

A dictionary of British birds : reprinted from Montagu's Ornithological dictionary, and incorporating the additional species described by Selby; Yarrell, in all three editions, and in natural-history journals / compiled and edited by Edward Newman.

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Montagu, George, 1751-1815.
Newman, Edward, 1801-1876.

Publication/Creation

London : J. Van Voorst, 1866.

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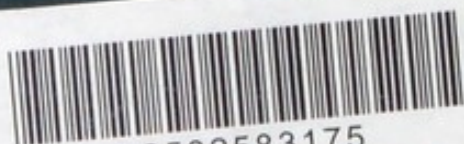
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DICTIONARY OF BRITISH BIRDS.

E. NEWMAN, PRINTER, 9, DEVONSHIRE STREET, BISHOPSGATE.

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A
DICTIONARY
OF
BRITISH BIRDS.

REPRINTED FROM
G. MONTAGU'S ORNITHOLOGICAL DICTIONARY,
AND INCORPORATING

The Additional Species

DESCRIBED BY SELBY; YARRELL, IN ALL THREE EDITIONS; AND
IN NATURAL-HISTORY JOURNALS.

COMPILED AND EDITED BY
EDWARD NEWMAN, F.L.S., F.Z.S., &c., &c.,
EDITOR OF THE 'ZOOLOGIST.'

"We are little airy creatures,
All of different voice and features."
DEAN SWIFT.

LONDON:
JOHN VAN VOORST, PATERNOSTER ROW.
M.DCCC.LXVI.

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"Under the greenwood tree,
Who loves to lie with me,
And tune his merry note
Unto the bird's sweet throat,
Come hither, Come hither, Come hither."

SHAKSPERE.

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INTRODUCTION.

THE variety of publications on Ornithology are as extensive as instructive ; but the difficulty of discovering any particular species in the works of an author, where the bird is called by a different name from which it may be provincially denominated, has, we conceive, been a preventive to a more enlarged investigation of that part of the Natural History of our country. To persons well acquainted with the generic characters the difficulty may not be so great ; but the general part of mankind might wade through volumes before they would find the object of their inquiry. For such persons, therefore, who are desirous of being better acquainted with the most beautiful part of the animal creation, we have published the following Dictionary of British Ornithology, in hopes of advancing knowledge on the subject.

Of the various writers on British Ornithology the public are particularly indebted to Mr. Pennant, who has not only been diffuse on the subject, but has given a great variety of excellent figures. The last edition of the 'British Zoology' is replete with information, and far exceeds the bounds of anything written before on the subject of English birds. Since which the 'General Synopsis of Birds,' published by Dr. Latham, has added much new light to this branch of history ; which, together with his 'Index Ornithologicus,' is a masterpiece of erudition and knowledge. But these are too extensive and too complex for the more confined part of the science or study of British birds, and too expensive for general use.

These considerations have induced the author to lay before the public this work, which is at once calculated to give every information on the subject, to render the study more easy, and to be not only within the reach of most persons' pockets who are capable of scientific researches, but that it will be found an index to all the English works of credit on the subject in general use, as well as to many of the best authors in other languages. It has been our intention to confine this work within as small a compass as possible, in order to render it more portable ; at the same time we have been sufficiently diffuse in the description of each species, as well as in the natural history belonging thereto. There are, however, some general remarks, which could not be so well placed in the alphabetical order of this work ; and as they are such as ought not to be omitted, we have thought proper to throw them into the form of an Introduction.

In respect to the anatomy of birds we confess ourselves not sufficiently qualified to enlarge upon the subject ; we shall, however, point out some singularities in the formation of particular species, which may add to the illustration of Ornithology.

First, then, the stomach of birds forms them into two natural distinct zootomic classes : those with cartilaginous stomachs, covered with very strong muscles, called a gizzard ; and those with membranaceous stomachs, more

resembling that of carnivorous quadrupeds. The former is given to such whose principal food is grain and seeds of various kinds, or other hard substances that require much friction to comminute; to assist which gravel is necessary: the latter is given to those who are carnivorous or piscivorous, and their digestion accelerated more by the gastric juice than by the action of the stomach. Those of the first class digest or retain every substance taken in; and those who eject or disgorge innutritious matter unavoidably taken in, such as feathers, fur, bones, &c., belong to the second class; conspicuous in the Falcon and Owl genus, and others that feed on fish. Granivorous birds seem to possess a power of retaining the small stones taken into the gizzard, or evacuating them when they become polished and less useful, but cannot disgorge them. In a state of nature the quantity of gravel taken in must be regulated, no doubt, by the sensation of the stomach; but, extraordinary as it may seem, in domesticated animals those instinctive faculties are deranged. We have known instances where the whole cavity of the gizzard has been filled with gravel-stones. We once remember part of a brood of young Ducks half-grown taking in such a quantity of gravel as not only filled the gizzard, but the craw, and even the gullet, and soon after died.

We shall now consider parturition and incubation. And as the Cuckow appears to be an exception to the general rule, it may not be amiss to make some inquiries into the natural history of that extraordinary bird. But first we shall remark, that by experiment it appears that birds do not instinctively know the necessary time of incubation; for we have repeatedly taken the eggs of a bird unincubated, and placed them under another of the same species who was on the point of hatching, and *vice versa* those on the point of hatching into the nest of such who had only begun to sit; and in both cases the young were brought to maturity. Birds will sometimes discriminate the egg of another species put into their nest, and will turn it out; but they will frequently breed up the young of another when exchanged, provided they are of the same age, and not very large when the experiment is made.

