water with the rapidity of an arrow, like a little brilliant meteor, by which appearance the eye is enabled to follow its long-continued course. Considering the shortness of its wings, the velocity with which it flies is surprising.

Ornithologists inform us that Kingfishers are found in almost every part of the globe; but it does not appear that more than this one species has ever been seen in Europe.

OF THE SPOONBILL.

THE bill is broad, long, flat, and thin, the end widening into a roundish form not unlike a spoon; the nostrils small, and placed near the base; the tongue small and pointed, and the feet semi-palmated.

This genus consists of only three known species, and three varieties, and these are thinly dispersed over various parts of the globe. Their common residence is on the sea-shores, or the contiguous fenny swamps which are occasionally overflowed by the tide, or on such low marshy coasts as are constantly covered with stagnant pools of water. These places they very seldom quit, but they sometimes are seen by the sides of lakes or rivers in the interior parts of the country. They feed on various kinds of little fishes, and small shell-fish, which they swallow whole; also on worms, insects, frogs, and the various other inhabitants of the slimy pools, through which they wade, and search the mud with their curiously constructed bills; and sometimes they eat the weeds, grasses, and roots which grow in those boggy places.

THE SPOONBILL,
OR, WHITE SPOONBILL.

(*Platalea leucorodia*, Lin.—*La Spatule*, Buff.)

The Spoonbill measures two feet eight inches in length, and is about the bulk of the Common Heron, but its legs and neck are shorter. The whole plumage is white, though some few have been noticed with the quills tipped with black.

The bill, which flaps together not unlike two pieces of leather, is the most striking feature in this bird: it is six inches and a half long, broad and thick at the base, and very flat towards the extremity, where, in shape, it is widened and rounded like the mouth of a mustard spatu-

la : it is rimmed on the edges with a black border, and terminated with a small downward-bent point or nib. The colour of the bill varies in different birds ; in some, the little ridges which wave across the upper bill are spotted, in others striped with black or brown, and generally the ground colour of both mandibles is in different shades of deeper or lighter yellow : the insides, towards the gape of the mouth, near the edges, are studded with small hard tubercles or furrowed prominences, and are also rough near the extremities of the bill, which enables these birds to hold their slippery prey. A black bare skin extends from the bill round the eyes, the irides of which are grey ; the skin which covers the gullet is also black and bare, and is capable of great distention. The feathers on the hinder part of the head are long and narrow, and form a sort of tuft or crest which falls behind. The toes are connected near their junction by webs, which reach the second joint of the outer toe and the first of the inner ones, and slightly border them on each side to their extremities : the feet, legs and bare part of the thighs are covered with a hard and scaly skin of a dirty black colour.

The White Spoonbill migrates northward in the summer, and returns to southern climes on the approach of winter, and is met with in all the intermediate low countries, between the Ferro Isles and the Cape of Good Hope. It is said that they were formerly numerous on the marshes of Sevenhuys, near Leyden in Holland. In England they are rare visitants : Pennant mentions that a flock of them migrated into the marshes near Yarmouth in April, 1774.

Like the Rooks and the Herons, they build their nests

on the tops of large trees, lay three or four eggs, the size of those of a Hen, of a white colour, sprinkled with pale red, and are very noisy during the breeding season. The intestines are described as being very long, and the *trachea arteria* is like that of the Crane, and makes a double inflection in the thorax.

OF THE CRANE.

THE characters by which this genus is distinguished, are a long, strong, straight, sharp-pointed bill, nostrils linear, tongue pointed, the toes connected by a membrane as far as the first joint, and the middle claw of some of the species pectinated. Their thighs are half naked, and their legs long, by which, without wetting their plumage, they are enabled to wade deep in the water, where they stand motionless, awaiting the approach of the unsuspecting finny tribes, and the moment these are within reach, they strike them with their bill, admirably formed for the purpose, with the rapidity of a dart. Their body is slender, and covered with a very thin skin; their wings, which are very large and strong, contain twenty-four quills; and their tails are short. They live mostly in lakes and fens, upon water animals; they also occasionally eat grain and herbage, and they build their nests chiefly upon the ground. Their flesh is savoury.

The Crane differs from the Stork and Heron in the singular conformation of the windpipe, which, "entering far into the breast bone, (which has a cavity to receive it) and being thrice reflected, goes out again at the same hole, and so turns down to the lungs."* It differs from them also in some other particulars, both internally and externally.

* Willoughby.

THE CRANE,

OR, COMMON CRANE.

(Ardea Grus, Lin.—La Grue, Buff.)

THE bill is about four inches long, straight, pointed, and compressed at the sides, of a greenish black colour, turning lighter towards the point; the tongue is broad and short, and horny at the tip. The forehead, to the middle of the crown, is covered with black hairy down, through which, if the bird be healthy, the skin appears

red; behind this it is nearly bare, and entirely so for the space of about two inches on the nape of the neck, which is ash coloured. The sides of the head behind the eyes, and the hinder part of the neck are white. The space between the bill and the eyes, the cheeks, and the fore part of the neck, are of a blackish ash colour; the greater wing coverts are also blackish, and those farthest from the body, with the bastard wing and quills, are quite black: the rest of its plumage is of a fine waved light ash colour. From the pinion of each wing springs an elegant tuft of loose feathers, curled at the ends, which fall gracefully over the tail, in their flexibility, their position, and their texture, resembling the plumes of the Ostrich. The legs and bare part of the thighs are black. The Crane measures, when extended, from the tip of the bill to the toes, more than five feet in length, and weighs nearly ten pounds; its gait is erect, and its figure tall and slender.

This species is widely spread, and, in its migrations, performs the boldest and most distant journeys,

“ Marking the tracts of air, the clamorous Cranes
“ Wheel their due flight, in varied lines descried;
“ And each with out-stretch’d neck his rank maintains
“ In marshall’d order through the æthereal void.”

In the summer they spread themselves over the north of Europe and Asia as far as the arctic circle, and in the winter are met with in the warmer regions of India, Syria, Egypt, &c. and at the Cape of Good Hope. The course of their flight is discovered by the loud noise they make, for they soar to such a height as to be hardly visible to the naked eye. Like the Wild Geese, they form

themselves into different figures, describing a wedge, a triangle, or a circle. It is said that they formerly visited the fens and marshes of this island in large flocks, but they have now entirely forsaken it.

THE STORK,
OR, WHITE STORK.

(*Ardea Ciconia*, Lin.—*La Cigogne*, Buff.)

THE White Stork is smaller than the Crane, but much larger than the Heron: its length, from the point of the bill to the end of the tail, is three feet six inches; and its breadth, from tip to tip, above six feet. The bill is of a fine red colour, and its length, from the tip to the corners of the mouth is seven inches; the legs and bare

part of the thighs are also of the same colour ; the former below the knees measure eight inches, and the latter five. The plumage is of a bright white, except the quills, greater coverts, and some of the scapulars, which are black ; the eyes are dark and full, the orbits bare of feathers, and of a dusky reddish hue. The neck is long and arched ; the feathers near the breast, like those of the Heron, are long and pendulous ; the secondary quills are nearly of the same length as the primaries, and when the wings are closed, they cover its short tail. The female nearly resembles the male in her plumage and general appearance : her nest is made of dry sticks, twigs, and aquatic plants, sometimes on large trees or the summits of high rocky cliffs : this, however, seldom happens, for the Stork prefers the neighbourhood of populous places, where it finds protection from the inhabitants ; who, for ages, have regarded both the bird and its nest as sacred, and commonly place boxes for them on the tops of the houses wherein to make their nests ; to which they return after the most distant journies, and every Stork takes possession of his own box. When these are not provided for them, they build on the tops of chimnies, steeples, and lofty ruins.

The Stork lays from two to four eggs, the size and colour of those of a Goose, and the male and female sit upon them by turns. They are singularly attentive to their young, both together never quitting the nest, which is constantly watched by one of them, while the other is seeking for, and bringing provisions, which the young receive with a sort of whistling noise.

The food of the Stork consists of serpents, lizards, frogs, small fish, &c. for which it watches with a keen

eye, on the margins of lakes and pools, and in swamps and marshes. In low countries abounding with places of this description, the Stork is a welcome visitant, and always meets a friendly reception.

In its migrations this bird avoids alike the extremes of heat and cold : in summer it is never seen farther north than Sweden or Russia, and in winter it is not known to venture further southward than Egypt, where it is constantly seen during that season : in the intermediate countries, both in Asia and Europe, it is common in the temperate seasons of the year.

Before the Storks take their departure from their northern summer residence, they assemble in large flocks, and seem to confer on the plan of their projected route. Though they are very silent at other times, on this occasion they make a singular clattering noise with their bills, and all seems bustle and consultation. It is said that the first north wind is the signal for their departure, when the whole body become silent, and move at once, generally in the night, and, taking an extensive spiral course, they are soon lost in the air.*

The Stork is now seldom seen in Britain : Wallis, in his History of Northumberland, mentions one which was killed near Chollerford-bridge, in the year 1766. Its skin was nailed up against the wall of the inn at that place, and drew crowds of people from the adjacent parts to view it. The foregoing figure was taken from a stuffed specimen in the Wycliffe museum.

* “ The Stork in the heavens knoweth her appointed times ; and the Turtle and the Crane, and the Swallow observe the time of their coming.” *Jeremiah* viii. 7.

OF THE HERON.

SOME ornithologists have separated this tribe from the Cranes and the Storks, and from the difference observable in the conformation of their parts, consider them as a distinct genus: others, preferring the Linnæan system, class the whole together, and thus make them amount to above eighty distinct species, besides varieties, widely distributed over various parts of the globe, all differing in their size, figure, and plumage, and with talents adapted to their various places of residence, or their peculiar pursuits. But notwithstanding the difference in the colours of their plumage and their bills, the manners of all are nearly the same, as is also their character, which is stigmatized with cowardice and rapacity, indolence, and yet insatiable hunger: they are, indeed, excessively voracious and destructive; but from the meagre-looking form of their bodies, to an inaccurate observer, the greatest abundance might seem insufficient for their support.

THE HERON.

COMMON HERON, HERONSEWGH, OR HERONSHAW.

(*Ardea Major*, Lin.—*Le Heron hupé*, Buff.)

ALTHOUGH the Heron is of a long, lank, awkward shape, yet its plumage gives it on the whole an agreeable appearance; but when stripped of its feathers, it looks as if it had been starved to death. It seldom weighs more than between three and four pounds, notwithstanding it measures about three feet in length, and in the breadth of its wings, from tip to tip, above five. The bill is six inches long, straight, pointed, and strong, and its edges are thin and slightly serrated; the upper mandible is of a yellowish horn colour, darkest on the ridge; the under one yellow. A bare skin, of a greenish colour, is extended from the beak beyond the eyes, the irides of which

are yellow, and give them a fierce and piercing aspect. The brow and crown of the head are white, bordered above the eyes by black lines which reach the nape of the neck, where they join a long flowing pendent crest of the same colour. The upper part of the neck, in some, is white, in others pale ash ; the fore part, lower down, is spotted with a double row of black feathers, and those which fall over the breast are long, loose, and unwebbed ; the shoulders and scapular feathers are also of the same kind of texture, of a grey colour, generally streaked with white, and spread over its down-clothed back. The ridge of the wing is white, coverts and secondaries lead colour, bastard wings and quills of a bluish black, as are also the long soft feathers which take their rise on the sides under the wings, and, falling down, meet at their tips, and hide all the under parts : the latter, next the skin, are covered with a thick, matted, dirty white down, except about the belly and vent, which are almost bare. The tail is short, and consists of twelve feathers of a cinereous or brownish lead colour : the legs are dirty green, long, bare above the knees, and the middle claw is jagged on the inner edge.

The female has not the long flowing crest, or the long feathers which hang over the breast of the male, and her whole plumage is more uniformly dull and obscure. In the breeding season they congregate in large societies, and, like the Rooks, build their nest on trees, with sticks, lined with dried grass, wool, and other warm materials. The female lays from four to six eggs, of a pale greenish blue colour.*

* “ A remarkable circumstance, with respect to these birds, occurred not long ago, at Dallam Tower, in Westmorland, the seat of Daniel Wilson, Esq.

The Heron is described by Buffon as exhibiting the picture of wretchedness, anxiety, and indigence; condemned to struggle perpetually with misery and want, and sickened by the restless cravings of a famished appetite, &c. However faithful this ingenious naturalist may have been in portraying the appearance of the Heron, yet others are not inclined to adopt his sentiments in describing its habits and manners, or to agree with him in opinion that it is one of the most wretched of animated beings. It is probable that it suffers no more than other birds, many species of which employ equal attention in looking for their prey; and it is not unlikely that the He-

“ There were two groves adjoining to the park : one of which, for many years, had been resorted to by a number of Herons, which there built and bred; the other was one of the largest rookeries in the country. The two tribes lived together for a long time without any disputes. At length the trees occupied by the Herons, consisting of some very fine old oaks, were cut down in the spring of 1775, and the young brood perished by the fall of the timber. The parent birds immediately set about preparing new habitations, in order to breed again; but, as the trees in the neighbourhood of their old nests were only of a late growth, and not sufficiently high to secure them from the depredations of boys, they determined to effect a settlement in the rookery. The Rooks made an obstinate resistance; but, after a very violent contest, in the course of which many of the Rooks, and some of their antagonists, lost their lives, the Herons at last succeeded in their attempt, built their nests, and brought out their young.

“ The next season the same contests took place, which terminated like the former, by the victory of the Herons. Since that time peace seems to have been agreed upon between them: the Rooks have relinquished possession of that part of the grove which the Herons occupy; the Herons confine themselves to those trees they first seized upon, and the two species live together in as much harmony as they did before their quarrel.” *Heysham.*

ron derives pleasure from it instead of pain. This bird, however, is of a melancholy deportment, a silent and patient creature ; and will, in the most severe weather, stand motionless a long time in the water, fixed to a spot, in appearance like the stump or root of a tree, waiting for its prey, which consists of frogs, water-newts, eels, and other kinds of fish ; and it is also said that it will devour field-mice.

The Heron traverses the country to a great distance in quest of some convenient or favourite fishing spot, and in its aerial journies soars to a great height, to which the eye is directed by its harsh cry, uttered from time to time while on the wing. In flying it draws the head between the shoulders, and the legs stretched out, seem, like the longer tails of some birds, to serve the office of a rudder. The motion of their wings is heavy and flagging, and yet they get forward at a greater rate than would be imagined.

In England Herons were formerly ranked among the royal game, and protected as such by the laws ; and whoever destroyed their eggs was liable to a penalty of twenty shillings for each offence. Heron hawking was at that time a favourite diversion among the nobility and gentry of the kingdom, at whose tables this bird was a favourite dish, and was as much esteemed as Pheasants and Peacocks.

THE GREAT WHITE HERON.

(*Ardea alba*, Lin.—*Le Heron blanc*, Buff.)

THE great white Heron is of nearly the same bulk as the common Heron, but its legs are longer. It has no crest, and its plumage is wholly white, its bill yellow, and its legs black.

Its character and manner of living are the same as those of the common Heron, and it is found in the same countries, though this species is not nearly so numerous. It has rarely been seen in Great Britain. Pennant, in his *Arctic Zoology*, says it is found in the Russian dominions, about the Caspian and Black Seas, the lakes of Great Tartary, and the river Irtisch, and sometimes as far north as latitude 53. Latham says, it is met with at New York, in America, from June to October; at different seasons of the year it is found in Jamaica, and in the Brazils: and our circumnavigators have met with it at New Zealand.

THE NIGHT HERON.

LESSER ASH-COLOURED HERON, OR NIGHT RAVEN.

(*Ardea nycticorax*, Lin.—*Le Biboreau*, Buff.)

THE length of this bird is about twenty inches. The bill is three inches and three-quarters long, slightly arched, strong, and black, inclining to yellow at the base; the skin from the beak round the eyes is bare, and of a greenish colour; irides yellow. A white line is extended from the beak over each eye; a black patch, glossed with green, covers the crown of the head and nape of the neck, from which three long narrow white feathers, tipped with brown, hang loose and waving: the hinder part of the neck, coverts of the wings, the sides and tail, are ash-coloured; throat white; fore part of the neck,

breast and belly yellowish white or buff; the back black; the legs a greenish yellow.

The female is nearly of the same size as the male, but she differs considerably in her plumage, which is less bright and distinct, being more blended with clay or dirty white, brown, grey, and rusty ash colour, and she has not the delicate plumes which flow from the head of the male.

The Night Heron frequents the sea-shores, rivers, and inland marshes, and lives upon insects, slugs, frogs, reptiles, and fish. It remains concealed during the day, and does not roam abroad until the approach of night, when it is heard and known by its rough, harsh, and disagreeable cry, which is by some compared to the noise made by a person straining to vomit. Some ornithologists affirm that the female builds her nest on trees, others that she builds it on rocky cliffs: probably both accounts are right. She lays three or four white eggs.

This species is not numerous, although widely dispersed over Europe, Asia, and America.

The above figure was taken from a stuffed specimen in the Wycliffe museum, and is the only one the author has seen. The bird is indeed very uncommon in this country. Latham mentions one in the Leverian museum, which was shot not many miles from London, in May, 1782.

THE EGRET.

{ *Ardea Garzette*, Lin.—*Egretta*, Buff.)

THE Egret is one of the smallest, as well as the most elegant of the Heron tribe : its shape is delicate, and its plumage as white as snow ; but what constitute its principal beauty are the soft, silky, flowing plumes on the head, breast, and shoulders : they consist of single slender shafts, thinly set with pairs of fine soft threads, which float on the slightest breath of air. Those which arise from the shoulders are extended over the back, and flow beyond the tail. These plumes were formerly used to decorate the helmets of warriors : they are now applied to a gentler and better purpose, in ornamenting the head-dresses of the European ladies, and the turbans of the Persians and Turks.

The Egret seldom exceeds a pound and a half in weight, and rarely a foot and a half in length. A bare green skin is extended from the beak to the eyes, the irides of which are pale yellow : the bill and legs are black. Like the common Heron they perch and build their nests on trees, and live on the same kinds of food.

This species is found in almost every temperate and warm climate, and must formerly have been plentiful in Great Britain, if it be the same bird as that mentioned by Leland in the list or bill of fare prepared for the famous feast of Archbishop Nevil, in which one thousand of these birds were served up. No wonder the species has become nearly extinct in this country !

THE BITTERN.

BOG-BUMPER, BITTER-BUM, OR MIRE-DRUM.

(Ardea Stellaris, Lin.—Le Butor, Buff.)

THE Bittern is nearly as large as the common Heron ; its legs are stronger, body more plump and fleshy ; and its neck is more thickly clothed with feathers. The beak is strong at the base, straight, sharp on the edges, and gradually tapers to an acute point ; the upper mandible is brown, the under inclining to green ; the mouth is wide, the gape extending beyond the eyes, with a dusky patch at each angle : the irides are yellow. The crown of the head is somewhat depressed, and covered

with long black feathers ; the throat is yellowish white, the sides of the neck pale rust colour, variegated with black, in spotted, waved, and narrow transverse lines, and on the fore part the ground colour is whitish, and the feathers fall down in less broken and darker lengthened stripes. These neck feathers, which it can raise and depress at pleasure, are long and loose, and inclining backward, cover the neck behind ; those below them on the breast, to the thighs, are streaked lengthwise with black, edged with yellowish white : the thighs, belly, and vent are of a dull pale yellow, clouded with dingy brown. The plumage on the back and wings is marked with black zigzag lines, bars and streaks, upon a ground shaded with rust colour and yellow. The bastard wings, greater coverts, and quills are brown, barred with black. The tail, which consists only of ten feathers, is very short : the legs are of a pale green, bare a little above the knees ; the claws, particularly those on the hind toes, are long and sharp, the middle ones serrated.

The female is less than the male ; her plumage is darker, and the feathers on her head, breast, and neck are shorter, and the colours not so distinctly marked. She makes an artless nest, composed chiefly of the withered stalks and leaves of the high coarse herbage, in the midst of which it is placed, and lays from four to six eggs of a greenish white colour.

The Bittern is a shy solitary bird ; it is never seen on the wing in the day time, but sits, commonly with the head erect, hid among the reeds and rushes in the marshes, where it always takes up its abode, and from whence it will not stir, unless it is disturbed by the sportsman. When it changes its haunts, it removes in the

dusk of the evening, and then rising in a spiral direction, soars to a vast height. It flies in the same heavy manner as the Heron, and might be mistaken for that bird, were it not for the singularly resounding cry which it utters from time to time while on the wing; but this cry is feeble when compared to the hollow booming noise* which it makes during the night time, in the breeding season, from its swampy retreats.

The Bittern, when attacked by the Buzzard, or other birds of prey, defends itself with great courage, and generally beats off such assailants; neither does it betray any symptoms of fear, when wounded by the sportsman, but eyes him with a keen undaunted look, and when driven to extremity, will attack him with the utmost vigour, wounding his legs, or aiming at his eyes with its sharp and piercing bill. It was formerly held in much estimation at the tables of the great, and is again recovering its credit as a fashionable dish.

This bird lives upon the same water animals as the Heron, for which it patiently watches, unmoved, for hours together.

- * “ The Bittern booms along the sounding marsh,
“ Mixt with the cries of Heron and Mallard harsh.”

THE LITTLE BITTERN.

(*Ardea minuta*, Lin.—*Le Blongios*, Buff.)

THIS bird, in the bulk of its body, is not much bigger than the Thristle, measuring only about fifteen inches in length. From the corners of the mouth, a black stroke extends along the under-sides of the cheeks ; and a patch of black, glossed with green and edged with chesnut, covers the crown of its head. On the back, rump, and scapulars, the feathers are dark brown, edged with pale rusty-coloured red ; the sides of the neck, and the breast, are of the same colours, but the brown on the middle of each feather is in narrower streaks. The belly is white ; the hinder part of the neck is bare, but the long feathers on the fore part lie back and cover it. The tail is short,

and of a black green colour, edged and tipped with tawny: the legs dirty green. The Little Bittern has seldom been met with in Great Britain.

The above drawing and description were taken from an ill-stuffed specimen in the Wycliffe museum.

OF THE CURLEW.

THE bill is long, equally incurvated, and terminated in a blunt point ; nostrils linear, and longitudinal near the base ; tongue short and sharp pointed ; and the toes are connected as far as the first joint by a membrane.

With the Curlew, Linnæus begins a numerous tribe of birds under the generic name of *Scolopax*, which, in his arrangement, includes all the Snipes and Godwits, amounting, according to Latham, to forty-two species and eight varieties, spread over various parts of the world, but no where very numerous.

Buffon describes fifteen species and varieties of the Curlew, and Latham ten, only two or three of which are British birds. They feed upon worms which they pick up on the surface, or with their bills dig from the soft earth : on these they depend for their principal support ; but they also devour the various kinds of insects which swarm in the mud, and in the wet boggy grounds, where these birds chiefly take up their abode.

THE CURLEW.

(*Scolopax arquata*, Lin.—*Le Courlis*, Buff.)

THE Curlew generally measures about two feet in length, and from tip to tip above three feet. The bill is about seven inches long, of a regular curve, and tender substance at the point, which is blunt. The upper mandible is black, gradually softening into brown towards the base; the under one flesh-coloured. The head and neck are streaked with darkish and light brown; the wing coverts are of the same colours; the feathers of the back and scapulars are nearly black in the middle, edged and deeply indented with pale rust colour, or light grey. The breast, belly, and the lower part of the back are dull white, the latter thinly spotted with black, and the two former with oblong strokes more thickly set, of the same

colour. The quill feathers are black, the inner webs crossed or spotted with white: the tail is barred with black, on a white ground tinged with red: the thighs are bare about half way above the knees, of a bluish colour, and the toes are thick, and flat on the under side, being furnished with membraneous edgings on each side to the claws.

These birds differ much in size, as well as in the different shades of their plumage, some of them weighing not more than twenty-two ounces, and others as much as thirty-seven. In the plumage of some the white parts are much more distinct and clear than in others, which are more uniformly grey, and tinged with pale brown.

The female is so nearly like the male, that any particular description of her is unnecessary: she makes her nest upon the ground, in a dry tuft of rushes or grass, of such withered materials as are found near, and lays four eggs of a greenish cast, spotted with brown.

The Curlew is met with by travellers in most parts of Europe, from Iceland to the Mediterranean Islands. In Britain their summer residence is upon the large, heathy, boggy moors, where they breed. Their food consists of worms, flies, and insects, which they pick out of the soft mossy ground by the marshy pools, which are common in such places. In winter they depart to the sea-side, where they are seen in great numbers, and then live upon the worms, marine insects, and other fishy substances which they pick up on the beach, and among the loose rocks and pools left by the retiring tide. The flesh of the Curlew has been characterised by some as very good, and of a fine flavour; by others as directly the reverse:

the truth is, that while they are in health and season, and live on the moors, scarcely any bird can excel them in goodness; but when they have lived some time on the sea-shore, they acquire a rank and fishy taste.

THE WHIMBREL.

(*Scolopax Phaopus*, Lin.—*Le petit Courlis*, Buff.)

THE Whimbrel is only about half the size of the Curlew, which it very nearly resembles in shape, the colours of its plumage, and manner of living. It is about seventeen inches in length, and twenty-nine in breadth, and weighs about fourteen ounces. The bill is about three inches long, the upper mandible black, the under one pale red. The upper part of the head is black, divided in the middle of the crown by a white line from the brow to the hinder part: between the bill and the eyes there is a darkish oblong spot: the sides of the head, the

neck, and breast, are of a pale brown, marked with narrow dark streaks pointing downwards: the belly is of the same colour, but the dark streaks upon it are larger; about the vent it is quite white; the lower part of the back is also white. The rump and tail feathers are barred with black and white; the shafts of the quills are white, the outer webs totally black, but the inner ones marked with large white spots: the secondary quills are spotted in the same manner on both the inner and outer webs. The legs and feet are of the same shape and colour as those of the Curlew.

The Whimbrel is not so commonly seen on the seashores of this country as the Curlew; it is also more retired and wild, ascending to the highest mountain heaths in spring and summer to feed and rear its young.

OF THE SNIPE.

THE bill is long, straight, narrow, flexible, and rather blunt at the tip ; the nostrils are linear, and lodged in a furrow ; the tongue is pointed and slender ; the toes divided, or very slightly connected, and the back toe very small.

This division of the numerous *Scolopax* genus of Linnæus amounts, according to Latham, to about twenty species, besides varieties, of which only the Woodcock, Common Snipe, and Judcock, and their varieties, are accounted British Birds.

Pennant has placed the Woodcock after the Curlews as the head of the Godwits and Snipes ; and others are of opinion that the Knot, from the similarity of its figure to that of the Woodcock, ought to be classed in this tribe. In these subdivisions ornithologists may vary their classifications without end. As in a chain doubly suspended, the rings of which gradually diminish towards the middle, the leading features of some particular bird may point it out as a head to a tribe ; others from similarity of shape, plumage, or habits, will form, by almost imperceptible variations, the connecting links ; and those which may be said to compose the curvature of the bottom, by gradations equally minute, will rise to the last ring of the other end, which, as the head of another tribe, will be marked with characters very different from the first.

THE WOODCOCK.

(*Scolopax Rusticola*, Lin.—*La Becasse*, Buff.)

THE Woodcock measures fourteen inches in length, and twenty-six in breadth, and generally weighs about twelve ounces. The shape of the head is remarkable, being rather triangular than round, with the eyes placed near the top, and the ears very forward, nearly on a line with the corners of the mouth. The upper mandible, which measures about three inches, is furrowed nearly its whole length, and at the tip it projects beyond and hangs over the under one, ending in a kind of knob, which, like those of others of the same genus, is susceptible of the finest feeling, and calculated by that means, aided, perhaps, by an acute smell, to find the small worms in the soft moist grounds, from whence it extracts them with its sharp-pointed tongue. With the bill it also turns over

and tosses the fallen leaves in search of the insects which shelter underneath. The crown of the head is of an ash colour; the nape and back part of its neck black, marked with three bars of rusty red: a black line extends from the corners of the mouth to the eyes, the orbits of which are pale buff; the whole under parts are yellowish white, numerously barred with dark waved lines. The tail consists of twelve feathers, which, like the quills, are black, and indented across with reddish spots on the edges: the tip is ash coloured above, and of a glossy white below. The legs are short, feathered to the knees, and, in some, are of a bluish cast, in others, of a sallow flesh colour. The upper parts of the plumage are so marbled, spotted, barred, streaked, and variegated, that to describe them with accuracy would be difficult and tedious. The colours, consisting of black, white, grey, ash, red, brown, rufous, and yellow, are so disposed in rows, crossed and broken at intervals by lines and marks of different shapes, that the whole seems to the eye, at a little distance, blended together and confused, which makes the bird appear exactly like the withered stalks and leaves of ferns, sticks, moss, and grasses, which form the back ground of the scenery by which it is sheltered in its moist and solitary retreats. The sportsman only, by being accustomed to it, is enabled to discover it, and his leading marks are its full dark eye, and glossy silver-white tipped tail. In plumage the female differs very little from the male, and like most other female birds, only by being less brilliant in her colours.

The flesh of the Woodcock is held in very high estimation, and hence it is eagerly sought after by the sportsman. It is hardly necessary to notice, that in cooking

it, the entrails are not drawn, but roasted within the bird, whence they drop out with the gravy upon slices of toasted bread, and are relished as a delicious kind of sauce.

The Woodcock is migratory, and in different seasons is said to inhabit every climate: it leaves the countries bordering upon the Baltic in the autumn and setting in of winter, on its route to this country. They do not come in large flocks, but keep dropping in upon our shores singly, or sometimes in pairs, from the beginning of October till December. They must have the instinctive precaution of landing only in the night, or in dark misty weather, for they are never seen to arrive; but are frequently discovered the next morning in any ditch which affords shelter; and particularly after the extraordinary fatigue occasioned by the adverse gales which they often have to encounter in their aerial voyage. They do not remain near the shores to take their rest longer than a day, but commonly find themselves sufficiently recruited in that time to proceed inland, to the very same haunts which they left the preceding season.* In temperate weather they retire to the mossy moors, and high bleak mountainous parts of the country; but as soon as the frost sets in, and the snows begin to fall, they return to lower and warmer situations, where they meet with boggy

* In the winter of 1797, the gamekeeper of E. M. Pleydell, Esq. of Whatcombe, in Dorsetshire, brought him a Woodcock, which he had caught in a net set for rabbits, alive and unhurt. Mr P. scratched the date upon a bit of thin brass, and bent it round the Woodcock's leg, and let it fly. In December the next year, Mr Pleydell shot this bird with the brass about its leg, in the very same wood where it had been first caught by the gamekeeper.

(Communicated by Sir John Trevelyan, Bart.)

grounds and springs, and little oozing mossy rills which are rarely frozen, and seek the shelter of close bushes of holly, furze, and brakes in the woody glens, or hollow dells which are covered with underwood: there they remain concealed during the day, and remove to different haunts and feed only in the night. From the beginning of March to the end of that month, or sometimes to the middle of April, they all keep drawing towards the coasts, and avail themselves of the first fair wind to return to their native woods: should it happen to continue long to blow adversely, they are thereby detained; and as their numbers increase, they are more easily found and destroyed by the merciless sportsman.

The female makes her nest on the ground, generally at the root or stump of a decayed tree; it is carelessly formed of a few dried fibres and leaves, upon which she lays four or five eggs, larger than those of a Pigeon, of a rusty grey colour, blotched and marked with dusky spots. The young leave the nest as soon as they are freed from the shell, but the parent birds continue to attend and assist them until they can provide for themselves. Buffon says they sometimes take a weak one under their throat, and convey it more than a thousand paces.

Latham mentions three varieties of British Woodcocks: in the first, the head is of a pale red, body white, and the wings brown; the second is of a dun, or rather cream colour; and the third of a pure white.* Dr Heysham, in

* A white Woodcock was seen three successive winters in Penrice wood, near Penrice Castle, in Glamorganshire: it was repeatedly flushed and shot at during that time, in the very same place where it was first discovered: at last it was found dead, with several others which had perished by the severity of the weather, in the winter of 1793. This account, which was com-

his Catalogue of Cumberland Animals, mentions his having met with one, the general colour of which was a fine pale ash, with frequent bars of a very delicate rufous: tail brown, tipped with white; and the bill and legs flesh colour. In addition to these, some other varieties are taken notice of by the late Marmaduke Tunstall, Esq. of Wycliffe, in his interleaved books of ornithology.

Latham and Pennant assert, that some Woodcocks deviate from the course which Nature seems to have taught their species, by remaining throughout the year, and breeding in this country; and this assertion Mr Tunstall corroborates by such a number of well-authenticated instances, that the fact is unquestionable.

When the Woodcock is pursued by the sportsman, its flight is very rapid, but short, as it drops behind the first suitable sheltering coppice with great suddenness, and in order to elude discovery, runs swiftly off, in quest of some place where it may hide itself in greater security.

To describe the various methods which are practised by fowlers to catch this bird, would be tedious; but it may not be improper to notice those most commonly in use, and against which it does not seem to be equally on its guard as against the gun. It is easily caught in the nets, traps, and springes which are placed in its accustomed runs or paths, as its suspicions are all lulled into security by the silence of the night; and it will not fly or leap over any obstacles which are placed in its way, while it is in quest of its food; therefore, in those places,

municated to the author by Sir John Trevelyan, Bart. on the authority of the Rev. Dr Hunt, proves not only the existence of white Woodcocks, but also the truth of the assertion, that the haunts of this bird are the same year after year.

barriers and avenues formed of sticks, stones, &c. are constructed so as to *weir* it into the fatal openings, where it is entrapped : in like manner, a low fence made of the tops of broom stuck into the ground, across the wet furrow of a field, or a runner from a spring which is not frozen, is sufficient to stay its progress, and to make it seek from side to side for an opening through which it might pass ; and there it seldom escapes the noose that is set to secure it.

At the root of the first quill in each wing is a small-pointed narrow feather, very elastic, and much sought after by painters, by whom it is used as a pencil. A feather of a similar kind is found in the whole of this tribe, and also in every one of the Tringas and Plovers which the author has examined. The annexed figure represents a scapular feather of the Woodcock.

THE GREAT SNIPE.

(*Scolopax Media.*)

LATHAM gives the following description of this bird :
“ Size between the Woodcock and Snipe : weight eight ounces : length sixteen inches : bill four inches long, and like that of the Woodcock : crown of the head black, di-

vided down the middle by a pale stripe : over and beneath each eye another of the same : the upper parts of the body very like the Common Snipe : beneath white : the feathers edged with dusky black on the neck, breast, and sides ; and those of the belly spotted with the same, but the middle of it is plain white : quills dusky : tail reddish, the two middle feathers plain, the others barred with black : legs black.” He adds, “ This is a rare species. A fine specimen of it was shot in Lancashire, now in the Leverian museum ; said also to have been met with in Kent.”*

* The author has seen three specimens of a large kind of Snipe called, by some sportsmen, from being always found alone, the *Solitary Snipe*. They weighed the same as the above-mentioned, but differed in some slight particulars, measuring only twelve inches in length, and from tip to tip about nineteen. The upper parts of the plumage were nearly like those of the Common Snipe : the breast, sides, belly, and vent white, spotted, barred, and undulated with black. It is not clearly ascertained whether this be a distinct species of Snipe, or whether it acquires its bulk and change of plumage from age, and its solitary habits from ceasing to breed.

THE COMMON SNIPE.

SNITE, OR HEATHER-BLEATER.

(*Scolopax Gallinago*, Lin.—*La Bécassine*, Buff.)

THE Common Snipe is generally about four ounces in weight, and measures twelve inches in length, and fourteen in breadth. The bill is nearly three inches long; in some pale brown, in others greenish yellow, rather flat and dark at the tip, and very smooth in the living bird; but it soon becomes dimpled like the end of a thimble, after the bird is dead: the head is divided lengthwise by three reddish or rusty white lines, and two of black; one of the former passes along the middle of the crown, and one above each eye: a darkish mark is extended from the corners of the mouth nearly to each eye, and the auriculars form spots of the same colour: the chin and fore part of the neck are yellowish white, the former plain, the latter spotted with brown. The scapulars are elegantly striped lengthwise on one web, and barred on the

other with black and yellow : the quills are dusky, the edge of the primaries, and tips of the secondaries, white ; those next to the back barred with black, and pale rufous : the breast and belly are white : the tail coverts are of a reddish brown, and so long as to cover the greater part of it : the tail consists of fourteen feathers, the webs of which, as far as they are concealed by the coverts, are dusky, thence downward, tawny or rusty orange, and irregularly marked or crossed with black. The tip is commonly of a pale reddish yellow, but in some specimens nearly white : the legs are pale green.*

The common residence of the Snipe is in small bogs or wet grounds, where it is almost constantly digging and nibbling in the soft mud, in search of its food, which consists chiefly of a very small kind of red transparent worm, about half an inch long ; it is said also to eat slugs, and the insects and grubs of various kinds, which breed in great abundance in those slimy stagnant places. In these retreats, when undisturbed, the Snipe walks leisurely, with its head erect, and at short intervals keeps moving the tail. But in this state of tranquillity it is very rarely to be seen, as it is extremely watchful, and perceives the sportsman or his dog at a great distance, and instantly conceals itself among the variegated withered herbage, so similar in appearance to its own plumage, that it is almost impossible to discover it while squatted motionless in its seat : it seldom, however, waits the near

* Mr Tunstall mentions a "very curious pied Snipe which was shot in Bottley meadow, near Oxford, September 8, 1789, by a Mr Court : its throat, breast, back and wings were beautifully covered or streaked with white, and on its forehead was a star of the natural colour ; it had also a ring round the neck and the tail, with the tips of the wings of the same colour."

approach of any person, particularly in open weather, but commonly springs, and takes flight at a distance beyond the reach of the gun. When first disturbed, it utters a kind of feeble whistle, and generally flies against the wind, turning nimbly in a zigzag direction for two or three hundred paces, and sometimes soaring almost out of sight; its note is then something like the bleating of a goat, but this is changed to a singular humming or drumming noise, uttered in its descent.

From its vigilance and manner of flying, it is one of the most difficult birds to shoot. Some sportsmen can imitate their cries, and by that means draw them within reach of their shot; others, of a less honourable description, prefer the more certain and less laborious method of catching them in the night by a springe like that which is used for the Woodcock.

The Snipe is migratory, and is met with in all countries: like the Woodcock, it shuns the extremes of heat and cold, by keeping upon the bleak moors in summer, and seeking the shelter of the vallies in winter. In severe frosts and storms of snow, driven by the extremity of the weather, they seek the unfrozen boggy places, runners from springs, or any open streamlet of water, and they are sure to be found, often in considerable numbers, in these places, where they sometimes sit till nearly trodden upon before they will take their flight.