It has long been a received opinion that the Cuckow deposited its egg in the nest of some other bird; that it never sat on its own egg, but left it to be incubated by the bird in whose nest it was deposited; that it seldom laid more than one egg, because that number is most commonly found in a nest; and that as no other young but that of the Cuckow is found in a nest, it was imagined that the old Cuckow either destroyed the eggs or young of the bird whose nest it dropped its own egg into.

In this state had the natural history of the Cuckow remained till the ingenious Mr. Jenner illustrated it in a letter to Mr. John Hunter, published in the 'Philosophical Transactions.' To the light this gentleman has thrown on the subject every naturalist must feel himself obliged. But, knowledge arriving by slow degrees, and the fallibility of human power being certain, will, we hope, plead an excuse for further attempting to elucidate the history of that singular bird. The opinion of different persons coinciding cannot fail to strengthen an assertion; and we are happy to declare, from personal experience, that we agree with that gentleman in respect to the incubation and nutrition of the Cuckow, and the phenomenon of the infant bird throwing the eggs or young of the foster parent out of the nest; and only differ somewhat in respect to the parturition of that and other birds. It must be understood that we do not mean to contradict that author absolutely in any point, but only to offer such ideas to the friends of Science as may further stimulate to a more minute investigation. Many years ago a Cuckow's egg was brought to me taken out of a Reed Bunting's nest; I immediately put it into the nest of

a Swallow, in an out-building, who had just begun to sit. On visiting it about the time I expected the exclusion of the young, I was surprised to find the young Cuckow sole possessor of the nest. This and similar instances convinced me that the eggs of the foster parent could not be destroyed by the old Cuckow. It was difficult to suggest what became of the bird's eggs in whose nest the Cuckow chose to deposit hers. It was unnatural to suppose the bird would throw out or destroy its own in preference to that of the intruder; and the circumstance of young Cuckows never being found with companions in the nest, could not admit of a supposition that they were destroyed by accident. In this very unenlightened state, then, was the history of this bird, till Mr. Jenner proved, by a variety of experiments, exhibited under his own inspection, the extraordinary circumstance of the young Cuckow's turning out its nestling mates, or the eggs. But notwithstanding this undoubted authority, many incredulous persons, to our knowledge, disbelieve the possibility of the facts related. Too apt are some persons to wonder at and disbelieve anything seemingly out of the ordinary course of Nature; whereas it should only excite our admiration. That Being who alone can give animation, can most assuredly endow it with what powers and properties seems best to his unerring wisdom. To disallow things because our contracted comprehensions and confined ideas are limited within so small a compass, savours of atheism. It is more than probable the all-wise Creator of all things never intended we should penetrate into the reasons for all his actions; and shall we mortals of fallible nature deny well-attested facts because we are not able to see into the wisdom of an infallible Being?

But to return to the Cuckow. Previous to the above-mentioned publication I had taken much pains towards investigating the several phenomena I had noticed in this bird, and was so fortunate to have ocular proof of the fact related by Mr. Jenner, of a young Cuckow turning out of a Hedge Sparrow's nest a young Swallow I had put in for the purpose of experiment. It is needless to recite all the circumstances attending this extraordinary bird, as that gentleman has so amply explained it; I shall therefore only add that I first saw it when a few days' old in the Hedge Sparrow's nest, in a garden close to a cottage, the owner of which assured me the Hedge Sparrow had four eggs when the Cuckow dropped in a fifth; that on the morning the young Cuckow was hatched, two young Hedge Sparrows were also excluded, and that on his return from work in the evening nothing was left in the nest but the Cuckow. At five or six days' old I took it to my house, where I frequently saw it throw out the young Swallow for four or five days after. This singular action was performed by insinuating itself under the Swallow, and with its rump forced it out of the nest with a sort of jerk. Sometimes, indeed, it failed after much struggle, by reason of the strength of the Swallow, which was nearly full-feathered; but after a small respite from the seeming fatigue it renewed its efforts, and seemed continually restless till it succeeded. At the end of the fifth day this disposition ceased, and it suffered the Swallow to remain in the nest unmolested.

In respect to the Cuckow being able to continue laying from the production of the first egg till she leaves us, we are doubtful, that is, in regular succession; but we suspect, contrary to all other birds, it has the property of retaining its egg, of which we shall speak hereafter. It is possible some may lay two lots of eggs during their stay with us; but then we have reason to believe there is a considerable space of time between the first and second lot. In two or three females dissected at the time they first began to lay, we could only discover four or five eggs that could possibly be laid successively; from

the smallest of which, to what may be termed the secondary eggs, there was a sudden break off, not a gradual decrease in size. Now if this bird was able to continue laying for a month or six weeks together daily, all the eggs to be protruded in that time would appear in regular gradation. If any bird is killed at the time of laying the first egg, the number of eggs destined to be excluded successively may be pretty easily ascertained; and we are confident no bird we are yet acquainted with, the Cuckow excepted, has the power of keeping back its eggs after it has received the stimulus of the male fecundity; and after the first egg is laid the others must successively follow, one after the other, each in twenty-four hours, with a few exceptions in the larger undomesticated birds; and we know the force of Nature is often sufficiently powerful to separate eggs from the ovarium without male contact.* Cuckows, on the contrary, we conceive, are capable of retaining their egg after it is arrived at maturity; and we think there is much reason for supposing this bird is endowed with so extraordinary a property, considering it makes no nest, and that it is obliged to seek the nest of another bird to deposit it in, and that nest fit to receive it, into which one egg only is dropped,† and other nests to seek for the like purpose, it becomes not only a work of labour, but of hazard and uncertainty; therefore, did it not possess such a qualification, we should conceive the difficulties it had to encounter were too numerous to insure a continuation of its species. Suppose this bird was obliged, like others, to lay its eggs successively day after day, which we believe to be five or six, it is hardly probable that five or six nests should be found in a state proper to receive them, much less if she laid a greater number, as has been suggested.

We think it reasonable to conceive the female Cuckow receives the male's embraces from a certain period after her arrival till she is near laying her first egg; and that she does not admit the male again till after she has laid her usual number. If she has been fortunate in discovering such nests as answer her purpose, and has laid all her first-forwarded eggs early in the season, then, after a short interval, it is possible Nature may stimulate again, and a second lot of eggs be produced; so that, in either case, Cuckows may lay eggs about the time they depart from us; but we cannot help doubting whether more than one lot of eggs is laid during its continuation in this country; and that alone may be a work of time, for the reasons before mentioned.

If a Cuckow continued laying each day successively from the time of her excluding the first egg till near the time of migrating, surely a greater number of eggs or young of that bird would be found, especially as they are so dispersed; but, on the contrary, although we have been anxious to procure the eggs or young for several years together, we have not been able to succeed; yet the old birds have been in plenty about us.

Those who suppose a bird is capable of producing eggs at will, or that any bird is excited to lay more eggs than usual by daily robbing their nest, are certainly mistaken. In a domesticated fowl it is probable the desire of incubation may be prolonged by leaving little or nothing in the nest to sit on. It will therefore lay the number allotted by Nature, which is determined before the first egg is produced. If it is prevented from incubation by any means whatever, it may begin again to lay in five or six days; but there is always an interval of a few days, and sometimes as many weeks, which must wholly depend on the age and vigour of the bird. When it happens that a

* Pullets often lay eggs in a coop without impregnation, and small birds often in cages: many instances of which we have seen. These are of course unprolific.

† Where two have been found in one nest they certainly were laid by different birds.

fresh lot of eggs is laid with only a few days' interval, and that perhaps in the same nest, it is deemed a continuation, for want of nice observation; but we are not to look to domesticated animals for natural causes, for those are taken from a state of Nature. Let us look to birds in their natural wild state, and see if any well-attested instances are to be found where they have laid more eggs successively by taking one from the nest daily: for instance, the number laid by a Hedge Sparrow is commonly five, sometimes only four, and rarely six; will the taking away the daily-laid egg produce a seventh or an eighth? No: we believe there never was an instance; at least we have never been fortunate enough to discover one in the great variety of experiments we have tried on various birds, amongst which was the Swallow, which has been declared to lay as many as nineteen.* A bird will only lay the usual number peculiar to the species; and if, at the period of incubation, it perceives the nest emptied, it is deserted. The link of Nature having been broken, the female stimulates to love again, and soon brings forward by that stimulus, aided by the male fecundity, a new lot of eggs; never more than the former, and usually less, because this is properly a forced production, at the additional expense of the vigour of the bird, and loss of animal parts, which is the cause of great variation as to the number of eggs laid by domestic fowls, depending entirely on the strength of constitution, and the nourishment of the food. In all animals taken immediately under the care of man, the dictates of Nature are partly suppressed, their food changed, habits and manners altered, and disease often ensues, which is the origin of the great variety of colours in reclaimed animals.

Nature pursues invariably one course; therefore to draw a general rule of her actions we must strictly adhere to her in an unmolested, uncultivated state; for if we deviate from that we must infallibly err. We do not mean to say accidental varieties do not take place in animals unreclaimed, but such *lusus* are by no means common; and when we see a bird materially deviate in colour from its species, we may consider it as a constitutional defect; that the natural secretions are changed or suppressed with which the feathers are dyed. To enter minutely into a discussion on this head would swell this Introduction beyond its limits; all we wish is to point out the necessity of strictly adhering to Nature for observations on natural causes. A domestic fowl who will sit for six weeks upon an empty nest is not to be produced as a proof of the actions of Nature. Will any bird, in its natural wild state, continue to sit on its nest after the eggs are taken out? One egg, indeed, is sometimes sufficient to produce the act of incubation; but what is it then prevents the secondary eggs from coming forward, when it is well known if a bird is prevented from sitting she soon resumes her desire of propagation natural to every animated being? Because the very act of incubation is the effective cause; the line which Nature has drawn, and which the animal by instinct feels. We conceive the production of a second lot of eggs to be an extraordinary exertion of Nature; a wonderful proof of the affection of the all-wise Creator for the preservation and continuation of his creatures, and the resources he has furnished some animals with, in case of necessity, to prevent the total extinction of the breed. It is but few birds, if any, that would produce a second lot of eggs in the same season if unmolested; but if their nests are destroyed, it is probable three or four separate lots may be protruded.