Although it is well known that numbers of Snipes leave Great Britain in the spring, and return in the autumn, yet it is equally well ascertained that many constantly remain and breed in various parts of the country, for their nests and young ones have been so often found as to leave no doubt of this fact. The female makes her nest in the

most retired and inaccessible part of the morass, generally under the stump of an alder or willow : it is composed of withered grasses and a few feathers : her eggs, four or five in number, are of an oblong shape, and of a greenish colour, with rusty spots. The young ones run off soon after they are freed from the shell, but they are attended by the parent birds until their bills have acquired a sufficient firmness to enable them to provide for themselves.

The Snipe is a very fat bird, but its fat does not cloy, and very rarely disagrees even with the weakest stomach. It is much esteemed as a delicious and well-flavoured dish, and is cooked in the same manner as the Woodcock.

THE JUDCOCK.

JACK SNIPE, GID, OR JETCOCK.

(Scolopax Gallinula, Lin.—La petite Becassine, Buff.)

THE Judcock, in its figure and plumage, nearly resembles the Common Snipe ; but it is only about half its weight, seldom exceeding two ounces, or measuring more, from the tip of its beak to the end of its tail, than eight inches and a half. The bill is black at the tip, and light towards the base, and rather more than an inch and a half in length. A black streak divides the head lengthwise from the base of the bill to the nape of the neck ; and another, of a yellowish colour, passes over each eye to the hinder part of the head : in the midst of this, above the eye, is a narrow black stripe running parallel with the top of the head from the crown to the nape. The neck is white, spotted with brown and pale red. The scapulars and tertials are very long and beautiful ; on their exterior edges they are bordered with a stripe of

yellow, and the inner webs are streaked and marked with bright rust colour on a deep brown, or rather bronze ground, reflecting in different lights a shining purple or green. The quills are dusky. The rump is of a glossy violet or bluish purple; the belly and vent white. The tail consists of twelve pointed feathers of a dark brown, edged with rust colour: the legs are of a dirty or dull green.

The Judcock is of nearly the same character as the Snipe; it feeds upon the same kinds of food, lives and breeds in the same swamps and marshes, and conceals itself from the sportsman with as great circumspection, among the rushes or tufts of coarse grass. It, however, differs in this particular, that it seldom rises from its lurking place until it is almost trampled upon, and, when flushed, does not fly to so great a distance. It is as much esteemed as the Snipe, and is cooked in the same manner.

The eggs are not bigger than those of a lark; in other respects they are very like those of the Snipe.

THE KNOT,

KNUTE, OR KNOUT.

(Tringa Canutus, Lin.—Le Canut, Buff.)

THESE birds, like others of the same genus, differ considerably from each other in their appearance, in different seasons of the year, as well as from age and sex. The specimen from which the above drawing was taken, measured from the point of the bill to the tip of the tail, eight inches and a half, the extended wings about fifteen, and it weighed two ounces eight drachms: the bill was one inch and three-eighths long, black at the tip, and dusky, fading into orange towards the base; tongue of nearly the same length, sharp and horny at the point; sides of the head, neck, and breast, cinereous, edged with ash-coloured grey; the chin white, and a stroke of the same colour passed over each eye. All the upper parts of the plumage were darkish brown, but more deep and glossy on the crown of the head, back and scapulars, and

each feather was edged with ash or grey : the under parts were a cream-coloured white, streaked or spotted with brown on the sides and vent ; the greater coverts of the wings tipped with white, which formed a bar across them when extended : the legs reddish yellow, and short, not measuring more than two inches and one-eighth from the middle toe nail to the knee ; the thighs feathered very nearly to the knees ; toes divided without any connecting membrane.

This bird is caught in Lincolnshire and the other fenny counties, in great numbers,* by nets, into which it is decoyed by carved wooden figures, painted to represent itself, and placed within them, much in the same way as the Ruff. It is also fattened for sale, and esteemed by many equal to the Ruff in the delicacy of its flavour. The season for taking it is from August to November, after which the frost compels it to disappear.

This bird is said to have been a favourite dish with Canute, king of England ; and Camden observes, that its name is derived from his—Knute, or Knout, as he was called, which, in process of time, has been changed to Knot.

* Pennant says fourteen dozen have been taken at once.

OF THE GODWIT.

BUFFON enumerates eight species of this division of the *Scolopax* genus, under the name of Barges, including the foreign kinds; and Latham makes out the same number of different sorts, all British. They are a timid, shy, and solitary tribe; their mode of subsistence constrains them to spend their lives amidst the fens, searching for their food in the mud and wet soil, where they remain during the day, shaded and hidden among reeds and rushes, in that obscurity which their timidity makes them prefer. They seldom remain above a day or two in the same place; and it often happens that in the morning not one is to be found in those marshes where they were numerous the evening before. They remove in a flock in the night, and when there is moonlight, may be seen and heard passing at a vast height. Their bills are long and slender, and, like the Common Snipe's, are smooth and blunt at the tip: their legs are of various colours, and long. When pursued by the sportsman, they run with great speed, are very restless, spring at a great distance, and make a scream as they rise. Their voice is somewhat extraordinary, and has been compared to the smothered bleating of a goat. They delight in salt marshes, and are rare in countries remote from the sea. Their flesh is delicate and excellent food.

THE GODWIT.

COMMON GODWIT, GODWYN, YARWHELP, OR YARWHIP.

(*Scolopax ægocephala*, Lin.—*La grande Barge grise*, Buff.)

THE weight of this bird is about twelve ounces ; length about sixteen inches. The bill is four inches long, and bent a little upwards, black at the point, gradually softening into a pale purple towards the base ; a whitish streak passes from the bill over each eye : the head, neck, back, scapulars, and coverts, are of a dingy reddish pale brown, each feather marked down the middle with a dark spot. The fore part of the breast is streaked with black ; the belly, vent, and tail are white, the latter regularly barred with black : the webs of the first six quill feathers are black, edged on the interior sides with reddish brown : the legs are in general dark coloured, inclining to a greenish blue.

The Godwit is met with in various parts of Europe, Asia, and America: in Great Britain, in the spring and summer, it resides in the fens and marshes, where it rears its young, and feeds upon small worms and insects. During these seasons it removes only from one marsh to another; but when the winter sets in with severity, it seeks the salt marshes and the sea-shores.

The Godwit is much esteemed, by epicures, as a great delicacy, and sells very high. It is caught in nets, to which it is allured by a *stale*, or stuffed bird, in the same manner, and in the same season, as the Ruffs and Reeves.

THE RED GODWIT,

OR, RED-BREASTED GODWIT.

(*Scolopax Lapponica*, Lin.—*La Barge Rouffe*, Buff.)

THIS bird exceeds the Common Godwit in size, and is distinguished from it by the redness of its plumage;

in other respects its general appearance and manner of living are nearly the same. It measures eighteen inches in length, and weighs about twelve ounces. The bill is nearly four inches long, slightly turned upwards, dark at the tip, and of a dull yellowish red towards the base. The predominant colour of the head, upper part of the shoulders, breast and sides, is a bright ferruginous or rusty red, streaked on the head with brown, and on the breast and sides barred or marbled with dusky, cinereous, and white; the neck plain dull rusty red. The back, scapulars, greater and lesser coverts, are ash-coloured brown; on the former two, some of the feathers are barred and streaked with black and rust colour, and edged with pale reddish white. The rump is white; the middle of the belly, and the vent, the same, slightly spotted with brown: a bar of white is formed across each wing by the tips of the greater coverts. The exterior webs, and tips of the primary quills, are of a dark brown colour, and the interior webs are white towards their base. In some specimens the tail is barred with black, or dark brown, upon a pale rufous ground; in others it is plain dark brown, with light tips and edges. The legs are dusky, and bare a long space above the knees.

Mr Pennant, in his *Arctic Zoology*, says, “these birds are found in the north of Europe, and about the Caspian Sea, but never in Siberia, or any part of Northern Asia.” According to Latham, they are plentiful in the fens about Hudson’s Bay, in America. They are not very common in Great Britain. It is praised by those who have eaten it, as a very well-tasted and delicious bird.

There is reason to suppose that Buffon has described the male and female Red Godwits as two distinct species.

In his *Planches Enluminees*, the *Barge Rousse* is the female, and the *Grande Barge Rousse*, the male, Red Godwit. The colours are the same in both, but the feathers of the female are not so variegated, clouded and barred, being of a more uniform rufous, or rust colour, on the head, neck, breast, and belly, and on the upper parts of a more plain brown. His descriptions agree with the foregoing, except that the tail of his *Grande Barge Rousse* is plain brown, and that of the specimen from which the above drawing was made, is barred with rust colour.

The foregoing figure and description were taken from a bird in full plumage, sent to the author by the Rev. J. Davies, senior fellow of Trinity College, Cambridge, to whom he is indebted for most of the fen birds.

THE CINEREOUS GODWIT.

THIS species, as well as several others of the same genus, seems to be very imperfectly known, or ascertained: the slight shades of difference in their size and plumage, probably occasioned only by age or sex, there is cause to suspect may have led nomenclators, in their over anxiety to add new species to their numbers, into errors; but, however this may be, the author will leave the matter as it stands at present, to be elucidated by sportsmen and ornithologists; and as he has never seen this or the two following kinds, he presents only the descriptions of others. Latham says it is the "size of the Greenshank. Bill two inches and a half long, but thicker than in that bird: the head, neck, and back variegated with ash colour and white: tail slightly barred with cinereous: throat and breast white; the last marked with a few ash-colour-

ed spots: legs long, slender, and ash-coloured." He mentions one as having been shot near Spalding, in Lincolnshire. Pennant says, "it is about the size of the Greenshank, which it nearly resembles in its colours, but the bill is so much thicker, as to form a specific distinction."

THE CAMBRIDGE GODWIT.

"LARGER than the Common Redshank. Head, upper part of the neck, and back, cinereous brown: lesser wing coverts brown, edged with dull white, and barred with black: primaries dusky, whitish on their inner sides: secondaries barred, dusky and white: underside of the neck and breast, dirty white: belly and vent, white: tail barred, cinereous and black: legs orange: shot near Cambridge." *Latham.*

THE LESSER GODWIT.

SECOND SORT OF GODWIT, OR JADREKA SNIPE.

(*Scolopax limosa*, Lin.—*La Barge*, Buff.)

"LENGTH seventeen inches: weight nine ounces. Bill near four inches long, dusky, the base yellowish: irides white: the head and neck are cinereous: cheeks and chin white: back, brown: on the wings, a line of white: vent and rump, white: two middle tail feathers, black; the others, white at the ends, which increases on the outer feathers, so as the exterior ones are white for nearly the whole length: legs, dusky. This inhabits Iceland, Greenland, and Sweden. Migrates in flocks in the south of Russia. Seen about Lake Baikal: and is said also to have been met with in England." *Latham.*

THE GREENSHANK.

GREEN-SHANKED GODWIT, OR GREEN-LEGGED HORSE-MAN.

(*Scolopax glottis*, Lin.—*La Barge variée*, Buff.)

THE Greenshank is of a slender and elegant shape, and its weight small in proportion to its length and dimensions, being only about six ounces, although it measures from the tip of its beak to the end of its tail fourteen inches, and to the toes twenty; and from tip to tip of the wings, twenty-five. The bill is about two inches and a half long, straight and slender, the upper mandible black, the under reddish at its base. The upper parts of its plumage are pale brownish ash colour, but each feather is marked down the shaft with a glossy bronze brown: the under parts, and rump, are of a pure white: a whitish streak passes over each eye: the quill feathers are dusky, plain on the outer webs, but the inner ones are speckled with white spots: the tail is white, crossed with dark

waved bars : the legs are long, bare about two inches above the knees, and of a dark green colour : the outer toe is connected by a membrane to the middle one as far as the first joint.

This species is not numerous in England, but they appear in small flocks, in the winter season, on the seashores and the adjacent marshes ; their summer residence is in the northern regions of Russia, Siberia, &c. where they are said to be in great plenty ; they are also met with in various parts of both Asia and America. Their flesh, like all the rest of this genus, is well-flavoured, and esteemed good eating.

The above figure and description were taken from a stuffed specimen in the Wycliffe museum.

THE SPOTTED REDSHANK.

RED-LEGGED GODWIT, SPOTTED SNIPE, OR BARKER.

(*Scolopax Totanus*, Lin.—*Le Chevalier rouge*, Buff.)

THE length of this bird, from the tip of the bill to the

end of the tail, is twelve inches, and to the end of the toes fourteen inches and a half; its breadth twenty-one inches and a quarter, and its weight about five ounces two drachms, avoirdupoise. The bill is slender, measures two inches and a half from the corners of the mouth to the tip, and is, for half its length, nearest the base, red; the other part black: irides hazel: the head, neck, breast, and belly are spotted in streaks, mottled and barred with dingy ash brown and dull white, darker on the crown and hinder part of the neck: the throat is white, and lines of the same colour pass from the upper sides of the beak over each eye, from the corners of which two brown ones are extended to the nostrils: the ground colour of the shoulders, scapulars, lesser coverts, and tail, is a glossy olive brown,—the feathers on all these parts are indented on the edges, more or less, with triangular-shaped white spots. The back is white; the rump barred with waved lines of ash-coloured brown, and dingy white: the vent feathers are marked nearly in the same manner, but with a greater portion of white: the tail and coverts are also barred with narrow waved lines, of a dull ash colour, and, in some specimens, are nearly black and white. Five of the primary quills are dark brown, tinged with olive; the shaft of the first quill is white; the next six are, in the male, rather deeply tipped with white, and slightly spotted and barred with brown: the secondaries, as far as they are uncovered, when the wings are extended, are of the same snowy whiteness as the back. The feathers which cover the upper part of the thighs, and those near them, are blushed with a reddish or vinous colour: the legs are of a deep orange red, and

measure, from the end of the middle toe nail to the upper bare part of the thigh, five inches and a half.

A stuffed specimen of this elegant-looking bird, from which the figure and description were taken, was the gift of Mr Riddiough, of Ormskirk: another of these birds, in perfect plumage, was shot by Mr John Bell, of Alemoutli, merchant, in September, 1801; it differed from the former in being more sparingly spotted with white on the upper parts, and in its breast, belly, and the inside of the wings, being of a snowy whiteness, and its sides, under the wings, more delicately spotted with pale brown.

THE REDSHANK.

RED-LEGGED HORSEMAN, POOL SNIPE, OR
SAND COCK.

(*Scolopax Calidris*, Lin.—*Le Chevalier aux Pieds Rouges*, Buff.)

THIS bird weighs about five ounces and a half: its length is twelve inches, and the breadth twenty-one. The bill, from the tip to the corners of the mouth, is more than an inch and three-quarters long, black at the point, and red towards the base: the feathers on the crown of the head are dark brown, edged with pale rufous; a light or whitish line passes over, and encircles each eye, from the corners of which a dark brown spot is extended to the beak: irides hazel: the hinder part of the neck is obscurely spotted with dark brown, on a rusty ash-coloured ground; the throat and fore part are more distinctly marked or streaked with spots of the same colour: on the breast and belly, which are white, tinged with ash, the spots are thinly distributed, and are shaped

something like the heads of arrows or darts. The general appearance of the upper parts of the plumage is glossy olive brown; some of the feathers are quite plain, others spotted on the edges with dark brown, and those on the shoulders, scapulars, and tertials are transversely marked with the same coloured waved bars, on a pale rusty ground: the bastard wing and primary quills are dark brown; the inner webs of the latter are deeply edged with white, freckled with brown, and some of those quills next the secondaries are elegantly marked, near their tips, with narrow brown lines, pointed and shaped to the form of each feather: some of the secondaries are barred in nearly the same manner, others are white: back white; the tail feathers and coverts are beautifully marked with alternate bars of dusky and white, the middle ones slightly tinged with rust colour: legs red, and measure from the end of the toes to the upper bare part of the thigh, four inches and a half.

This species is of a solitary character, being mostly seen alone, or in pairs only. It resides the greater part of the year in the fen countries, in the wet and marshy grounds, where it breeds and rears its young. It lays four eggs, whitish, tinged with olive, and marked with irregular spots of black, chiefly on the thicker end. Pennant and Latham say, "it flies round its nest, when disturbed, making a noise like a Lapwing." It is not so common on the sea-shores as several others of its kindred species.

Ornithologists differ much in their descriptions of the Redshank, and probably have confounded it with others of the red-legged tribe, whose proper names are yet wanting, or involved in doubt and uncertainty. Latham, in his supplement, describes this bird as differing so much

in its summer and winter dress, and in its weight, as to appear to be of two distinct species. There is reason to believe that several species of the *Scolopax* and *Tringa* genera which have not yet been taken into the list of British birds, appear occasionally in Great Britain, and that this circumstance, together with the difference of age and sex, has occasioned much confusion. The figure and description of this pretty bird were taken from a specimen sent by the Rev. J. Davies, of Trinity College, Cambridge: on comparing it with that figured in the *Planches Enluminees*, under the title of *Le Chevalier rayé*, and the striated Sandpiper of Pennant and Latham, the difference was so slight, that there is no doubt of its being the same species.

OF THE SANDPIPER.

THE tongue is slender ; toes divided, or very slightly connected at the base by a membrane ; hinder toe weak : their bills are nearly of the same form as those of the preceding species, but shorter : their haunts and manner of life are also very similar. Latham has enumerated thirty-seven species and nine varieties of this genus, seventeen of which are British, exclusive of those which in this work are placed among the Plovers ; but the history and classification of this genus are involved in much uncertainty.

THE RUFF.

(*Tringa Pugnax*, Lin.—*Le Combattant*, Buff.)

The male of this curious species is called the Ruff, and the female the Reeve : they differ materially in their ex-

terior appearance ; and also what is remarkable in wild birds, it very rarely happens that two Ruffs are alike in the colours of their plumage.* The singular, wide-spreading, variegated tuft of feathers which, in the breeding season, grows out of their necks, is different in all. This tuft or ruff, a portion of which stands up like ears behind each eye, is in some black, in others black and yellow, and in others again white, rust colour, or barred with glossy violet, black and white. They are, however, more nearly alike in other respects : they measure about a foot in length, and two in breadth, and when first taken, weigh about seven ounces and a half ; the female seldom exceeds four. The bill is more than an inch long, black at the tip, and reddish yellow towards the base ; the irides are hazel : the whole face is covered with reddish tubercles, or pimples ; the wing coverts are brownish ash colour : the upper parts and the breast are generally marked with transverse bars, and the scapulars with roundish-shaped glossy black spots, on a rusty-coloured ground : quills dusky : belly, vent, and tail coverts white : the tail is brown, the four middle feathers of it are barred with black : the legs are yellow. The male does not acquire the ornament of his neck till the second season, and, before that time, is not easily distinguished from the female, except by being larger. After moulting, at the end of June, he loses his ruff and the red tubercles on his face, and from that time until the spring of the year, he again, in plumage, looks like his mate.

These birds leave Great Britain in the winter, and are then supposed to associate with others of the *Tringa*

* Buffon says, that Klien compared above a hundred Ruffs together, and found only two that were similar.

genus, among which they are no longer recognized as the Ruff and Reeve. In the spring as soon as they arrive again in England, and take up their abode in the fens where they were bred, each of the males (of which there appears to be a much greater number than of females) immediately fixes upon a particular dry or grassy spot in the marsh, about which he runs round and round, until it is trodden bare: to this spot it appears he wishes to invite the female, and waits in expectation of her taking a joint possession, and becoming an inmate. As soon as a single female arrives, and is heard or observed by the males, her feeble cry seems as if it roused them all to war, for they instantly begin to fight, and their combats are described as being both desperate and of long continuance: at the end of the battle, she becomes the prize of the victor.* It is at the time of these battles that they are caught in the greatest numbers in the nets of the fowlers, who watch for that opportunity: they are also, at other times, caught by clap, or day nets,† and are drawn together by means of a stuffed Reeve, or what is called a *stale bird*, which is placed in some suitable spot for that purpose.

* Buffon says, “they not only contend with each other in single rencounter, but they advance to combat in marshaled ranks.”

† These nets, which are about fourteen yards long, and four broad, are fixed by the fowler over night: at day-break in the morning he resorts to his stand, at a few hundred yards distance from the place, and at a fit opportunity pulls his cord, which causes his net to fall over and secure the prize. Mr Pennant says, an old fowler told him he once caught forty-four birds at one haul, and, in all, six dozen that morning: he also adds, that a fowler will take forty or fifty dozen in a season. The females are always set at liberty.

The Ruff is highly esteemed as a most delicious dish, and is sought after with great eagerness by the fowlers who live by catching them and other fen birds, for the markets of the metropolis, &c. Before they are offered for sale, they are commonly put up to feed for about a fortnight, and are during that time fed with boiled wheat, and bread and milk mixed with hempseed, to which sugar is sometimes added : by this mode of treatment they become very fat, and are often sold as high as two shillings and sixpence each.* They are cooked in the same manner as the Woodcock.

The female, in the beginning of May, makes her nest in a dry tuft of grass, in the fens, and lays four white eggs, marked with rusty spots.

These birds are common in the summer season in the fens of Denmark, Sweden, and Russia, and are also found in other more northern regions, even as far as Iceland.

THE SHORE SANDPIPER.

(*Tringa Littorea*, Lin.—*Le Chevalier varié*, Buff.)

UNDER this name Latham describes this bird, which, it is said, migrates from Sweden into England at the approach of winter. He makes it a variety of the last species, and says it does not differ materially from it. “The spots on the back are ferruginous instead of

* In a note communicated by the late George Allan, Esq. of the Grange, near Darlington, he says, “I dined at the George inn, Coney-street, York, August 18, 1794, (the race week,) where four Ruffs made one of the dishes at the table, which, in the bill, were separately charged sixteen shillings.”

white: the shaft of the first quill is white, as in the Green Sandpiper; and the secondaries have white tips: * the legs are brown." Brunnich mentions a further variety, wherein the first quill has a black shaft, and the spots on the back and wings are less; and observes, that they differ in age and sex. †

THE GREEN SANDPIPER.

(*Tringa Ochropus*, Lin.—*Le Becasseau, ou Cul-blanc*, Buff.)

THIS bird measures about ten inches in length, to the end of the toes nearly twelve, and weighs about three ounces and a half. The bill is black, and an inch and a half long: a pale streak extends from it over each eye; between which and the corners of the mouth, there is a dusky patch. The crown of the head and hinder part of

* These are marks so common to many of this genus, that they cannot be considered as a feature sufficient to distinguish any particular species.

† Buffon's figure in the *Planches Enluminees* differs from this description.

the neck are of a dingy brownish ash colour, in some specimens narrowly streaked with white: the throat is white: fore part of the neck mottled or streaked with brown spots, on a white or pale ash-coloured ground. The whole upper parts of the plumage are of a glossy bronze, or olive brown, elegantly marked on the edge of each feather with small roundish white spots: the quills are without spots, and are of a darker brown: the secondaries and tertials are very long: the insides of the wings are dusky, edged with white grey; and the inside coverts next the body are curiously barred, from the shaft of each feather to the edge, with narrow white lines, formed nearly of the shape of two sides of a triangle. The belly, vent, tail coverts, and tail, are white; the last broadly barred with black, the middle feathers having four bars, and those next to them decreasing in the number of bars towards the outside feathers, which are quite plain: the legs are green.

This bird is not any where numerous, and is of a solitary disposition, seldom more than a pair being seen together, and that chiefly in the breeding season. It is a scarce bird in England, but is said to be more common in the northern parts of the globe, even as far as Iceland. It is reported that they never frequent the sea-shores, but their places of abode are commonly on the margins of the lakes in the interior and mountainous parts of the country.

THE GAMBET.

(*Tringa gambetta*, Lin.—*La Gambette*, Buff.)

THIS is the Chevalier Rouge of Brisson, and the Red-legged Horseman of Albin. For want of a specimen of this bird, the following description is borrowed from Latham:—

“ Size of the Greenshank: length twelve inches. Bill of a reddish colour, with a black tip: the irides yellowish green: head, back, and breast cinereous brown, spotted with dull yellow: wing coverts and scapulars cinereous, edged with dull yellow: prime quills dusky; shaft of the first white: tail dusky, bordered with yellow: legs yellow.* This inhabits England, but is not common: has been shot on the coast of Lincolnshire. Known in France; but is there a rare bird. Has a note not unlike the whistle of a Woodcock; and the flesh is esteemed. Inhabits Scandinavia and Iceland; called in the last *Stelkr*. It has also been taken in the frozen sea between Asia and America.”

THE ASH-COLOURED SANDPIPER.

Tringa Cinerea.

THIS bird weighs between four and five ounces, and measures ten inches in length, and about nineteen in breadth. The whole upper parts of the plumage are of a brownish ash colour: the head is spotted, and the neck streaked with dusky lines: the feathers of the back, sca-

* The figure of this bird in the *Planches Enluminees* of Buffon, is red legged, and also differs in plumage from this description.

pulars, and wing coverts, are elegantly marked or bordered on their ridges and tips, with two narrow lines of dull white, and dark brown. Some specimens have black spots on the breast, but most commonly the whole under parts are pure white: the tail is cinereous, edged with white, and its coverts are barred with black: legs dirty green; toes edged with a fine narrow scalloped membrane.

The Ash-coloured Sandpiper, it is said, breeds in the northern parts of both Europe and America. Pennant says they appear in vast flocks on the shores of Flintshire in the winter season; and Latham, that they are seen in vast numbers on the Seal-Islands, near Chateaux Bay; and also that they breed and remain the whole summer at Hudson's Bay, where they are called by the natives *Sasqua pisqua nishish*.

THE COMMON SANDPIPER.

(*Tringa hypoleucos*, Lin.—*La Guignette*, Buff.)

THIS bird weighs about two ounces, and measures seven inches and a half in length. The bill is about an inch long, black at the tip, fading into pale brown towards the base. The head and hinder part of the neck are brownish ash, streaked downwards with dark narrow lines: the throat is white, and a streak of the same colour surrounds and is extended over each eye: the cheeks and auriculars are streaked with brown: the fore part of the neck to the breast is white, mottled and streaked with spots and lines of a brown colour, pointing downwards: in some the breast is plain white: belly and vent white. The ground colour of all the upper parts of the plumage is ash, blended with glossy olive bronze brown: the coverts, scapulars, lower part of the back and tail coverts, are edged with dull white, and most elegantly marked with transverse dark-coloured narrow waved

lines : the first two quills are plain brown ; the next nine are marked on the middle of their inner webs, with white spots ; the secondaries are also marked in the same manner, on both webs, and tipped with white. The tail consists of twelve feathers : the four middle ones are of an olive brown, dark at the tips ; those next to them, on each side, are much lighter coloured, mottled with dark brown, and tipped with white ; the two outside ones are edged and tipped in the same manner, but are barred on their webs with dark brown : legs pale dull green, faintly blushed with red.

This description was taken from a perfect bird, the present of the right honourable Lord Charles Aynsley, of Little-Harle Tower, Northumberland, in May, 1798. By comparing it with other birds, and other descriptions, (no doubt taken with equal accuracy) the truth of the observation so often made, that two birds even of the same species, are very seldom exactly alike, will be proved.

This elegant little bird breeds in this country, but the species is not numerous ; yet they are frequently seen in pairs during the summer months ; and are well known by their clear piping note, by their flight, by jerking up their tails, and by their manner of running after their insect prey on the pebbly margins of brooks and rivers. The female makes her nest in a hole on the ground near their haunts ; her eggs, commonly five in number, are much mottled and marked with dark spots, on a yellowish ground. They leave England in the autumn, but whether they go is not particularly noticed by ornithologists. Buffon says they retire far north ; and Pennant and Latham, that they are met with in Siberia and Kamtschatca, and are also not uncommon in North America.

THE BROWN SANDPIPER.

Fusca.

PENNANT describes this bird, which, he says, was bought in the London market, and preserved in the collection of the late M. Tunstall, Esq. of Wycliffe:—"Size of a Jacksnipe: the bill is black: the head, upper part of the neck, and back, are of a pale brown, spotted with black: coverts of the wings dusky, edged with dirty white: under side of the neck white, streaked with black: the belly white: tail cinereous: legs black."

THE GREENWICH SANDPIPER.

Grenovicensis.

"SIZE of the Redshank: weight nearly eight ounces: length twelve inches and a half. Bill an inch and a half long, black: crown of the head reddish brown, streaked with black: nape, cheeks, and neck, ash colour; the middle of the feathers dusky down the shaft: lower part of the neck and back black; the feathers margined on the sides with pale ferruginous, and some of those of the back at the tips also: chin nearly white: fore part of the neck very pale ash colour, as far as the breast, which is of a dusky white: belly, sides, vent, and upper tail coverts on each side, and the whole of the under ones, white: lesser wing coverts ash colour; the greater, the same, obscurely margined with pale ferruginous: greatest tipped with white; under wing coverts pure white: prime quills dusky, the shafts more or less white; secondaries and scapulars nearly the colour of the back; the secondaries and primaries very little differing in length: the

lower part of the back, rump, and middle of the tail coverts, ash colour : tail a little rounded at the end, brownish ash colour, somewhat mottled with brownish near the tips, and fringed near to the end with pale ferruginous : legs dusky olive green, bare an inch above the knee : the outer and middle toe connected at the base." The bird from which the above description was taken, was shot by Dr Leith, at Greenwich, on the 5th of August, 1785, and sent to Mr Latham, who considered it as a new species.

THE BLACK SANDPIPER.

Leucura.

" SIZE of a Thrush : the beak short, blunt at the point, and dusky : nostrils black : the irides yellow : the head small, and flatted at the top : the colour white, most elegantly spotted with grey : the neck, shoulders, and back mottled in the same manner, but darker, being tinged with brown ; in some lights these parts appeared of a perfect black, and glossy : the wings were long : the quill-feathers black, crossed near their base with a white line : the throat, breast, and belly white, with faint brown and black spots of a longish form, irregularly dispersed ; but on the belly become larger and more round : the tail short, entirely white, except the two middle feathers, which are black : legs long and slender, and of a reddish brown colour." This bird was shot in Lincolnshire ; and the description communicated to Mr Pennant by Mr Bolton.

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THE SPOTTED SANDPIPER,

OR SPOTTED TRINGA.

(*Tringa macularia*, Lin.—*La Grive d'eau*, Buff.)

THIS bird measures about eight inches in length. The bill is black at the tip, and fades into a reddish colour towards the base ; a white streak is extended over each eye, and a brownish patch between them and the bill : the whole upper part of the plumage is of a glossy lightish brown, with green reflections : the head and neck are marked with longish small dark spots : on the back, scapulars, and wing coverts the spots are larger, and of a triangular shape : the rump is plain : the greater quills are dusky ; secondaries tipped with white ; as are also the greater and lesser coverts, which form two oblique white lines across the extended wings : the two middle feathers of the tail are greenish brown ; the side ones white, crossed with dusky lines : the breast, belly, and vent are white, but in the female, spotted with brown : legs of a dirty flesh colour.

This species is not common in England. The specimen from which the foregoing figure was drawn, was shot in the month of August, on the bleak moors above Bellingham, in Northumberland; and the author is indebted for it, and many other favours of the same kind, at different times, to Mr John Wingate, of the Westgate, Newcastle.

THE RED-LEGGED SANDPIPER.

Tringa Erythropus.

THIS bird measures from the tip of the beak to the end of the tail, ten inches. The bill is an inch and three-eighths long, black at the tip, and reddish towards the base: the crown of the head is spotted with dark brown, disposed in streaks, and edged with pale brown and grey: a darkish patch covers the space between the corners of the mouth and the eyes: the chin is white; the brow and cheeks pale brown, prettily freckled with small dark spots: the hinder part of the neck is composed of a mix-

ture of pale brown, grey and ash, with a few indistinct dusky spots; the fore part, and the breast, are white, clouded with a dull cinnamon colour, and sparingly and irregularly marked with black spots, reflecting a purple gloss: the shoulder and scapular feathers are black, edged with pale rust colour, and have the same glossy reflections as those on the breast: the tertials are nearly of the same length as the quills, and are marked like the first annexed figure: the ridges of the wings are a brownish ash colour; the coverts, back, and rump are nearly the same, but inclining to olive, and the middle of each feather is of a deeper dusky brown: the primary quills are deep olive brown: the exterior webs of the secondaries are also of that colour, but lighter, edged and tipped with white, and the inner webs are mostly white towards the base: the tail coverts are glossy black, edged with pale rust colour, and tipped with white; but in some of them a streak of white passes from the middle upwards, nearly the whole length, as in the second figure. The tail feathers are lightish brown, except the two middle ones, which are barred with large spots of a darker hue: the belly and vent are white: legs bare above the knees, and red as sealing-wax; claws black. The female is less than the male, and her plumage more dingy and indistinct: an egg taken out of her, previous to stuffing, was surprisingly large, considering her bulk, being about the size of that of a Magpie, of a greenish white colour, spotted and blotched with brown, of a long shape, and pointed at the smaller end.

The foregoing figure and description were taken from a pair, male and female, which were shot on Rippengale fen, in Lincolnshire, on the 14th of May, 1799, by Major

Charles Dilke, of the Warwickshire cavalry, who also obligingly pointed out several leading features of these birds, in which they differ materially from the *Scolopax Calidris* of Linnæus, called here the Redshank or Pool-snipe. He says, “this bird is a constant inhabitant of the fens, and is known to sportsmen by its singular notes, which are very loud and melodious, and are heard even when the bird is beyond the reach of sight.”

The description of this bird, which, it seems, is common in the fen countries, has been more particularly attended to, because it has not been described in any of the popular works on ornithology; at least, not so accurately as to enable a naturalist to distinguish it by the proper name.

THE RED SANDPIPER.

ABERDEEN SANDPIPER.

(Tringa Islandica, Lin.)

LATHAM describes this bird in the following manner :
“ Length from eight to ten inches : bill brown, one inch and a half long, and a little bent downwards : head, hinder part of the neck, and beginning of the back, dusky, marked with red : fore part of the neck and breast cinereous, mixed with rust colour, and obscurely spotted with black : lesser wing coverts cinereous : quills dusky : secondaries tipped with white : the two middle tail feathers dusky ; the others cinereous : legs long and black.” The same author mentions another variety, which is called by Pennant the Aberdeen Sandpiper : it has the breast reddish brown, mixed with dusky : belly and vent white : in other respects it is like the Red Sandpiper, of which it is supposed by Latham to be the female, or a young bird. He adds, “ the Red Sandpiper has appeared in great flocks on the coasts of Essex : the Aberdeen, in Scotland. They have also been met with on the coasts of New York, Labrador, and Nootka Sound ; and are also found in Iceland. In summer they frequent the neighbourhood of the Caspian sea ; and also the river Don. It is perpetually running up and down on the sandy banks, picking up insects and small worms, on which it feeds.”

THE DUNLIN.

(*Tringa Alpina*, Lin.—*La Brunette*, Buff.)

THIS bird is nearly of the size of the Judcock, and its bill is of the same shape, but much shorter in proportion to the bulk : it may also be easily distinguished among its associates, the Purres, Dottrels, Sanderlings, &c. by the redness of the upper parts of its plumage ; the ground colour of which, from the beak to the rump, is ferruginous, or rusty red ; but the middle of each feather is black, and the edges of some of them are narrowly fringed with yellowish white, or ash-coloured grey : in some specimens the lesser wing coverts are dingy ash-coloured brown ; in others they are of a clear brown, edged with ferruginous rather deeply : the quills and greater coverts are dark brown, the latter deeply tipped with white, which, together with the bases of the secondaries, forms an oblique bar across the extended wings : the primaries, except the first three, are edged on the exterior webs with white ; their shafts are also mostly white, and each feather is sharply pencilled and distinctly defined with a light co-

lour about the tips : a darkish spot covers each side of the head from the corners of the mouth, and a pale streak passes from the bill over each eye : the throat and fore part of the neck to the breast, are of a yellowish white, mottled with brown spots : a dusky crescent-shaped patch, the feathers of which are narrowly edged with white, covers the breast, the horns pointing towards the thighs :* the belly and vent are white : the middle tail feathers black, edged with ferruginous ; the others pale ash, edged with white : legs and thighs black. The female is rather larger than the male, but in other respects resembles him pretty nearly.

The above description and figure were taken from a pair, sent by the Rev. C. Rudston, of Sandhutton, near York, the 22d of April, 1799 ; and the author has been favoured with numbers of these and others of the same genus, by the Rev. H. Cotes, vicar of Bedlington ; not two of which were exactly alike, probably owing to the difference of age or sex.

* In some specimens, supposed to be female, this patch was wanting.

THE PURRE.

(*Tringa Cinclus*, Lin.—*L'Alouette de Mer*, Buff.)

IN the north of England these birds are called Stints, in other parts, the Least Snipe, Ox-Bird, Ox-Eye, Bull's-Eye, Sea-Lark, and Wagtail: they generally measure about seven inches and a half in length, and in breadth about fourteen; but sometimes they weigh and measure rather more. The bill is black, grooved on the sides of the upper mandible, and about an inch and a quarter in length: tongue of nearly the same length, sharp and hard at the point: a whitish line runs from the brow over each eye, and a brownish one from the sides of the mouth to the eyes, and over the cheeks: the fore part of the neck is pale ash colour, mottled with brown: the head, hinder part of the neck, upper part of the back, and the scapulars, are brownish ash colour, but the middle of the feathers on these parts is dark brown; hence there is a more or less mottled and streaked appearance in different birds. The scapular feathers, next the back, are deep brown, edged with bright ferruginous; tertials,

rump, and tail coverts nearly the same : bastard wing, primary and secondary quills, deep brown : lesser coverts brown, edged with yellowish white : greater coverts of nearly the same colour, but tipped with white : the throat, breast, belly, and vent, white : the two middle feathers of the tail are dusky ; the rest ash-coloured : legs, thighs, and toes black, inclining to green. The female has not the bright ferruginous-edged feathers on the upper scapulars, and her whole plumage is more uniformly of a brownish ash colour, mixed with grey.

The Purre, with others of the same genus, appears in great numbers on the sea-shores, in various parts of Great Britain, during the winter season : they run nimbly near the edges of the flowing and retiring waves, and are almost perpetually wagging their tails, whilst they are at the same time busily employed in picking up their food, which consists chiefly of small worms and insects. On taking flight, they give a kind of scream, and skim along near the surface of the water with great rapidity, as well as with great regularity : they do not fly directly forward, but perform their evolutions in large semicircles, alternately in their sweep approaching the shore and the sea, and the curvature of their course is pointed out by the flock's appearing suddenly and alternately in a dark or in a snowy white colour, as their backs or their bellies are turned to or from the spectator.*

The Purre leaves this country in the spring, but whi-

* It is somewhat remarkable that birds of different species, such as the Ring-Dotterel, Sanderling, &c. which associate with the Purre, Dunlin, &c. should understand the signal, which, from their wheeling about altogether with such promptitude and good order, it would appear is given to the whole flock.

ther it retires to breed is not yet known. It is said to be widely dispersed over both Europe and America.

By the kindness of his friends the author has been furnished with many of these birds; and on the most minute inspection, as has before been noticed in respect of others of this genus, they all differed in a greater or less degree from each other.*

* In a variety of this species, obligingly presented by George Strickland, Esq. of Ripon, the bill was bent a little downward; and the fore part of the neck and the breast were of a pale reddish buff colour: in other respects it did not differ materially.