We have never been able to discover with certainty, either in the Red-breast or Hedge Sparrow, who are the earliest breeders, the production of a

* An assertion of Dr. Lister. See Br. Zool. p. 337.

second brood after the first has been brought to maturity. Their attention to their young continues long after they leave the nest. The great exertion to collect food for so many must exhaust the animal spirits, to recruit which is a work of time; so that the season is too far advanced for a second production. The secondary eggs being brought forward is not effected by the will of the bird, but is caused by the dictates of Nature, the impulse of love.

We shall here take notice of the eggs of a Hedge Sparrow being found in a nest of that bird in a prolific state, and a young Cuckow of a fortnight old covering them, as related by Mr. Jenner, in order to strengthen a supposition we shall hereafter mention. May not this be owing to a very different cause than what has been suspected? If the Cuckow had dropped an egg into the Hedge Sparrow's nest before it was finished, it is unlikely it would have been suffered to remain; but even suppose it had, it would not have been sat on till the Hedge Sparrow began to incubate her own eggs; consequently the Cuckow's egg, which is largest, could not be hatched before the others in the common course of Nature. Again: if we suppose the Hedge Sparrow had previously laid her eggs, which she sat on together with the Cuckow's, and and that the young Cuckow, soon after it was hatched, had turned out of the nest the eggs or young of the Hedge Sparrow, which is the natural consequence, how should these eggs come into the nest containing a living foetus? It is very improbable a bird should lay eggs in a nest where she had young, for such we may call the young Cuckow, the Hedge Sparrow not knowing the difference. If birds were capable of this, it would be similar to superfetation in viviparous animals, of which there are but few instances. We can therefore only account for this singular circumstance by supposing the Cuckow is actually endowed with the property of retaining its egg in the uterus, after it is matured, till it has discovered a nest in a state fit to deposit it. The consequence of this retention would be a dilatation of the embryo by the internal heat of the body,* and the foetus advanced towards perfection in proportion to the time the egg remained in that state. Of course, after such a previous enlargement of the foetus, were the egg dropped into the nest of a bird on the point of sitting, it would most certainly be hatched as long before the eggs of the bird whose nest it was deposited in as it had been forwarded in the uterus. It has frequently been observed, that where the egg of a Cuckow has been found in the nest of a bird together with some of its own, that the Cuckow's egg is hatched first.† This seems difficult to account for, unless upon the principle we have suggested, as the egg of that bird is rather superior in size to that of any bird whose nest it makes choice of to deposit it in, amongst which the Yellowhammer's is the largest, weighing in general from thirty-six to forty-six grains; whereas that of the Cuckow weighs from forty-four to fifty-four grains. The other birds which the Cuckow more generally chooses to incubate its egg seldom produce eggs above forty grains in weight, and mostly from thirty to thirty-six; if, therefore, the embryo of the Cuckow was not sometimes enlarged before the egg was laid, is it reasonable to suppose it would be first hatched?

In respect to the young Cuckow suffering the Hedge Sparrow's eggs to remain in the nest, as above mentioned, which is contrary to the general rule, we can only suppose some defect existed in the young Cuckow, or that these eggs were so placed in some small cavity in the bottom of the nest that its

* The viper is oviparous, or rather oviviparous, hatching its young by the internal heat of its body.

† Page 3, Jenner, Nat. Hist. of the Cuckow.

utmost efforts could not disengage them. These and other accidental causes are much more likely than that the Hedge Sparrow should lay these additional eggs at the time she was performing the act of nutrition to her supposed offspring?

From late observation we conclude the female Cuckow retires from the male so soon as she feels an inclination to deposit an egg, and does not admit him again while she is capable of laying, all the eggs of the first set being fecundated at the same time. This, indeed, is probable with respect to all birds, though it is difficult to ascertain how the prolific quality is regulated so as only to affect such a portion of eggs in the ovarium;* and that every particular species should almost invariably lay the same quantity.

The extraordinary growth of a young Cuckow is no more than what happens with others produced from eggs of a disproportionate size; for instance the egg of a Raven is not half the size of that of the Kite, and yet the young of the former are not longer arriving at maturity than the latter. Some birds are hatched blind, and entirely naked; others possess the organs of sight, and are covered with down. Those birds which feed and breed on the ground, and never perch on trees, are generally provided with warm covering, and have the use of their eyes and legs soon after they are excluded from the egg.† These are not fed by the parent bird, being more perfectly formed when hatched, but soon discover by instinct their proper food; on the contrary, predacious birds are totally helpless at first, though warmly clothed with down.

The extraordinary and rapid growth of the egg is also worthy notice. We before observed there is a line drawn by Nature to prevent more than a certain quantity of eggs, peculiar to each species, being fecundated at once; otherwise a bird in one season might produce all the eggs she possessed, and afterwards become useless in propagation.

But notwithstanding only a portion of the ovaries are impregnated at the same time, yet the stimulus to love considerably increases the size of all the eggs in the ovarium. When this stimulus ceases, be it from what cause it may, the organic particles cease to flow to that part; therefore, as a redundancy of organic particles excite love by distending those parts necessary for production, so, on the contrary, the want of a sufficient quantity reduces them to their primitive state. It seems absolutely necessary that a dilatation of the ovaries should take place before they can be fecundated; and that by the law of Nature only a certain number should be sufficiently large to be impregnated at the same time; and that no others can possibly receive the male stimulus till after the first set are produced. We have before remarked, a superabundance of organic particles is cause sufficient to separate an egg from the ovarium without male contact.‡

The growth of an egg after impregnation is exceedingly rapid: the yolk only is formed in the ovarium, where it remains till within twenty-four hours of its being produced; when that part is fully matured, it separates, and falls down the oviduct into the uterus, where the egg is perfectly formed; first the vitellus, or yolk, is surrounded by the albumen, or white; and lastly is

* Domestic fowls, separated from the male after the first impregnation, are known to lay many prolific eggs. (Young on Turkeys, in Nat. Hist. of Norfolk.)

† With a few exceptions. Some that occasionally perch have these properties.

‡ It is possible a bird, in its natural state, may lay an egg unimpregnated, which may account for addled eggs being found in nests. We once found a Whitethroat sitting on four eggs perfectly dried up. This also seems to prove birds do not know the necessary time of incubation.

covered with a calcareous shell.* The very expeditious growth of these last appear to be an extraordinary exertion of Nature. The calcareous covering of an egg is concremented and formed in a most expeditious manner; a few hours only seems necessary for this work. Only one vitellus separates from the ovarium at a time (except as we shall hereafter mention), till the exclusion of which no other succeeds. But as this is a daily production, with few exceptions, there is no more time allowed for perfecting the albumen and shell than twenty-four hours.

As the course of Nature is sometimes obstructed by remote causes, there are few general rules without some exceptions; but an individual deviation by no means perverts the law of Nature, but is simply an individual defect. We shall here instance imperfect eggs sometimes produced, such as want the vitellus,† and others containing two yolks; and although there are probably very few instances of such productions from birds in their wild state,‡ yet it is no uncommon thing in domestic fowls. We are also told of eggs with double shells; and we have frequently seen eggs without any calcareous covering, but wrapped in a soft pliable skin like vellum.

To account for these extraordinary productions we must conceive a defect exists at the time in some part of the animal body; and as the vitellus and albumen derive their origin from different parts, it is natural to conclude, in those preternatural eggs destitute of yolk, the cause proceeds from some defect in the ovarium. May it not be occasioned by an unequal stimulus in the parts necessary to perfect the egg, and that the growth of the vitellus is not in proportion to the albumen? Thus while the vesicles appointed for collecting, preparing, and uniting the organic particles of the albumen in the uterus have all their effective powers, those of the ovarium are weak; of course the one goes on with the operations appointed by Nature, while the other is stopped in its progress for want of a sufficient quantity of organic matter to bring it to perfection at the same time. Hence the reason of the common fowl sometimes producing three or four imperfect eggs following, by which time the vitellus becomes sufficiently large, and a regular succession of perfect eggs are produced. On the contrary, when, from the same causes, the growth of the vitellus in the ovarium is too luxuriant, two yolks pass the oviduct together, which being surrounded with the usual quantity of the albumen, is brought forth in the form of a single egg, of an extraordinary size. From these it is possible twins are produced, but more frequently deformities, which are seldom hatched.

We shall now proceed to the subject of incubation. It is probable birds are endowed with an instinctive power of regulating the necessary heat for this purpose; of course, should the heat of the air, together with the natural warmth of the body on the close contact of the bird to the eggs, be too great, her feelings would dictate the necessity of leaving them for a time to cool. At the early part of incubation birds quit their eggs more frequently than at the time the foetus is more perfect. Yet, in the advanced state, the embryo young is not in more danger of being destroyed, if so much; for we have frequently found a living foetus in an egg that has been taken from the nest two

* We do not mean to enter minutely into the physiological description of an egg, which may be found in various publications.

† The egg of an Hedge Sparrow and of the Common Tern are the only instances, in a state of Nature, we ever remember finding yolkless, and were of course not half the usual size.

‡ The Centinimum Ovum of naturalists, vulgarly called a cock's egg. This name has been given it from a supposition it was the hundredth egg, or last the bird could lay.

days. If, however, the young is within a few hours of being excluded, and the egg is suffered to be some time cold, it either dies, or becomes so weak as not to be able to extricate itself from the shell. Various degrees of heat will enlarge the embryo young, but regular heat seems necessary to its production; and yet artificial heat, regulated by the heat of a brooding bird, will not produce young with such certainty.* Birds frequently turn and change the situation of their eggs in the nest; besides this, it is possible the moisture of the bird's body may assist the natural growth of the foetus and production of the young.

The male birds of some species supply the place of the female on the nest; but then it is of short duration, and rarely, if ever, when the eggs are near hatching: at that time the female is frequently fed by the male.† Many species of birds possess a reservoir for food called a *craw*, or *crop*; this seems to answer the same purpose as the first stomach in ruminating animals. Here it is the food is softened and prepared for the stomach; from this reservoir it is by some ejected for the purpose of feeding their young; conspicuous in the Pigeon. The Rook has a small pouch under the tongue, in which it carries food to its young. It is probable the use of the *craw* may be extended further than is generally imagined; for, besides the common preparation of the food to assist its digestion in the stomach, there are some species who actually secrete a lacteal substance in the breeding season, which, mixing with the half-digested food, is ejected to feed and nourish the young. The *mammæ*, from which this milky liquor is produced, is situated on each side the upper part of the breast, immediately under the *craw*. In the female Turtle Dove we have met with these glands tumid with milky secretion; and we believe it common to both sexes of the Dove genus. The Corvorant or Pelican genus possess no *craw*; but, to supply its place, they have a loose skin at the base of the under mandible, capable of great distention, in which they carry fish to their young. The Bustard is said to possess a bag of an astonishing size, for the purpose of retaining water. But the most unaccountable and extraordinary formation in the trachea of many of the males of the Duck genus, called a labyrinth, is beyond our reach to discover the use of; as well as the singular flexure in the windpipe of the Hooping Swan and Crane.‡