There is reason to suspect that some ornithologists have denominated this bird the Dwarf Curlew; and probably the *Cincle*, or *L'Alouette de Mer*, of Buffon, and the variety of the Purre, described by Latham, only differ from the specimen whence the above drawing was taken, in age or sex.

THE LITTLE STINT.

LITTLE SANDPIPER, OR LEAST SNIPE.

(*Tringa pusilla*, Lin.—*La petite Alouette de Mer*, Brisson.)

THIS bird, the least of the Sandpiper tribe, in its figure and plumage nearly resembles the last two kinds. It weighs twelve pennyweights troy, and measures in length, extended, from the point of the beak to the end of the tail, nearly six inches; from tip to tip of its wings, about eleven inches and a half; and the bill, to the corners of the mouth, is five-eighths of an inch. The feathers on the crown of the head are black, edged with rust colour: it is marked, like most of the genus, by a light streak over each eye, and a darkish spot below and before them: the throat, fore part of the neck, and belly are white; and the breast is tinged with pale reddish yellow: the shoulders and scapulars are black, edged with white on the exterior webs of each feather, and on the interior with rust colour: back and tail dusky: legs slender, and nearly black.

This figure and description were taken from a bird shot by Robert Pearson, Esq. of Newcastle, on the 10th of September, 1801, the only one the author has seen. It will be remarked that it differs from Pennant and Latham's descriptions, simply in the feathers on the upper parts not being edged with black and pale rusty brown.

THE TURNSTONE.

SEA DOTTEREL, OR HEBRIDAL SANDPIPER.

(*Tringa interpres*, Lin.—*Le Coulon-chaud*, Buff.)

THIS is a plump-made, and prettily variegated bird, and measures about eight inches and a quarter in length. The bill is black, straight, strong, and not more than an inch in length : the ground colour of the head and neck is white, with small spots on the crown and hinder parts ; a black stroke crosses the forehead to the eyes : the auriculars are formed by a patch of the same colour, which,

pointing forward to the corners of the mouth, and falling down, is spread over the sides of the breast, whence ascends another branch, which, like a band, goes about the lower part of the neck behind.* The back, scapulars, and tertials are black, edged with rusty red : lesser coverts of the wings cinereous brown ; greater coverts black, edged with ferruginous, and tipped with white : primary and secondary quills black, the latter white at the ends : the rump and tail coverts are white, crossed with a black bar : tail black, tipped with white : the fore part of the breast, belly and vent white : thighs feathered nearly to the knees : legs and feet red.

* In some specimens the lower part of the neck is white.

THE TURNSTONE.

(*Tringa morinella*, Lin.—*Le Coulon-chaud cendré*, Buff.)

THIS bird is like the preceding species in its size and shape. The bill is short, strong, thick at the base, and of a dark horn-colour, tinged with red : the crown and hinder part of the head are dusky, edged with greyish brown ; the fore part, from the eyes to the bill, pale brown ; a curved patch or band of the latter colour bounds the lower part of the neck, points forward, and falls down towards the points of the wings ; between this band and the head, is a demi-ring of brownish black, which nearly surrounds the neck, a branch from which strikes upwards to the corners of the mouth, and another falls down, forming a kind of inverted gorget on the fore part of the neck, and sides of the breast : the colour of the throat is white, which tapers to a point on the fore part of the neck : the upper parts of the plumage are dusky, edged with rusty or brownish red ; but some of the scapulars

next to the wings are partly edged with white: the tertials are long, and deeply edged and tipped with a fine pale rufous brown: the ridge of the wings and bastard quills are brownish black; the lesser coverts adjoining the ridge, white: primaries and secondaries, black,—the bases of the former, and tips of the latter, white; the greater coverts are also deeply tipped with white, which, when the wing is extended, forms a bar quite across it: the under parts of the plumage, the back, and tail coverts are white, excepting a black patch which crosses the rump. The tail consists of twelve black feathers, tipped with white, except the two middle ones, which are entirely black: the legs and toes are short, and of an orange red. The male excels the female in the beauty of his plumage; her pyebald marks are not so distinct, and her colours are uniformly more dull and confused.

These birds frequent the sea-shores in various parts of Great Britain, and have obtained their name from their manner of turning over small stones in quest of their prey, which lies concealed under them.

This species of Turnstone is chiefly confined to the northern, as is the former to the southern parts of Great Britain.

THE WATER HEN.

COMMON GALINULE, OR MOOR HEN.

(Fulica chloropus, Lin.—La Poule d'Eau, Buff.)

THE weight of this bird varies from ten and a half to fifteen ounces : the length from the tip of the beak to the end of the tail is about fourteen inches, the breadth twenty-two. The bill is rather more than an inch long, of a greenish yellow at the tip, and reddish towards the base, whence a singular kind of horny or membraneous substance shields the forehead as far as the eyes : this appendage to the bill is as red as sealing-wax in the breeding season ; at other times it varies or fades into a white colour. The head is small and black, except a white spot under each eye, the irides of which are red : all the upper parts of the plumage are of a dark shining olive green, inclining to brown : the under parts are of a dark hoary

lead colour : vent feathers black ; those on the belly and the thighs tipped with dirty white : the long loose feathers on the sides, which hang over the upper part of the thighs, are black, streaked with white : the ridge of the wing, outside feathers of the tail, and those underneath, are white : the upper bare part of the thighs is red ; from the knees to the toes, the colours are different shades, from pale yellow to deep green : the toes are very long, the middle one measuring, to the end of the nail, nearly three inches ; their under sides are broad, being furnished with membranous edgings their whole length on each side, by which the bird is enabled to swim, and easily run over the surface of the slimy mud by the sides of the waters, where it frequents.

The body of the Water Hen is long and compressed at the sides, and the legs are placed far behind ; its feathers are thickly set, or compact, and are bedded upon down. Like the Water Rail and Water Crake, it lives concealed, during the day, among reeds and willows, by the sides of rivers or rivulets, which it prefers to bogs and stagnant pools : like those birds, it can run over the surface of such waters as are thickly covered with weeds, and it dives and hides itself with equal ease : like the Water Crake, it also flirts up its tail when running, and flies with its legs hanging down, but is a better swimmer. In the evenings, it creeps, runs, and skulks by the margins of the waters, among the roots of the bushes, osiers, and long loose herbage which over-hang the banks, in quest of its food, which consists of water insects, small fishes, worms, aquatic plants and seeds. It is likewise granivorous, and, if killed in September or October, after having had the advantage of a neighbouring stubble, its flesh is very good.

The female makes her nest of a large quantity of withered reeds and rushes, closely interwoven, and is particularly careful to have it placed in a most retired spot, close by the brink of the water; and it is said, she never quits it without covering her eggs with the leaves of the surrounding herbage. Pennant and Latham say, she builds her nest upon some low stump of a tree, or shrub, by the water's side: no doubt she may sometimes vary the place of her nest, according as particular circumstances may command, but she generally prefers the other mode of building it. She lays six or seven eggs at a time, and commonly has two hatchings in a season. The eggs are nearly two inches in length, and are irregularly and thinly marked with rust-coloured spots on a yellowish white ground. The young brood remain but a short time in the nest, under the nurturing care of the mother; but as soon as they are able to crawl out, they take to the water, and shift for themselves.

Although the Water Hen is no where very numerous, yet one species or other of them is met with in almost every country in the known world. It is not yet ascertained whether they ever migrate from this to other countries, but it is well known that they make partial flittings from one district to another, and are found in the cold mountainous tracts in summer, and in lower and warmer situations in winter.

On examination of several specimens of this bird, in full feather, they were found, like most birds of plain plumage, very little different from each other.

OF THE COOT.

BILL strong, thick, sloping to a point ; the base of the upper mandible rising far up into the forehead : both mandibles of equal length : nostrils inclining to oval, narrow, short : body compressed : wings and tail short : toes long, furnished with broad scalloped membranes between each joint, on each side ; the inner toe has two, the middle three, and the outer four scallops : and the hinder toe, one plain membrane adhering to it its whole length.

The Coot is met with in various parts of Europe, Asia, and America ; its flesh is of a strong *marshy* taste ; for which, by some people, it is much liked ; while others, for the same reason, hold it in little estimation.

THE COOT,

OR, BALD COOT.

(*Fulica atra*, Lin.—*La Foulque, ou Morrelle*, Buff.)

THIS bird generally weighs, when in full condition, about twenty-eight ounces, and measures fifteen inches in length. The bill is of a greenish white colour, more than an inch and a quarter long: a callous white membrane, like that of the Water Hen, but larger, is spread over the forehead, which also, as in that bird, changes its colour to a pale red in the breeding season: irides red: the upper parts of its plumage are black, except the outer edges of the wings, and a spot under each eye, which are white: the under parts are of a hoary dark ash or lead colour. The skin is cloathed with a thick down, and covered with close fine feathers: the thighs are placed far behind, are fleshy and strong, bare, and yellow above the knees: the legs and toes are commonly of a yellowish green, but sometimes of a lead colour.

The Common Coot has so many traits in its character, and so many features in its general appearance like the Rails and Water Hens, that to place it after them, seems a natural and easy gradation : Linnæus and other ornithologists, however, describe it as of a genus distinct from those birds, and from the waders in general, on account of its being fin-footed, and its constant attachment to the waters, which, indeed, it seldom quits. With it naturalists begin the numerous tribe of swimmers, and rank it among those that are the most completely dependent upon the watery element for their support : it swims and dives with as much ease as almost any of them ; and also, like those which seldom venture upon land, it is a bad traveller, and may be said not to walk, but to splash and waddle between one pool and another, with a laboured, ill-balanced, and awkward gait.

These birds, like those of the preceding kinds, skulk and hide themselves, during the day, among rushes, sedges, and weeds, which grow abundantly in the loughs and ponds, where they take up their constant abode : they rarely venture abroad, except in the dusk, and in the night, in quest of their food, which consists of the herbage, seeds, insects, and the slippery inhabitants of stagnant waters. It seldom happens that the sportsman and his dog can force the Coot to spring from its retreat ; for it will, in a manner, bury itself in the mud rather than take wing, and when it is very closely pursued, and compelled to rise, it does this with much *flustering* and apparent difficulty.

This species is met with in Great Britain, at all seasons of the year, and it is generally believed that it does not migrate to other countries, but changes its stations, and

removes in the autumn from the lesser pools or loughs, where the young have been reared, to the larger lakes, where flocks assemble in the winter. The female commonly builds her nest in a bush of rushes, surrounded by the water;* it is composed of a great quantity of coarse dried weeds, well matted together, and lined within with softer and finer grasses: she lays from twelve to fifteen eggs at a time, and commonly hatches twice in a season: her eggs are about the size of those of a pullet, and are of a pale brownish white colour, sprinkled with numerous small dark spots, which, at the thicker end, seem as if they had run into each other, and formed bigger blotches.

As soon as the young quit the shell, they plunge into the water, dive, and swim about with great ease; but they still gather together about the mother, and take shelter under her wings, and do not entirely leave her for some time. They are at first covered with sooty-coloured down, and are of a shapeless appearance: while they are in this state, and before they have learned, by experience, to shun their foes, the Kite, Moor Buzzard, and others of the Hawk tribe, make dreadful havoc among them;† and this, notwithstanding the numerous brood, may account for the scarcity of the species.

* A Bald Coot built her nest in Sir William Middleton's lake, at Belsay, Northumberland, among the rushes, which were afterwards loosened by the wind, and, of course, the nest was driven about, and floated upon the surface of the water, in every direction; notwithstanding which, the female continued to sit as usual, and brought out her young upon her moveable habitation.

† The Pike is also the indiscriminate devourer of the young of all these water birds.

THE GREATER COOT.

(*Fulica atterima*, Lin.—*La Grande Foulque*, ou la
Macroule, Buff.)

“ THIS is of a larger size than the last, but differs not in the colour of the plumage, except that it is blacker. *Brisson* distinguishes the two by the colour of the bare part of the forehead, which is in this white: and the garters, which are of a deep red.* This bird is said to be found in *Lancashire* and *Scotland*. It should seem to be a mere variety of the former, did not authors join in advancing the contrary. They are more plentiful on the continent, being found in *Russia* and the western part of *Siberia* very common; and are also in plenty at *Sologne* and the neighbouring parts, where they call it *Judelle*. The people eat them on *maigre days*, and the flesh is much esteemed.” *Latham*.

* “ This can be no distinction, as birds differ in the colour of these parts according to the season.” *Latham*.

OF THE PHALAROPE.

BILL straight and slender ; nostrils minute ; body and legs like the Sandpiper ; toes furnished with scalloped membranes.

THE RED PHALAROPE.

(*Tringa hyperborea*, Lin.—*Le Phalarope cendre*, Buff.)

THE bill is black, slender, straight, about an inch long, and bent a little downwards at the tip. A dusky stripe passes through the eyes to the back part of the head, where it is joined to a reddish one above it, which falls down on the sides of the neck : the chin and throat are white ; the top of the head, hinder part of the neck, breast, and wing coverts of a lead colour, darkest on the breast : the back and scapulars are the same, but striped with yellowish rusty edges : the greater coverts are crossed with a white stripe ; the quills dusky : the tail coverts are barred with black and white : tail short, and of a cinereous colour : belly white : legs black.

This species is rarely met with in England ; but it is said to be pretty common on the continent. It is, however, a native of the arctic regions, and only migrates southward to shun the long dreary freezing period of the winter months. In summer it returns to breed and rear its young, and has been met with by voyagers and travellers in Hudson's Bay, Greenland, Spitzbergen, &c. It is seen in Greenland in April, and is said to leave it in September.

THE GREY PHALAROPE.

COOT-FOOTED TRINGA, OR SCALLOP-TOED SANDPIPER.

(*Tringa Lobata*, Lin.—*Le Phalarope à festons dentiles*, Buff.)

The bill of this bird is nearly an inch long : the upper mandible is of a dusky horn colour, grooved on each side, and flattened near the tip ; the under one is orange towards the base. The eyes are placed high in the head ; there is a dark patch underneath each, and the same on the hinder part of the head and neck. The shoulder and scapular feathers are of a fine lead colour, edged with white : fore part of the head, throat, neck, and breast, white : the belly is also white, but slightly dashed with pale rust colour : the greater coverts are broadly tipped with white, which forms an oblique bar across the wings, when closed : some of the first and secondary quills are narrowly edged with white : on the middle of the back the feathers are brown, edged with bright rust colour : on the rump there are several feathers of the same colour, but mixed with others of white, rufous, and lemon.

The wings are long, and, when closed, reach beyond the tail : the primary quills are dusky, the lower part of their inner sides white ; secondaries tipped with white : tail dusky, edged with ash colour : legs black. The scalloped membranes on its toes differ from those of the Red Phalarope, in being finely serrated on their edges.

This curious and pretty bird, like the preceding, is a native of the northern regions of Europe, Asia, and America, and migrates southward in the winter. It has seldom been met with in any part of the British isles. Ray, however, saw one at Brignal, in Yorkshire ; and Mr Penant mentions one which was shot in the same county ; Mr Tunstall another, shot at Staveley, in Derbyshire ;—and the specimen from which this drawing and description were taken, was shot near the city of Chester, by Lieutenant-Colonel Dalton, of the 4th regiment of dragoons, on the 14th of October, 1800.

OF THE GREBES.

THE bills of this genus are compressed on the sides, and though not large, are firm and strong, straight and sharp-pointed : nostrils linear : a bare space between the bill and the eyes : tongue slightly cloven at the end : body depressed : feathers thickly set, compact, very smooth and glossy : wings short ; scapulars long ; no tail : legs placed far behind, much compressed, or flattened on the sides, and serrated behind with a double row of notches : toes furnished on each side with membranes ; the inner toes broader than the outer ; the nails broad and flat.

This genus is ranked by Ray and Linnæus with the Diver and Guillemot ; but as the Grebes differ materially from those birds, Brisson, Pennant, and Latham have separated them.

The Grebes are almost continually upon the water, where they are remarkable for their agility : at sea they seem to sport with the waves, through which they dart with the greatest ease, and, in swimming, slide along, as it were without any apparent effort, upon the surface, with wonderful velocity ; they also dive to a great depth in pursuit of their prey. They frequent fresh water lakes and inlets of rivers, as well as the ocean, to which they are obliged to resort in severe seasons, when the former are bound up by the ice. No cold or damp can penetrate their thick close plumage, which looks as if it were glazed on the surface, and by which they are enabled, while they have open water, to brave the rigours of the coldest winter. They can take wing from the water, or drop from an eminence, and fly with great swift-

ness to a considerable distance ; but when they happen to alight on the land, are very helpless, for they cannot either rise from the flat surface of the ground, or make much progress in walking upon it. On shore they sit with the body erect, commonly upon the whole length of their legs, and, in attempting to regain the water, they awkwardly waddle forward in the same position ; and, if by any interruption, they happen to fall on the belly, they sprawl with their feet, and flap their short wings as if they were wounded, and may easily be taken by the hand, for they can make no other defence than by striking violently with their sharp-pointed beak. They live upon fish, and, it is said, also upon fresh-water roots and seaweeds. They are generally very fat and heavy in proportion to their size.

The females generally build their nests in the holes of the rocky precipices which overhang the sea shores ; and those which breed on lakes, make theirs of withered reeds and rushes, &c. and fix it among the growing stalks of a tuft or bush of such like herbage, close by the water's edge. They lay from two to four eggs at one hatching.

The skins of these birds are dressed with the feathers on, and made into warm beautiful tippets and muffs : the under part only is used for this purpose ; and a skin of one of the species sells as high as fourteen shillings.

THE GREAT-CRESTED GREBE.

GREATER-CRESTED DOUCKER, CARGOOSE, ASH-COLOUR-
ED LOON, OR GAUNT.

(*Colymbus cristatus*, Lin.—*Le Grébe huppé*, Buff.)

THIS bird is the largest of the Grebes, weighing about two pounds and a half, and measuring twenty-one inches in length, and thirty in breadth. The bill is about two inches and a quarter long, dark at the tip, and red at the base : the bare stripe, or lore, between the bill and the eyes, is in the breeding season red, but afterwards changes to dusky : irides, fine pale crimson. The head, in adult males, is furnished with a great quantity of feathers, which form a kind of ruff, surrounding the upper part of

the neck ; those on each side of the head, behind, are longer than the rest, and stand out like ears : this ruff is of a bright ferruginous colour, edged on the under side with black. The upper parts of the plumage are of a sooty or mouse-coloured brown ; the under parts of a glossy or silvery white : the inner ridge of the wing is white ; the secondaries of the same colour, forming an oblique bar across the wings, when closed : the outside of the legs is dusky, the inside and toes of a pale green.

This species is common in the fens and lakes in various parts of England, where they breed and rear their young. The female conceals her nest among the flags and reeds which grow in the water, upon which it is said to float, and that she hatches her eggs amidst the moisture which oozes through it. It is made of various kinds of dried fibres, stalks and leaves of water plants, and (Pennant says) of the roots of bugbane, stalks of water-lily, pond-weed, and water-violet ; and he asserts, that when it happens to be blown from among the reeds, it floats about upon the surface of the open water.

These birds are met with in almost every lake in the northern parts of Europe, as far as Iceland, and southward to the Mediterranean ; they are also found in various parts of America.

THE TIPPET GREBE.

GREATER DOBCHICK, OR GREATER LOON.

(*Colymbus urinator*, Lin.—*La Grebe*, Buff.)

THIS bird differs from the last only in being somewhat less, in having its neck, in most specimens, striped downward on the sides with narrow lines of dusky and white, and in having no crest.

Modern ornithologists begin to suspect that the Tippet Grebe is the female of the Great-crested Grebe, or a young bird of that species. Latham says, "It is with some reluctance that we pen our doubts concerning the identity of this, as a species, at least as being distinct from the Great crested Grebe, in contradiction to what former authors have recorded on the subject. It is certain that the last-named bird varies exceedingly at different periods of life; and we are likewise as certain that the birds which have been pointed out to us as the Geneva Grebes, have been no other than young ones of the Great-crested, not having yet attained the crest; and whoever will com-

pare Brisson's three figures of the birds in question, will find (the crest excepted) that they all exactly coincide, allowing for their different periods of age. We have been further led into this opinion from the circumstance of a large flock of them, which appeared in various parts of the shores of the Thames, from Gravesend to Greenwich, last winter, many of which were killed, and came under our inspection : among them we found the greatest variety about the head, from being perfectly without a crest, to the most complete one, with all the intermediate stages above-mentioned."

In the progress of this work, the author has been favoured, by sporting friends, with several of these birds, which differed from each other in the manner described by Mr Latham, and induced him to adopt the opinion of that gentlemen concerning them.

THE EARED GREBE.

OR EARED DOBCHICK.

(*Colymbus auritus*, Lin.—*Le petit Grebe huppé*, Buff.)

THIS bird measures about twelve inches in length, and twenty-two from tip to tip of the wings. The bill is black, inclining to red towards the base, rather slender, nearly an inch long, and slightly bent upwards at the point : lore and irides red : the head is thickly set and enlarged with feathers of a sooty black colour, except two large, loose and spreading orange-coloured tufts, which take their rise behind each eye, flow backward, and nearly meet at their tips : the neck and upper parts of the plumage are black ; the under parts of a glossy white : the sides a rusty chesnut colour : legs greenish black.

The male and female are nearly alike, only the latter is not furnished or puffed up about the head with such a quantity of feathers.

This species is not numerous in the British Isles. Pennant says they inhabit and breed in the fens near Spalding, in Lincolnshire, and that the female makes a nest not unlike that of the Crested Grebe, and lays four or five small white eggs. The Eared Grebe is found in the northern regions of Europe, as far as Iceland, and is also met with in southern climates. The circumnavigator Bougainville says it is called the "Diver with Spectacles" in the Falkland Islands.

THE DUSKY GREBE.

OR BLACK AND WHITE DOBCHICK.

(Nigricans, —. La petite Grebe, Buff.)

THIS species measures about an inch less in length, and two in breadth, than the last. The bill is more than an inch long, and of a pale blue colour, with reddish edges : lore and orbits red : irides bright yellow : the upper part of the head, hinder part of the neck, scapulars, and rump, are of a dark sooty, or a mouse-coloured brown : the feathers on the back are nearly of the same colour, but glossy, and with greyish edges : the ridge of the wings and the secondary quills are white ; the rest of the wing dusky. There is a pale spot before each eye : the cheeks and throat are white : the fore part of the neck is light brown ; and the breast and belly are white and glossy,

like satin: the thighs and vent are covered with dirty white downy feathers: the legs are white behind, dusky on the outer sides, and pale blue on the inner sides and shins: the toes and webbed membranes are also blue on the upper sides, and dark underneath.

This description was taken from a very perfect bird, caught on Sand Hutton Car, near York, on the 28th of January, 1799, by the Rev. C. Rudston: other specimens of this species have differed in the shades of their plumage and colour of the bill: in some the upper mandible is yellow, from the nostrils to the corners of the mouth, and the under one entirely of that colour.

THE RED-NECKED GREBE.

(*Colymbus subcristatus*, ——. *Le Jougris*, Buff.)

THIS bird measures from the bill to the rump seventeen inches, to the end of the toes twenty-two, and weighs eighteen ounces and three-quarters. The bill is about two inches long, dusky or horn-coloured on the ridge and tip, and on the sides of it, towards the corners of the mouth, of a reddish yellow; the under side of the lower mandible is also of the latter colour: lore dusky: irides dark hazel: the cheeks and throat are of a dirty or greyish

white : the upper part of the head is black, with a greyish cast ; and the feathers are lengthened on each side on a line with the eyes backward, so as to look like a pair of rounded ears ; these it can raise or depress at pleasure : the fore part and sides of the neck are of a dingy brown, mixed with feathers of a bright rusty red : the upper parts of the plumage are of a darkish mouse-coloured brown, lightest on the wing coverts, deepest on the scapulars and rump, and edged with grey on the shoulders ; the under parts are of a glossy white, like satin, mottled with indistinct brownish spots : primary quills brownish tawny, with dark-coloured tips ; secondaries white : outer sides of the legs dusky, inner sides sallow green ; webs of the outer toes flesh colour, middle ones redder, and the inner ones orange.

Pennant supposes the Red-necked Grebe to be only a variety of the Great-crested Grebe ; but Latham, who had been furnished with several specimens, is of opinion that it is a distinct species. He describes the adult males, in full feather, as having their necks of an uniform reddish chesnut ; and the younger birds, when they have not obtained their full plumage, to be only partially spotted on their necks with that colour.

The foregoing figure and description were taken from a specimen, the gift of George Silvertop, of Minsteracres, Northumberland, Esq. January 16th, 1802.

THE LITTLE GREBE.

DOBCHICK, SMALL DOUCKER, DIPPER, OR DIDAPPER.

(*Colymbus minutus*, Lin.—*Le Caflagneux*, Buff.)

THIS is the least of the Grebe tribe, weighing only between six and seven ounces, and measuring to the rump ten inches, to the end of the toes thirteen, and about sixteen from tip to tip of the wings. The bill is scarcely an inch long, of a dusky reddish colour: irides hazel; the head is thickly cloathed with a downy kind of soft feathers, which it can puff up to a great size, or lay down flat at pleasure: the cheeks are mostly of a bay colour, fading towards the chin and throat into a yellowish white. The neck, breast, and all the upper parts of the plumage, are of a brown or chesnut colour, tinged with red, lightest on the rump: the belly is white, clouded with ash colour, mixed with red: thighs and vent grey: greater quills dark brown; the lesser white on their inner webs: legs dirty olive green.

The little Grebe is a true aquatic, for it seldom quits the water, nor ventures beyond the sedgy margins of the lake where it has taken up its abode. It is a most excellent diver, and can remain a long while under water, in pursuit of its prey, or to shun danger. It is found in al-

most every lake, and sometimes upon rivers, but seldom goes out to sea. Its food is of the same kind, and its habits much the same as those of the other Grebes.

Ornithologists and sportsmen describe the nest of this bird as being of a large size, and composed of a very great quantity of grass and water plants, at least a foot in thickness, and so placed in the water, that the female hatches her eggs amidst the continual wet, in which they were first laid : and it is conjectured that the natural warmth of her body occasions a fermentation of the herbage, which greatly aids the incubation. She lays from four to six eggs, of a yellowish dull white colour, and is said to cover up, or hide them, with the surrounding leaves, every time she has occasion to stir abroad.

This species of the Grebe is an inhabitant of both Europe and America. In several specimens furnished by the author's sporting friends, the difference was very trifling, except that the plumage of some was more dashed with red than that of others.

THE BLACK-CHIN GREBE.

THIS bird is described as being larger than the last. "Chin black : fore part of the neck ferruginous ; hinder part mixed with dusky : belly cinereous and silver intermixed. Inhabits Tiree, one of the Hebrides." *Latham.*

OF THE AVOSET.

BILL long, slender, very thin, depressed, and bending considerably upwards: nostrils narrow and pervious: tongue short: legs very long: feet palmated; the webs deeply indented from the nails towards their middle; back toe placed high, and very small.

The Avoset is migratory, and is met with in temperate climates, on the shores in various parts of Europe.

THE AVOSET.

SCOOPER, CROOKED-BILL, OR YELPER.

(*Recurvirostra Avosetta*, Lin.—*L'Avocette*, Buff.)

THIS bird, which is the only British species of Avoset, does not much exceed the Lapwing in the bulk of its body ; but, from the length of its legs, it is much taller.

It measures about eighteen inches in length, to the end of the toes twenty-two, and from tip to tip thirty, and weighs from twelve to fourteen ounces. The bill is black, about three inches and a half long, and of a singular conformation, looking not unlike flexible flat pieces of whalebone, curved upwards to the tip: the irides are hazel: the head round, black on the upper part to below the nape of the neck : above and beneath each eye, in most specimens, there are small white spots ; but in the one from which the above figure was taken, a streak of that colour passed over each eye towards the hinder part of

the head. The thighs are naked, and, as well as the legs and feet, are of a fine pale blue colour. The whole plumage of the Avoset is white, intersected with black; and, like most of the variegated or pyebald birds, the patches of these colours are not placed exactly the same in every individual; therefore, as the bird cannot be mistaken, a more minute description is unnecessary.

These birds are common in the winter about the lakes, mouths of rivers, and marshes, in the southern parts of England; and they assemble in large flocks on the fens, in the breeding season. When the female is frightened off her nest, she counterfeits lameness; and when a flock is disturbed, they fly with their necks stretched out, and their legs extended behind, over the head of the spectator, much in the same way as the Peewit or Lapwing, making a shrill noise, and uttering a yelping cry of *twit, twit*, all the time. The places where they have been feeding may be traced out by the semicircular marks left in the mud or sand by their bills in scooping out their food, which consists of spawn, worms, insects, &c. Latham says, "they lay two eggs, the size of those of a Pigeon, an inch and three quarters in length, of a cinereous grey, singularly marked with deep brownish dark patches, of irregular sizes and shapes, besides some under markings of a dusky hue." They keep near the shore, wading about, up to the belly in the water, and sometimes swimming. In all their motions they are smart, lively, and volatile, and do not remain long stationary in one spot.

OF THE AUK, OR PENGUIN.

BILL strong, thick, convex, compressed on the sides : nostrils linear, placed parallel to the edge of the bill : tongue almost as long as the bill : toes, three in number, all placed forwards.

THE GREAT AUK.

NORTHERN PENGUIN, OR GAIR-FOWL.

(*Alca impennis*, Lin.—*Le Grand Pingoin*, Buff.)

THE length of this bird, to the end of the toes, is three feet. The bill is black, and four inches and a quarter long; both mandibles are crossed obliquely with several ridges and furrows, which meet at the edges. Two oval-shaped white spots occupy nearly the whole space between the bill and the eyes: the head, back part of the neck, and all the upper parts of the body and wings are covered with short, soft, glossy black feathers, excepting a white stroke across the wings, formed by the tips of the lesser

quills : the whole under side of the body is white : the wings are very short, not exceeding four inches and a quarter, from the tips of the longest quill feathers to the first joint : legs black, short, and placed near the vent.

From the inability of these birds to fly or walk, they are seldom seen out of the water, and it is remarked by seamen, that they never wander beyond soundings. The female lays only one egg, which she deposits and hatches on a ledge close to the sea-mark : it is of a very large size, being about six inches in length, of a white colour, streaked with lines of a purple cast, and blotched with dark rusty spots at the thicker end.

This species is not numerous any where : it inhabits Norway, Iceland, the Ferro Isles, Greenland, and other cold regions of the north, but is seldom seen on the British shores.

The Gair-fowl described by Martin, in his voyage to St Kilda, and account of that island, published in 1698, differs in some particulars from the foregoing : he says, “ it is larger than the Solan Goose, black, red about the eyes, has a large white spot under each eye, a long broad bill ; stands erect, has short wings, cannot fly ; lays one egg, twice the size of that of the Solan Goose, variously speckled with black, green, and dusky spots.”

THE RAZOR-BILL.

AUK, MURRE, FALK, MARROT, OR SCOUT.

(*Alca torda*, Lin.—*Le Pingoin*, Buff.)

THE wings of this species are more furnished with feathers, and longer in proportion to the size of the bird, than those of the last ; they measure, extended, about twenty-seven inches : the length of the bird, from bill to tail, is eighteen. The bill is black, strong, curved towards the point, and sharply edged ; the upper mandible is crossed with four transverse grooves, and the under one with three, the broadest of which is white, and forms a band across them both : the inside of the mouth is yellow : the base of the bill is covered with feathers a great way forward, upon which, on each side, is placed a singular, narrow, white streak, which passes to the corner of the eye ; another white stripe, or bar, formed by the tips and lesser quills, crosses each wing obliquely : the upper part of the head, hinder part of the neck, back, rump, and tail coverts are of a soft glossy black, and look something like velvet : the cheeks, chin, and throat are

of a dull sooty dark brown : ridge and pinions of the wings, light brown : coverts and quills dusky : legs black.

These birds associate with the Guillemots, and also breed in the same places. About the beginning of May they take possession of the highest impending rocks, for the purpose of incubation, and upon the ledges of these rocks they congregate in great numbers, sitting closely together, tier above tier, and row above row : there they deposit their single large egg on the bare rock ; and notwithstanding the numbers of them, which are thus as it were mixed together, yet no confusion takes place, for each bird knows her own egg, and hatches it in that situation.

It has often excited wonder that as the eggs have no nest or bedding to rest upon, they are not rolled off into the sea by gales of wind, or upon being touched by the birds : it is also said, that if they are removed by the human hand, it is impossible, or at least extremely difficult, to replace them in their former steady situation. This is accounted for by some ornithologists, who assert that the egg is fixed to the spot upon which it is first laid, by a glutinous substance with which the shell is covered, and which keeps it firmly in its place until the young is produced. The egg of this Auk is three inches long, of a greenish white colour, irregularly marked with dark spots. They are gathered, with other kinds, in great numbers, by the neighbouring inhabitants, from the rocky promontories in various parts of the British isles, but particularly in the north, where the men who are accustomed to gather these eggs, are let down over the precipices by ropes, which are tied to, or held by, their companions above.

The foregoing figure and description were taken from a specimen in perfect plumage, shot on Jarrow-Slake, near the mouth of the Tyne, in May, by the late Mr Thomas Walton, of Farnacres, to whose memory, for many favours of the same kind, the author feels a large debt of gratitude.

THE BLACK-BILLED AUK.

(*Alca Pica*, Lin.—*Le Petit Pingoin*, Buff.)

LATHAM says, "This weighs eighteen ounces : is in length fifteen inches : breadth twenty-four. The bill is not above half the breadth of the Razor-bill's, and very little curved, perfectly smooth throughout the whole of its surface, except a slight indentation at the base : inside of the mouth of a pale flesh-colour : the top of the head, taking in the eyes, part of the neck, the back, wings, and tail, are black : on the sides of the neck the black comes forward so as almost to meet on the fore part : the sides of the head, throat, fore part of the neck, and all beneath, white : from behind the eye a dusky black mark tends to the hinder part of the head, as in the Lesser Guillemot ; the white on the sides of the head is less pure than that on the under parts : all the secondary quills are tipped with white ; and the primaries are of a deeper black than the others : legs brownish black." Linnæus says the legs are red, but no other author records it. Latham further observes, "This, from its external marks, should appear to be a different species from the Razor-bill, but we are pretty certain it is no other than the young of that bird."

THE PUFFIN.

MULLET, COULTERNEB, SEA-PARROT, POPE, OR
WILLOCK.

(*Alca Arctica*, Lin.—*Le Macareux*, Buff.)

THE Puffin weighs about twelve ounces, and measures twelve inches in length, and twenty one in breadth. Its singular bill looks not unlike a kind of sheath slipped over both mandibles, and, from its appearance, the bird is not improperly named Coulterneb, or Knife-bill. At the base, where it is about an inch and a half in depth, it is rimmed with a white callous border, the two corners of which project above the brow, and below the chin. It is about the same in length, curved towards the point, compressed vertically, very flat, and transversely furrowed on the sides; the half of it adjoining to the head is smooth, and of a fine lead-coloured blue; the other part, to the tip, red: the nostrils are placed in long narrow slits, near the edge of the bill: the corners of the mouth,

when closed are curiously puckered, and form a kind of small star, or rose : the eyes are protected by small callous protuberances, both above and below : the edges of the eye-lids are crimson : irides grey : the chin and cheeks are white, bordered with grey, the latter much puffed up with feathers, which makes the head look large and round. From behind the corner of each eye, the feathers are curiously separated, forming a narrow line, which reaches to the hinder part of the head : the crown of the head, hinder part of the neck, and upper part of the plumage are black, and a collar of the same colour encircles the neck : the under parts are white : the tail consists of sixteen feathers : the legs are reddish orange.

The Puffin, like others of the same genus, takes wing with great difficulty, and walks upon the whole length of the leg and foot, with a wriggling awkward gait. In tempestuous weather it takes shelter in caverns and holes in the nearest rocks, or in those made by the rabbit on the beach, among the *bent* grass, in which it sits dozing, in snug security, till the return of calm weather ; for these birds cannot brave the storm, and it is not uncommon, when they have been overtaken by it, to find them drowned and cast on shore. Various kinds of fish, such as small crabs, shrimps, sprats, and also sea-weeds, are said to be the food upon which they live ; but it is evident, from the structure, great strength, and sharpness of the bill, that they are furnished with powers to crush and pluck out other kinds of shell-fish, which ornithologists have not noticed.

The female makes no nest ; she deposits her single whitish coloured egg upon the bare mould, in a hole dug out and formed in the ground, by her mate and herself.

for that purpose ; or in those that they find ready made by the rabbits, which they easily dislodge. The parent birds are very attentive to their young, which they will defend to the last, by severely biting whatever enemy attempts to molest them, and will suffer themselves to be taken rather than desert them : and yet, notwithstanding this uncommon attachment, when the day of migration comes, the young ones which are not able to fly are left behind, and mostly perish of want, or are destroyed by birds of prey.

The bite of these birds is very severe : one sent to the author in a box covered with netting, caught hold of the finger of a poor man, and brought away the fleshy part, as if it had been cut out with a knife : but they may be tamed, and soon become familiar. They are fed on fish and other animal substances.

These birds are spread over various parts of the northern world, and are met with on almost all the rocky cliffs on the coasts of Britain and Ireland, and on many of the surrounding isles, in immense numbers. They congregate in flocks of a magnitude regulated by the accommodations afforded them at their breeding places, at which they first assemble early in April, but do not settle to prepare for the business of incubation till May. They hatch their young in the beginning of July ; from which time until nearly the middle of August, they are employed in nurturing and rearing their brood : when this is accomplished, the whole associated swarm leaves the place at once, and pursues its route to other regions, more suited to their future exigencies, there to spend the remainder of the varied year.

The foregoing figure and description were taken from

a perfect specimen of an old bird, the present of Mrs Cheney, late Miss Harriot Carr, of Dunston Bank; and on comparing it with several others, it appeared evident that their bills increase in size with their age.

THE LITTLE AUK.

LITTLE BLACK AND WHITE DIVER, GREENLAND DOVE,
OR SEA-TURTLE.

(*Alca alle*, Lin.—*Le petit Guillemot*, Bnff.)

THIS is a plump round-shaped bird, and measures about nine inches in length. The bill is black, short, thick, strong, and convex; it is feathered from the corners of the mouth half way forward towards the point. The crown of the head is flat and black; all the upper parts of the plumage are of the same colour, except a narrow bar of white, formed by the tips of the lesser quills across the wings, and the scapulars, which are streaked

downwards with the same : * the cheeks and under parts are white : legs and toes yellowish ; webs dusky.

These birds are inhabitants of Spitzbergen and Greenland, and are also met with at Newfoundland, where they are called Ice Birds ; but they are rare visitants of the British Isles. That from which the above figure and description were taken, was caught alive on the Durham coast, and was, for a short time, fed with grain.