We shall here mention the difficulty naturalists labour under in the description of some birds, their eggs, and nest. From a variation in plumage in some birds we doubt not naturalists have enumerated a greater variety in some genera than there really are; in others a similitude of colour in distinct species have occasioned their being confounded and blended together for one and the same. We do not so much wonder at it in exotics, who come to us in an imperfect state. But this has frequently happened to those of our own country.

If the ornithologist attended more to the habits and manners of birds he would not be so liable to be led into these errors, being invariably distinct in

* In Egypt a vast quantity of eggs are hatched by artificial heat in stoves. It is probable, however, one-third or one-fourth miscarry. The necessary heat for this purpose is about 96 degrees of Fahrenheit's thermometer, or 32 of Reaumur's scale.

† This is not common to all species, but very conspicuous in the Rook, the Pigeon, and many others.

‡ It is much to be wished naturalists would pay more attention to these singular internal formations of birds; it would no doubt throw light on many obscurities in the division of species. The number of tail-feathers should also be well ascertained, for this alone is a mark of distinction, as in the Corvorant and Shag.

some particulars, either in their notes, their nest, eggs, place of resort, and various other circumstances necessary to be considered. It is true, the eggs, and sometimes the nest, of distinct species are so nearly allied,* that it would puzzle the most scrutinizing eye to determine: but other concomitant circumstances in the habits and manners of birds, such as the place of nidification, &c. &c. would determine. The length of time some birds are arriving at maturity in their plumage is cause of very great difficulty in determining the species. The Gulls are not maturely feathered till the return of the breeding season, and many not till the second, or perhaps the third year.† It has been observed, by an author of great ability, and for whom we have the highest respect, that the quill and tail-feathers are permanent; but in this we cannot agree, as we could produce innumerable instances to the contrary.‡ Besides the markings of the feathers, there are other markings which change by age and season, such as the colour of the bill, legs, irides, and skin, particularly the orbits of the eye. Some species of birds seem to change their winter and summer feathers, or at least in part: in some this is performed by moulting twice a year, as in the Ptarmigan; in others only additional feathers are thrown out. But we have no conception of the feathers themselves changing colour, although we have been informed of such happening in the course of one night. That confined birds do sometimes become wholly black, is unquestionable; but this is occasioned by a succession of feathers; and we have more than once seen the Bulfinch in the state of changing, in which the black on the breast first appeared. The colouring of feathers is perhaps one of the most wonderful productions of Nature. How the colouring secretions are disposed in such regular order, far surpasses human abilities to determine. It is probable, however, this is performed in an embryo state. The circulation in a feather seems to stop as fast as the parts are matured, and when it is fully grown there certainly is no circulatory fluid whatever; of course the colours cannot change except in brilliancy. It might naturally be supposed for want of some secretory matter the feathers might become more brittle, or be injured, by wet, or otherwise; but Nature, ever provident in all her ways, has taken care to supply every bird, more or less, with an external secretion of an unctuous nature, situated in a glandular bag upon the rump, which they by instinct make use of for oiling and dressing their feathers, as occasion requires. In water-fowl this bag is most conspicuous; and it is remarkable that birds most frequently use it after washing, previous to their feathers becoming perfectly dry.

Migration of birds is a curious fact that no one denies, though we have not wanted for incredulous persons who believed the Nightingale was to be found in every hedge during winter. That an accidental summer bird of passage may be by disease prevented from returning to its natural winter quarters, we can admit; because there are variety of instances of the Swallow and Martin having been seen flying in the months of November and

* That of the Marsh and Cole Titmouse, which are still supposed to be only a variety of the same species by some persons who have never minutely attended them in their natural haunts.

† There is very little doubt the Winter Mew is no other than the young of the Common Gull; as no doubt the Wagel of authors is the young of the Great Black-back Gull of this work.

‡ For instance: the male Kestrel, which, from being barred on the tail-feathers, becomes wholly ash-coloured, except at the end; also the Black-headed Gull, whose tail is at first tipped black, and the quills without white at their ends, change in the first moulting. The Herring Gull, and others whose tail is white when matured, are for the first two years mottled.

December; roused probably from a state of torpidity by an unusual warmth of air. So also there are instances of some of our winter migrants remaining with us the whole summer. The Woodcock's eggs and young have many times been taken in our woods; but these are individual occurrences only, occasioned by accident. If all the migrative species did actually reside with us the whole year, whether in a torpid state or not, we should have daily productions of the fact; and yet, in the various historic pages of this country, very few instances have been related, that had the appearance of authenticity, of the torpidity of any of our summer migrants; and such appear to be only that of the Swallow tribe.* That our summer migrants come from the south, or warmer climate, and our winter migrants from the north, or colder climate, there is no doubt; but by what rule this is performed is difficult to determine, especially as we have reason to believe the same bird will return for many years together to the same spot; and yet, why is this more to be wondered at than the performance of a carrier Pigeon, or the labouring bee, who returns with certainty to its well-known hive? But what is the more extraordinary part in the history of our summer migrants is, that the males always precede the other sex in their vernal flight; from what cause this is produced we cannot determine, though it is certain the male is no sooner arrived than he feels the impulse of love, for, if the weather is warm, he is incessant in his call, or song.

But as the song of birds is not allowed to be the effect of love by an honourable author on the subject of singing birds, we shall endeavour to elucidate this matter from experiments on birds in their natural wild state; and also endeavour to prove that their notes are innate, contrary to the same author's opinion.

That confined birds will learn the song of others they are constantly kept with, there is no doubt; but then it is generally blended with that peculiar to the species. In the spring the very great exertion of the male birds in their vociferous notes are certainly the calls to love; and the peculiar notes of each is an unerring mark for each to discover its own species. If a confined bird had learned the song of another, without retaining any part of its natural notes, and was set at liberty, it is probable it would never find a mate of its own species; and even suppose it did, there is no reason to believe the young of that bird would be destitute of its native notes; for if nestling birds have no innate notes peculiar to the species, and that their song is only learned from the parent bird, how are we to account for the invariable note each species possesses, when it happens two different species are bred up in the same bush or very contiguous, or when hatched and fostered by a different species.† There is every reason to believe it is necessary there should be native notes peculiar to each species, or the sexes might have some difficulty in discovering each other, the species be intermixed, and a variety of mules produced;‡ for we cannot suppose birds discriminate colours by which they know their species, because some distinct species are so exactly alike that a mixture might take place.§ The males of song birds, and many others, do

* Torpidity is probably the state of those summer birds of passage which accident may have detained with us during winter; similar to the hedgehog, the dormouse, and bat. These become inanimate when the thermometer sinks within ten degrees of the freezing point, as their animal heat keeps pace with the temperature of the air at that time.

+ A Goldfinch hatched and fostered by a Chaffinch retained its native notes.

† This we believe never happens in a state of Nature.

§ The Rook and Crow.

not in general search for the female, but, on the contrary, their business in the spring is to perch on some conspicuous spot, breathing out their full and amorous notes, which by instinct the female knows, and repairs to the spot to choose her mate. This is particularly verified with respect to the summer birds of passage. The Nightingale, and most of its genus, although timid and shy to a great degree, mount aloft to pour forth their amorous strains incessant, each seemingly vying in their love-laboured song before the females arrive.* No sooner do they make their appearance than dreadful battles ensue, and their notes are considerably changed; sometimes their song is hurried through without the usual grace and elegance; at other times modulated into a soothing melody. The first we conceive to be a provocation to battle on the sight of another male; the last an amorous cadence, a courting address. This variety of song lasts no longer than till the female is fixed in her choice, which is in general in a few days after her arrival; and, if the season is favourable, she soon begins the task allotted to her sex.†

The male now no more exposes himself to sing as before, nor are his songs heard so frequent, or so loud; but while she is searching for a secure place to nidificate in, he is no less assiduous in attending her with ridiculous gestures, accompanied with notes peculiarly soft.‡ When the female has chosen a spot for nidification the male constantly attends her flight to and from the place, and sits upon some branch near, while his instinctive mate places the small portion of material she each time brings to rear a commodious fabric for her intended brood. When the building is complete, and she has laid her portion of eggs, incubation immediately takes place. The male is now heard loud again, but not near so frequent as at first; he never rambles from her hearing, and seldom from her sight; if she leaves her nest he soon perceives it, and pursues her, sometimes accompanied with soft notes of love. When the callow brood appears he is instantly apprised of it, either by instinct, or by the female carrying away the fragment shells to some distant place. The male is now no more heard in tuneful glee (unless a second brood should force the amorous song again); his whole care and attention is now taken up in satisfying the nutrimental calls of his tender infant race, which he does with no less assiduity than his mate, carrying them food, and returning frequently with the mutings of the young in his beak, which is dropped at a distance from the nest.§ Here we must beg leave to digress for a moment to remark, that with the utmost attention we have never been able to discover the parent birds giving their young a musical lesson; and much question if the late brood of many species ever hear the song of their parents till they join chorus the ensuing spring, when they also feel the impulse of love, the great dictate of Nature.

The continuation of song in caged birds by no means prove it is not occasioned by a stimulus to love; indeed it is likely the redundancy of animal matter from plenty of food, and artificial heat, may produce it; and this is sufficient reason for continuing their song longer than birds in their natural

* The females of the migrative part of this genus come to us later than the males; some indeed not till three weeks after.

† The females make their nest without much assistance from the males, with few exceptions.

‡ When we have disturbed their courting, and separated the sexes from the sight of each other, the male assumes his usual vociferous notes.