* Some specimens have a white spot below each eye:

OF THE GUILLEMOT.

THE bills of birds of this genus, though of a slender shape, are firm, strong, and pointed : the upper mandible slightly bending towards the end : base covered with soft short feathers : nostrils lodged in a hollow near the base : tongue slender, almost the length of the bill : thighs placed in the abdomen : no back toe.

The Guillemots appear to be a stupid race of birds : they do not, like many other kinds, become cautious from experience, but suffer themselves repeatedly to be shot at, as if they did not know danger, or care for life ; for notwithstanding they have seen their associates drop at every fire, they still continue to wheel about in the same circle, and to alight again on the same place whence they were first disturbed.

These birds are numerous spread over various parts of the northern world, whence they are driven by the approach of winter to seek more temperate climes. At that season they arrive on the British shores, where they remain until they have reared their young.

THE GUILLEMOT.

WILLOCK, FOOLISH GUILLEMOT, SKOUT, KIDDAW,
SEA-HEN, LAVY, OR STRANY.

(*Colymbus Troile*, Lin.—*Le Guillemot*, Buff.)

THE Guillemot is a plump heavy bird in proportion to its size, weighing about twenty-four ounces, and measuring only seventeen inches in length, and twenty-seven and a half in breadth. The bill is a bluish black colour, about two inches and three-quarters long, from the tip to the corners of the mouth, the inside of which is yellow: both mandibles are slightly notched near their points: irides hazel: from each eye to the hinder part of the head, a narrow line is formed by a singular division of the feathers, which here, as well as on the head and neck, are close and smooth, and of a dull dusty mouse-colour; the back, wings, and tail are nearly the same, but have a lead-coloured cast: the tips of the lesser quills, and the breast, belly, and vent, are white: legs dusky and brown: nails black.

The female lays only one egg, which is large in proportion to her size, being about three inches in length:

they are not all alike; those of one bird being of a whitish ground, and of another, perhaps, pale blue, or pale sea-green, and all of them are curiously and irregularly spotted and streaked with black.

It has been before observed, that these birds associate with and breed in the same places as the Razor-bill, and that they are, in many places, indiscriminately called Willocks.

THE LESSER GUILLEMOT,
OR MARROT.

Ringia.

THIS species weighs about nineteen ounces, and measures in length sixteen inches, and in breadth twenty-six. The bill is shaped like that of the last, and is about two inches and a half long: the stroke formed by the divided feathers behind the eye, is dusky, on a white ground: the cheeks, fore part of the neck and the breast, tips of the secondary quills, and the whole of the under parts, are white, except a few dull spots on the auriculars, and some freckles on the breast: the front and crown of the head, back of the neck, and the whole of the upper parts, are dusky, inclining to lead colour: the legs and feet dusky, blushed with red.

Some naturalists suspect that the Lesser Guillemot is

only the young of the foregoing species ; but this is not yet ascertained, neither is it known where they breed. They, however, seldom associate with the Guillemots that breed on the British shores, which they visit only during the winter season, and almost all of them retire northward in the spring.

The bird from which the above drawing and description were taken, was caught alive at Tynemouth, in the latter end of September, 1801 : the tide had left it in a situation surrounded by rocks, upon the flat sand, from which it could not raise itself to take flight. While the drawing was making, it sat under a table trimming its feathers, and appeared perfectly at ease, and not the least alarmed at the peeping curiosity of the children who surrounded it. When this business was finished, it was taken and set down upon an open part of the shore, where it immediately began to waddle towards the water, with the whole leg and foot extended on the ground ; and as soon as it reached its beloved element, it flapped its wings, darted through the surge, dived, and disappeared.

THE BLACK GUILLEMOT.

GREENLAND DOVE, SEA-TURTLE, OR TYSTE.

(Colymbus Grylle, Lin.—Le petit Guillemot noir, Buff.)

THE length of the Black Guillemot is about fourteen inches, breadth twenty-two, and its weight fourteen ounces. The bill is black, slender shaped, and pointed; the upper mandible slightly bent at the point: the inside of the mouth red. The whole plumage is sleek and glossy, and of a sooty-coloured black, excepting a large patch of white on the coverts of each wing: its feathers appear all unwebbed, and look like silky hair: the legs and feet are red: claws black. In some of this species the whole plumage is black; in others the lesser quills are tipped with white; and all those that remain in the northern climates are said to turn white in winter.

These birds are found in great numbers in the North Sea, in Greenland, Iceland, Spitzbergen, and the Ferro Isles, and when the winter sets in, they migrate southward along the shores of Scotland and England, where some of them remain and breed. The nest is made in the

deep crevices of the rocks which overhang the sea : the eggs are of a grey colour : some ornithologists assert that the female lays only one, others that she lays two. They commonly fly in pairs, and so low that they raise the surface of the sea by the flapping of their narrow wings.

The Greenlanders eat the flesh of this bird, and use its skin for cloathing, and the legs as a bait for their fishing lines. Ray, Albin, Willoughby, and Edwards have named it the Greenland Dove, or Sea Turtle. In the Orkney Islands it is called the Tyste.

The foregoing figure was taken from a drawing presented to the author.

THE SPOTTED GUILLEMOT.

THIS is a variety of the last species, which the author has not seen. It is thus described by Latham :—" In this the plumage is in patches of white and black on the upper parts, and all beneath white. In Brunnich's bird the belly was spotted black and white : he supposed it to be a bird of the first year."

Latham enumerates several other varieties of this genus of birds, but as they have not been observed to visit the British Isles, they do not come within the scope of this work. There are, however, others which are occasionally met with in this country, but whether the differences may not be owing to age or sex, is not yet ascertained. One of these, presented in October, 1802, by the Rev. H. Cotes, of Bedlington, differed from the Lesser Guillemot in its bill's being much shorter, measuring only about an inch and a half on the ridge of the upper mandible, and in having the hinder part of the head surrounded by a continuation of the white feathers which cover the cheeks, but mixed with dusky spots.

OF THE DIVERS.

THE bills are strong, straight, and pointed : the upper mandibles the longest ; the edges of each bending inwards : nostrils linear, the upper part divided by a small cutaneous appendage : tongue long, pointed, and serrated on each side near the base : thighs placed far backward : legs thin and flat, and extended horizontally : the toes, four in number ; the exterior the longest ; the back one small, and joined to the interior by a thin membrane : tail short, consisting of twenty feathers. These birds are broad, flat, and long-bodied, and swim in a squat position on the water. Ornithologists enumerate eight species of this genus, six of which, besides some doubtful varieties, frequent the British shores.

THE GREAT NORTHERN DIVER.

LOON, IMBRIM, OR EMBERGOOSE.

(*Colymbus glacialis*, Lin.—*L'Imbrim*, Buff.)

THE Great Diver weighs about sixteen pounds; measures three feet six inches in length, and four feet eight in breadth. The bill is black, four inches and a half long, and strongly formed: the head is of a deep black, glossed with green and purple reflections: the neck appears as if wrapped obliquely round with a bandage of the same colours as the head; the feathers in the spaces between are white, streaked down the middle with narrow black lines; the sides of the breast are marked in the same manner: the whole of the upper parts are black, spotted with white: the spots on the scapulars are the largest, and of an oblong square shape, placed in rows, two on the end of each feather: the under parts are white: quills and tail black. The female is less than the

male, and her whole upper plumage inclines more to brown. Her under parts are of a dirty white, and the bandages on her neck and the spots on her body are not so distinct.

This species of the Diver seldom visits the British shores, except in very severe winters. In the summer season it inhabits the north of Europe, and the arctic coasts, as far as the river Ob in the Russian dominions, and Hudson's Bay in North America, and is common in the intermediate dreary countries in the same latitudes. They seldom quit the sea, or are seen inland, except at the breeding season, when, for the purposes of ovation and incubation, they repair to the fresh-water lakes in the Ferro Isles, Spitzbergen, Iceland, Greenland, &c. on the shores and small islets of which they make their nests and rear their young. The female is said to lay only two eggs, which are of a dirty white or stone colour : when she quits her nest, she flies very high, and on her return darts down upon it in an oblique direction.

The natives of some of the northern countries dress or tan the skins of these birds, as well as those of several other water-fowls, and make them into caps, pelices, and other warm garments.

The foregoing figure was taken from a stuffed specimen in the Wycliffe museum.

THE IMBER.

GREAT DOUCKER, OR EMBERGOOSE.

(Colymbus Immer, Lin.—Le Grand Plongeon, Buff.)

THE Imber measures from the tip of the beak to the end of the tail nearly three feet, and from tip to tip of the wings three feet eight inches. The bill is four inches and a quarter long, and of a dark horn colour. The upper parts of the plumage are dark brown, each feather on the back and wings edged with light brownish ash: the front and crown of the head, and hinder part of the neck, are slightly broken with spots of the same light brownish ash-colour: the cheeks and sides of the neck, to the breast, are speckled with brown; near to the lower part of the neck the brown colour spreads forward towards the front, which, as well as the throat, is white: the breast and belly are also of a glossy white: vent mottled with brown. The quills and tail are dusky, but the feathers on the latter are edged with dirty white: the legs are of a dark dingy lead colour. The plumage of the female is less distinct in its colours, being nearly of a dull brown on the upper parts, and dull white beneath.

This species is of nearly the same manners and habits as the last: they are both excellent divers and fishers, and are inhabitants of the same northern countries; but this is oftener met with farther southward, towards Scotland and its numerous adjacent isles. It is also spread more abroad in other countries both in Europe, Asia, and America.* Latham describes it as being common in

* A fine specimen was presented by Admiral Byron, when governor of Newfoundland, to Mr Tunstall.

Switzerland, where it is known by the name of Fluder. He says, "it makes its nest among the reeds and flags, and places it in the water; so that it is continually wet, as in some of the Grebe genus. It utters a loud shrill cry." He adds that it is "sometimes taken twenty yards deep under water, viz. with a net or iron hook baited with a fish:" and Buffon also asserts, that "it dives to very great depths, and swims under water to the distance of an hundred paces without ascending to take breath: a portion of air included in its dilated wind-pipe supplies its respiration during this interval."

THE LESSER IMBER.

“ BILL black and horn colour, tinged with blue, three inches long, pointed and slender : nostrils very near the base : tongue pointed : crown of the head, and back of the neck, mouse-colour : irides brown : scapulars, back, rump, tail, and wings, black, edged with grey : quill feathers black : tail very short and rounded. The whole under side of the body, from the throat to the tail, silvery white, except a brown bar which crosses the vent : inner coverts of the wings white : legs remarkably flat, and placed close to the tail ; they are black and grey, with a blue tinge : the feet are very large, webs entire and flesh

colour. Length two feet one inch ; extent of the wings three feet two inches : weight three pounds eight ounces. This bird was shot on Windermere Lake, in Westmorland, in December, 1794."

This work is indebted for the above drawing and description, to Geo. Strickland, Esq. of Ripon, who further adds,—“ As this species of the *Colymbus* much resembles the Imber in the colour of its plumage, I have given it the name of the *Lesser Imber*, as in weight and size it is one-third less. I have not met with any description of it, and the specimen now in my possession is the only one I have seen.”

THE FIRST SPECKLED DIVER.

SPRAT LOON, GREATEST-TAILED DIVER, OR SPECKLED LOON.

(*Colymbus stellatus*, Lin.—*Le petit Plongeon*, Buff.)

THIS species generally weighs about two pounds and a half, and somewhat exceeds two feet in length, and three and a half in breadth. The bill is three inches long, of

a light colour, and has rather a cast upwards : the crown of the head and upper parts of the body are dusky, inclining to grey ; and, excepting the hinder part of the neck, lesser coverts and quills, which are plain, the rest of the plumage is speckled all over with small white spots ; those on the scapulars and middle wing coverts are the largest, and marked more distinctly on the margins of each feather, near to their tips. The fore part of the neck is of an ash colour : cheeks, chin, throat, and under parts, of a glossy white : tail tipped with white : legs and toes dusky ; webs pale.

The natural habits of the Speckled Diver are much the same as those of the kinds before described, but it seems still more to shun the rigours of the north, and remains longer in the temperate climates. In the winter season it keeps its route southward, and is then met with in the Baltic, the German ocean, and on various parts of the British shores. In the spring it retires northward to the lakes of the continent, and the islands within the arctic circle, to breed and rear its young. The female makes her nest in the grass, near the edge of the water, and lays two eggs of a longish oval shape, larger than those of a Hen : they are of a dingy stone colour, spotted with black.

The foregoing figure was done from a stuffed specimen.

THE SECOND SPECKLED DIVER.

THE length of this bird, to the end of the tail, is two feet four inches, and rather more to the end of the longest or outside toe ; the extended wings are three feet four inches, from tip to tip ; and it weighs three pounds and a quarter. The bill, from the tip to the brow, is two inches and an eighth, and a little more than three inches to the corners of the mouth : both mandibles are white, faintly blushed with a livid or purple cast, except on the ridge of the upper one, where it is of a dark horn colour, fading off lighter towards the tip, which is entirely white : the irides are of a clear brown. The head and hinder part of the neck have a hoary dark ash-coloured appearance, at a little distance, but on a nearer view, the feathers on the crown and brow, which are very small, are dark in the middle, and distinctly edged with light grey : those from the nape downwards are larger, but the edges are less defined. The sides of the mouth, about the eyes, also the cheeks and throat, are white, but are partially dulled or freckled by a mixture of numerous small brownish ash-coloured spots : the fore part of the neck is

darkened with closer set and larger spots, inclining more to brown. All the upper parts of the plumage are of a deep or black brown, and except the greater coverts and the quills, are speckled all over with oblong oval white spots, placed on the side of each feather, near the tip. The whole under side of the body is white, but crossed by a brown bar at the vent. The tail is brown, very short, and of a rounded or fan shape : the legs on the insides, down the shins, and on the edges behind, are white : the middle of the webs, the two inner toes, and the terminating joint of the outer one, together with all the nails, are the same : all the other parts of the legs and feet are dusky.

A pair of these birds were shot on the Tyne, at Newcastle, in the month of January, by Mr Pollock. They differed somewhat from the preceding species, but very little, excepting in weight, from each other. This figure and description were taken from the larger bird. The smaller, which probably was the female, weighed only two pounds and a half. Although a particular chapter has been allotted to these birds, the author does not suppose them to be a distinct species from the preceding, which was probably a very old female.

THE RED-THROATED DIVER.

RED-THROATED LOON, OR RAIN GOOSE.

(*Colymbus septentrionalis*, Lin.—*Le Plongeon à gorge rouge*, Buff.)

THIS bird measures three feet five inches in breadth, two feet to the end of the tail, and four inches more to the end of the toes, and weighs nearly three pounds. The bill is dark coloured, and less than that of the Speckled Diver: the irides reddish: the head, chin, and sides of the neck are of a spotless or plain dusty lead-coloured blue: the upper fore part of the neck, to the throat, is of a deep red bay: the hinder part of the neck from the nape towards the shoulders and sides of the breast, is streaked downwards with dusky and white, and formed into curious ridges, by the white edges and tips of the feathers standing outwards. The upper parts of the plumage in some specimens are of a greyish dusky colour, in others of a shining deep brown, and in both thinly sprinkled all over with white spots, which on the coverts and scapulars assume a more streaked or lengthened form: the under parts are white: the legs the same as those of the preceding species. The male and female are nearly alike in their plumage.

This species inhabits the same cold countries as the other Divers, and its manners and habits do not differ from theirs ; but it is of a more lively character, and has a more sprightly appearance than any of the preceding kinds : also, like the rest of the genus, it is driven, in severe winters, from the northern to more southern climes. They breed, and are common in Greenland, Hudson's Bay, Iceland, the Shetland and Orkney Isles, &c. The female makes her nest, which is composed of moss and herbage, lined with a little of her own down, on the very edge of the shore : she lays two eggs, which are nearly of the size of those of a hen, but of a longer shape, and of a dingy bluish white, thinly marked with dusky spots. They live in pairs with inconceivable affection, run swiftly upon the water, dive immediately, but are very awkward upon the land, from which they rise with great difficulty. Their flight, however, when once on the wing, is both strong and swift : they rise to a great height, making at intervals a disagreeable croaking, or a loud howling cry.

THE BLACK-THROATED DIVER.

(*Colymbus Arcticus*, Lin.—*Le Lumme, ou petit Plongeon de la Mer du Nord*, Buff.)

THIS bird is somewhat bigger than the Red-throated Diver, and differs from it in its plumage ; but in every other respect they are very much alike. The fore parts of the head, the throat, and front of the neck, are black, changing in different lights to glossy purple or green : on the sides of the neck this long black patch is bordered by a stripe of black and white oblong spots, pointing downwards, and falling over each side of the breast. The hinder part of the head and neck are ash-coloured : upper parts of the plumage black, marked on the scapu-

lars with square white spots, and on the wing coverts with smaller round ones: the under parts are white: quills dusky: tail black: legs dark, and reddish on the inside.

The Black-throated Diver, like the preceding, is common in all the Arctic regions, and but rarely visits England. It has the same disagreeable cries, which, in both kinds, are believed by the natives of Norway, the Orkney Isles, &c. to forebode heavy rains or bad weather. Their skins are dressed, and made into caps, hoods, &c. and are much esteemed as a covering for the head and breast in the rigorous climates in which these birds are found, the great thickness of the feathers rendering them very fit for that purpose.

By many naturalists it is thought that this differs from the former bird in sex only.*

* A bird supposed to be of this species, was caught in the month of March, in a pool near Dukesfield, Northumberland, and presented to the author, by Mr Thomas Crawhall: it wanted the black patch on the throat; its tail, like the First Grey Speckled Diver's, was tipped with white, and its legs were marked like those of the second. It measured two feet two inches from the bill to the tail.

OF THE TERNS, OR SEA SWALLOWS.

BIRDS of this genus have straight, slender-shaped, and pointed bills : nostrils linear : tongue slender and sharp : their legs are small, the webs deeply scalloped from the toe ends to the middle, and the back toe small : the wings are very long, and the tail forked.* These birds continue long on the wing, and, in their quick and circling evolutions, they rise and sink in the air, or glide along near the surface of the waters, sometimes snapping at the insects in their way, or, suddenly checking their course, darting down upon their finny prey, which they swallow in the ascent, without delaying their progress. Their common residence is the sea-shores, or the mouths of large rivers, whose courses, however, they sometimes traverse nearly to their rise. They also visit loughs and lakes very distant from the ocean, and likewise make excursions a long way out to sea. They congregate in large flocks, but particularly in the breeding season, when they are more than usually restless, wheeling and redoubling their varied flight high in the air, and uttering their loud screams in clamorous confusion. Some of the species are described as breeding on the shores, and depositing their two eggs upon the bare rock ; others lay three or four eggs in a hole made in the dry sand ; and some kinds nestle among the reeds and rushes in the marshy borders of the lakes which they frequent. The young ones keep the nest a good while after they have been hatched, not offering to leave it until their wings have

* In the young of some species, the tails are nearly even at the ends.

attained sufficient length and strength to enable them to fly with ease and safety.

One kind or another of these birds is met with by navigators in almost every part of the world. Latham enumerates twenty-three species, besides varieties : five of the former and one of the latter are British.

THE COMMON TERN.

GREAT TERN, KIRMEW, OR SEA-SWALLOW.

(*Sterna Hirundo*, Lin.—*La grande Hirondelle de Mer*, Buff.)

THIS bird measures above fourteen inches in length, thirty in breadth, and weighs more than four ounces. The bill is of a crimson colour, tipped with black, and about two inches and a quarter in length : the head is capped with a longish black patch, which extends over the eyes, and ends in a point below the nape of the neck : the throat, cheeks, neck, and the whole of the under parts are white : the tail, which is long, and greatly forked, is also white, except the two outside feathers, which are black on their exterior webs ; but in flying,

these forks are frequently closed so as to look like a single feather. The upper part of the plumage is of a fine pale lead colour : the quills are of a deeper cast, the outside ones the darkest : the legs and feet red.

The female, it is said, forms her nest in the moss or long coarse grass, near the lake, and lays three or four eggs of a dull olive colour, marked with different sized black spots at the thicker end : it is added, that she covers them only during the night, or in the day when it rains ; at all other times she leaves the hatching of them to the heat of the sun.

This clean-looking bird is pretty common in the summer months on the sea-coasts, rivers and lakes of the British Isles, and is also met with in various parts of Europe, Asia, and America. It migrates southward to the Mediterranean, and to the Madeira and Canary Isles, and northward as far as Spitzbergen and Greenland.

THE LESSER TERN,

OR, LESSER SEA-SWALLOW.

(*Sterna minuta*, Lin.—*La petite Hirondelle de Mer*, Buff.)

THE Lesser Tern measures about eight inches in length, and nineteen in breadth, and weighs a little more than two ounces. It looks like the former species in miniature; is equally, if not more delicately elegant in its plumage and general appearance, and its manners and habits are much the same; but it is not nearly so numerous, or so widely dispersed. It differs from the Common Tern in having the black patch on its head divided by a white line on the front of its brow, and over each eye, in the tail being wholly white, and, in proportion to the size of the bird, much shorter or less forked, and in the bill and the feet being more inclined to orange or yellow. Nothing can exceed the clean, clear, and glossy whiteness of its close-set feathers on the under parts of the body; but the upper plumage is of a plain *sober* lead-coloured grey. The egg is an inch and a half in length, of a dirty yellowish brown, dashed all over with reddish blotches.

This bird is met with in the summer months about the Baltic, in some parts of Russia, the river Irtysh in Siberia, the Black and Caspian Seas, and in America near New York, &c. In Belon's time "the fishermen floated a cross of wood, in the middle of which was fastened a small fish for a bait, with limed twigs stuck to the four corners, on which the bird darting, was entangled by the wings."

THE BLACK TERN.

SCARE-CROW, CLOVEN-FOOTED GULL, OR CAR-SWALLOW.

(*Sterna fiffipedes*, Lin.—*L'Epouvantail*, Buff.)

THIS bird measures about ten inches in length, and twenty-four in breadth, and weighs about two ounces and a half. The bill, head, neck, breast, and belly, are a dull black: back, wings, and tail, a deep ash colour: vent, and the exterior feather on each side of its sharp forked tail, white; and in the male there is a white spot on the throat. The legs and feet are a dusky red, the webs much depressed in the middle.

The Black Tern is of a size between that of the last two. Like them it frequents the sea-shores in summer; but its habits and manners are somewhat different: it has a shriller cry, does not associate with them, and seems rather to prefer the rivers, fens, marshes, and lakes inland, to the sea. It breeds and rears its young among the reeds and rushes in the former places, and is said to lay three or four eggs of a dirty greenish colour, spotted and encircled about the middle with black. It feeds on beetles, maggots, and other insects, as well as on small fishes; and, like the rest of the genus, is very noisy, cla-

morous, and restless. Voyagers and ornithologists say it is met with in Hudson's Bay, Newfoundland, and Iceland, and that it is common in Siberia, and the salt lakes in the deserts of Tartary.

THE SANDWICH TERN.

(*Sandvicensis*, Latham.)

A PAIR of these birds, male and female, were shot on the Fern Islands, on the coast of Northumberland, in July, 1802, from the former of which this figure was taken.* They measured two feet nine inches from tip to tip of the wings: the bills were tipped with yellow: the black feathers which capped and adorned their heads

* These birds, as well as specimens of nearly the whole of the different kinds which breed on the Fern Isles, were, after great trouble and risk, shot there, expressly for the use of this work, by Major Shore and Lieutenant Henry Forster Gibson, of the 4th Dragoons: and the author takes this opportunity of expressing the high sense of gratitude he feels to those gentlemen, for the facilities they have given to his labours.

were elongated behind, forming a kind of peaked crest, which overhung the nape and hinder part of the neck : the feathers of the fore part of the neck and breast, when ruffled up, appeared delicately and faintly blushed with red. In other respects they corresponded so nearly with Mr Latham's accurate description, that to attempt giving any other is needless.—“ Length eighteen inches : bill two inches ; colour black with the tip horn colour : tongue half the length of the bill : irides hazel : forehead, crown, hind head, and sides above the eyes, black : the rest of the head, neck, under parts of the body and tail white ; the back and wings pale hoary lead colour : the first five quills hoary black, the inner webs deeply margined with white ; the sixth like the others, but much paler : the rest of the quills like the back : the tail is forked, the outer feathers six inches and a quarter in length ; the wings reach beyond it : legs and claws black : the under part of the feet dusky red.” “ Some specimens have the top of the head dotted with white.” “ In young birds the upper parts are much clouded with brown ; and the whole of the top of the head greatly mixed with white : but this is not peculiar, as the young of other Terns with black heads are in the same state.” “ It is pretty common on the Suffolk and Kentish coasts in the summer months, breeds there in the month of June, is supposed to lay its eggs upon the rocks, and to hatch them about the middle of July.” He adds, “ Whether these birds only visit us at uncertain seasons, or have hitherto passed unnoticed among other Terns, we know not ; but believe that this has not yet been recorded as a British species.” “ They generally make their appearance in the neighbourhood of Romney in

Kent, about the middle of April, and take their departure in the beginning of September.

(*Sterna nævia*, Lin.—*La Guifette*, Buff.)

LATHAM says this bird is in “length eleven inches and a half. Bill dusky : back part of the head and nape black, edged with rufous brown : the eye half surrounded at the back part with a black crescent : the rest of the head, neck, and under parts, white : back and wings of a bluish brown, the margins of the feathers paler : the outward part of the wing more inclined to blue grey : the wings exceed the tail in length ; the last very little forked : legs dusky brown.” He adds, “ This by authors has been considered as a species, but is, no doubt, a young bird merely of the Sandwich Tern.”

Buffon gives a figure, and describes this bird as common on the coast of Picardy, and frequently seen flying on the rivers Seine and Loire : that it is of a middle size between the Greater and Lesser Tern, but differs from them in some particulars in its habits and œconomy, viz : that it feeds more upon insects, flies, &c., is not so clamorous as the Greater Tern, does not lay its eggs on the naked sand, but makes its nest in the marshes with a few dried herbs, in a tuft of grass or moss, in some insulated hillock, and that it sits upon its eggs closely (generally three in number) till the young are hatched.

THE BROWN TERN.

(*Sterna nigra*, Lin. *Sterna Fufca*, Ray.—*Brown Tern*,
Willoughby. *Brown Gull*, Pennant:)

“The whole under side white; the upper brown; the wings partly brown, partly ash-colour: the head black: the tail not forked. These birds fly in companies.”

This short and imperfect account is all that ornithologists have been enabled to give of this doubtful species, which has found its way into notice merely from the communications of Mr Johnson* to Mr Ray, copied by the latter into his Synopsis of Birds, &c.

* Mr R. Johnson, the correspondent, friend, and assistant of the immortal Ray, was vicar of Brignall in Yorkshire. He died there on the 7th of May, 1695, aged 66 years.

OF THE GULL.

THE bill is strong and straight, but bent downwards at the point : the nostrils are pervious, oblong, and narrow, and are placed in the middle ; the lower mandible has an angular prominence on the under side, which tapers towards, and forms its tip : the tongue is a little cloven. The body is cloathed with a great quantity of down and feathers, which, together with the large head and long wings, give these birds an appearance of bulk, without a proportionate weight. Their legs are small, naked above the knees : feet webbed, and the back toe detached, and very small.

This genus, which some naturalists have described as consisting of about nineteen species, besides a few varieties, is numerously dispersed over every quarter of the known world, and is met with, at certain seasons, in some parts, in such multitudes, that the whole surface of the ground is covered with their dung : and their eggs are gathered by the inhabitants in prodigious quantities. They assemble together in a kind of straggling mixed flocks, consisting of various kinds, and greatly enliven the beach by their irregular movements, whilst their shrill cries are deadened by the noise of the waves, or nearly drowned in the roarings of the surge. They occasionally take a wide range over the ocean, and are met with by navigators many leagues distant from the land. Their plumage, which in each individual of the species varies with its age,* is clean and agreeable, but their car-

* Hence the confusion which has arisen among authors and nomenclators, respecting this numerous tribe of birds.

riage and gait are ungraceful, and their character is stigmatised as cowardly, cruel, lazy, thievish, and voracious; for which reason they have by some been called the Vulture of the sea: and it is certain [t]hough this trait is not peculiar to them [t]hat the stronger will rob the weaker kinds, and that they are all greedy and gluttonous, almost indiscriminately devouring whatever comes in their way, whether of fresh or putrid substances, until they are obliged to disgorge their overloaded stomachs. On the contrary, they are able to endure hunger a long while: Buffon mentions one that lived nine days without tasting food.

Some ornithologists divide this genus of birds into two kinds, calling the larger Gulls, and the lesser Mews, and class with the former kind those which measure eighteen or twenty inches from the point of the bill to the end of the tail; and with the latter all those which are of less dimensions. The larger kinds are not so common in the warm, as they are in the cold climates, where they remain to breed and rear their young, feeding chiefly upon the rotting carcasses of dead whales, &c. which they find floating on the sea, among the ice, or driven on shore by the winds and waves; and many are said to remain in the dreary regions of ice and snow during the winter, the extreme severity of which does not compel them all to quit their native climes.

In the temperate and cultivated countries they occasionally leave the shores, and make excursions inland, tempted probably to search for a change of food, such as worms, slugs, &c. and of these they find, for a time, an abundant supply on the downs and pastures which they visit. The jelly-like substance which is sometimes met

with in the fields, and known by the name of *star-shot*, is believed to be the remains of half-digested worms, &c. which they have discharged from their over-loaded stomachs.

THE BLACK-BACKED GULL,

OR, GREAT BLACK AND WHITE GULL.

(*Larus marinus*, Lin.—*Le Goiland noir*, Buff.)

THIS species, which is the largest of the tribe, measures twenty-nine inches in length, and five feet nine inches in breadth, and weighs nearly five pounds. The bill is pale yellow, very firm, strong, and thick, and nearly four inches long from the tip to the corners of the mouth: the projecting angle on the lower mandible is red, or orange, with a black spot in the middle, on each side: the irides are yellow, and the edges of the eye-lids orange. The upper part of the back and wings is black: all the

other parts of its plumage, and the tips of the quills, are white : the legs pale flesh colour.

Gulls of this species are common in the northern parts of Europe, the rocky isles of the North Sea, and in Greenland, but are only thinly scattered on the coasts of England, where they, however, sometimes remain to breed on the highest cliffs which overhang the sea : their eggs are of a round shape, of a dark olive colour, thinly marked with dusky spots, and quite black at the thicker end. Their cry of *kac, kac, kac*, quickly repeated, is roughly hoarse and disagreeable.

Mr Pennant says, "I have seen on the coast of Anglesea a bird that agrees in all respects with this, except in size, in wanting the black spot on the bill, and in the colour of the legs, which in this are of a bright yellow : the extent of the wings is only four feet five : the length only twenty-two inches : the weight one pound and a half. This species, or perhaps variety, (for I dare not assert which) rambles far from the sea, and has been shot at Bullstrode, in Middlesex." One of this sort was shot by Mr Latham on the Thames, near Dartford, and measured full two feet in length.

THE HERRING GULL.

(*Larus fuscus*, Lin.—*Le Goiland in manteau gris-brun, ou le Bourgmeistre*, Buff.)

THE weight of this bird exceeds thirty ounces; the length is about twenty-three inches, and the breadth fifty-two. The spot on the angular knob of the under mandible is deep orange; the rest of the bill yellow: irides pale yellow; edges of the eye-lids red. The back and wing coverts are of a dark bluish ash colour: the first five quills in most specimens are black on the upper parts, and have each a roundish white spot on the outer webs near the tips; others are marked differently on the quills: legs pale flesh colour. The back and wings of some of this species, which are supposed to be the young not arrived at full plumage, are ash-coloured, spotted with brown: the old ones are said to turn quite white.

The haunts, manners, and habits, as well as the general appearance of this Gull, are very similar to those of the preceding species, but this is much more common on the British shores: they make their nests of dry grass on the projecting ledges of the rocks, and lay three eggs of a dull whitish colour, spotted with black. They have obtained their name from pursuing the shoals of herrings, and preying upon those fish. Fishermen describe them as the constant, bold, intruding attendants on their nets, from which they find it difficult to drive them away. This species, like the preceding, is met with in the cold northern seas, but has been observed to wander farther into southern climates.

Naturalists are divided in their opinions respecting the Black-backed Gull, the Herring Gull, and the Wagel:

it is by some suspected that they are all of one species, and that the difference in their appearance is owing merely to their age and sex. This, as well as much more respecting the Gull tribe, remains to be determined by further investigation. The Glaucous Gull of Pennant and Latham, which they do not consider as a British bird, called by the Dutch *Burgermeister*, or *Burgomaster*, and figured in the *Planches Enluminees* under the name *Goi-land cendrée*, is also one of the number involved in the same doubt, and is probably not a species distinct from the Herring Gull; and Latham has the same doubt respecting the Silvery Gull.

THE WAGEL.

GREAT GREY GULL, GRISARD, OR BURGO-MASTER.

(*Larus naevius*, Lin.—*Le Goiland varié*, ou *le Grisard*, Buff.)

THIS Gull is about two feet in length, and five in breadth, and weighs nearly three pounds; but the individuals vary much in their size, some of them being less, and others larger than these dimensions. The bill is black, scarcely three inches long: the irides dark blue. The whole plumage is a mixture of ash-coloured brown and white. The feathers on the back are dark in the middle, with whitish grey edges: the wing coverts nearly the same, but more spotted; and the under parts of the body have a much lighter and more mixed appearance: the quills are plain black: the middle tail feathers the same, but tipped with white, and crossed with a nar-

row white bar towards the root or base : the side feathers are mottled black and white : the legs are of a dirty white, sometimes blushed with red.

Mr Pennant treated of the Wagel as a distinct species, from an opinion he had formed, “ that the first colours of the irides, of the quill feathers, and of the tail, are in all birds permanent.” Further observation, however, caused him to alter his mind. Other observers say that this Gull is the young of the Herring Gull, and that it does not change its grey plumage until the fourth year.

THE COMMON GULL.

COMMON SEA-MALL, OR MEW.

(*Larus Canus*, Lin.—*La Grande Mouette cendrée*, Buff.)

THE Common Gull generally measures between sixteen and seventeen inches in length, thirty-six, and sometimes more, in breadth, and weighs about one pound. The bill is pale yellow, tinged with green,* and an inch and three-quarters long: irides hazel: edges of the eye-lids red: the upper part of the head and cheeks, and the hinder part and sides of the neck are streaked with dusky spots: the back, scapulars, and wings are of a fine pale bluish grey: the throat, rump, tail, and all the under parts are pure white: the first two quills are black, with a pretty large white spot near the tips; the next four are tipped with black, and the secondaries largely with white:

* Buffon says, the bluish bill and feet, always observable in this species, ought to distinguish it from every other, in which the feet are generally of a flesh colour, more or less vermillion or livid.

the legs are greenish, or a dirty white. This is nearly the description of an individual specimen ; but from the number which the author has examined, it is certain that these birds vary in the markings of the head, quills, tail, and in the colour of the bills and feet, hardly two of them being found exactly alike. Some have the head quite white ; some the quills plain black at the ends ; others the tail tipped with black, and the feet blushed with red, green, or blue. Their plumage and look altogether is very clean and agreeable.

The habits and manners of this species are much the same as those of the rest of the genus : they are spread all over the globe, and are the most common and numerous of all the Gulls which frequent the British shores. They breed on the rocky cliffs ; and lay two eggs, nearly of the size of those of a Hen, of an olive brown colour, marked with dark reddish blotches, or irregular spots. At the mouths of the larger rivers, they are seen in numbers, picking up the animal substances which are cast on shore, or come floating down with the ebbing tide : for this kind of food they watch with a quick eye, and it is curious to observe how such as are near the breakers will mount upon the surface of the water, and run splashing towards the summit of the wave to catch the object of their pursuit. This species also, at particular seasons, resorts to the inland parts of the country to feed upon worms, &c.

Some persons who live near the sea commonly eat this, as well as various other kinds of Gulls, which they describe as being good food, when they have undergone a certain sweetening process before cooking, such as burying them in fresh mould for a day, or washing them in vinegar.

THE WINTER GULL.

WINTER MEW, OR CODDY MODDY.

(Larus hybernus, Lin.—La Mouette d'hiver, Buff.)

THIS generally exceeds the Common Gull in its weight and admeasurement. The bill is lightish, except at the tip, of a slender shape, and about two inches long: irides hazel. It is marked with oblong dusky spots on the top of the head and hinder part of the neck: back and scapulars pale ash-coloured grey; but these feathers are spotted with brown: wing coverts pale brown, edged with dingy white; the first quill is black, the six following more or less black at the ends; the others tipped with white: the tail is crossed with a broad black bar near the end: all the other parts of the plumage are white: legs bluish dirty white. Mr Pennant asserts that this is only a young bird, not a species distinct from the Common Gull; and he also differs from Linnæus in his opinion that it is the same as the *Larus tridactylus*, or *Tarroek*.

THE BLACK-HEADED GULL.

BLACK-CAP, OR PEWIT GULL.

(*Larus ridibundus*, Lin.—*La Mouette rieufe a pattos rouges*,
Briffon.—*La Mouette rieufe*, Buff.)

THIS pretty looking bird measures fifteen inches in length, and thirty-six in breadth, and weighs about ten ounces. The bill is of rather a slender make, and of a full red colour: the irides hazel: edges of the eye-lids red: head black; but in some specimens it inclines to a mouse-coloured brown. The back and wings are of a delicate pale lead, or ash colour; the neck, tail, and all the under parts, pure white. The first quills in the specimen from which the above drawing was made, were black on the outer webs; those next them white, and black towards their tips: others of the quills were partly ash-coloured, and partly white: the legs red.

The Black-cap Gulls breed on the marshy edges of rivers, lakes, and fens, in the interior parts of the country.

The female makes her nest among the reeds and rushes, of heath or dried grass, and lays three or four eggs of an olive brown colour, blotched over with spots and streaks of dull rusty red. As soon as the young are able to accompany them, they all retire from those places, and return to the sea.

In former times these birds were looked upon as valuable property, by the owners of some of the fens and marshes in this kingdom, who, every autumn, caused the little islets or *hafts*, in those wastes, to be cleared of the reeds and rushes, in order properly to prepare the spots for the reception of the old birds in the spring, to which places at that season they regularly returned in great flocks to breed. The young ones were then highly esteemed as excellent eating, and on that account were caught in great numbers before they were able to fly. Six or seven men, equipped for this business, waded through the pools, and with long staves drove them to the land, against nets placed upon the shores of these hafts, where they were easily caught by the hand, and put into pens ready prepared for their reception. The gentry assembled from all parts to see the sport. Dr Plot,* in his Natural History of Staffordshire, published

* Dr Plot describes them as coming annually "to certain pools in the estate of the right worshipful Sir Charles Skrymsher, Knight, to build and breed, and to no other estate but that of this family, in or near the county, to which they have belonged *ultra hominum memoriam*, and never moved from it, though they have changed their station often." What the Doctor relates of the attachment of these birds to the head of that family, of their removal to another spot immediately on his death, and of their returning again with the same predilection to his heir, is curious enough, although bordering very much upon the marvellous.

in 1686, gives the above particulars, and says that in this manner as many have been caught in one morning as, when sold at five shillings per dozen, (the usual price at that time) produced the sum of twelve pounds ten shillings; and that in the several drifts on the few succeeding days of this sport, they have been taken in some years in such abundance, that their value, according to the above rate, was from thirty to sixty pounds—a great sum in those days. These were the *See-Gulles* of which we read as being so plentifully provided at the great feasts of the ancient nobility and bishops of this realm. Although the flesh of these birds is not now esteemed a dainty, and they are seldom sought after as an article of food, yet in the breeding season, where accommodation and protection are afforded them, they still regularly resort to the same old haunts, which have been occupied by their kind for a long time past.* The foregoing figure and description were taken from a specimen shot on Prestwick-Car, near Newcastle upon Tyne.

The *Larus Attricilla* of Linnæus (Laughing Gull of Catesby, &c.) is by some naturalists believed to be an old bird of this species, differing from it only in being rather larger, and in having the legs black.

Willoughby gives nearly the same account, in his excellent Ornithology, published in 1678, and computes the sale of the birds to amount to twenty-five pounds per annum.

* This is the case with the flocks which now breed at Pallinsburne, in Northumberland, where they are accounted of great use in clearing the surrounding lands of noxious insects, worms, slugs, &c.

THE BROWN-HEADED GULL.

RED-LEGGED GULL, OR PICKMIRE.

FOUR of these birds, two males and two females, were shot out of a flock on Prestwick-Car, Northumberland, in the middle of May, by Mr John Wingate, of Newcastle, who favoured the author with a pair: they were of the same kind as the one described by Dr Heysham in his Catalogue of Cumberland Animals, and communicated by him to Mr Latham. The bill and feet red; the edges of the eye-lids the same: inside of the mouth reddish orange: irides hazel. The female, which was rather less than the male, weighed about seven ounces, and measured fourteen inches in length, and thirty-five in breadth: her head and throat were mouse-coloured brown, the feathers, in places, very slightly edged or fringed with white. The plumage on the head of the male was of the same colour, but much more dappled and broken with white. In both, the neck, throat, and belly were white; back and scapulars of a fine pale blue grey colour; middle coverts of the wings light brown, edged with greyish white; the exterior webs, and part of the interior ones of the first four quills, were black: tail white, tipped with black: toes short.

Dr Heysham says, "It is clear," from his description, "that it neither agrees with the Tarrock nor the Pewit, and it could not be a young bird, as it was killed in June, and the ovary contained eggs." This reasoning does not appear decisive; the bird might be old enough to breed, although not in perfect plumage, to which some species do not attain in less than two or three years: therefore, whether it really was the young of the Black-headed

Gull, or a distinct species, remains to be determined by further investigation.

The male of the Brown-headed Gull is by some ornithologists called the Kittiwake (the *Larus Rissa* of Linnaeus); but as there is no end of the conjectures, opinions, and doubts respecting many of the Gulls, which, from the slightest differences of plumage, have, in some instances, been branched out into new varieties, in this work the descriptions of others have been given in preference to making alterations, when the author could not with certainty throw any new light upon the subject.

La petite Mouette grise, Brisson.

MR PENNANT describes this as a variety of the Black-headed or Pewit Gull. He says, "It differed in having the edges of the eye-lids covered with white soft feathers. The fore part of the head white; the space round the eyes dusky: from the corner of each eye is a broad dusky bar, surrounding the hind part of the head; behind that is another reaching from ear to ear: the ends, interior and exterior edges of the three first quill feathers, black; the ends and interior sides only of the two next white; beneath a black bar: the rest, as well as the secondaries, ash-colour." "In all other respects it resembled the Common Pewit Gull." "The fat was of a deep orange colour."

The above figure was taken from a stuffed specimen in the Wycliffe museum.

THE KITTIWAKE,

OR, ANNETT.

(Larus Rissa, Linnæus.)

THE Kittiwake measures from fourteen to seventeen inches in length, thirty-eight to forty in breadth, and weighs generally about fourteen ounces. The bill is of a greenish yellow: the inside of the mouth and edges of the eye-lids are orange: irides dark: the head, neck, under parts and tail, pure white: back and wings a lead or ash-coloured grey: the exterior edge of the first quill feather, and the tips of the next four or five are black: legs dusky: hinder toe not bigger than a small wart. Some specimens of the Kittiwake are described as having the auriculars tipped with black.

These birds chiefly haunt the rocky promontories and islets on the British coasts: they are likewise widely dispersed over the world, particularly in the north, and

are met with from Newfoundland to Kamtschatka, as well as in all the intermediate parts, and as far north as navigators have visited.

This specimen was shot on one of the Fern Islands in July, 1802.

THE TARROCK.

(*Larus tridactylus*, Lin.—*La Mouette cendrée tachetée*, Buff.)

THIS bird is somewhat less than the Kittiwake. The bill is black, short, and strong: the head, neck, breast, belly, and tail are all white, with the exception of the tips of ten of the middle feathers of the tail, a spot on the auriculars, another under the throat, and a crescent-shaped patch on the hinder part of the neck, all of which are black: the back and scapulars are of a bluish grey: lesser coverts of the wings deepish brown, edged with grey: some of the greater covert feathers are of the same colour, and others of plain grey: the outer webs and ends of the first four quills, and the tips of the next two, are black; all the rest are wholly white: the legs are of a dingy ash colour: the hinder toe, like that of the Kittiwake, is only a kind of small, and apparently useless, protuberance.

The habits and manners of these birds are the same as those of the Kittiwake: they are met with in the same countries, and at the same breeding places, from Greenland to Scotland and its isles. They leave the sea-shores in autumn, and spread themselves over the northern ocean, making, it is said, the floating isles of ice their chief resting places. In the spring they return to the rocky crags to breed; and in the month of June the female lays two eggs of a dingy greenish colour, spotted with brown:

these as well as the flesh of the birds, are held in great estimation by the Greenlanders, who also use their skins for caps and garments.

After many doubts and surmises respecting the Tar-rock, the prevailing opinion among ornithologists is, that it is only the Kittiwake not arrived at full age and plumage.

A specimen of this bird, presented by Charles John Brandling, Esq. of Gosforth, had not the black spot on the throat. The lesser wing coverts were very dark brown ; the first five quills were black on the outer webs and tips ; the tips of the next two were marked with a black spot ; and the two outside feathers of the tail were tipped in the same way.

THE SKUA GULL,

OR BROWN GULL.

(*Larus catarractes*, Lin.—*Le Goiland brun*, Buff.)

THIS stout Gull is two feet in length, and between four and five from tip to tip of the extended wings, and weighs about three pounds. The bill is dark, more than two inches long, strong, much hooked, and sharp at the tip; and, what is singular, it is covered to the nostrils with a kind of cere, something like that of the Hawk tribe. The whole upper plumage is of a deep brown, edged with a dull rust colour: the under parts are of the same colours, but lighter; and in some birds, the head and throat are dashed or mixed with ash grey, and have the secondary quills tipped with white: the tail is white at the root, the shafts are of the same colour, and the webs of deep brown: the legs and toes are covered with coarse black scales; the claws are strong and hooked, the inner one more so than the rest.

This fierce species is met with by navigators in the high latitudes of both hemispheres, where they are much more common than in the warm or temperate parts of the globe. In Captain Cook's voyages round the world, they are often mentioned; and, from their being numerous about the Falkland Isles, the seamen called them Port-Egmont Hens. They are also common in Norway, Iceland, the Shetland and Ferro Isles, &c. It is said that they prey not only upon fish, but also upon the lesser sorts of water-fowl, and even upon young lambs: this, however, is doubted, and, by some of the northern islanders, even denied: they on the contrary assert, that these birds afford protection to the flocks, by driving away the Eagle, which they furiously attack whenever it comes within their reach, and on this account they are highly valued. It is, however, well ascertained that they are uncommonly courageous in defence of their own young, and that they seize, with the utmost vengeance, upon any animal, whether man or beast, that offers to disturb their nests; and it is said also, that they sometimes attack the shepherds even while they are watching their flocks upon the hills, who are obliged, in their own defence, to guard their heads, and to ward off the blows of the assailants by holding a pointed stick towards them, against which they sometimes dash with such force as to be killed on the spot. In like manner, they who are about to rob their nests, hold a knife, or other sharp instrument, over their heads, upon which the enraged bird precipitates, and transfixes itself. They make their nests among the dry grass, and, when the young are reared, they disperse themselves, commonly in pairs, over the ocean.

The feathers of this species, as well as those of other Gulls, are by many people preferred to those of the Goose; and in some parts they are killed in great numbers, merely for the sake of the feathers. On the English coasts they are not very common: that from which the foregoing figure was taken, was shot near Tynemouth, in the month of September.

THE BLACK-TOED GULL.

LABBE, DUNG BIRD, OR BOATSWAIN.

(*Larus Crepidatus*, Lin.—*Le Stercorare*, Buff.)

THIS bird measures sixteen inches and a half in length, and three feet four inches in breadth, and weighs eleven ounces.* The bill is of a lead colour, dark at the point, from which to the brow it is little more than an inch in length: the nostrils are placed near the nail or tip, in a kind of cere not much unlike that of the Skua Gull. The whole upper and under plumage is dark brown, each feather slightly edged and tipped with ferruginous: the greater wing coverts, and the first and secondary quills are dusky, and more distinctly tipped with rusty spots. The tail consists of twelve feathers, the two middle ones

* This is the weight given by Mr Pennant. The specimen from which this figure and description were taken weighed only eight ounces, but it was very lean. It was shot on the Durham coast, by Mr John Forster, of Newcastle, the first of October, 1800.

longer than the rest ; it is of the same colour as the quills, except at the concealed part of its root, which is white. The legs are slender, and of a lead colour ; the thighs and part of the joint, and the toes, black : the webs are of the same colour, excepting a small space between the first joints of the toes, which is white.

The black-toed Gull, described by Mr Pennant, differs from this in some particulars : he says, “ the head and neck are of a dirty white : the hinder part of the latter plain, the rest marked with oblong dirty spots : the breast and belly are white, crossed with numerous dusky and yellowish lines : the feathers on the sides and vent are barred transversely with black and white : the back, scapulars, coverts of the wings, and tail, are black, beautifully edged with white or pale rust colour : the shafts and tips of the quill feathers are white : the exterior web, and upper half of the interior web, black ; but the lower part of the latter white : the tail consists of twelve black feathers tipped with white.” The male is said to be blacker and darker than the female.

These birds are not common on the British shores, nor, although widely dispersed over the face of the ocean, are they numerous any where. They do not exceed the Lesser Gulls, or Mews, in size, yet their greater ferocity enables them to carry into effect that continual persecution which is prompted by their ravenous appetite. As soon as they perceive that one of the Mews has seized a prey, they pursue and attack it with the speed and vigour of a Hawk, until the harassed bird, through fatigue or fear, is compelled to drop or disgorge the object of contention, which the pursuer catches in the fall, commonly before it reaches the water. Distant observers have sup-

posed this dropping substance to be the dung of the fugitive; and hence the Black-toed Gull obtained the name of the Dung-bird.

THE ARCTIC GULL.

FEASER, OR LONG-TAILED LABBE.

(*Larus parasiticus*, Lin.—*Le Labbe à longue queue*, Buff.)

“ THE length of this species is twenty-one inches : the bill is dusky, about an inch and a half long, pretty much hooked at the end, but the straight part is covered with a sort of cere. The nostrils are narrow, and placed near the end, like the former. In the male the crown of the head is black : the back, wings, and tail dusky : but the lower part of the inner webs of the quill feathers, white : the hind part of the neck, and the whole under side of the body, white : the tail consists of twelve feathers, the two middlemost nearly four inches longer than the others : the legs black, small, and scaly.” “ The female is entirely brown ; but of a much paler colour below than above : the feathers in the middle of the tail only two inches longer than the others. Linnæus has separated this from its mate, his *Larus Parasiticus*, and made it a synonym to his *Larus Catarractes*, a bird as different from this as any other of the whole genus.” *Pennant*.

The habits and manners of this species are the same as those of the last. It pursues the smaller Gulls for the purpose of robbing them of their prey, and like the other, is called the Dung-bird, from similar groundless notions. It is pretty common in the northern parts of Europe, Asia, and America. Numbers of them frequent the He-

brides in the breeding season, which is from May till August. The female makes her nest of moss on the dry grassy tufts in boggy places, and lays two eggs of an ash colour, spotted with black.

OF THE PETREL.

THE bills of this genus are straight, except the end, which is bent or hooked : the nostrils, for the most part, contained in one tube ; but in a few species they are distinct and separate. Legs small, and naked above the knees : three toes placed forward, and a spur behind, instead of a back toe : wings very long and strong.

These birds are the constant, roving, adventurous inhabitants of the ocean ; one species or another of them is met with by navigators in every climate, and at the greatest distances from land. They seem to sport with the tempest, and run on foot, swim, or fly at pleasure over the foaming billows, with amazing velocity.* In flying they generally keep so near to the undulating waters, that the tips of their wings often beat upon the surface, and thereby accelerate their progress. In calm weather they float and repose, as it were, on the bosom of the ocean. They are seldom seen on shore, and when they are, it is only in the breeding season, and then merely for the purposes of incubation. The females deposit their eggs in holes in the ground, or in the deep hidden caverns and recesses of the rocks, where they and their mates, while employed in rearing their young, are heard in croaking, clucking converse, not unlike the unvaried hollow sounds of a number of frogs. They are accounted a stupid race of birds, because they seem fearless of danger, and suffer themselves to be so nearly approached as easily to be shot, or even knocked on the head. In the preservation of their young they seem to

* Some species of them are known to dive also. *Cook's Voyages.*

have only one mode of defence, and that is the singular faculty of squirting oil from their bills, with great force, on the face of their enemy ; by which means they sometimes succeed in disconcerting his attempts to rob their nests. They are a remarkably oily fat race of birds.

Ornithologists have reckoned nineteen species, and a few varieties, of the Petrel, whose nostrils are contained in a single tube,—and four species which have nostrils divided into two tubes. Three species only of this genus are accounted British birds.

THE FULMAR,
OR MALLEMOKE.

(*Procellaria glacialis*, Lin.—*Le Fulmar*, ou *Petrel Puffin gris blanc*, Buff.)

THE Fulmar measures seventeen inches in length, and weighs about twenty-two ounces. The bill is strongly formed, and about two inches long; the hook or nail of the upper mandible, and the truncated termination or tip of the under one, are yellow; the other parts of it are of a greyish colour, and, in some specimens, blushed with red: the nostrils are contained in one sheath, divided into two tubes. The head, neck, all the under parts, and the tail, are white: back and wing coverts blue grey: quills dusky blue: legs yellowish, inclining more or less, in some specimens, to red. The body is thickly cloathed with feathers upon a close fine down.

This species is much more common in cold than in warm or temperate climates: it has been met with in

both the arctic and antarctic regions, in all parts which navigators have been able to visit, even to the foot of those impenetrable barriers, the floating islands and eternal mountains of ice and snow.

In the northern parts of the world, the natives of the various coasts and islands easily catch these heedless birds in great numbers. Pennant, speaking of those which breed on, or inhabit, the Isle of St Kilda, says—"No bird is of such use to the islanders as this: the Fulmar supplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their distempers." He says also, that it is a "certain prognosticator of the change of the wind: if it comes to land, no west wind is expected for some time; and the contrary when it returns and keeps the sea."

These birds are extremely greedy and gluttonous, and will devour any floating putrid substances, such as the filth from the ships, which they fearlessly follow. They also pursue the whales, but particularly the bloody track of those which are wounded, and in such great flocks as thereby sometimes to discover the prize to the fishers, with whom they generally share; for when the huge animal is no longer able to sink, the Fulmars, in multitudes, alight upon it, and ravenously pluck off and devour lumps of the blubber, until they can hold no more.

The female is said to lay only one large white and very brittle egg, which she hatches about the middle of June.

THE SHEARWATER.

SKRABE, MANKS PETREL, MANKS PUFFIN, OR LYRE.

(*Procellaria Puffinus*, Lin.—*Le Puffin*, Buff.)

THIS species measures in length fifteen inches, and in breadth thirty one, and weighs about seventeen ounces. The bill is about an inch and three quarters long; the tip black, the other parts yellowish: the tubular nostrils are not so prominent as in others of this genus. The inner coverts of the wings, and under parts of the body, are white: the head, tail, thighs, and upper parts black, tinted more or less with grey: the legs are flattened on the sides, and weak; light-coloured, or whitish on the fore parts, and dusky behind.

The Shearwater is found in greater or smaller numbers in almost every part of the watery world, in both hemispheres, and in every climate; but they are met with in greater abundance in the north. In the Hebrides, and other islands with which the seas of Scotland are dotted,

these birds are caught by the natives in great numbers, and are used for the same purposes as the Fulmar.

Willoughby whose excellent ornithology has thrown so much light on this branch of natural history, and cleared the paths for subsequent writers, gives the following account of the coming of these birds to breed in the Isle of Man:—

“ At the south end of the Isle of Man lies a little islet, divided from Man by a narrow channel, called the Calf of Man, on which are no habitations but only a cottage or two lately built. This islet is full of rabbits, which the Puffins coming yearly dislodge, and build in their burroughs. They lay each but one egg before they sit, like the Razor-bill and Guillem, although it be the common persuasion that they lay two at a time, of which the one is always addle.” “ The old ones early in the morning, at break of day, leave their nests and young, and the island itself, and spend the whole day in fishing at sea, and never returning or once setting foot on the island before evening twilight: so that all day the island is so quiet and still from all noise as if there were not a bird about it.” He observes that they feed the young ones from the contents of their loaded stomachs during the night, that they become extremely fat, and are taken and salted down for keeping, and that the Romish church permitted them to be eaten in lent. He adds further respecting the young ones:—“ When they come to their growth, they who are intrusted by the lord of the island (the Earl of Derby) to draw them out of the rabbit-holes, that they may the more readily know and keep account of the number they take, cut off one foot, and reserve it, which gave occasion to that fable, that the Puffins are

single footed. They usually sell them for about ninepence the dozen, a very cheap rate."

The above figure was taken from a stuffed specimen in the Wycliffe museum.

THE STORMY PETREL.

STORM FINCH, OR LITTLE PETREL.

(Procellaria pelagica, Lin.—L'Oiseau de Tempête, Buff.)

THIS is the least of all the web-footed birds, measuring only about six inches in length, and thirteen in breadth. The bill is half an inch long, hooked at the tip; the nostrils tubular. The upper parts of the plumage are black, sleek, and glossed with bluish reflections: the brow, cheeks, and under parts, sooty brown: the rump, and some feathers on the sides of the tail, white: legs slender, black, and scarcely an inch and three quarters in length, from the knee joint to the end of the toes.

This bird resembles the Chimney Swallow in general appearance, in the length of its wings, and in the swiftness of its flight. It is sometimes met with by navigators on every part of the ocean, diving, running on foot, or skimming over the surface of the heavy rolling waves of the most tempestuous sea, quite at ease, and in security;

and yet it seems to foresee, and fear the coming storm, long before the seaman can discover any appearance of its approach ; and this these little sure prognosticators make known by flocking together under the wake of the ship, as if to shelter themselves from it, or to warn the mariners, and prepare them to guard against the danger. They are silent during the day, and their clamorous piercing voice is heard only in the night. In the breeding season they betake themselves to the promontories, where, in the fissures of the rocks, they breed and rear their young, which they conduct to the watery element as soon as they are able to crawl, and immediately lead them forward to roam, with themselves, over the dreary and trackless waste.

Mr Pennant, on the authority of Brunnich, says, that “ the inhabitants of the Ferro Isles make this bird serve the purposes of a candle, by drawing a wick through the mouth and rump, which being lighted, the flame is fed by the fat and oil of the body.” Like others of this genus, it squirts oil from its bill on the face of its enemy.

Although it has been generally said that these birds are never seen but at sea, except during the period of incubation ; yet some instances occur of their having been shot inland. Mr Latham speaks of one which was shot at Sandwich, in Kent, in a storm of wind, among a flock of Hoopoes, in the month of January,—of another shot at Walthamstow, in Essex,—and of a third which was killed near Oxford. The late M. Tunstall, Esq. of Wycliffe, had one sent to him, which was shot near Bake-well, in Derbyshire ; and the specimen from which the above figure and description were taken, was found dead in a field near Ripon, in Yorkshire, and obligingly sent

to the author by Lieutenant-Colonel Dalton, late of the 4th Dragoons. It is probable that sickness, or the extreme violence of some hurricane had driven these birds so far from their natural element.

OF THE MERGUS.

BIRDS of this genus have roundish slender bills, furnished at the end with a hard, horny, crooked nail; edges of the mandibles very sharply toothed, or serrated; nostrils small, subovated and placed near the middle of the bill: tongue rough, with hard indented papillæ turned backward: legs short; feet webbed; toes long, and the outer ones about the same length as the middle: the head is small, but the quantity of soft silky feathers with which it is furnished, and which they can bristle up from the nape of the neck to the brow, gives it a large appearance. They are a broad, long-bodied, and flat-backed kind of birds, and swim very squatly on the water, the body seeming nearly submerged, with only the head and neck clearly seen. They are excellent divers, remaining a long while under water, and getting to a great distance before they appear again. They fly near the surface of the water, and, notwithstanding the shortness of their wings, with great swiftness, though seldom to any great distance. They devour a large quantity of fish; and their pointed, sharp-toothed, and hooked bills are well calculated for holding fast their slippery prey, none of which, when once within their gripe, can escape.

Latham enumerates six species and three varieties of this genus, five of which are accounted British birds. George Strickland, Esq. of Ripon, to whom this work is much indebted for sundry communications, enumerates six species of this genus, which are all met with in Great Britain and its adjacent isles: the author agrees with him likewise in opinion, that much remains to be done in order to clear up the doubts in which their history is in-

volved, and by which the classification of the different species is confused: he says—"The genus *Mergus*, though only a very small tribe of birds, still remains in the greatest obscurity, and I have not yet met with any ornithologist who has not, in my opinion, multiplied the number of the species, by considering birds of this genus as of different kinds, when they differed only in sex." His arrangement is as follows:—

GENUS MERGUS.

- Species 1. *Merganser* Goosander.
 2. *Castor* Dun-Diver.
 3. *Serrator* Less Dun-Diver.
 4. *Albellus* Smew.
 5. ——— Lough-Diver.
 6. *Minutus* Red-headed Smew.

THE GOOSANDER.

(*Mergus Merganser*, Lin.—*L'Harle*, Buff.)

THE male generally weighs about four pounds, and measures in length nearly two feet, and in breadth three feet two inches. The bill is slender, and turned a little upwards; it is three inches long from the hooked nail or tip to the corners of the mouth, but little more than two inches on the ridge; both mandibles are black on the upper and under parts, and crimson on the sides; they are sharply toothed on the edges, and on the inside of the upper, which is narrow, thin, and hard at the tip, there is a double row of smaller teeth: the tongue is furnished with a similar kind of double row, running along the middle, and edged with a kind of hairy border: the irides are commonly of a fine red colour, but in some dusky. The head is covered or crowned with a great quantity of feathers, which, when erected, form a crest; at other times they are laid flatly down, and fall over the nape of the neck: these feathers are of a glossy bottle

green colour; and the cheeks, throat, and upper fore part of the neck, dull black: the lower part of the neck, the breast, belly, vent, and inner coverts of the wings are of a beautiful kind of cream colour: the upper part of the back, and adjoining scapulars are a fine glossy black; the others bordering on the wing, white: the coverts at the setting on of the wing, black; the rest pure white; the secondary quills are the same, narrowly edged with black; the primaries dusky: the middle of the back and rump are ash colour; from the thighs to the sides of the tail, waved and freckled with ash and white: the tail consists of eighteen dark bluish grey feathers: the legs and feet are deep scarlet, like sealing-wax. Willoughby says—"It hath a huge bony labyrinth on the windpipe, just above the divarications; and the windpipe hath, besides, two swellings out, one above another, each resembling a powder-puff."* It is probable that the whole genus have a similar kind of windpipe, and that the use of it is to contain the air which the bird respire while diving, and remaining long under water.

The Goosander is an inhabitant of the cold northern latitudes, and seldom makes its appearance in the temperate or more southern climates, to which it is driven only by the inclemency of the weather, in severe winters, in search of those parts of rivers or lakes which are not bound up by the frost. It leaves this country early in the spring, and goes northward to breed, and is never seen during the summer months in any part of England; but in hard winters (which the appearance of these birds presages) they are common on the fresh water pools, rivers, and fens in the east riding of Yorkshire, and on

* The Red-breasted Goosander has the same.

the fens of Lincolnshire. Their flesh is by some accounted rank and fishy ; others say that it is dry unpleasant food, and, in corroboration of this, quote the old vulgar proverb, “ He who would regale the devil, might serve him with Merganser and Cormorant.” The author, in some instances, has found these proverbs to be not well founded ; but never having tasted of this particular species, he cannot hazard a contrary opinion.

The foregoing description was taken from a bird in full plumage, with which this work was favoured by Robert Pearson, Esq. of Newcastle, 20th March, 1800.

THE DUN-DIVER,
OR SPARLING-FOWL.

(*Mergus castor*, Lin.—*L'Harle cendré, ou le Bievre*, Buff.)

THIS is of the same form as the Goosander, but differs from that bird in its plumage and size: it measures twenty-seven inches in length, and thirty-five in breadth, and, when in good condition, weighs sometimes between three and four pounds. The bill, from the tip to the corners of the mouth, is two inches and a quarter long, of a red colour, but darker on its ridge; the hooked horny nail of the upper mandible is blackish; the tip of the under one white. The head and upper part of the neck are of a deep chesnut; the crest, the feathers of which are soft, very long, and pendent, is of a deeper shade of the same colour: the chin and upper part of the throat are white: the back, scapulars, coverts of the wings, rump, and sides of the body, are of a bluish ash or lead colour: the fore part of the neck, the breast, belly, and vent, are yellowish white; the bastard and pri-

mary quills dark brown : a large white patch or bar is formed on the middle of the wing, by the tips of the greater coverts and the outer webs of six of the secondary quills ; but those nearest to the body are of a hoary dark ash : the tail, which consists of fourteen feathers, is nearly of the same colour : the legs are orange red.

The habits, manners, and haunts of this species are nearly the same as those of the last ; but the Dun-diver is met with in this country in greater numbers.* They have long been looked upon and treated of by ornithologists as the female of the Goosander ; later observations, however, have wrought a change of opinion among the modern investigators of this branch of natural history, and it is now generally agreed that the Dun-diver is a distinct species. Dr Heysham, of Carlisle, was probably the first who, by dissection, removed some of the doubts in which this matter was involved :—in his Catalogue of Cumberland Animals,† he says, “ This has generally been considered as the female of the Goosander.” “ The following circumstances which have come under my observation, however, render this opinion somewhat doubtful : 1st, The Dun-divers are far more numerous than the Goosanders. 2d, The Dun-divers are all less than the Goosanders, (the largest I have seen being little more than three pounds) but of various sizes, some being under two pounds. 3d, The crest of the Dun-diver is considerably longer than the crest (if it can be so called) of the

* Latham, on the authority of Mr Jackson, says they breed on the islands of the river Shannon, near Killaloe, in Ireland, and are frequently seen there the whole summer.

† See the additional ornaments to Hutchinson's History of Cumberland.

Goosander. 4th, Dun-divers have been found, upon dissection, to be males. 5th, The neck of the largest Dun-diver, and which has proved to be a male, is nothing like so thick as the neck of the Goosander." " On the 26th of December, 1783, I dissected a Dun-diver, which was rather more than three pounds in weight; its length was twenty-seven inches, and its breadth thirty-five inches. It proved to be a male: the testes, though flaccid, were very distinct, and about half an inch in length. In the middle of January, 1786, I received two Dun-divers, both of which I dissected: the first was a small one, about two pounds in weight; it proved to be a female; the eggs were very distinct: the second was much larger, and weighed three pounds; its crest was longer, and its belly of a fine yellowish rose colour: it was a male, and the testes were beginning to grow turgid. I have dissected only one Goosander, and that proved to be a male. Therefore, until a Goosander be found, upon dissection, to prove a female, or two Goosanders to attend the same nest, the doubts respecting these birds cannot be satisfactorily removed."

Although Willoughby describes this as the female Goosander, yet he expresses his doubts of the matter, from its being, like that bird, furnished with a kind of large labyrinth, which, he says, is to be found in the males only of the Duck tribe, and whence he conjectures that this is also peculiar to all the males of the *Mergi*, and that all the females are without it; but he notices one of this family (which at Venice is called *Cokall*) in which this labyrinth, or enlargement of the windpipe, was wanting. Respecting the Dun-diver he further observes, that "the stomach of this bird is as it were a craw

and a gizzard joined together. The upper part, resembling the craw, hath no wrinkles or folds in its inner membrane, but is only granulated with small papillary glandules, resembling the little protuberances on the third ventricle of a Beef, called the Manifold, or those on the shell of a Sea-urchin."

The above figure was drawn from one in full plumage and perfection, for which this work was indebted to Robert Pearson, Esq. of Newcastle, the 28th of February, 1801.

THE RED-BREASTED MERGANSER.

(*Mergus serrator*, Lin.—*L'Harle huppé*, Buff.)

THIS bird measures one foot nine inches in length, and two feet seven in breadth, and weighs about two pounds. The bill, from the tip to the angles of the mouth, is three inches in length, slender, and of a rather roundish form, and like those of the rest of this genus, hooked at the tip, and toothed on the edges: the upper mandible is dark brown, tinged with green, and edged with red: the lower one wholly red: the irides are deep red: the head, long pendent crest, and upper part of the neck, are of a glossy violet black, changing in different lights to a beautiful gilded green: the rest of the neck and belly white: the breast rusty red, spotted with black on the front, and bordered on each side with five or six white feathers, edged with black: the upper part of the back, glossy black; the lower, the rump, and sides, are prettily mark-

ed with transverse zigzag lines of brown and pale grey : the ridge of the wings, and adjoining coverts are dusky ; the feathers nearest to the wings are white : the greater coverts, and some of the secondary quills, black and white ; the others, and the scapulars, are also party-coloured of the same hue : the primary quills are black ; some of those next to the body tipped with white, and others of them white on the upper half, and black to their points. The tail is short, its colour brown : the legs and feet are of a deep saffron-coloured red. These birds, both male and female, are said to differ much in their plumage ; some having more white on them than others, and some also brighter colours, and more distinctly marked.

The female (which the author has not seen) is described as differing from the male in having only the rudiment of a crest. Mr Pennant says—" The head and upper part of the neck are of a deep rust-colour : throat white : fore part of the neck and breast marbled with deep ash colour : belly white : great quill feathers dusky : lower half of the nearest secondaries black ; the upper white : the rest dusky : back, scapulars, and tail, ash-coloured : the upper half of the secondary feathers white ; the lower half black ; the others dusky."

In a male of this species which was shot at Sandwich, in Kent, Latham says—" I observed that the feathers which compose the crest, were simply black ; also down the middle of the crown, as well as the space before the eye, and beneath the chin and throat ; but in the rest of the neck the black had a gloss of green." He also describes it as having " a curious and large labyrinth," similar, it is supposed, to those of other males of this genus which have been noticed before.

The Red-breasted Merganser is not common in Britain, particularly in the southern parts of the island ; but they are met with in great flocks at Newfoundland, Greenland, and Hudson's Bay, during the summer months ; they are found also in various other northern parts of the world, and in the Mediterranean sea.

THE SMEW,

OR WHITE NUN.

(*Mergus albellus*, Lin.—*Le petit Harle huppé, ou la Piette*, Buff.)

THE Smew is about the size of a Wigeon: the bill is nearly two inches long, of a dusky blue colour, thickest at the base, and tapering into a more slender and narrow shape towards the point; it is toothed like those of the rest of this tribe: the irides are dark: on each side of the head, an oval-shaped black patch, glossed with green, is extended from the corners of the mouth over the eyes: the under side of the crest is black; the other parts of the head and neck white: the breast, belly, and vent are also white, excepting a curved black stroke, pointing forward from the shoulders on each side of the upper part of the breast, which, on the lower part, has also similar strokes pointing the same way: the back, the coverts on the ridge of the wings, and the primary quills, are black:

the secondaries and greater coverts black, tipped with white: the middle coverts and the scapulars white: the sides, under the wings to the tail, are agreeably variegated and crossed with dark waved lines. The tail consists of sixteen dark ash coloured feathers; the middle ones are about three inches and a half long, the rest gradually tapering off shorter on each side: the legs and feet are of a bluish lead colour. This species is at once distinguished from the rest of the *Mergi* by its black and white piebald appearance, although the individuals vary from each other in the proportion and extent of those colours on their plumage.

THE RED-HEADED SMEW,

OR WEESEL COOT.

(Mergus minutus, Lin.—L'Harle étoilé, Buff.)

THIS bird measures fifteen inches and a half in length, and twenty-four in breadth, and weighs about fourteen or fifteen ounces. The bill is of a bluish lead colour, the tip dusky: the head and crest are of a reddish brown, with a dusky spot between the bill and the eyes: the cheeks, throat, belly, sides of the body, and vent, are white: the middle of the neck is encircled with pale brown; the lower part of it, the breast, and shoulders, are clouded with dingy brown and pale grey: the ridge of the wings, and adjoining lesser coverts are grey; the middle coverts white; the greater and the secondary quills, like those of the Smew, black, tipped with white; the primary quills dusky: the back, scapulars, rump, and tail, of a deep brownish ash colour: legs and feet dull pale blue.

The Red-headed Smew has long been considered, by some ornithologists, as a distinct species; while others have maintained that it is only the female of the last; and this matter is still doubtful. Mr Pennant, in the supplement to his Arctic Zoology, says, it is now found to be the female of the Smew; Mr Latham is of the same opinion; but Mr Strickland thinks differently; he rests his opinion chiefly on the great disproportion in their weight: the former, he says, is two pounds two ounces, while this is only about fourteen ounces.

THE LOUGH-DIVER.

THIS is somewhat less than the Smew. "The head and hinder part of the neck are rust-coloured; the head slightly crested: back, scapulars, and tail dusky: fore part of the neck white: breast clouded with grey: on the lesser coverts of the wings a great bed of white; on the primaries and greater coverts two transverse lines of white: legs dusky." In describing this as the female of the Smew, Mr Pennant says it has "around the eyes a spot of the same colour and form as in the male;" he afterwards corrects his error in supposing it the female, and adds—"The bird I thought to be the female, and called the Lough-diver, is a distinct kind. Mr Plymley informs me that he dissected several, and found males and females without any distinction of plumage in either sex."

Having had no opportunity of examining either of the two birds last described, the author has been obliged to relate merely what others have said concerning them, and is at a loss how to reconcile their different opinions, not only indeed concerning these, but others of this tribe; to some of which no known females have yet been distinctly attached: and whilst it is evident that this is a circumstance which cannot happen, it is also plain that much further investigation is necessary in order to elucidate their history. The finishing hand of some scientific ornithologist is yet wanting, whose zeal and industry in the pursuit may be rewarded by the means and opportunities of acquiring such information as may clear up those doubts, and remove those difficulties, which have hitherto rendered this class of birds so imperfectly known.

The Lough-diver, the White Nun, and the Red-head-

ed Smew seldom visit this country, except in very severe winters, by which they are driven from their haunts in the northern parts of the world. Their manners and habits are alike; they also differ little from the rest of the genus, which all live on fish of various kinds, which they eagerly hunt after, both at sea and in the fresh water lakes, as necessity or inclination impels them to visit the one or the other.

OF THE *ANAS*.

THE bill of this genus is strong, broad, depressed, or flat, and commonly furnished at the end with a nail; the edges of the mandibles divided into lamillæ or teeth: nostrils small and oval: tongue broad, edges near the base, fringed: feet webbed; the middle toe the longest.

This genus, in which ornithologists have included all the Swans, Geese, and Ducks, amounts, according to the latest enumeration, to ninety-eight species, and about fourteen varieties; thirty-three of the former, and one of the latter, are accounted British birds.

From the Swan downward to the Teal, they are all a clean-plumaged beautiful race of birds, and some of them exquisitely so. Those which have been reclaimed from a state of nature, and live dependent on man, are extremely useful to him: under his protection they breed in great abundance, and without requiring much of his time or care, lead their young to the pool almost as soon as they are hatched, where they instantly, with instinctive perception, begin to search for their food, which at first consists chiefly of weeds, worms, and insects; these they sift, as it were, from the mud, and for that purpose their bills are admirably adapted. When they are further advanced in life, they pick up the sodden scattered grain of the farm-yard, which, but for their assiduous searchings, would be lost. To them also are allotted the larger quantities of corn which are shaken by the winds from the over-ripened ears in the fields. On this clean and simple food they soon become fat, and their flesh is accounted delicious and nourishing.

In a wild state, birds of various kinds preserve their original plumage ; but when tamed they soon begin to vary, and shew the effects of domestication : this is the case with the tame Goose and the Duck, which differ as much from the wild of their respective kinds, as they do from each other.

THE WILD SWAN.

ELK, HOOPER, OR WHISTLING SWAN.

(*Anas Cygnus ferus*, Lin.—*Le Cygne sauvage*, Buff.)

THE Wild Swan measures five feet in length, and above seven in breadth, and weighs from thirteen to sixteen pounds. The bill is three inches long, of a yellowish white from the base to the middle, and thence to the tip, black: the bare space from the bill over the eye and eyelids is yellow: the whole plumage in adult birds is of a pure white, and, next to the skin, they are cloathed with a thick fine down: the legs are black.

This species generally keeps together in small flocks, or families, except in the pairing season, and at the setting in of winter. At the latter period they assemble in immense multitudes, particularly on the large rivers and lakes of the thinly inhabited northern parts of Europe, Asia, and America: but when the extremity of the weather threatens to become insupportable, in order to shun the gathering storm, they shape their course, high in air, in divided and diminished numbers, in search of milder climates. In such seasons they are most commonly seen in various parts of the British isles, and in other more southern countries of Europe. The same is observed of them in the North American states. They do not, however, remain longer than till the approaching of the spring, when they again retire northward to the arctic regions to breed. A few, indeed, drop short, and perform that office by the way, for they are known to breed in some of the Hebrides, the Orkney, Shetland, and other solitary isles; but these are hardly worth notice: the great bodies of them are met with in the large

rivers and lakes near Hudson's Bay, and those of Kamtschatka, Lapland, and Iceland. They are said to return to the latter place in flocks of about a hundred at a time, in the spring, and also to pour in upon that island from the north, in nearly the same manner, on their way southward in the autumn. The young which are bred there remain throughout the first year; and in August, when they are in moult, and unable to fly, the natives taking advantage of this, kill them with clubs, shoot, and hunt them down with dogs, by which they are easily caught. The flesh is highly esteemed by them as a delicious food, as are also the eggs, which are gathered in the spring. The Icelanders, Kamtschatdales, and other natives of the northern world, dress their skins with the down on, sew them together, and make them into garments of various kinds: the northern American Indians do the same, and sometimes weave the down as barbers weave the cawls for wigs, and then manufacture it into ornamental dresses for the women of rank, while the larger feathers are formed into caps and plumes to decorate the heads of their chiefs and warriors. They also gather the feathers and down in large quantities, and barter or sell them to the inhabitants of more civilized nations.

Buffon is of opinion that the Tame Swan has been derived originally from the wild species; other naturalists entertain a contrary opinion, which they form chiefly on the difference between them in the singular conformation of the windpipe. Willoughby says, "The windpipe of the Wild Swan, after a strange and wonderful manner enters the breast bone in a cavity prepared for it, and is therein reflected, and after its egress at the divari-

cation is contracted into a narrow compass by a broad and bony cartilage; then being divided into two branches, goes on to the lungs: these branches before they enter the lungs, are dilated, and as it were swollen out into two cavities." Dr Heysham corroborates the above, and adds, that the Wild Swan, in this particular, differs not only from the Tame Swan, but also from every other bird. The only observable external difference between the two species is in the markings of the bill, (which are figured in the subjoined head) and in the Wild Swan's being of less bulk than the Mute or Tame kind.

Much has been said in ancient times, of the singing of the Swan, and many beautiful and poetical descriptions have been given of its dying song. "No fiction of natural history, no fable of antiquity, was ever more celebrated, oftener repeated, or better received: it occupied the soft and lively imagination of the Greeks; poets, orators, and even philosophers, adopted it as a truth too pleasing to be doubted." "The dull insipid truth," however, is very different from such amiable and affecting fables, for the voice of the Swan, singly, is shrill, piercing, and harsh, not unlike the sound of a clarionet when blown by a novice in music. It is, however, asserted by those who have heard the united and varied voices of a numerous assemblage of them, that they produce a more harmonious effect, particularly when softened by the murmur of the waters.

At the setting in of frosty weather, the Wild Swans are said to associate in prodigious multitudes, and thus united, to use every effort to prevent the water from freezing: this they accomplish by the continual stir kept up amongst them; and by constantly dashing it with-

their extended wings, they are enabled to remain as long as it suits their convenience, in some favourite part of a lake or river which abounds with their food.

The Swan is very properly entitled the peaceful Monarch of the Lake : conscious of his superior strength, he fears no enemy, nor suffers any bird, however powerful, to molest him ; neither does he prey upon any one. His vigorous wing is as a shield against the attacks even of the Eagle, and the blows from it are said to be so powerful as to stun or kill the fiercest of his foes. The Wolf or the Fox may surprise him in the dark, but their efforts are vain in the day. His food consists of the grasses and weeds, and the seeds and roots of plants, which grow on the margins of the water, and of the myriads of insects which skim over, or float on its surface ; also occasionally of the slimy inhabitants within its bosom.

The female makes her nest of the withered leaves and stalks of reeds and rushes, and lays commonly six or seven thick-shelled white eggs : she is said to sit upon them six weeks before they are hatched. Both male and female are very attentive to their young, and will suffer no enemy to approach them.

THE MUTE SWAN,

OR TAME SWAN.

(*Anas Cygnus mansuetus*, Lin.—*Le Cygne*, Buff.)

THE plumage of this species is of the same snowy whiteness as that of the Wild Swan, and the bird is covered next the body with the same kind of fine close down; but it greatly exceeds the Wild Swan in size, weighing about twenty-five pounds, and measuring more in the length of the body and extent of the wings. This also differs in being furnished with a projecting, callous, black tubercle, or knob, on the base of the upper mandible, and in the colour of the bill, which in this is red,

with black edges and tip : the naked skin between the bill and the eyes is also of the latter colour : in the Wild Swan this bare space is yellow.

The manners and habits are much the same in both kinds, particularly when they are in a wild state ; for indeed this species cannot properly be called domesticated ; they are only as it were partly reclaimed from a state of nature, and invited by the friendly and protecting hand of man to decorate and embellish the artificial lakes and pools which beautify his pleasure grounds. On these the Swan cannot be accounted a captive, for he enjoys all the sweets of liberty. Placed there, as he is the largest of all the British birds, so is he to the eye the most pleasing and elegant. What in nature can be more beautiful than the grassy-margined lake, hung round with the varied foliage of the grove, when contrasted with the pure resplendent whiteness of the majestic Swan, wafted along, with erected plumes, by the gentle breeze, or floating, reflected on the glossy surface of the water, while he throws himself into numberless graceful attitudes, as if desirous of attracting the admiration of the spectator ?

The Swan, although possessed of the power to rule, yet molests none of the other water birds, and is singularly social and attentive to those of his own family, which he protects from every insult. While they are employed with the cares of the young brood, it is not safe to approach near them, for they will fly upon any stranger, whom they often beat to the ground by repeated blows ; and they have been known by a stroke of the wing to break a man's leg. But, however powerful they are with their wings, yet a slight blow on the head will kill them.

The Swan, for ages past, has been protected on the river Thames as royal property ; and it continues at this day to be accounted felony to steal their eggs. “ By this means their increase is secured, and they prove a delightful ornament to that noble river.” Latham says, “ In the reign of Edward IV. the estimation they were held in was such, that no one who possessed a freehold of less than the clear yearly value of five marks, was permitted even to keep any.” In those times, hardly a piece of water was left unoccupied by these birds, as well on account of the gratification they gave to the eye of their lordly owners, as that which they also afforded when they graced the sumptuous board at the splendid feasts of that period : but the fashion of those days is passed away, and Swans are not nearly so common now as they were formerly, being by most people accounted a coarse kind of food, and consequently held in little estimation : but the Cygnets (so the young Swans are called) are still fattened for the table, and are sold very high, commonly for a guinea each, and sometimes for more : hence it may be presumed they are better food than is generally imagined.

This species is said to be found in great numbers in Russia and Siberia, as well as further southward, in a wild state. They are, without an owner, common on the river Trent, and on the salt-water inlet of the sea, near Abbotsbury, in Dorsetshire : they are also met with on other rivers and lakes in different parts of the British isles.

It is the generally received opinion that the Swan lives to a very great age, some say a century, and others have protracted their lives to three hundred years ! Strange

as this may appear, there are who credit it: the author, however, does not scruple to hazard an opinion, that this over-stretched longevity originates only in traditionary tales, or in idle unfounded hear-say stories; as no one has yet been able to say, with certainty, to what age they attain.

The female makes her nest, concealed among the rough herbage, near the water's edge: she lays from six to eight large white eggs, and sits on them about six weeks (some say eight weeks) before they are hatched. The young do not acquire their full plumage till the second year.

It is found by experience that the Swan will not thrive if kept out of the water: confined in a court yard, he makes an awkward figure, and soon becomes dirty, tawdry, dull, and spiritless.

THE SWAN GOOSE.

CHINESE, SPANISH, GUINEA, OR CAPE GOOSE.

(*Anas Cynoides*, Lin.—*L'Oie de Guinée*, Buff.)

THIS species is more than a yard in length, and is of a size between the Swan and the Common Goose: it is distinguished from others of the Goose tribe by its upright and stately deportment, by having a large knob on the root of the upper mandible, and a skin, almost bare of feathers, hanging down like a pouch, or a wattle, under the throat:* a white line or fillet is extended from the corners of the mouth over the front of the brow: the base of the bill is orange: irides reddish brown: a dark brown

* The bird from which the above figure was taken, was without this appendage.

or black stripe runs down the hinder part of the neck, from the head to the back : the fore part of the neck, and the breast, are yellowish brown : the back, and all the upper parts, brownish grey, edged with a lighter colour : the sides, and the feathers which cover the thighs, are clouded nearly of the same colours as the back, and edged with white : belly white : legs orange.

It is said that these birds originally were found in Guinea only : now they are become pretty common, in a wild as well as a domesticated state, both in warm and in cold climates.

Tame Geese of this species, like other kinds, vary much, both in the colour of the bill, legs, and plumage, as well as in size ; but they all retain the knob on the base of the upper mandible, and rarely want the pouch or wattle under the gullet. They are kept by the curious in various parts of England, and are more noisy than the Common Goose : nothing can stir, in the night or day, without their sounding the alarm, by their hoarse cacklings and shrill cries. They breed with the Common Goose, and their offspring are as prolific as those of any other kind. The female is smaller than the male : “ the head, neck, and breast are fulvous ; paler on the upper part : the back, wings, and tail, dull brown, with pale edges : belly white : in other respects they are like the male, but the knob over the bill is smaller.”

THE CANADA GOOSE,

OR CRAVAT GOOSE.

(Anas Canadensis.—L'Oie à cravate, Buff.)

THIS is less than the Swan Goose, but taller and longer than the Common Goose. Their average weight is about nine pounds, and the length about three feet six inches. The bill is black, and two inches and a half long: irides hazel: the head and neck are also black, with a crescent-shaped white band on the throat, which tapers off to a point on each side below the cheeks, to the hinder part of the head: the whiteness of this cravat is heightened by its contrast with the dark surrounding plumage, and it looks very pretty: this mark also distinguishes it from others of the Goose tribe. All the upper parts of the plumage, the breast, and a portion of the belly, are of a dull brown, sometimes mixed with grey: the lower part of the neck, the belly, vent, and upper tail coverts, white: quills and tail black: legs dingy blue.

This is another useful species which has been reclaimed from a state of nature, and domesticated and multiplied in many parts of Europe, particularly in France and Germany; and it is not very uncommon in England. It is as familiar, breeds as freely, and is in every respect as valuable as the Common Goose: it is also accounted a great ornament on ponds near gentlemen's seats. Buffon says, "Within these few years, many hundreds inhabited the great canal at Versailles, where they lived familiarly with the Swans: they were oftener on the grassy margins than in the water. There is at present a great number of them on the magnificent pools that decorate the charming gardens of Chantilly." The wild stock whence these

birds were taken are found in the northern parts of America; they are one of those immense families, which, when associated with others of the same genus, are said, at certain seasons, to darken the air like a cloud, and to spread themselves over the lakes and swamps in innumerable multitudes.

Mr Pennant, in his *Arctic Zoology*, gives the following interesting account of the mode of taking the Canada Goose in Hudson's Bay :—

“ The English of Hudson's Bay depend greatly on Geese, of these and other kinds, for their support; and, in favourable years, kill three or four thousand, which they salt and barrel. Their arrival is impatiently attended; it is the harbinger of the spring, and the month named by the Indians the *Goose* moon. They appear usually at our settlements in numbers, about St George's day, O. S. and fly northward to nestle in security. They prefer islands to the continent, as further from the haunts of men. Thus Marble island was found, in August, to swarm with Swans, Geese and Ducks; the old ones moulting, and the young at that time incapable of flying.

“ The English send out their servants, as well as Indians, to shoot these birds on their passage. It is in vain to pursue them: they therefore form a row of huts made of boughs, at musquet-shot distance from each other, and place them in a line across the vast marshes of the country. Each hovel, or, as they are called, *stand*, is occupied by only a single person. These attend the flight of the birds, and, on their approach, mimic their cackle so well, that the Geese will answer, and wheel and come nearer the stand. The sportsman keeps motionless, and on his knees, with his gun cocked, the whole time; and

never fires till he has seen the eyes of the Geese. He fires as they are going from him, then picks up another gun that lies by him, and discharges that. The Geese which he has killed, he sets up on sticks as if alive, to decoy others ; he also makes artificial birds for the same purpose. In a good day (for they fly in very uncertain and unequal numbers) a single Indian will kill two hundred. Notwithstanding every species of Goose has a different call, yet the Indians are admirable in their imitation of every one.

“ The vernal flight of the Geese lasts from the middle of April until the middle of May. Their first appearance coincides with the thawing of the swamps, when they are very lean. The autumnal or the season of their return with their young, is from the middle of August to the middle of October. Those which are taken in this latter season, when the frosts usually begin, are preserved in their feathers, and left to be frozen for the fresh provisions of the winter stock. The feathers constitute an article of commerce, and are sent to England.”

THE EGYPTIAN GOOSE.

GANSER, OR GAMBO GOOSE.

(*Anas Ægyptiaca*, Lin.—*L'Oie d'Egypte*, Buff.)

THIS beautifully variegated species is nearly of the size of the Grey Lag, or common Wild Goose. The bill red, about two inches in length, tip black, and nostrils dusky: eye-lids red, and the irides pale yellow: the throat, cheeks, and upper part of the head are white: a rusty chesnut-coloured patch on each side of the head surrounds the eyes. About two-thirds of the neck, from the head downwards, is of a pale reddish bay colour, darker at the lower end: a broad deep chesnut-coloured spot covers the middle of the breast: the shoulders and scapulars are of a reddish brown, prettily crossed with numerous dark waved lines: the wing-coverts are white: the greater ones barred near their tips with black: the secondary quills are tinged with reddish bay, and bordered with chesnut; those of the primaries which join them are edged with glossy green, and the rest of the first quills are black: the lower part of the back, the rump and tail, are black: the belly is white, but all the other fore parts, and sides of the body, from the neck to near the vent, are delicately pencilled with narrow rust-coloured zigzag lines on a pale ash-grey ground: each wing is furnished on the bend with a short blunt spur. The colours of the female are pretty much the same as those of the male, but not by any means so bright or distinctly marked.

This kind is common in a wild state in Egypt, at the Cape of Good Hope, and in various parts of the intermediate territories of Africa, whence they have been brought

into, and domesticated in this and other civilized countries, and are now an admired ornament on many pieces of water contiguous to gentlemen's seats ; but neither the author nor his correspondents were able to procure a specimen of this or the preceding species, for the purpose of making drawings.

THE RED-BREASTED GOOSE,

OR SIBERIAN GOOSE.

(Anser ruficollis.)

THE Red-breasted Goose measures above twenty inches in length, and its extended wings three feet ten in breadth. The bill is short, of a brown colour, with the nail black : irides yellowish hazel : the cheeks and brow are dusky, speckled with white : an oval white spot occupies the space between the bill and the eyes, and is bounded above, on each side of the head, by a black line which falls down the hinder part of the neck : the chin, throat, crown of the head, and hinder part of the neck to the back, are black : two stripes of white fall down from behind each eye, on the sides of the neck, and meet in the

middle : the other parts of the neck, and the upper part of the breast, are of a deep rusty red, and the latter is terminated by two narrow bands of white and black : the back and wings are dusky ; the greater coverts edged with grey : sides and lower part of the breast, black : belly, upper and under tail coverts, white : legs dusky.

This beautiful species is a native of Russia and Siberia, whence they migrate southward in the autumn, and return in the spring : they are said to frequent the Caspian sea, and are supposed to winter in Persia. They are very rare in this country, only three of them (so far as the author's knowledge extends) having ever been met with in it, and those all by the late M. Tunstall, Esq. of Wycliffe, in Yorkshire, in whose valuable museum the first of these birds, in high preservation, was placed.* It was shot near London in the beginning of the hard frost in the year 1766 ; and another of them was about the same time taken alive near Wycliffe, and kept there for several years in a pond among the Ducks, where it became quite tame and familiar. Mr Tunstall informed Mr Latham of these particulars, and also mentioned a third of the same kind, which had been shot in some other part of the kingdom. They are said to be quite free from any fishy taste, and are highly esteemed for the table.

* The foregoing figure was taken from this specimen.

THE GREY LAG GOOSE,

OR COMMON WILD GOOSE.

(*Anas Anser*, Lin.—*L'Oie sauvage*, Buff.)

THIS Wild Goose generally weighs about ten pounds, and measures two feet nine inches in length, and five in breadth. The bill is thick at the base, tapers towards the tip, and is of a yellowish red colour, with the nail white: the head and neck are of a cinereous brown, tinged with dull yellow, and from the separations of the feathers, the latter appears striped downwards: the upper part of the plumage is of a deep brown, mixed with ash-grey; each feather is lighter on the edges, and the lesser coverts are tipped with white: the shafts of the primary quills are white, the webs grey, and the tips black: the secondaries black, edged with white: the breast and belly are crossed and clouded with dusky and ash on a whitish ground; and the tail-coverts and vent are of a

snowy whiteness : the middle feathers of the tail are dusky, tipped with white ; those adjoining more deeply tipped, and the exterior ones nearly all white : legs pale red.

This species is common in this country, and although large flocks of them, well known to the curious, in all the various shapes which they assume in their flight,* are seen regularly migrating southward in the autumn, and northward in the spring,† yet several of them are known to remain and breed in the fens of Lincolnshire and Cambridgeshire, and it is said, in various other parts of Great Britain. Pennant says they reside in the fens the whole year, breed there, and hatch about eight or nine

* The elevated and marshaled flight of the Wild Geese, seems dictated by geometrical instinct : shaped like a wedge, they cut the air with less individual exertion ; and it is conjectured, that the change of its form from an inverted V, an A, and L, or a straight line, is occasioned by the leader of the van's quitting his post at the point of the angle through fatigue, dropping into the rear, and leaving his place to be occupied by another.

† A gentleman in the county of Durham, one morning in the month of April, observed a flock of Wild Geese going northward, in the line of two objects whose distance he knew to be four miles : he found by his watch the exact time they were in flying this distance ; from which he calculated, that if they continued to fly at the same rate for twelve hours, they would be at the Orkneys by sun-set, which is twenty-five miles an hour. But it is not probable that these birds ever migrate from the fens in Cambridgeshire, &c. to the Orkneys, or other places where they breed, in one day, or at one flight ; for great numbers of them are known to stop for several days, both in going and coming back again, at the mouth of the Tees, Prestwick Car, the haughs of the river Till, near Wooler in Northumberland, and at some places in the Merse in Scotland.

young ones, which are often taken, easily made tame, and much more esteemed for the excellent flavour of their flesh than the domestic Goose: he adds, “ The old Geese which are shot are plucked and sold in the market as fine tame ones, and readily bought, the purchaser being deceived by the size ; but their flesh is coarse.”*

This species is widely and numerously spread over all the various parts of the northern world, whence some flocks of them migrate a long way southward in the winter. Latham says they seem to be general inhabitants of the globe, are met with from Lapland to the Cape of Good Hope,—are frequent in Arabia, Persia, and China, as well as indigenous to Japan,—and on the American continent from Hudson’s Bay to South Carolina. He also observes that our voyagers have met with them in the Straits of Magellan, Port Egmont in the Falkland Islands, Terra del Fuego, and New Holland. There can be little doubt about the territories assigned to them for their summer residences and breeding places ; the lakes, swamps, and dreary morasses of Siberia, Lapland, Iceland, and the unfrequented or unknown northern regions of America seem set apart for that purpose, where, with multitudes of other kinds, in undisturbed security, they rear their young, and are amply provided with a variety of food, a large portion of which must consist of the larvæ of the gnats which swarm in those parts, and the myriads of insects that are fostered by the unsetting sun.

* This is the case with all very old Geese, both tame and wild ; but the flesh of a middle-aged one of the latter sort, in the spring of the year, when the bird is in full feather, is very tender, finely flavoured, and nowise like that of the Tame Goose either in taste or colour.

Pennant says that these Wild Geese appear in Hudson's Bay early in May, as soon as the ice disappears ;—collect in flocks of twenty or thirty, stay about three weeks, then separate in pairs, and take off to breed ; that about the middle of August they return to the marshes with their young, and continue there till September. Some of them are caught and brought alive to the factories, where they are fed with corn, and thrive greatly.

Wild Geese are very destructive to the growing corn in the fields where they happen to halt in their migratory excursions. In some countries they are caught at those seasons in long nets, resembling those used for catching Larks : to these nets the Wild Geese are decoyed by tame ones placed there for that purpose. Many other schemes are contrived to take these wary birds ; but as they feed only in the day-time, and betake themselves to the water at night, the fowler must exert his utmost care and ingenuity in order to accomplish his ends : all must be planned in the dark, and every trace of suspicion removed ; for nothing can exceed the vigilant circumspection and acute ear of the sentinel, who, placed on some eminence, with out-stretched neck surveys every thing that moves within the circle of the centre on which he takes his stand ; and the instant he sounds the alarm, the whole flock betake themselves to flight.

THE TAME GOOSE.

(*Anas Anser*, Lin.—*L'Oie domestique*, Buff.)

To describe the varied plumage and the economy of this well-known valuable domestic fowl, may seem to many a needless task ; but to others, unacquainted with rural affairs, it may be interesting.* Their predominant colours are white and grey, with shades of ash, blue, and brown : some of them are yellowish, others dusky, and many are found to differ very little in appearance from the wild kind last described—the original stock whence, in early times, they were all derived. The only permanent mark, which all the grey ones still retain, like those of the wild kind, is the white ring which surrounds the root of the tail. They are generally furnished with a small tuft on the head ; and the most usual colour of

* A certain town lady wondered how a Goose could suckle nine Goslings.

the males (Gander or Steg) is pure white : the bills and feet in both males and females are of an orange red. By studied attention in the breeding, two sorts of these Geese have been obtained : the less are by many esteemed as being more delicate eating ; the larger are by others preferred on account of the bountiful appearance they make upon the festive board. The average weight of the latter kind is between nine and fifteen pounds ; but instances are not wanting, where they have been fed to upwards of twenty pounds : this is, however, to sacrifice the flavour of the food to the size and appearance of the bird ; for they become disgustingly fat and surfeiting, and the methods used to cram them up are unnatural and cruel. It is not, however, altogether on account of their use as food that they are valuable ; their feathers, their down, and their quills,* have long been considered as articles of more importance, and from which their owners reap more advantages. In this respect the poor creatures have not been spared : urged by avarice, their inhuman masters appear to have ascertained the exact quantity of plumage of which they can bear to be robbed, without being deprived of life. Mr Pennant, in describing the methods used in Lincolnshire, in breeding, rearing, and plucking Geese, says “ they are plucked

* “ An English archer bent his bow,

“ Made of a trusty tree,—

“ An arrow of a cloth-yard long,

“ Unto the head, drew he :

“ Against Sir Hugh Montgomery

“ So right his shaft he set,

“ The grey Goose wing that was thereon

“ In his heart’s blood was wet.”

Chevy Chase.

five times in the year : first at Lady-day for the feathers and quills ; this business is renewed for the feathers only, four times more between that and Michaelmas :” he adds, that he saw the operation performed even upon Goslings of six weeks old, from which the feathers of the tails were plucked ; and that numbers of the Geese die when the season afterwards proves cold. But this unfeeling greedy business is not peculiar to one county, for much the same is practised in others. The care and attention bestowed upon the brood Geese, while they are engaged in the business of incubation, in the month of April, is nearly the same every where : wicker pens are provided for them, placed in rows, and tier above tier, not uncommonly under the same roof with their owner. Some place water and corn near the nests ; others drive them to the water twice a-day, and replace each female upon her own nest as soon as she returns. This business requires the attendance of the Gozzard (Goose-herd) a month at least, in which time the young are brought forth : as soon afterwards as the brood are able to waddle along, they are, together with their dams, driven to the contiguous loughs, and fens or marshes, on whose grassy-margined pools they feed and thrive, without requiring any further attendance until the autumn. To these marshes, which otherwise would be unoccupied, (except by wild birds) and be only useless watery wastes, we are principally indebted for so great a supply of the Goose ; for in almost every country where lakes and marshes abound, the neighbouring inhabitants keep as many as suit their convenience, and in this way immense numbers annually attain to full growth and perfection. But in no part of the world are such numbers reared as

in the fens of Lincolnshire, where it is said to be no uncommon thing for a single person to keep a thousand old Geese, each of which, on an average, will bring up seven young ones. So far those only are noticed which may properly be called the larger flocks, by which particular watery districts are peopled; and, although their aggregate numbers are great, yet they form only a part of the large family: those of the farm-yard, taken separately, appear as small specks on a great map; but when they are gathered together, and added to those kept by almost every cottager throughout the kingdom, the immense whole will appear multiplied in a ratio almost incalculable. A great part of those which are left to provide for themselves during the summer, in the solitary distant waters, as well as those which enliven the village green, are put into the stubble fields after harvest, to fatten upon the scattered grain; and some are penned up for this purpose, by which they attain to greater bulk; and it is hardly necessary to observe, that they are then poured in weekly upon the tables of the luxurious citizens of every town in the kingdom. But these distant and divided supplies seem trifling when compared with the multitudes which, in the season, are driven in all directions into the metropolis:* the former appear only like the scanty waterings of the petty streamlet; the latter like the copious overflowing torrent of a large river. To the country market towns they are carried in bags and panniers; to the great centre of trade they are sent in droves of many thousands.† To a stranger it is

* In ancient times they were driven in much the same way, from the interior of Gaul to Rome.

† In an article which Mr Latham has copied from the St

a most curious spectacle to view these hissing, cackling, gabbling, but peaceful armies, with grave deportment, waddling along (like other armies) to certain destruction. The drivers are each provided with a long stick, at one end of which a red rag is tied as a lash, and a hook is fixed at the other : with the former, of which the Geese seem much afraid, they are excited forward ; and with the latter, such as attempt to stray, are caught by the neck and kept in order ; or if lame, they are put into an *hospital cart*, which usually follows each large drove. In this manner they perform their journeys from distant parts, and are said to get forward at the rate of eight or ten miles in a day, from three in the morning till nine at night : those which become fatigued are fed with oats, and the rest with barley.

It is universally believed that the Goose lives to a great age, and particular instances are recorded by ornithologists, which confirm the fact : some are mentioned which have been kept seventy years ; and Willoughby notices one which lived eighty years. They are, however, seldom permitted to live out their natural life, being sold with the younger ones long before they approach that period. The old ones are called *cagmags*, and are bought only by novices in market-making ; for, from their toughness, they are utterly unfit for the table.

The Tame Goose lays from seven to twelve eggs, and sometimes more : these the careful housewife divides equally among her brood Geese, when they begin to sit. Those of her Geese which lay a second time in the course

James's Chronicle of September 2d, 1783, it is noticed, that a drove of about nine thousand Geese passed through Chelmsford on their way to London, from Suffolk.

of the summer, are seldom, if ever, permitted to have a second hatching; but the eggs are used for household purposes. In some countries the domestic Geese require much less care and attendance than those of this country. Buffon, in his elegant and voluminous Ornithology, in which nothing is omitted, gives a particular detail of their history and economy every where: he informs us, that among the villages of the Cossacks, subject to Russia, on the river Don, the Geese leave their homes, in March or April, as soon as the ice breaks up, and the pairs joining each other, take flight in a body to the remote northern lakes, where they breed and constantly reside during the summer; and that on the beginning of winter, the parent birds, with their multiplied young progeny, all return, and divide themselves, every flock alighting at the door of the respective place to which it belongs.

The Goose has for many ages been celebrated on account of its vigilance. The story of their saving Rome by the alarm they gave, when the Gauls were attempting the capitol,* is well known, and was probably the first time of their watchfulness being recorded; and on that account, they were afterwards held in the highest estimation by the Roman people. It is certain, that nothing can stir in the night, nor the least or most distant noise be made, but the Geese are roused, and immediately begin to hold their cackling converse; and on the nearer approach of apprehended danger, they set up their more shrill and clamorous cries. It is on account of this property that they are esteemed by many persons, as the most vigilant of all sentinels, when placed in particular situations.

* As the poet sings—

“ Et servaturis vigili Capitolia voce Anseribus.”

THE WHITE-FRONTED WILD GOOSE,
OR LAUGHING GOOSE.

(*Anas albifrons*.—*L'Oie rieufe*, Buff.)

THIS species measures two feet four inches in length, and four feet six in the extended wings, and weighs about five pounds. The bill is thick at the base, of a yellowish red colour; the nail white; from the base of the bill and corners of the mouth, a white patch is extended over the forehead: the rest of the head, the neck, and the upper parts of the plumage are dark brown: the primary and secondary quills are of the same colour, but much darker; and the wing coverts are tinged with ash: the breast and belly are dirty white, spotted with dusky: the tail is of a hoary ash coloured brown, and surrounded, like the Lag Goose's, with a white ring at the base: the legs yellow.

These birds form a part of those vast tribes which swarm about Hudson's Bay, and the north of Europe and Asia, during the summer months, and are but thinly scattered over the other quarters of the world. They visit the fens and marshy places in England, in small flocks, in the winter months, and disappear about the beginning of March. It is said that they never feed on the corn-fields, but confine themselves wholly to such wilds and swamps as are constantly covered with water.

THE BEAN GOOSE.

THIS species differs very little in its general appearance from the Grey Lag Goose, the chief distinction between them being in the bill; which in this is small, much compressed near the end, whitish, and sometimes of a pale red in the middle, and black at the base and nail: the latter is shaped somewhat like a horse-bean, from which the species has obtained the name of Bean Goose. The length of this bird is two feet seven inches; breadth four feet eleven; its weight about six pounds and a half. The head and neck are of a cinereous brown colour, tinged with ferruginous: breast and belly dirty white, clouded with cinereous: sides and scapulars dark ash, edged with white: the back of a plain ash colour: coverts of the tail white: lesser coverts of the wings light grey, nearly white; the middle deeper, tipped with white: primaries and secondaries grey, tipped with black: feet and legs saffron colour; claws black.

These birds arrive in the fen counties in the autumn, and take their departure in May. They are said to alight in the corn-fields, and to feed much upon the green wheat, while they remain in England. They are reported to breed in great numbers in the Isle of Lewis, and no doubt on others of the Hebrides, and also at Hudson's Bay.

THE BERNACLE.

CLAKIS, OR TREE GOOSE.

(*Anas Erythropus*, Lin.—*La Bernache*, Buff.)

THE Bernacle weighs about five pounds, and measures more than two feet in length, and nearly four and a half in breadth. The bill, from the tip to the corners of the mouth, is scarcely an inch and a half long, black, and crossed with a pale reddish streak on each side : a narrow black line passes from the bill to the eyes, the irides of which are brown : the head is small, and as far as the crown, together with the cheeks and throat, white : the rest of the head and neck, to the breast and shoulders, is black. The upper part of the plumage is prettily marbled or barred with blue grey, black, and white : the feathers of the back are black, edged with white, and those of the wing coverts and scapulars, blue grey, bordered with black near their margins, and edged with white : the quills black, edged a little way from the tips with blue grey : the under parts and tail coverts white : the thighs

are marked with dusky lines or spots, and are black near the knees : the tail is black, and five inches and a half long : the legs and feet dusky, very thick and short, and have a stumpy appearance.

In severe winters, these birds are not uncommon in this kingdom, particularly on the northern and western parts, where, however, they remain only a short time, but depart early in the spring to their northern wilds, to breed and spend the summer.

The history of the Bernacle has been rendered remarkable by the marvellous accounts which were in former times related concerning their propagation, or rather their growth. Almost all the old naturalists, as well ornithologists as others, assert that they were produced from shells which grew out of rotten ship-wrecked timber, and other kinds of wood and trees which lay under water, in the sea, and that these shells owed their origin to "spume or froth," which, in a short time, assumed a fungous appearance upon the wood : others affirmed that they were produced from the palms or fruits of a tree like the willow, which, when ripe, dropped off into the water, and became alive, &c. Treatises were written expressly on these chimerical principles, giving a particular description of their first appearance, progressive growth, birth, (or final exclusion from the shell) and of their dropping into the sea, swimming about, and becoming perfectly feathered birds, &c. Other authors, indeed, less credulous, suspected the truth of these assertions : Belon was of the number of those who laughed at the story in his day ; and Willoughby, long after him, treated such incoherent narratives with contempt. It must excite regret, that so respectable, so learned, and so grave

an author as Gerard, should not only have believed this wonderful transformation, but that he should have introduced the idle tale into his invaluable Herbal.* But even to enumerate these authors, or to quote the entertaining parts of the wild whimsies with which they have embellished their descriptions of these birds, would far exceed the limits of this work, and would only serve to prove (were that necessary) how credulous, not only the great unthinking mass, but even the philosophers, once were, and how far it was possible for such circumstantially told miracles to lay the understandings of mankind fast asleep. Bartholin discovered that these Goose-bearing conches contained only a shell-fish of a particular kind, a species of multivalve—the *Pousse-pieds* of Wormius and Lobel, and the *Lepas Anatifera* of Linnæus.

* See Gerard's Herbal, published in 1597, article—"The *Goose-tree*," which he seems to have reserved for the conclusion of his work, as being the most wonderful of all he had to describe. A small island called the Pile of Foulders, half a mile from the main land of Lancashire, he says, is the native soil of "*the Tree bearing Geese*," and so plentiful is the fruit, that a full-grown bird is sold for three-pence. The honest naturalist, however, although his belief was fixed, admits that his own personal knowledge was confined to certain shells which adhered to a rotten tree that he dragged from the sea between Dover and Romney, in some of which he found "living things without forme or shape; in others which were nearer come to ripenes, living things that were very naked, in shape like a birde: in others, the birds couered with soft downe, the shell halfe open, and the birde readie to fall out, which no doubt were the foules called Barnakles."

THE BRENT GOOSE.

(*Anas Bernicla*, Lin.—*Le Cravant*, Buff.)

THIS is of nearly the same shape, but somewhat less than the last, from which it differs in the colour of its plumage, being mostly of an uniform brown, the feathers edged with ash : the upper parts, breast and neck, are darker than the belly, which is more mixed and dappled with paler cinereous and grey : the head and upper half of the neck are black, excepting a white patch on each side of the latter, near the throat : the lower part of the back and the rump are also black : the tail coverts above and below, and the vent, white : tail, quills, and legs dusky : the bill is dark, rather of a narrow shape, and only about an inch and a half long : the irides are light hazel. In the females and the younger birds, the plumage is not so distinctly marked, and the white spots on the sides of the neck are often mixed with dusky : but such varyings are discernible in many other birds, for it seldom happens that two are found exactly alike.

The Brent Geese, like other species of the same genus, quit the rigours of the north in winter, and spread themselves southward in greater or less numbers, impelled forward, according to the severity of the season, in search of milder climates. They are then met with on the British shores, and spend the winter months in the rivers, lakes, and marshes in the interior parts, feeding mostly upon the roots, and also on the blades of the long coarse grasses and plants which grow in the water : but indeed their varied modes of living, as well as their other habits and propensities, and their migrations, haltings, breeding places, &c. do not differ materially from those of the other numerous families of the Wild Geese. Buffon gives a detail of the devastations which they made, in the hard winters of 1740 and 1765, upon the corn-fields, on the coasts of Picardy, in France, where they appeared in such immense swarms, that the people were literally raised (*en masse* we suppose) in order to attempt their extirpation, which, however, it seems they could not effect, and a change in the weather only, caused these unwelcome visitants to depart.

The Brent and the Bernacle were formerly, by some ornithologists, looked upon as being of the same species ; later observers, however, have decided differently, and they are now classed as distinct kinds. The foregoing figure was drawn from one shot at Axwell-Park, near Newcastle upon Tyne. There was a stuffed specimen in the Wycliffe museum, which slightly varied in the markings of the plumage.

THE EIDER DUCK.

ST CUTHBERT'S DUCK, OR GREAT BLACK AND
WHITE DUCK.

(*Anas mollissima*, Lin.—*L'Eider*, Buff.)

THIS wild, but valuable, species is of a size between the Goose and the Domestic Duck, and appears to be one of the graduated links of the chain which connects the two kinds. The full-grown old males generally measure about two feet two inches in length, and two feet eighteen in breadth, and weigh from six to above seven pounds. The head is large; the middle of the neck small, with the lower part of it spread out very broad, so as to form a hollow between the shoulders, which, while the bird is sitting at ease, seems as if fitted to receive its reclining head. The bill is of a dirty yellowish horn colour, darkish in the middle, and measures, from the tip to the corners of the mouth, two inches and a half: the upper mandible is forked in a singular manner towards each eye, and is covered with white feathers on the sides,

as far forward as the nostrils. The upper part of the head is of a soft velvet black, divided behind by a dull white stroke pointing downwards : the feathers, from the nape of the neck to the throat, are long, or puffed out, overhanging the upper part of the neck, and look as if they had been clipped off at the lower ends : they have the appearance of a pale pea-green velvet shag, with a white line dropping downward from the auriculars on each side. The cheeks, chin, upper part of the neck, the back, and lesser wing coverts, are white : the scapulars, and secondary quills, next the body, dirty white : bastard wings, and primary quills, brown ; the secondaries and greater coverts are the same, but much darker : the lower broad part of the neck, on the front, to the breast, is of a buff colour ; but in some specimens tinged with rusty red : the breast, belly, vent, rump, and tail coverts, are of a deep sooty black : tail feathers hoary brown : legs short, and yellow : webs and nails dusky. The female is nearly of the same shape, though less than the male, weighing only between five and six pounds, but her plumage is quite different, the ground colour being of a reddish brown, prettily crossed with waved black lines ; and in some specimens the neck, breast, and belly, are tinged with ash : the wings are crossed with two bars of white : quills dark : the neck is marked with longitudinal dusky streaks, and the belly is deep brown, spotted obscurely with black.

The Eider Duck lays from three to five large, smooth, pale olive-coloured eggs ; these she deposits and conceals in a nest, or bed, made of a great quantity of the soft, warm, elastic down, plucked from her own breast, and sometimes from that of her mate. The ground work or

foundation of the nest is formed of bent-grass, sea-weeds, or such like coarse materials, and it is placed in as sheltered a spot as the bleak and solitary place can afford.

In Greenland, Iceland, Spitzbergen, Lapland, and some parts of the coasts of Norway, the Eiders flock together, in particular breeding places, in such numbers, and their nests are so close together, that a person in walking along can hardly avoid treading upon them. The natives of these cold climates eagerly watch the time when the first hatchings of the eggs are laid: of these they rob the nest, and also of the more important article, the down with which it is lined, which they carefully gather and carry off. These birds will afterwards strip themselves of their remaining down, and lay a second hatching, of which also they are sometimes robbed: but it is said, that when this cruel treatment is too often repeated, they leave the place, and return to it no more.*

* The following particulars, from Von Troil's Letters on Iceland, are given, on account of the singular trait of character which is mentioned—that of two females occupying only one nest:—

“ The Eider birds build their nests on little islands not far from the shore, and sometimes even near the dwellings of the natives, who treat them with such kindness and circumspection as to make them quite tame. In the beginning of June they lay five or six eggs, and it is not unusual to find from ten to sixteen eggs in one nest, with two females, who agree remarkably well together. The whole time of laying continues six or seven weeks, during which time the natives visit the nest, for the purpose of taking the down and eggs, at least once a week. They first carefully remove the female, and then take away the down and part of the eggs; after which she lays afresh, covering her eggs with new down plucked from her breast: this being taken away, the male comes to her assistance, and covers the eggs with his down,

The quantity of this valuable commodity, which is thus annually collected in various parts, is uncertain. Buffon mentions one particular year, in which the Icelandic company sold as much as amounted to upwards of eight hundred and fifty pounds sterling. This, however, must be only a small portion of the produce, which is all sold by the hardy natives, to stuff the couches of the pampered citizens of more polished nations.

The great body of these birds constantly resides in the remote northern, frozen climates, the rigours of which their thick cloathing well enables them to bear. They are said to keep together in flocks in the open parts of the sea, fishing and diving very deep in quest of shell-fish and other food, with which the bottom is covered ; and when they have satisfied themselves, they retire to the shore, whither they at all times repair for shelter, on the approach of a storm. Other less numerous flocks of the Eiders branch out, colonize, and breed further southward in both Europe and America : they are found on the promontories and numerous isles of the coast of Norway, and on those of the northern, and the Hebrides or western isles of Scotland, and also on the Fern Isles, on the

which is left till the young are hatched. One female, during the whole time of laying, generally gives half a pound of down. The down from dead birds is accounted of little worth, having lost its elasticity. There are generally exported fifteen hundred or two thousand pounds of down on the company's account, exclusive of what is privately sold. The young ones quit the nest soon after they are hatched, and follow the female, who leads them to the water, where, having taken them on her back, she swims with them a few yards, and then dives, and leaves them floating on the water : in this situation they soon learn to take care of themselves, and are seldom afterwards seen on the land, but live among the rocks, and feed on insects and sea-weed."

Northumberland coast, which latter is the only place where they are known to breed in England, and may be said to be their utmost southern limit in this quarter, although a few solitary instances of single birds being shot further southward along the coast have sometimes happened. Mr Tunstal had a stuffed specimen in his museum, which was shot in January, at Hartlepool, on the Durham coast. The foregoing figure and description were taken from a perfect bird, in full plumage, shot in April, near Holy Island.

It is not known that any attempts to domesticate this species have succeeded. Such as were made by the Rev. Dr Thorp, of Ryton, entirely failed of success.

THE MUSK DUCK.

MUSCOVY, CAIRO, GUINEA, OR INDIAN DUCK.

(*Anas moschatus*, Lin.—*Le Canard Musque*, Buff.)

THIS species is less than the last, but much larger than the Common Duck, measuring about two feet in length. The bill is two inches long; the tip and nostrils brown; the other parts of it red, as is also the naked warty skin which joins its base, and surrounds the eyes.

The crown of the head is rather tufted or crested, and black: the cheeks, throat, and fore part of the neck, white, irregularly marked with black: the belly, from the breast to the thighs, white. The general colour of the rest of the plumage is deep brown, darkest, and glossed with green on the back, rump, quills, and tail; the two outside feathers of the latter, and the first three of the quills, are white: the legs and feet are red, short, and thick. This is the general appearance of the Musk Duck; but as it is domesticated in almost every country, it varies very much, like all other birds in that state. In the female, the bare warty, or carunculated skin, which is spread from the bill over the eyes, is of a much duller red, and does not cover so large a portion of the head as it does in the male: she is also of a less size.

Ornithologists are in doubt as to the country to which these birds originally belonged; it is, however, agreed, that they are natives of the warm climates. Mr Pennant says they are met with, wild, about lake Baikal, in Asia; Ray, that they are natives of Louisiana; Marcgrave, that they are met with in Brazil; and Buffon, that they are found in the overflowed savannas of Guiana, where they feed in the day-time upon the wild rice, which grows

there in abundance, and return in the evening to the sea : he adds, “ they nestle on the trunks of rotten trees ; and after the young are hatched, the mother takes them one after another by the bill and throws them into the water.” It is said that great numbers of the young brood are destroyed by the alligators, which are common in those parts. These birds have obtained the name of Musk Duck, from their musky smell, which arises from the liquor secreted in the glands on the rump. They are a thriving and prolific species, and their flesh, which is high-flavoured, is by many very much esteemed. They will associate with the Common Ducks ; and instances are not wanting of their producing a mixed breed.

THE VELVET DUCK.

DOUBLE SCOTER, OR GREAT BLACK DUCK.

(*Anas fusca*, Lin.—*La grande Macreuse*, Buff.)

THE Velvet Duck is larger than a Mallard, weighing about three pounds two ounces, and measuring above twenty inches in length. The upper mandible is broad, and flat, and rises into a kind of black knob at the base: the nostrils are of the same colour, and stand out on each side; the middle, or ridge, and the nail, are red; the rest of it is orange yellow, edged with black. The under mandible is pale or yellowish white, edged and spotted with black, and tipped with deep yellow: both are coarsely serrated. The head is large, the eyes small, with a spot of white below each; and the irides are nearly of the same colour. All the rest of the plumage, excepting a white stroke or band which crosses the closed wings in an oblique direction, is of a soft smooth sooty black, glossed with a cast of purple on the head, upper part of the neck, and shoulders, and inclin-

ing to brown on the sides, belly, and vent: the outer sides of the legs and toes are of a fine crimson colour; the inner sides deep yellow; the webs and nails black; and the joints of both legs and toes look as if they were stained or bespattered with ink: the tail, consisting of fourteen feathers, is short and pointed. The female is without the protuberance on the base of the bill, and has a white spot behind the ears, and her plumage is more more inclined to brown.

These birds are natives of the northern parts of the world, where they rear their young, and continue during the summer months, but retire southward in winter, at which season they are met with in greater or less numbers, and according to the severity of the weather, approach towards the temperate climates of Europe, Asia, and America. In the latter quarter they are frequently seen as far south as New York, and spread themselves in small numbers along the shores of western Europe, as far as France, where they sometimes appear in company with the large flocks of Scoters, and are often caught in the fishermen's nets with those birds; but they are seldom met with on the British shores.

THE SCOTER.

BLACK DUCK, OR BLACK DIVER.

(*Anas Nigra*, Lin.—*La Macreuse*, Buff.)

The Scoter is less than the Velvet Duck, weighing generally about two pounds nine ounces, and measuring twenty-two inches in length, and thirty-four in breadth. The base of the upper mandible is raised up into a kind of large knob, divided downwards in the middle by a narrow bright or deep yellow stripe, which is spread round the projecting edges of the nostrils, and extended nearly to the tip: the rest of the bill is black, grooved along near the edges, where it is broad and flat: the under mandible is also black: irides dusky. From the curious conformation and appearance of the bill, (of which a more accurate figure is subjoined) this species cannot easily be mistaken, although it is said that the knob in some specimens is red: in that of the females it is hardly noticeable; and in the younger males it is of a small size.

The eye-lids are yellow, the irides dark, and the whole of its close smooth plumage is black, glossed on the head and neck with purple. The tail consists of sixteen sharp-pointed feathers, of which the middle are the longest : legs brown. In some of the young females the plumage is grey.

In severe winters the Scoters leave the northern extremities of the world in immense flocks, dispersing themselves southward along the shores of more temperate climates. They are only sparingly scattered on the coasts of England ; but according to Buffon, they appear in great numbers on the northern coasts of France, to which they are attracted by beds of a certain kind of small bivalve shell-fish, (*vaimeaux*) which abound in those parts, and of which they are very fond, for they are almost incessantly diving in quest of them. Over these beds of shell-fish, the fishermen at low water spread their long nets, floated or supported horizontally two or three feet from the sand : these they leave to be covered by the overflowing tide, which also brings the Scoters prowling along with it, within their accustomed distance from the beach. As soon as the first of them perceives the shells, it instantly dives, when all the rest follow the example, and numbers are entangled in the floating meshes of the net. In this way it is said that sometimes twenty or thirty dozen have been taken in a single tide. These birds are sold to the Roman catholics, who eat them on fast days and in lent, when their religious ordinances have forbidden the use of all animal food except fish ; but these birds, and a few others of the same fishy flavour, have been exempted from the interdict, on the sup-

position of their being cold blooded, and partaking of the nature of fish.

The Scoters seldom quit the sea, upon which they are very nimble, and are indefatigable expert divers; but they fly heavily, near the surface of the water, and to no great distance, and are said to walk awkwardly erect on the land.

THE MALLARD,

OR COMMON WILD DUCK.

(Anas boschas, Lin.—Le Canard Sauvage, Buff.)

THE Wild Drake weighs from thirty-six to forty ounces, and measures twenty-three inches in length, and thirty-five in breadth. The bill is of a yellowish green colour, not very flat, about an inch broad, and two and a half long, from the corners of the mouth to the tip of the nail: the head and upper half of the neck, are of a glossy deep changeable green, terminated in the middle of the neck by a white collar, with which it is nearly encircled: the lower part of the neck, the breast, and shoulders, are of a deep vinous chesnut: the covering scapular feathers are of a kind of silvery white; those underneath rufous; and both are prettily crossed with small waved threads of brown: wing coverts ash: quills brown; and between these intervenes the beauty-spot (common in the Duck tribe) which crosses the closed wing in a transverse oblique direction; it is of a rich glossy purple, with violet

or green reflections, and bordered by a double streak of black and white. The belly is of a pale grey, delicately penciled and crossed with numberless narrow waved dusky lines, which, on the sides and long feathers that reach over the thighs, are more strongly and distinctly marked: the upper and under tail-coverts, lower part of the back, and the rump, are black; the latter glossed with green: the four middle tail-feathers are also black, with purple reflections, and, like those of the Domestic Drake, are stiffly curled upwards; the rest are sharp-pointed, and fade off to the exterior sides, from a brown to a dull white: legs, toes, and webs red.

The plumage of the female is very different from that of the male, and partakes of none of his beauties except the spot on the wings. All the other parts are plain brown, marked with black. She makes her nest, lays from ten to sixteen greenish white eggs, and rears her young, generally in the most sequestered mosses or bogs, far from the haunts of man, and hidden from his sight among reeds and rushes. To her young helpless unfledged family, (and they are nearly three months before they can fly) she is a fond, attentive, and watchful parent, carrying or leading them from one pool to another as her fears or inclinations direct her; and she is known in this country to use the same wily stratagems to mislead the sportsman and his dog, as those before noticed respecting the Partridge.*

Like the rest of the Duck tribes, the Mallards, in prodigious numbers, quit the north at the end of autumn, and migrating southward, arrive at the beginning of winter in large flocks, and spread themselves over all the

* Part I, page 304.

loughs and marshy wastes in the British isles. They pair in the spring, when the greater part of them again retire northward to breed; but many straggling pairs stay with us: they, as well as preceding colonists of their tribes, remain to rear their young, who become natives, and continue with us throughout the year.

Many and various are the contrivances which have been used, in both ancient and modern times, to catch these wild, shy, and wary birds; and from the avidity with which the sport is still followed, it is hardly necessary to observe how highly they are esteemed, and what place they hold as a delicacy on the table. To describe these various contrivances would swell out this part of their history beyond its proper limits, and Willoughby, Buffon, Pennant, Latham, and others, have left little new to add on this head. It will not be proper, however, to omit noticing the decoy, which from its superiority over every other method, promises to continue long in use; for in that mode the Mallard and other Ducks are taken by thousands at a time; whereas all the other schemes, of lying in ambush, shooting, baited hooks, wading in the water with the head covered in a perforated wooden vessel, or in a calabash, &c.* are attended with much watching, toil, and fatigue, and are also comparatively trifling in point of success.

* This method of taking Wild Geese or Ducks is represented, as well as those anciently in use, of taking almost every kind of wild animals, in an old folio book, consisting of 105 engravings, by Collaert and others, from the paintings of Johannes Stradanus. The wooden vessel which conceals the head of the fowler, is there represented, as it were floating about among the unsuspecting flocks, while with his hand the dextrous sportsman is pulling all those within his reach, one after another, by the legs under water. This method is still practised in China.

The decoys* now in use are formed by cutting *pipes* or

* For the following account of the manner of taking Wild-fowl in decoys, this work is indebted to Mr Bonfellow, of Stockton, in Norfolk.

“ In the lakes where they resort, the most favorite haunts of the fowl are observed : then in the most sequestered part of this haunt, they cut a ditch about four yards across at the entrance, and about fifty or sixty yards in length, decreasing gradually in width from the entrance to the farther end, which is not more than two feet wide. It is of a circular form, but not bending much for the first ten yards. The banks of the lake for about ten yards on each side of this ditch (or pipe, as it is called) are kept clear from reeds, coarse herbage, &c. in order that the fowl may get on them to sit and dress themselves. Across this ditch, poles on each side, close to the edge of the ditch, are driven into the ground, and the tops bent to each other and tied fast. These poles at the entrance form an arch, from the top of which to the water is about ten feet. This arch is made to decrease in height, as the ditch decreases in width, till the farther end is not more than eighteen inches in height. The poles are placed about six feet from each other, and connected together by poles laid lengthways across the arch and tied together. Over them a net with meshes sufficiently small to prevent the fowl getting through, is thrown across, and made fast to a reed fence at the entrance, and nine or ten yards up the ditch, and afterwards strongly pegged to the ground. At the farther end of the pipe, a tunnel net (as it is called) is fixed, about four yards in length, of a round form, and kept open by a number of hoops about eighteen inches in diameter, placed at a small distance from each other, to keep it distended. Supposing the circular bend of the pipe be to the right when you stand with your back to the lake, on the left hand side a number of reed fences are constructed, called *shootings*, for the purpose of screening from sight the *decoy-man*, and in such a manner, that the fowl in the decoy may not be alarmed, while he is driving those in the pipe : these shootings are about four yards in length, and about six feet high, and are ten in number. They are placed in the following

manner—

From the end of the last

tapering ditches, widened and deepened as they approach

shooting, a person cannot see the lake, owing to the bend of the pipe : there is then no farther occasion for shelter. Were it not for those shootings, the fowl that remain about the mouth of the pipe would be alarmed, (if the person driving the fowl already under the net should be exposed) and would become so shy as to forsake the place entirely. The first thing the decoy-man does when he approaches the pipe, is to take a piece of lighted turf or peat and hold near his mouth, to prevent the fowl smelling him. He is attended by a dog taught for the purpose of assisting him : he walks very silently about half-way up the shootings, where a small piece of wood is thrust through the reed fence, which makes an aperture just sufficient to see if any fowl are in ; if not, he walks forward to see if any are about the mouth of the pipe. If there are, he stops and makes a motion to his dog, and gives him a piece of cheese or something to eat ; upon receiving it he goes directly to a hole through the reed fence, (No. 1.) and the fowl immediately fly off the bank into the water ; the dog returns along the bank between the reed fences and the pipe, and comes out to his master at the hole (No. 2.) The man now gives him another reward, and he repeats his round again, till the fowl are attracted by the motions of the dog, and follow him into the mouth of the pipe. This operation is called working them. The man now retreats farther back, working the dog at different holes till the fowl are sufficiently under the net : he now commands his dog to lay down still behind the fence, and goes forward to the end of the pipe next the lake, where he takes off his hat and gives it a wave between the shooting ; all the fowl under the net can see him, but none that are in the lake can. The fowl that are in sight fly forward ; and the man runs forward to the next shooting and waves his hat, and so on, driving them along till they come to the tunnel net, where they creep in : when they are all in, he gives the net a twist so as to prevent their getting back : he then takes the net off from the end of the pipe with what fowl he may have caught, and takes them out one at a time and dislocates their necks, and hangs the net on again ; and all is ready for working again.

“ In this manner five or six dozen have been taken at one drift. When the wind blows directly in or out of the pipe, the fowl sel-

the water, in various semicircular directions through the dom work well, especially when it blows in. If many pipes are made in a lake, they should be so constructed as to suit different winds.

“ Duck and Mallard are taken from August to June. Teal or Wigeon, from October to March. Becks, Smee, Golden Eyes, Arps, Cricks, and Pintails or Sea Pheasants, in March and April.

“ Poker Ducks are seldom taken, on account of their diving and getting back in the pipe.”

REFERENCES TO THE CUT.

- No. 1. Dog's hole, where he goes to unbank the fowl.
2. Reed fences on each side of the mouth of the pipe.
3. Where the decoy-man shews himself to the fowl first, and afterwards at the end of every shooting.
4. Small reed fence to prevent the fowl seeing the dog when he goes to unbank them.
5. The shootings.
6. Dog's holes between the shootings, used when working.
7. Tunnel net at the end of the pipe.
8. Mouth of the pipe.

swampy ground, into particular large pools, which are sheltered by surrounding trees or bushes, and situated commonly in the midst of the solitary marsh. At the narrow points of these ditches, farthest from the pool, by which they are filled with water, the fowlers place their *funnel* nets: from these the ditch is covered by a continued arch of netting, supported by hoops, to the desired distance; and all along both sides, skreens formed of reeds are set up so as to prevent the possibility of the birds seeing the decoy-man; and as these birds feed during the night, all is ready prepared for this sport in the evening. The fowler, then, placed on the leeward side, sometimes with the help of his well-trained dog, but always by that of his better trained tame Decoy-Ducks, begins the business of destruction. The latter, directed by his well-known whistle, or excited forward by the floating hempseed, which he strews occasionally upon the water, entice all the Wild Ducks after them under the netting; and as soon as this is observed, the man or his dog, as the fitness of opportunity may direct, is from the rear exposed to the view of the birds, by which they are so alarmed that they dare not offer to return, and are prevented by the nets from escaping upwards: they therefore press forward in the utmost confusion to the end of the *pipe*, into the *funnel* or *purse* nets there prepared to receive them, while their treacherous guides remain behind in conscious security. The season allowed by act of parliament for catching these birds in this way, continues only from the latter end of October till February.

Particular spots or decoys, in the fen countries, are let to the fowlers at a rent of from five to thirty pounds per annum; and Pennant instances a season in which thirty-

one thousand two hundred Ducks, including Teals and Wigeons, were sold in London only, from ten of these decoys near Wainfleet, in Lincolnshire. Formerly, according to Willoughby, the Ducks, while in moult and unable to fly, were driven by men in boats, furnished with long poles, with which they splashed the water between long nets, stretched vertically across the pools, in the shape of two sides of a triangle, into lesser nets placed at the point; and in this way, he says, four thousand were taken at one driving in Deeping-Fen; and Latham has quoted an instance of two thousand six hundred and forty-six being taken in two days, near Spalding in Lincolnshire: but this manner of catching them while in moult is now prohibited.

THE TAME DUCK.

(*Anas domestica*, Lin.—*Le Canard domestique*, Buff.)

THIS valuable domestic owes its origin to the Mallard, the last-described species, but has long been reclaimed from a state of nature. Many of them appear in nearly the same plumage as the wild ones; others vary greatly from them, as well as from each other, and may be said to be marked with almost all colours; but all the males (Drakes) still retain the unvarying mark of their wild original, in the curled feathers of the tail. Long domestication has, however, deprived the Tame Duck of that keen, quick, and sprightly look and shape which distinguish the Mallard, and substituted a more dull and less elegant form and appearance in their stead. In the wild state they pair, and are monogamous, but become polygamous when tame.

The Count de Buffon, whose lively and ingenious flights of imagination are peculiar to himself, says, “Man

made a double conquest when he subdued inhabitants at once of the air and of the water. Free in both these vast elements, equally fitted to roam in the regions of the atmosphere, to glide through the ocean or plunge under its billows, the aquatic birds seemed destined by nature to live for ever remote from our society, and from the limits of our dominion." "Eggs taken from the reeds and rushes amidst the water, and set under an adopted mother, first produced, in our farm-yards, wild, shy, fugitive birds, perpetually roving and unsettled, and impatient to regain the abodes of liberty." These, however, after they had bred and reared their own young in the domestic asylum, became attached to the spot; and their descendants, in process of time, grew more and more gentle and tractable, till at last they appear to have nearly relinquished and forgotten the prerogatives of the savage state, although they still retain a strong propensity to roam abroad, in search, no doubt, of the larger pools, marshy places, and bogs, which it is natural to suppose they must prefer to the beaten, hard, pebbly-covered surface surrounding the scantily watered hamlet: and indeed it is well known to every observing good housewife, that where they are long confined to such dry places, they degenerate in both strength and beauty, and lose much of the fine flavour of those which are reared in spots more congenial to their nature. That these, and such like watery places, which their health requires for them to wash, dive, feed, rest, and sport in, are not better tenanted by these useful and pretty birds, is much to be regretted, and marks strongly a falling off—a want of industry* in those females to whose lot it falls, and whose

* "The thrifty huswife is aye weel kend by her sonsy swarms o' bonny chucky burdies."

Scotch Proverb

duty it is to contribute their quota of attention to these lesser but not uninteresting branches of rural economy. Were this done, and ponds made in aid of the purpose, in every suitable contiguous situation, there can be no doubt but that a multiplied stock of Ducklings, to an inconceivable amount, might be annually reared, with a comparatively trifling additional expence; for the various undistinguishable animal and vegetable substances upon which they chiefly live, and for which they unceasingly search with their curiously constructed bills, sifting and separating every alimentary particle from the mud, unless fed upon by them, are totally lost. When older, they also devour worms, spawn, water insects, and sometimes frogs and small fishes, together with the various seeds of bog and water plants, of which they find an abundant supply when left to provide for themselves in those wet places.

When they, with other kinds of fowl, are busily employed in picking up the waste about the barn door, they greatly enliven and beautify the rural scene.

“ A snug thack house, before the door a green ;

“ Hens on the middings, Ducks in dubs are seen :

“ On this side stands a barn, on that a byre ;

“ A peat-stack joins, and forms a rural square.”*

To this may be added the no less pleasing peep at the mill and mill-dam, when well furnished with these their feathered inhabitants. The village school-boy witnesses with delight the antic movements of the busy shapeless little brood, sometimes under the charge of a foster mother, who with anxious fears paddles by the brink, and

* Allan Ramsay.

utters her unavailing cries, while the Ducklings, regardless of her warnings, and rejoicing in the element so well adapted to their nature, are splashing over each other beneath the pendent foliage; or, in eager pursuit, snap at their insect prey on the surface, or plunge after them to the bottom: some meanwhile are seen perpendicularly suspended, with the tail only above water, engaged in the general search after food.

Scenes like these, harmonized by the clack of the mill and its murmuring water-fall, afford pleasures little known to those who have always been engaged in mere worldly pursuits: but such picturesque beauties pass not unnoticed by the young naturalist; their charms invite his first attentions, and probably bias his inclinations to pursue studies which enlarge and exalt his mind, and can end only with his life.

THE HOOK-BILLED DUCK.

(*Anas adunca*, Lin.—*Le Canard à bec courbé*, Brisson.)

THE bill of this differs from that of the Mallard and of the Tame Duck, in being broader, longer, and in bending more downwards; but as this bird is of the same species, so in other respects it nearly resembles them, and this variation of the bill is probably only one of those accidental sportings of nature, not very uncommon in all domestic animals; every variety of which, each with its original peculiarities, (for like begets like) may easily be kept up as long as caprice shall feel gratified by continuing them. Latham says these birds seem only to be kept in England out of curiosity, but that according to the information he received, they are full as common in Germany as the other sort of Tame Ducks. He also mentions other varieties of the Mallard. Those with copped heads, others wanting the webs of their feet, &c. if added to the list, would only serve to mislead the young enquirer; and to the experienced ornithologist such details are unnecessary.

THE SCAUP DUCK.

(*Anas Marila*, Lin.)

THIS species is less than the Mallard ; some of them, it is said, weighing only a pound and a half, while others exceed that weight by eight or nine ounces, and measure, when stretched out, nearly twenty inches in length, and thirty-two in breadth. The bill is broad and flat, more than two inches long, from the corners of the mouth to the tip, and of a fine pale blue or lead colour, with the nail black : irides bright deep yellow : the head and upper half of the neck are black, glossed with green : the lower part of the latter, and the breast, are of a sleek plain black : the throat, rump, upper and under coverts of the tail, and part of the thighs, are of the same colour, but dull, and more inclining to brown. The tail, when spread out, is fan-shaped, and consists of fourteen short brown feathers : the back, scapulars, wing coverts, and tertials, are varied from white to deeper shades of pale ash, and ash brown, and are prettily marked with delicate-

ly freckled, or more distinctly penciled transverse dark waved lines : the bastard wings, greater coverts, and the exterior webs of the first two or three primary quills, (the interior webs of which are brownish ash) and the tips of all the rest, are deep brown, more or less sprinkled with white, and crossed with narrow waved white lines : some of the primary quills towards the body, are white ; the bases of the secondaries, of the same colour, form an oblique bar across the wings, which is stopped by a single under tertial feather, of plain brown, with green reflections : the belly is white, and shaded off towards the vent with the same kind of sprinkled and waved lines as those so predominant on a large portion of the plumage. The legs are short ; toes long, and, as well as the outer or lateral webs of the inner toes, are of a dirty pale blue colour ; all the joints and the rest of the webs are dusky. These birds are said to vary greatly in their plumage, as well as size, but those which have come under the author's observation were all nearly alike.

The Scaup Duck, like others of the same genus, quits the rigours of the dreary north in the winter months, and in that season only is met with, in small numbers, on various parts of the British shores.

THE SHIELDRAKE.

SHELDRAKE, SKELDRAKE, OR BURROUGH DUCK.

(*Anas tadorna*, Lin.—*La Tadorne*.)

THE male of this prettily marked species is somewhat larger than the Mallard, measuring about two feet in length, three and a half in breadth, and weighing commonly two pounds ten ounces. The bill is red, with the nail and nostrils black : the upper mandible is broad, flat, and grooved on the edges towards the point, where it has rather a cast upwards ; it is also depressed in the middle, and raised into a knob or tubercle at the base. The head, and upper part of the neck, are of a glossy dark or bottle green : the lower part of the neck, to the breast, is encircled with white, and joined by a broad band of bright orange bay, which is spread over, and covers the breast and shoulders. The back, wing coverts, rump, upper tail coverts, and sides of the belly to the vent, and

tail, are white : a dusky stripe, tinged with rufous, runs along the middle from the breast, the whole length of the belly : part of the scapulars next the wings are black, and those next the body white : the bastard wing, and some of the first primary quills, are black ; the exterior webs of the next adjoining ones are glossed with gold green, which forms the speculum or beauty spot of the wings : this spot is bounded, and partly covered by the orange webs of the three succeeding quill feathers, which separate it from the scapulars. The tail is white, but some of its feathers are tipped with black : the legs pale red. The female is less than the male, and her plumage is not so vivid and beautiful. She makes her nest, and rears her young, under ground, in the rabbit-holes which are made in the sand-hills near the sea-shore : it is chiefly formed of the fine down plucked from her own breast : she lays from twelve to sixteen roundish white eggs, and the incubation lasts about thirty days. During this time the male, who is very attentive to his charge, keeps watch in the day-time on some adjoining hillock, where he can see all around him, and which he quits only when impelled by hunger, to procure subsistence. The female also leaves the nest, for the same purpose, in the mornings and evenings, at which times the male takes his turn and supplies her place. As soon as the young are hatched, or are able to waddle along, they are conducted, and sometimes carried in the bill, by the parents, to the full tide, upon which they launch without fear, and are not seen afterwards out of tide-mark until they are well able to fly : lulled by the roarings of the flood, they find themselves at home amidst an ample store of their natural food, which consists of sand-hoppers, sea-worms, &c.

or small shell fish, and the innumerable shoals of the little fry, which have not yet ventured out into the great deep, but are left on the beach, or tossed to the surface of the water by the restless surge.

If this family, in their progress from the nest to the sea, happen to be interrupted by any person, the young ones, it is said, seek the first shelter, and squat close down, and the parent birds fly off: then commences that truly curious scene, dictated by an instinct analogous to reason, the same as has been already noticed in the Mallard and the Partridge: the tender mother drops, at no great distance from her helpless brood, trails herself along the ground, flaps it with her wings, and appears to struggle as if she were wounded, in order to attract attention, and tempt a pursuit after her. Should these wily schemes, in which she is also aided by her mate, succeed, they both return when the danger is over, to their terrified motionless little offspring, to renew the tender offices of cherishing and protecting them.

These birds are sometimes watched to their holes, which are dug up to the nest, whence the eggs are taken, and hatched, and the young reared by a Tame Duck. In this way many gentlemen, tempted by the richness of their garb, have their ponds stocked with these beautiful birds; but as they are of a roving disposition, and are apt to stray, or to quit altogether such limited spots, it is generally found necessary to pinion or disable a wing to secure them. The Shieldrake has been known to breed with the Common Duck; but it is not well ascertained whether the hybrids thus produced will breed again or not.

This species is dispersed, in greater or less numbers,

over the warm, as well as the cold climates, in various parts of the world: they are met with as far north as Iceland in the spring, and in Sweden and the Orkney Islands in the winter. Captain Cook notices them, among other sea-fowl, on the coast of Van Diemen's land, and they have been seen, in great numbers, at the Falkland Islands. Although they are not numerous on the British and the opposite shores, yet they are common enough in the British Isles, where they remain throughout the year, always in pairs, and occasionally straggle away from the sea coast to the lakes inland.

THE SHOVELER.

BLUE-WING SHOVELER, KERTLUTOCK, OR BROAD-BILL.

(*Anas clypeata*, Lin.—*Le Souchet*, Buff.)

THE Shoveler is less than the Wild Duck, commonly weighing about twenty-two ounces, and measuring twenty-one inches in length. The bill is black, three inches long, very broad or spread out, and rounded like a spoon at the end, with the nail hooked inward and small: the insides of the mandibles are remarkably well furnished with thin pectinated rows, which fit into each other like a weaver's brake, and through which no dirt can pass, while the bird is separating or sifting the small worms and insects from amongst the mud, by the edges of the water, where it is continually searching for them: the irides are of a fine pure yellow; the head and upper half of the neck of a dark glossy changeable green: the lower part of the neck, the breast, and scapulars, white: the back is brown: belly and sides chesnut bay, and the wing

coverts of a fine pale sky-blue, terminated with white tips, which form an oblique stripe across the wings, and an upper border to the beauty spot, or spangle, which is of a glossy changeable bronze, or resplendent green, and also divides or crosses the wings in the same direction: the greater quills and the tail are dusky, but in the latter the outside feathers, and the edges of some of the adjoining ones, are white: a ring of white also encircles the rump and the vent, behind which the feathers under the tail are black: legs and feet red. The female is smaller than the male, from which she also differs greatly in the colours of her plumage, the coverts and spangle spot on her wings being less brilliant, and the other parts, composed of white, grey, and rusty, crossed with curved dusky lines, giving her much the appearance of the Common Wild Duck. She makes her nest, lined with withered grasses, on the ground, in the midst of the largest tufts of rushes or coarse herbage, in the most inaccessible part of the slaky marsh: she lays ten or twelve pale rusty-coloured eggs; and as soon as the young are hatched, they are conducted to the water by the parent birds, who watch and guard them with the greatest care. They are at first very shapeless and ugly, for the bill is then almost as broad as the body, and seems too great a weight for the little bird to carry. Their plumage does not acquire its full colours until after the second moult.

It would appear, from the varied descriptions of ornithologists, that these birds differ much from each other, both in the colour of the bill, and in the disposition of the markings of their rich-coloured plumage. All, however, agree in ranking the Shoveler among the most beautiful of the Duck tribe; and it is also, in the opinion

of many, inferior to none of them in the delicate flavour of its flesh, which is red, juicy, and tender.

It has not yet been ascertained whether the Shoveler breeds in England, where indeed it is a scarce bird ; but according to M. Baillon,* they are not uncommon in France, where they arrive about the month of February, disperse in the marshes, and a part of them hatch every year. He conjectures that they advance southward, for they are seldom met with after the first northerly wind that blows in March, and he adds, that those of them which then stay behind do not depart till September. He also remarks that hardly any are ever seen during the winter, from which he concludes that they shun the approach of cold. They are said to be met with in Scania and Gothland, and in most parts of Germany, Russia, and Kamtschatka ; and also, in the winter months, in New York and Carolina, in America.

This species is of so wild, shy, and solitary a disposition, that all attempts hitherto made to domesticate them have failed. This work was favoured with the bird from which the foregoing figure and description were taken, by the author's friends at Cambridge.

The *Anas muscaria* of Linnæus *Le Souchet à ventre blanc* of Brisson, differs only from this in having the belly white, and is considered merely as a variety of the same species.

* The friend and correspondent of the Count de Buffon.

THE RED-BREASTED SHOVELER.

“ SIZE of a Common Duck. Bill large, serrated on the sides, and entirely of a brownish yellow colour : head large : eyes small : irides yellow : breast and throat of a reddish brown : back brown, growing paler towards the sides : the tips and pinions of the wings grey : quills brown ; the rest of a greyish brown : the speculum, or wing spot, purple, edged with white : tail short, and white : vent of a bright brown, spotted with darker : legs short and slender : feet small, and of a reddish brown colour.”

“ In the female all the colours are fainter, and the speculum of the wings blue.”

“ This species is sometimes taken in the decoys of Lincolnshire.”

THE GADWALL,

OR GRAY.

(Anas strepera, Lin.—Le Chipeau, Buff.)

THE Gadwall is less than the Mallard, measuring about nineteen inches in length, and twenty-three in breadth. The bill is flat, black, and two inches long, from the tip to the corners of the mouth: the head, and upper part of the neck, are of a rufous brown colour, lightest on the throat and cheeks, and finely speckled and dotted all over with black and brown: the feathers on the lower part of the neck, breast, and shoulders, look like scales, beautifully margined and crossed with curved black and white lines: those of the back, scapulars, and sides, are brown, marked transversely with narrower waved streaks of a dusky colour: the belly and thighs are dingy white, more or less sprinkled with grey: the lower part of the back dark brown: rump and vent black; and the tail ash, edged with white. The ridge and lesser coverts of the wing are of a pale rufous brown, crossed obliquely by the beauty spot, which is a tri-coloured bar of purplish red, white, and black: the greater quills are dusky: legs orange red. The wings of the female are barred like those of the male, but the colours are of a much duller cast, and her breast, instead of his beautiful markings, is only plain brown, spotted with black.

Birds of this species breed in the desert marshes of the north, and remain there throughout the spring and summer. On the approach of winter they leave the European and Siberian parts of Russia, Sweden, &c. and aided by the first strong north-east wind, commonly make their appearance about the month of November, on the

French, British, and other more southern shores, where they remain till the end of February, and then return to their northern haunts. They are very shy and wary birds, feeding only in the night, and lurking concealed among the rushes in the watery waste during the day, in which they are seldom seen on the wing.

These birds shew themselves expert in diving as well as in swimming, and often disappoint the sportsman in his aim; for the instant they see the flash of the pan, they disappear, and dive to a distant secure retreat.

THE WIGEON.

WHEWER, WHIM, OR PANDLED WHEW.

(Anas Penelope, Lin.—Le Canard siffleur, Buff.)

THIS is nearly of the same size as the Gadwall, weighing generally about twenty-three ounces, and measuring nearly twenty inches in length, and two feet three in breadth. The bill is an inch and a half long, narrow, and serrated on the inner edges: the upper mandible is of a dark lead colour, tipped with black. The crown of the head, which is very high and narrow, is of a cream colour, with a small spot of the same under each eye: the rest of the head, the neck, and the breast, are bright rufous chesnut, obscurely freckled on the head with black spots, and darkest on the chin and throat, which are tinged with a vinous colour: a band, composed of beautifully waved, or indented narrow ash brown and white lines, separates the breast and neck; the back and scapulars are marked with similar feathers, as are also the sides of the body under the wings, even as low as the thighs, but there they are paler: the belly to the vent is white:

the ridge of the wing, and adjoining coverts, are dusky ash brown : the greater coverts brown, edged with white, (in some specimens wholly white) and tipped with black, which forms an upper border to the changeable green beauty-spot of the wings, which is also bordered on the under side by another stripe formed by the deep velvet black tips of the secondary quills : the exterior webs of the adjoining quills are white, and those next the back, which are very long, are of a deep brown, (in some specimens deep black) edged with yellowish white : the greater quills are brown ; the vent and upper tail coverts, black. The tail, which consists of fourteen feathers, is of a hoary brownish ash, edged with yellowish white ; the two middle ones are sharp-pointed, darker and longer than the rest. The legs and toes are of a dirty lead colour, faintly tinged with green ; the middle of the webs and nails black. “ The female is brown, the middle of the feathers deepest : the fore part of the neck and breast paler : scapulars dark brown, with paler edges : wings and belly as in the male.” The young of both sexes are grey, and continue in that plain garb till the month of February, after which a change takes place, and the plumage of the male begins to assume its rich colourings, in which, it is said, he continues till the end of July, and then again the feathers become dark and grey, so that he is hardly to be distinguished from the female.*

These birds quit the desert morasses of the north on the approach of winter, and as they advance towards the end of their destined southern journey, they spread them-

* M. Baillon, from whom these remarks are taken, adds, that the same changes happen to the Pintail, the Gadwall, and the Shoveler, and that they are also all grey when young.

selves along the shores, and over the marshes and lakes in various parts of the continent, as well as those of the British Isles ; and it is said that some of the flocks advance as far south as Egypt. They remain in these parts during the winter, at the end of which the old birds pair, and the whole tribe, in full plumage, take their departure northward about the end of March. While they remain with us, they frequent the same places, and feed in the same mode as the Mallard, and are often taken in the decoys along with them and other kinds of Ducks.

The Wigeons commonly fly, in small flocks, during the night, and may be known from others by their whistling note while they are on the wing. They are easily domesticated in places where there is plenty of water, and are much admired for their beauty, sprightly look, and busy frolicsome manners.

THE BIMACULATED DUCK.

CLUCKING DUCK.

(Anas Glocitans.)

“ LENGTH twenty inches. Bill deep lead colour; nail black: irides brown: crown brown, changeable with green, ending in a streak of brown at the hinder part of the head, with a small crest: between the bill and eye, and behind each ear, ferruginous spots, the first round, the last oblong and large: throat of a fine deep purple: the rest of the head bright green, continued in streaks down the neck: breast a light ferruginous brown, spotted with black: hind part of the neck and back dark brown, waved with black: wing coverts ash coloured; lower coverts streaked with rust colour: scapulars cinereous: quills the same, inclined to brown: secondaries fine green, ending in a shade of black, edged with white: tail coverts deep changeable green: twelve feathers in the tail; the two middlemost black, the others brown, edged with white: belly dusky, finely granulated: legs small, yellow: webs dusky.” “ Taken in a decoy in England. Has been met with along the Lena, and about the lake Baikal. Has a singular note, somewhat like clucking.” *Latham.*

THE POCHARD.

POKER, DUNBIRD, OR GREAT-HEADED WIGEON.

(*Anas ferina*, Lin.—*Penelope*, le Millouin, Buff.)

THE Pochard is nineteen inches in length, and two feet and a half in breadth, and weighs about one pound thirteen ounces. The bill is of a dark lead colour, with the tip and sides near the nostrils, black: iridēs fine deep yellow. The head and neck are of a glossy chesnut, joined to a large space of sooty black which covers the breast, and is spread over the shoulders: the lower part of the back, the rump, tail coverts, and vent, are also black: the rest of the plumage, both above and below, is wholly covered with prettily freckled slender dusky threads, disposed transversely in close-set zigzag lines, on a pale ground, more or less shaded off with ash and brown, and deepest on the wing coverts. The primary quills are brown, with dusky tips; the secondaries lead colour, tinged with brown, and slightly tipped with dull white. The tail consists of twelve short feathers, of a dark brownish ash, which have also a hoary grey appearance:

the legs and toes are lead colour, shaded and dashed with black.

This species is without the beauty-spot on the wings, and has altogether a more plain and half-mourning kind of look than others of this tribe. The specimen from which the above figure was drawn, was shot at Axwell-Park, in the county of Durham: the description was taken from one shot in January near Holy Island. The former differed from the latter in wanting the black on the rump and vent, and in some other slight variations in the shadings of its colours.

“ The head of the female is of a pale reddish brown : the breast is of rather a deeper colour : the coverts of the wings plain ash colour : the back marked like that of the male : the belly ash coloured.”*

These birds leave the north on the approach of winter, and migrate southward as far, it is said, as Egypt in Africa, and Carolina and Louisiana, in America. They arrive in the marshes of France about the end of October, in tolerably numerous flocks ; and considerable numbers of them are caught in the fens of Lincolnshire during the winter season, and sold in the London markets, where they and the female Wigeons are indiscriminately called Dunbirds, and are esteemed excellent eating. It has not yet been discovered whether any of them remain to breed in England.

The Pochard is of a plump round shape, and its walk is heavy, ungraceful and waddling ; but when on the wing, they fly with greater rapidity than the Mallard, and in flocks of from twenty to forty, commonly in a close compact body, whereby they may be easily distinguished

* Pennant.

from the triangular shaped flocks of the Wild Duck, as well as by the difference of the noise of their wings.

The few attempts which have been hitherto made to domesticate this species have failed of success. They do pretty well where they have plenty of water, but it is said that they cannot bear walking about on hard pebbly grounds.

THE FERRUGINOUS DUCK.

Anas Rutila.

“ WEIGHT twenty ounces. The bill long, and flattened, rounded a little at the base, serrated along the edges of each mandible, and furnished with a nail at the end of the upper ; colour pale blue : head, neck, and whole upper part of the bird, an agreeable reddish brown : throat, breast, and belly, the same colour, but paler : the legs of a pale blue : webs black.” “ One of this species was killed in Lincolnshire. Found in the Swedish rivers, but rarely. Mr Pennant has also received it from Denmark.” *Latham.*

THE PINTAIL DUCK.

SEA PHEASANT, CRACKER, OR WINTER DUCK.

(*Anas acuta*, Lin.—*Le Canard à longue queue*, Buff.)

THIS handsome-looking bird is twenty-eight inches in length, and thirty-eight in breadth, and weighs about twenty-four ounces. The bill is rather long, black in the middle, and blue on the edges: the irides reddish: the head and throat are of a rusty brown, mottled with small dark spots, and tinged behind the ears with purple: the nape and upper part of the neck are dusky, margined by a narrow white line, which runs down on each side, and falling into a broader stripe of the same colour, extends itself on the fore part as far as the breast; the rest of the neck, the breast, and the upper part of the back, are elegantly penciled with black and white waved lines: the lower back and sides of the body are undulated in the same manner, but with lines more freckled, less distinct,

and paler : the scapulars are long and pointed, each feather black down the middle, with white edges : the coverts of the wings are ash brown, tipped with dull orange : below these the wing is obliquely crossed by the beauty-spot of glossy bronze purple green, with a lower border of black and white : this spangle is formed by the outer webs and tips of the middle quills : the rest of the quills are dusky. All the tail feathers are of a brown ash colour, with pale edges, except the two middle ones, which are black, slightly glossed with green, considerably longer than the others, and end in a point : the belly and sides of the vent are white :* under tail coverts black : legs and feet small, and of a lead colour. The female is less than the male, and her plumage is of a much plainer cast, all the upper parts being brown, with each feather margined more or less with white, inclining to red or yellow : the greater coverts and secondary quills are tipped with cream colour and white, which form a bar across the wings. The fore part of the neck, the breast, and the belly, to the vent, are of a dull white, obscurely spotted with brown. The tail is long and pointed, but the two middle feathers do not extend themselves beyond the rest, like those of the male.

These birds do not visit the temperate and warm climates in great numbers, except in very severe winters, the great bulk of them dropping short, and remaining during that season in various parts of the Russian dominions, Sweden, Norway, &c. and also in the same latitudes in both Asia and America. They are seldom numerous in England, but flocks of them are sometimes abundantly

* In some, the belly and fore part of the neck are of a reddish buff, or cream colour.

spread along the isles and shores of Scotland and Ireland, and on the interior lakes of both those countries, as well as those of the continent, as far south as Italy, and in America, as far south as New York. They are esteemed excellent eating.

The Pintail Duck is of a taller or more lengthened shape than any of the other species, and, in the opinion of the Count de Buffon, seems to form the link between the Duck and the Garganey.

THE LONG-TAILED DUCK,

OR SWALLOW-TAILED SHELDRAKE.

(Anas Glacialis, Lin.—Canard de Miclon, Buff.)

THIS species is considerably less than the last, and comes more nearly to the size of the Wigeon. The bill is short, black, and crossed by an orange red bar between the tip and the nostrils, with both mandibles deeply pectinated on the edges. The front of the head, the cheeks, and the sides of the neck, are pale reddish brown, with an oval-shaped black and chesnut patch, placed on the sides behind the auriculars; the rest of the head and neck is white: the breast, shoulders, back, and lesser wing coverts, are of a deep chocolate colour, more or less inclining to black or brown in different birds: the greater coverts and primary quills dusky; the secondaries are reddish brown, and form an oblique bar of that colour across the wings: the belly, vent, and scapulars are white; the feathers of the latter long, narrow, and sharp pointed: the two middle or long feathers of the tail, and one on

each side of them, are black : the rest white. The legs and toes are pale blue : webs and nails black : the inner toes and the small ones behind are margined by small lateral webs.

This species is described as varying in the different shades of their plumage. In some the spots on the sides of the upper part of the neck are much larger and darker, and the two tail feathers are double the length of those of others : their legs are also said to be sometimes of deeper or lighter shades of red.

The Long-tailed Ducks, it is said, do not in the winter, like many of the other tribes, entirely quit their native haunts in the northern extremities of the world, but considerable numbers remain there, enduring its gloomy rigours, as well as enjoying the perpetual day, under the influence of the unsetting summer's sun, during the rest of the thus divided year. Numerous flocks, however, spread themselves southward in the winter, from Greenland and Hudson's Bay, as far as New York in America ; and from Iceland and Spitzbergen, over Lapland, the Russian dominions, Sweden, Norway, and the northern parts of the British isles, in Europe. The same progress of them is observed in Asia, where they are met with about Kamtschatka, &c. They frequent the lakes in the interior of all those parts as well as the sea shores. The flocks which visit the Orkney Isles appear in October, and continue there till April ; and " about sun-set they are seen in vast companies going to and returning from the bays, in which they frequently pass the night, making such a noise, as in frosty weather may be heard some miles." They are rather scarce in England, whither they come only in very hard winters, and even then but in

small straggling parties. They fly swiftly, but seldom to a great distance, making a loud and singular cry. They are expert divers, and are supposed to live chiefly upon shell-fish.

The female, it is said, makes her nest among the grass near the water, lined, like that of the Eider Duck, with her own equally valuable down. Her eggs are of a bluish white colour, about the size of those of a Pullet. Latham says she lays five; others assert that the number is "seldom fewer than ten, and often as many as fourteen or fifteen." Some are of opinion that the latter number may be the produce of two females, as is said to be the case with the Eider Duck. When the young are hatched, the mother carries them to the water in her bill.

Latham describes the *Anas hyemalis* of Linnæus as the female of this species: he says the bill is the same: "sides of the head white; hind head cinereous; the rest of the head, the neck, breast, and back, dusky black: the lower part of the breast and scapulars chesnut: belly white: upper tail coverts and wings, much as in the *male*: legs dusky reddish brown." "Some birds of this sex have the brown feathers edged with ferruginous, others not." "I have likewise observed in some a white spot on each side of the lower part of the neck." He adds, that in the females which he had seen, the long tail feathers were wanting.

THE GOLDEN-EYE.

(*Anas clangula*, Lin.—*Le Garrot*, Buff.)

THE weight of this species varies from twenty-six ounces to two pounds. The length is nineteen inches, and the breadth thirty-one. The bill is bluish black, short, thick, and elevated at the base: the head large, slightly crested, and black, or rather of a glossy bottle green; with violet reflections: a large white spot is placed on the space on each side between the corners of the mouth and the eyes, the irides of which are of a golden yellow: the throat, and a small portion of the upper part of the neck, are of a sooty or velvet black; the lower, to the shoulders, the breast, belly, and vent, white; but some of the side feathers, and those which cover the thighs, are tipped with black: the scapulars white and deep black: of the latter colour are also the adjoining long tertial feathers, and those on the greater part of the back: the first fourteen primary quills, with all the outside edge of the wing, including the ridge and a portion of the coverts, are brownish black: the middle part of

the wing is white, crossed by a narrow black stripe, which is formed by the tips of the lesser coverts : tail dark hoary brown : legs short, of a reddish yellow colour, with the webs dusky : the inner and hinder toes are furnished with lateral webs : on the latter these webs are large and flapped. Willoughby says " the windpipe hath a labyrinth at the divarication, and besides, above swells out into a belly or puff-like cavity."

This is the description of an individual adult male, in which, as to the identity of the sex and species, no one can be mistaken : but as younger males have been met with, bearing in every respect the same plumage as the old ones, except in having no white spots before the eyes, and other (supposed) young males have also been seen both with and without those white spots, though with a female-looking garb, and their bills tipped with orange, like that of the Morillon ; it is not only uncertain at what age the Golden-eye attains his full dress, but also, from the varied appearances, as well in these, as in those supposed to be females, it is doubtful whether two distinct species are not confounded in one, and the young of one species described as the old of another. Willoughby describes two species ; the one, the " smaller reddish-headed Duck," which he at last supposes to be the female Golden-eye,—and the other the " greater reddish-headed Duck," " perchance the same as the last described, or the male thereof." Latham confesses himself equally at a loss with Willoughby ; and as some of the correspondents of the author are of one opinion, and some of another, in respect to the sex, as well as the species of these birds, he forbears giving descriptions from other specimens, although accurately taken, because they would not

remove the doubts already entertained, or elucidate the subject. It may not be improper, however, to quote Mr Pennant's account of the female Golden-eye in this place, and that of the Morillon, sent to this work by George Strickland, Esq. of Ripon, in the subsequent account of the latter bird. "The head of the female is of a deep brown, tinged with red: the neck grey: breast and belly white: coverts and scapulars dusky and ash coloured: middle quill feathers white; the others, together with the tail, black: the legs dusky.* These birds frequent the fresh water, as well as the sea, being found on the Shropshire meres during winter."†

These birds do not congregate in large flocks, nor are they numerous on the British shores, or on the lakes in the interior. They are late in taking their departure northward in the spring, the specimens before mentioned being shot in April. In their flight they make the air whistle with the vigorous quick strokes of their wings; they are excellent divers, and seldom set foot on the shore, upon which, it is said, they walk with great apparent difficulty, and, except in the breeding season, only repair to it for the purpose of taking their repose.

The attempts which were made by M. Baillon to domesticate these birds, he informs the Count de Buffon, quite failed of success.

* A bird was sent to the author by the Rev. J. Davies, of Trinity College, Cambridge, agreeing with this description, except in the legs being yellow.

† Pennant.

THE MORILLON.

(*Anas Glaucion*, Lin.—*Le Morillon*, Buff.)

“BILL brown, orange from the nostrils to the point, the knob of which is black ; it is an inch and a half long, rather narrow towards the apex ; the nostrils are placed very forward : head brown, cheeks tinged with black : irides straw colour : a broad white circle round the neck, the back part of which is mottled with brown : breast, sides of the body, and scapular feathers, white, barred with black : belly white : thighs and vent feathers brown and white : inner coverts of the wings brown : back and coverts of the wings black, mottled with white : quill feathers and tertials black ; secondaries white : tail rounded, and grey : legs and toes yellow brown, with a greenish tinge ; webs and claws black. Length one foot four inches ; breadth two feet four inches ; weight one pound seven ounces.”

“ The above is a description of the male bird : the female has not the white circle round the neck, or the yellow on the bill, and has less white on the wings.” “ I have shot this species on Coniston lake, and on Eastwaite water, Lancashire, in December,—on Duddon-sands, Cumberland, in April,—and on a pond near Ripon, Yorkshire, in October. They are generally seen in small flocks, diving for their food, near the shore.”—*Mr Strickland*.

THE TUFTED DUCK.

(*Anas fuligula*, Lin.—*Le petit Morillon*, Brisson.)

THIS is a plump, round, and short-shaped species. The male is distinguished by a pendent crest, overhanging the nape of the neck, two inches in length. The weight is about two pounds, length eighteen inches. The bill is broad, of a dark lead colour; the nail black: irides deep orange: the head is black, glossed with purple: the neck, breast, and all the upper parts, are of a deep brown or black; the scapulars faintly powdered or sprinkled with light spots, so minute as not to be observed at a short distance. The wings are crossed by a narrow white bar: the belly, sides, and under coverts of the wings, are of a pure white: the vent white, mixed with dusky. The tail consists of fourteen very short feathers: the legs are of a dark lead colour; webs black. The female is of a browner colour than the male, and has no crest.

The habits, manners, and haunts of this species are much the same as those of the Golden-eye, and they return northward about the same time. Latham says "the French allow these birds to be eaten on maigre days, and in lent ; as they do also the Scoter : but though the flesh of the latter is now and then tolerable, that of the Tufted Duck is seldom otherwise than excellent."

THE GARGANEY.

(*Anas querquedula*, Lin.—*La Sarcelle*, Buff.)

THIS species, which is only a little bigger than the Teal, is clothed with an elegant plumage, and has altogether a most agreeable and sprightly look. It measures about seventeen inches in length, and twenty-eight in breadth. The bill is of a dark lead colour, nearly black : the irides light hazel. From the crown of the head, over the nape of the neck downwards, it is of a glossy brown : chin black : brow, cheeks, and the upper fore part of the neck, reddish chesnut, with vinous reflections, and sprinkled all over with numerous small pointed white lines. A white stripe passes over each eye, and slanting backwards, falls down on each side of the neck, the lower part of which, with the breast, is light brown, pretty closely crossed with semicircular bars of black : the shoulders and back are marked nearly the same, but on a darker ground : the scapulars are long and narrow, and are striped with ash colour, black and white. The belly, in some, is white, in others pale reddish yellow ; the

lower part of it, and the vent, mottled with dusky spots: the sides are freckled and waved with narrow lines of ash coloured brown, more and more distinctly marked towards the thighs, behind which this series of feathers terminates in a ribband striped with ash, black, white, and lead-coloured blue. The coverts of the wings are of an agreeable bluish ash, margined with white: next to this the exterior webs of the middle quills are glossy green, tipped with white, and form the beauty-spot or spangle of the wings, to which the white tips make a border: the primary quills are ash-brown, edged with white: tail dusky: legs lead colour.—The foregoing figure and description were taken from a male bird in full and perfect plumage. This sex is furnished with a labyrinth.

“ The female has an obscure white mark over each eye; the rest of the plumage is of a brownish ash colour, not unlike the female Teal; but the wing wants the green spot, which sufficiently distinguishes these birds.”

It has not yet been noticed whether any of this species ever remain to breed in England, where indeed they are rather a scarce bird.

THE TEAL,

OR COMMON TEAL.

(*Anas crecca*, Lin.—*La petite Sarcelle*.)

THIS beautiful little Duck seldom exceeds eleven ounces in weight, or measures more, stretched out, than fourteen inches and a half in length, and twenty-three and a half in breadth. The bill is a dark lead colour, tipped with black : irides pale hazel : a glossy bottle-green patch, edged on the upper side with pale brown, and beneath with cream-coloured white, covers each eye, and extends to the nape of the neck : the rest of the head,* and the upper part of the neck, are of a deep reddish chesnut, darkest on the forehead, and freckled on the chin and about the eyes with cream-coloured spots : the hinder part of the neck, the shoulders, part of the scapulars, sides under the wings, and lower belly, towards the vent, are elegantly penciled with black, ash-brown, and

* In some of this species, the feathers on the head are lengthened out into a crest ; the upper part of which is pale brown, the under deep purple.

white transverse waved lines : the breast, greatly resembling the beautifully spotted appearance of an India shell, is of a pale brown or reddish yellow, and each feather is tipped with a roundish heart-shaped black spot : the belly is a cream-coloured white : back and rump ash brown, each feather freckled and edged with a paler colour : vent black : the primary quills, lesser and greater coverts, are brown ; the last deeply tipped with white, which forms a bar across the wings : the first six of the secondary quills are of a fine velvet black ; those next to them, towards the scapulars, are of a most resplendent glossy green, and both are tipped with white, forming the divided black and green bar, or beauty-spot of the wings. The tail consists of fourteen feathers, of a hoary brown colour, with pale edges : the legs and feet are of a dirty lead colour. The female, which is less than the male, is prettily freckled about the head and neck with brown and white. She has not the green patch behind the eyes, but a brown streak there, which extends itself to the nape of the neck : the crown of the head is dark brown : the upper mandible yellow on the edges, olive green on the sides, and olive brown on the ridge ; nail black, and the under bill yellow : breast, belly, and vent glossy yellowish white, spotted on the latter parts with brown : the upper plumage is dark brown, each feather bordered with rusty brown, and edged with grey : the wings and legs nearly the same as those of the male.

The Teal is common in England in the winter months, but it is uncertain whether or not they remain throughout the year to breed,* as is the case in France. The

* Dr Heysham says " the Teal is now known to breed in the mosses about Carlisle."

female makes a large nest, composed of soft dried grasses, (and, it is said, the pith of rushes) lined with feathers, and cunningly concealed in a hole among the roots of reeds and bulrushes, near the edge of the water; and some assert that it rests on the surface of the water so as to rise and fall with it. The eggs are of the size of those of a Pigeon, six or seven in number, and of a dull white colour, marked with small brownish spots; but it appears that they sometimes lay ten or twelve eggs, for Buffon remarks that that number of young are seen in clusters on the pools, feeding on cresses, wild chervil, &c. and no doubt, as they grow up, they feed, like other Ducks, on the various seeds, grasses, and water-plants, as well as upon the smaller animated beings with which all stagnant waters are so abundantly stored. The Teal is highly esteemed for the excellent flavour of its flesh.

OF THE PELICAN.

THE bill of this genus is long and straight ; the end either hooked or sloping ; the nostrils placed in a furrow that runs along the sides of the bill, and in most of the species not distinguishable. The face generally destitute of feathers, being covered only with a bare skin : gullet naked, and capable of great distention : body long, heavy, and flat : legs placed far backward : toes four in number, and all webbed together.

Latham, following the example of Linnæus, includes the Pelican, Man of War bird, Corvorant, Shag, Gannet, and Booby, in this genus, of which he enumerates thirty distinct species and two varieties : four only of this number, and one variety, are British Birds. In confining the present account to these, it is proper to remark, that they are not the inhabitants of this country only, but are widely dispersed over the globe, being met with in almost every climate which navigators have visited, whether temperate, hot, or cold. The Gannet only is migratory : large flocks of this species arrive in the spring of the year, and disperse themselves in colonies over the rocky promontories of Scotland and its isles, in various parts of which they breed and rear their young ; and as soon as that office is performed, they retire in the autumn to their unknown abodes. Their return each season points out also that of the shoals of the herring, which they hover over, pursue, and chiefly feed upon. These shoals, at that season of increasing warmth, are poured forth on their southern route, gliding forward in wide glittering columns of myriads upon myriads, from the unknown but prolific regions of the northern pole. These prodi-

gious shoals, with their divisions and subdivisions, in their branched course around the British isles, are attended by the Gannet. On our southern coasts the Pilchard affords these birds another supply of food, in pursuit of which they are enticed as far southward as the Mediterranean sea.

The Corvorant and the Shag remain with us throughout the year, but particularly on our more northern shores, upon whose rocky shelving precipices they station themselves, and perform the offices of incubation; while stragglers occasionally taking a wider range, with outstretched neck and vigorous wing, sweep along the coast, and entering the mouths of the rivers, follow their course in quest of food, to the lakes inland.

THE CORVORANT.

COLE GOOSE, OR GREAT BLACK CORMORANT.

(Pelicanus Carbo, Lin.—Le Cormoran, Buff.)

THE weight of this species varies from four to seven pounds, and the size from thirty-two inches to three feet four or five in length, and from four feet to four feet six inches in breadth. The bill, to the corners of the mouth, measures four inches, and on its ridge two and three quarters: it is of a dark horn colour, and the tip or nail of the upper bill is much hooked and sharp: from the base of this it is furrowed on each side nearly to the tip,

without any visible appearance of nostrils : the lower bill is compressed, and covered about the gape of the mouth with a naked yellowish skin, extended under the chin and throat, where it hangs loose, and forms a kind of pouch, which, together with the springing blades on each side, forming its rim, is capable of distention to a great width, and enables the bird to swallow prey apparently too large to be admitted into its throat : the skin about the eyes is also naked, and of the same colour as the pouch : the eyes, which have a remarkable wild stare, and are placed near the bill, look like two little greenish glass globes. The crown of the head, and the neck, are black : on the hinder part of the former the feathers appear elongated, and form a sort of loose short crest. In some specimens the throat is white, with a kind of stripe passing from it upwards behind each eye ; in others the cheeks and throat are mixed with brown and white ; and again, in others the head and neck are streaked with scratches of the latter colour : the middle of the belly is white, with a patch of the same colour over each thigh : all the under parts, however, together with the back and rump, are commonly of a glossy blue black, with green reflections : the shoulders, scapulars, and wing coverts are of a bronze brown, tinged and glossed with green, and each feather is bordered with shining bluish black : the secondary quills are nearly of the same colour : the coverts and the primaries are dusky. The tail consists of fourteen stiff *hasky* dark feathers, which look as if they were discoloured by being dipped in mud or dirty kennel water, and dried again : the legs are thick, strong, black, and coarse, about two inches and a half long, and the outer toe is more than four in length.

The Corvorant, as before observed, is found in every climate. In Greenland, where it is said they remain throughout the year, the jugular pouch is made use of by the natives as a bladder to float their fishing darts, after they are thrown : their skins, which are tough, are used for garments, and their flesh for food ; “ but the eggs are too fetid to be eaten even by the Greenlanders.”*

These birds usually assemble in flocks on the summits and inaccessible parts of the rocks which overhang, or are surrounded by the sea, upon which the female makes her nest of the withered sea-tang, weeds, sticks, and grasses, which are cast on shore by the waves : she lays four or more greenish white eggs, of the size of those of a Goose, but of a longer shape. There are writers who assert that, in some parts of the world they build their nests on trees, like the Rook and the Heron ; other authors, stricken with the singular conformation of the feet† and serrated claw, have ascribed properties to them which they do not possess, and believe that they hold their prey in one foot, while with the other they push forward to the shore, or carry it thither, in the same manner, on the wing : but this seems mere conjecture, for the feet of this tribe are not fitted for any such purpose ; they are, like those of all the expert divers, placed far behind ; and while by the position of these, and the powerful strokes from their broad webs, the bird is enabled to pursue and overtake its slippery prey, the hooked sharp-edged beak is the only fit instrument both to catch and to secure it ; and there is no need to use the awkward expedient of removing it afterwards to the foot.

* Arctic Zoology. This must surely mean the rotten eggs.

† See the cut in the Explanation of Technical Terms, part I, page xxxiv.

At sea, or on the inland lakes, they make terrible havoc. From the greatest height they drop down upon the object of pursuit, dive after it with the rapidity of a dart, and with an almost unerring certainty, seize the victim; then emerging, with the fish across the bill, with a kind of twirl, throw it up into the air, and, dexterously catching it head foremost, swallow it whole.

While at rest on the shore, commonly on the ledge of a projecting rock, these birds sit more or less in an erect posture, and are propped up by the stiff feathers of the tail; and in places where they have not experienced the fatal effects of the gun, they have been known, however wary at other times, to sit and receive repeated shots, without offering to remove out of the danger.* At other times and places, while they sit in a dozing and stupified state, from the effects of one of their customary surfeits, they may easily be taken by throwing nets over them, or by putting a noose around their necks, which they avoid no further than by slipping the head from side to side as long as they can.

Notwithstanding the natural wildness of their disposition, it seems, according to some accounts, that certain

* Dr Heysham relates that, about the year 1759, one of these birds “perched upon the castle at Carlisle, and soon afterwards removed to the cathedral, where it was shot at upwards of twenty times without effect: at length a person got upon the cathedral, fired at, and killed it.” “In another instance, a flock of fifteen or twenty perched, at the dusk of evening, in a tree on the banks of the river Esk, near Netherby, the seat of Sir James Graham. A person who saw them settle, fired at random at them in the dark six or seven times, without either killing any or frightening them away: surprised at this, he came again, at day light, and killed one; whereupon the rest took flight.”

species of these birds have formerly been tamed and rendered subservient to the purposes of man, both in this and in other countries. Among the Chinese, it is said, they have frequently been trained to fish, and that some fishermen keep many of them for that purpose, by which they gain a livelihood. "A ring, placed round the neck, hinders the bird from swallowing; its natural appetite joins with the will of its master, and it instantly dives at the word of command; when unable to gorge down the fish it has taken, it returns to the keeper, who secures it to himself. Sometimes, if the fish be too big for one to manage, two will act in concert, one taking it by the head and the other by the tail."* In England, according to Willoughby,† they were hood-winked in the manner of the Falcons, till they were let off to fish, and a leather thong was tied round the lower part of their necks, to

* Latham.

† "When they come to the rivers, they take off their hoods, and having tied a leather thong round the lower part of their necks, that they may not swallow down the fish they catch, they throw them into the river. They presently dive under water, and there for a time, with wonderful swiftness, they pursue the fish, and when they have caught them, they arise presently to the top of the water, and pressing the fish lightly with their bills, they swallow them, till each bird hath in this manner swallowed five or six fishes; then their keepers call them to the fist, to which they readily fly, and, little by little, one after another, vomit up all their fish, a little bruised with the nip they gave them with their bills. When they have done fishing, setting the birds on some high place, they loose the string from their necks, leaving the passage to the stomach free and open, and for their reward they throw them part of the prey they have caught, to each, perchance, one or two fishes, which they by the way, as they are falling in the air, will catch most dexterously in their mouths."—*Willoughby*.

prevent them swallowing the fish. Whitlock tells us “that he had a cast of them *manned* like Hawks, which would come to hand.” He took much pleasure in them, and relates, that the best he had was one presented to him by Mr Wood, Master of the Corvorants to Charles I.

This tribe seems possessed of energies not of an ordinary kind ; they are of a stern sullen character, with a remarkably keen penetrating eye, and a vigorous body ; and their whole deportment carries along with it the appearance of the wary circumspect plunderer, the unrelenting tyrant, and the greedy insatiate glutton, rendered lazy only when the appetite is palled, and then they sit puffing forth the fetid fumes of a gorged stomach, vented occasionally in the disagreeable croakings of their hoarse hollow voice. Such is their portrait, such the character generally given of them by ornithologists ; and Milton seems to have put the finishing hand to it, by making Satan personate the Corvorant, while he surveys, undelighted, the beauties of Paradise.* It ought, however, to be observed, that this bird, like other animals, led only by the cravings of appetite, and directed by instinct, fills the place and pursues the course assigned to it by nature.

* Paradise Lost, Book iv. l. 194—198.

THE CRESTED CORVORANT.

THE crest is black, and longer than that of the Great Black Corvorant: the crown of the head, and nearly the whole neck, are streaked downwards with scratches of white and dusky: a white gorget hangs from the cheeks, and covers the chin; this is bounded behind by a broadish black fillet, which partly covers the auriculars, and is extended to the corner of each eye: a patch of white feathers covers the hinder part of each thigh: the rest of its plumage is the same as that of the preceding species; its character is also similar.

It is not yet clearly ascertained whether this is a variety of the last, or a distinct species, or whether it is the Corvorant in the garb of its highest adult state. Latham inclines to the latter opinion, and supposes the streaked head and different markings of its plumage to be acquired only by age. Buffon, in his *Planches Enluminées*, has given its figure as the Corvorant; and Pennant, differing from them, makes it a species of the Shag. Mr Tunstall was in doubt on this subject, but discovered, by dissection, that the whiteness under the chin and on the thighs is not confined to the males, for one with these marks, which was sent to him out of Holderness, in Yorkshire, in 1775, was full of eggs. The above figure was taken from the specimen in his museum.

THE SHAG.

SKART, SCARFE, OR GREEN CORMORANT.

(*Pelicanus graculus*, Lin.—*Le petit Cormoran, ou le Nigaud*, Buff.)

THE form, the aspect altogether, the outward conformation of all the parts, the character, manners and habits, and the places of abode, of this species, are nearly like those of the Corvorant; but they do not associate, and these make their nests on the rugged shelvy sides and crevices of the rocky precipices or projecting cliffs which overhang the sea, while the others make theirs on the summits above them; and these are at once distinguished from the others by the greenness of the upper, and brownness of the under plumage, and also in being of a much less size; the largest Shags weighing only about

four pounds, and measuring nearly two feet six inches in length, and three feet eight in breadth. The bill is of a more slender make, but nearly as long as that of the Corvorant; the head, in the male, is crested in the same manner; the middle claw is serrated; and its tail, consisting of twelve stiff feathers stained with green, is also of the same form and hoary or dirty appearance as that of the Corvorant: the crown of the head, hinder part of the neck, lower back, and rump, are of a plain black, or very dark green, shining like sattin: the upper back, or shoulders, together with the scapulars and wings, are nearly of the same colour, but with a tinge of bronze brown, and each feather is distinctly edged with purple glossed black: the under parts are clouded with dusky dirty white and brown.

The Shag is as greedy and voracious as the Corvorant, and, like that bird, after having over-gorged its stomach, is often found on shore in a sleepy or stupified state; but when this torpor is over, and they appear again upon the water, they are then extremely alert, and are not easily shot, for both kinds dive the instant they see the flash of the gun, and take care afterwards to keep out of its reach. In swimming they carry their head very erect, while the body seems nearly submerged, and from their feathers not being quite impervious to the water, they do not remain very long upon it at a time, but are frequently seen flying about, or sitting on the shore, flapping the moisture from their wings, or keeping them for some time expanded to dry in the sun and the wind. Notwithstanding the strong and offensive smell emitted from the Shags and the Corvorants, some instances are not wanting of their having been eaten by people in this country; but before

they are cooked, they must undergo a certain sweetening process, part of which consists in their being first skinned and drawn, and then wrapped up in a clean cloth, and buried for some time in the earth ; after which they are made ready for eating in various ways, though generally potted like Moor Game.

THE GANNET,

GAN, SOLAND OR SOLAN GOOSE.

(*Pelicanus bassanus*, Lin.—*Le Fou de Bassan*, Buff.)

THE Gannet is generally about seven pounds in weight, three feet in length, and six in breadth. The bill is of a pale or lead-coloured blue, six inches long, a little jagged on the edges, strong and straight to the tip, which is inclined a little downwards: the upper bill is furnished with a distinct rib or ridge, running along from the tip nearly to its base, on each side of which it is furrowed, without any visible appearance of nostrils: the tongue is small, and placed far within the mouth, all the inside of which is black: a darkish line passes from the brow over the eyes, which are surrounded with a naked blue skin, and, like those of the Owl, are set in the head so as to look nearly straight forward, and the extreme paleness of

the irides gives them a keen wild stare. The gape of the mouth is very wide, and seems more lengthened, by a slip of naked black skin, which is extended on each side from the corners beyond the cheeks: these features of its countenance, altogether, give it somewhat the appearance of wearing spectacles. A loose black bare dilatable skin, capable of great distention, hung from the blades of the under bill, and extended over the throat, serves it as a pouch to carry provisions to its mate, or its young. The body is flat and well cloathed with feathers; the neck long: the crown of the head, nape, and, in some specimens, the hinder part of the neck, are of a buff colour; greater quills and bastard wings black, and the rest of the plumage white. The tail is wedge-shaped, and consists of twelve tapering sharp-pointed feathers, the middle ones the longest. The legs and feet are nearly of the same colour and conformation as those of the Corvorant, but they are curiously marked by three pea-green stripes, which run down each leg, and branch off along the toes. The male and female are nearly alike, but the young birds, during the first year, appear as if they were of a distinct species, for their plumage is then of a dusky colour, speckled all over with triangular white spots.

The female makes her nest in the caverns and fissures, or on the ledges of the louring precipice, as well as on the plain surface of the ground: it is formed of a great quantity of withered grasses and sea-weeds of various kinds, gathered with much labour from the barren soil,*

* “ They continue to pluck grass for their nests from their coming in March, till the young fowl are ready to fly, in August or September, according as the inhabitants take or leave the first

or picked up floating about upon the water. She lays three eggs, of a white colour, and somewhat less than those of a Goose, although ornithologists assert that she will lay only one egg, if left to herself undisturbed, and that when this egg is taken away she then lays a second, and in like manner a third, which she is generally permitted to hatch, and rear the young one.* “The male and female hatch and fish by turns; the fisher returns to the nest with five or six herrings in its gorget, all entire and undigested, which the hatcher pulls out from the

or second eggs. It is remarkable of them that they never pluck grass but on windy days.”—*Martin*. [It would appear from this that they are not so successful in taking their prey in boisterous weather as when it is calm.]

Martin gives an account of the Solan Geese stealing the materials of which they form their nests, from each other, and describes a battle between two of them in consequence of a theft of this kind: the one which had robbed the nest flew towards the sea with its load, and returned again as if it had gathered the stuff from a different quarter; but the owner, though at a distance from his nest, had observed the robbery, and waited the return of the thief, which he attacked with the utmost fury. “This bloody battle was fought above our heads, and proved fatal to the thief, who fell dead so near our boat, that our men took him up, and presently dressed and eat him.”

* “The Solan Geese have always some of their number that keep watch in the night time, and if the centinel is surprised, (as it often happens) all that flock are taken, one after another; but if the centinel be awake at the approach of the creeping fowlers, and hear a noise, he cries softly *Grog, Grog*, at which the flock do not move; but if this centinel see or hear the fowler approaching, he cries softly *Bir, Bir*, which would seem to import danger, since immediately after, all the tribe take wing, leaving the disappointed fowlers without any prospect of success for that night.”

throat of its provider, and swallows them, making at the same time a loud noise."

These birds are common on the coasts of Norway and Iceland, and are said to be met with in great numbers about new Holland and New Zealand; they breed also on the coasts of Newfoundland, and migrate southward along the American shores as far as South Carolina: they are noticed, indeed, by navigators, as being met with, dispersed over both hemispheres, and are probably one great family spread over the whole globe; but their greatest known rendezvous is the Hebrides and other solitary rocky isles of North Britain, where their nests, in the months of May and June, are described as so closely placed together, that it is difficult to walk without treading upon some of them; and it is said that the swarms of the old birds are so prodigious, that when they rise into the air, they stun the ear with their noise, and overshadow the ground like the clouds.* At the small isle of Borea, Martin says "the heavens were darkened by those flying above our heads; their excrements were in such quantity, that they gave a tincture to the sea, and at the same time sullied our boat and cloaths." Besides this small isle of Borea, and St Kilda, noticed by Martin,

* Martin, in his History of and Voyage to St Kilda, published in 1698, says "the inhabitants of St Kilda take their measures from the flight of these fowls, when the heavens are not clear, as from a sure compass, experience shewing that every tribe of fowls bend their course to their respective quarters, though out of sight of the isle; this appeared clearly in our gradual advances; and their motion being compared, did exactly quadrate with our compass."

Pennant and other writers mention the isle of Ailsa in the Frith of Clyde; the Stack of Souliskerry, near the Orkneys; the Skellig Isles, off the coast of Kerry, Ireland; and the Bass Isle, in the Frith of Forth. This last-mentioned isle is farmed out at a considerable rent, for the eggs of the various kinds of water fowl with which it swarms; and the produce of the Solan Geese forms a large portion of this rent; for great numbers of their young ones are taken every season, and sold for about twenty-pence each, in Edinburgh, where they are esteemed a favourite dish, being generally roasted, and eaten before dinner. On the other bleak and bare isles, the inhabitants, during a great part of the year, depend for their support upon these birds and their eggs, which are taken in amazing quantities, and are the principal articles of their food.* From the nests placed upon the ground the eggs are easily picked up one after another, in great numbers, as fast as they are laid; but in robbing the nests built in the precipices, chiefly for the sake of the birds, the business wears a very different aspect: there, before the dearly earned booty can be secured, the adventurous fowler, trained to it from his youth, and familiarised to the danger, must first approach the brow of the fearful precipice, to view and to trace his progress on

* “They preserve the eggs in stone huts or pyramids, which they build for that purpose, as well as for a shelter to the fowlers: in these pyramids they cover up the eggs with turf ashes, which defend them from the air, dryness being their only preservative, and moisture their corruption: by this method, it is said, they keep them fresh and fit for use, for six, seven, or even for eight months.”—*Martin*.

the broken pendent rocks beneath him : over these rocks, which (perhaps a hundred fathoms lower) are dashed by the foaming surge, he is from a prodigious height about to be suspended. After addressing himself in prayer to the Supreme Disposer of events, with a mind prepared for the arduous task, he is let down by a rope, either held fast by his comrades, or fixed into the ground on the summit, with his signal cord, his pole-net, his pole-hook, &c. and thus equipped, he is enabled in his progress, either to stop, to ascend or descend, as he sees occasion. Sometimes by swinging himself from one ledge to another, with the help of his hook, he mounts upwards, and clambers from place to place ; and, at other opportunities, by springing backwards, he can dart himself into the hollow caverns of the projecting rock, which he commonly finds well stored with the objects of his pursuit, whence the plunder, chiefly consisting of the full-grown young birds, is drawn up to the top, or tossed down to the boat at the bottom, according to the situation of concurring circumstances of time and place. In these hollows he takes his rest, and sometimes remains during the night, especially when they happen to be at such vast and stupendous heights. To others of less magnitude the fowlers commonly climb from the bottom, with the help of their hooked poles only, by which they assist, and push or pull up each other from hold to hold, and in this manner traverse the whole front of the frightful scar. To a feeling mind the very sight of this hazardous employment, in whatever way it is pursued, is painful ; for, indeed, it often happens that these adventurous poor men, in this life-taking mode of obtaining their living, slip their hold, are precipitated from one

projection to another, with increasing velocity, and fall mangled upon the rocks, or are for ever buried in the abyss beneath.

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FINIS.

Bewick's British Birds. 1809

Received: The book was bound in $\frac{1}{4}$ green goatskin, with "stormont" marbled endpapers, plain endsheets, and tan endbands. The title was in gold on the spine, with double gold lines to indicate panels. The leather had red rot, and was generally tattered.

Treatment: The text block was reinforced with stab joint endpapers. Adhesive used at the spine was paste satch past and a 50/50 mix of Jade 403 and methyl cellulose.

1983

O. P.-C.