§ The sagacity of this, as also the disposal of the egg-shells, is a providential instinctive power implanted in these little creatures for the security of their young; to assist which Nature has given a skin, or covering, in which the fœces is enveloped.

wild state, because they have a constant stimulus ; whereas wild birds have it abated by a commerce with the other sex, by which, and other causes, it is prevented. It is true wild birds are heard to sing sometimes in the middle of winter when the air is mild, animated by the genial warmth of the sun, which acts as a stimulus. Birds in song are generally found by dissection to have the testes somewhat dilated.* But we shall now proceed to show, by experiments, that birds in their natural state may be forced to continue their song much longer than usual. A male Redstart made its appearance near my house early in the spring, and soon commenced his love-tuned song. In two days after a female arrived, which for several days the male was continually chasing, emitting soft interrupted notes, accompanied by a chattering noise. This sort of courting lasted for several days, soon after which the female took possession of a hole in a wall close to my house, where it prepared a nest, and deposited six eggs. The male kept at a distance from the nest, and sometimes sung, but not so loud or so frequent as at first, and never when he approached nearer his mate. When the eggs had been sat on a few days I endeavoured to catch the female on the nest, but she escaped through my hand. However, she soon returned, and I caught her. The male did not immediately miss his mate ; but on the next day he renewed his vociferous calls, and his song became incessant for a week, when I discovered a second female ; his note immediately changed, and all his actions as before returned. This experiment has been repeated with the Nightingale with the same success ; and a Golden-crested Wren, who never found another mate, continued his song from the month of May till the latter end of August. On the contrary, another of the same species, who took possession of a fir-tree in my garden, ceased its notes so soon as the young were hatched, and as this beautiful little family caused me much delight and amusement, some observations thereon may not be unacceptable to the curious reader. When first I discovered the nest I thought it a favourable opportunity to become acquainted with some of the manners of this minute species, and to endeavour to discover whether the male ever sung by way of instructing the young ones. Accordingly I took the nest when the young were about six days old, placed it in a small basket, and by degrees enticed the old ones to my study window ; and after they became familiar with that situation the basket was placed within the window ; then at the opposite side of the room. It is remarkable, that although the female seemed regardless of danger from her affection to her young, yet the male never once ventured within the room ; and yet would constantly feed them while they remained at the outside of the window ; on the contrary, the female would feed them at the table at which I sat, and even when I held the nest in my hand,† provided I remained motionless. But on moving my head one day, while she was on the edge of the nest, which I held in my hand, she made a precipitate retreat, mistook the open part of the window, knocked herself against the glass, and laid breathless on the floor for some time. However, recovering a little, she made her escape, and in about an hour after I was agreeably surprised by her return, and would afterwards frequently feed the young while I held the nest in my hand. The male bird constantly attended the female in her flight to and fro, but never ventured beyond the window-frame ; nor did he latterly ever appear with food in his bill. He never uttered any note but when the female was out of sight, and then only a

* We believe a Capon never crows.

† It is probable the focal distance of such minute animals' eyes is very near, and that large objects are not represented perfect on the retina ; that they do not seem to see such distinctly is certain, unless in motion.

small chirp. At first there were ten young in the nest, but probably for want of the male's assistance in providing food two died. The visits of the female were generally repeated in the space of a minute and a half or two minutes; or, upon an average, thirty-six times in an hour; and this continued full sixteen hours in a day, which, if equally divided between the eight young ones, each would receive seventy-two feeds in the day; the whole amounting to five hundred and seventy-six. From examination of the food, which by accident now and then dropped into the nest, I judged from those weighed that each feed was a quarter of a grain upon a medium; so that each young one was supplied with eighteen grains weight in a day; and as the young birds weighed about seventy-seven grains at the time they began to perch, they consumed nearly their weight of food in four days at that time.* I could always perceive by the animation of the young brood when the old one was coming; probably some low note indicated her near approach, and in an instant every mouth was open to receive the insect morsel. But there appeared no regularity in the supply given by the parent bird; sometimes the same was fed two or three times successively; and I generally observed that the strongest got most, being able to reach farthest, the old one delivering it to the mouth nearest to her, and after each feed she waited awhile to see if any muted.†

We shall now take notice of the external formation of some birds, so admirably adapted to their mode of life, and other singularities not so easily accounted for. It is well known carnivorous quadrupeds cannot exist without drink, and that they take liquid by means of their tongue; rapacious birds seldom or never drink; Eagles, Hawks, and Owls we have kept for years without ever tasting water. The large crooked talons of these birds, and their hooked beaks, are well formed for securing and tearing their prey.

The formation of the feet of the Woodpeckers, the toes being placed two forward and two backward, is well calculated for climbing; and the cuneiform shape of the extremity of their bills is suited to the purpose of cutting holes in decayed trees; their tongue is also wonderfully contrived to search out insects beyond the reach of their bill by its great length, which is double that of the bill at least. The Wryneck has this singularity, as well as the like formation of the toes; which last is also found in the Cuckow. But neither of these birds is seen to climb up the bodies of trees; nor have either the stiff sharp-pointed feathers in the tail, as in the Woodpecker, so admirably adapted to support them when in the act of hewing. The call of most birds is effected by the lungs and larynx; but some species of Woodpeckers, in the breeding season, have a very extraordinary and loud call to each other, by strong reiterated strokes of their bill against a dead sonorous branch of a tree, peculiar to this genus. The flight of birds differs exceedingly: some fly by jerks, closing their wings every three or four strokes, which gives them an undulated motion, very conspicuous in the Woodpeckers and Wagtails, and in most small birds; others fly smooth and even; and some appear to buoy themselves in the air without perceptible motion of the wings, such as the Kite and Kestrel Hawk. Most birds fly with their legs contracted and neck extended; but there are some whose length and weight of neck makes it necessary to contract it in flight, in order to bring the centre of gravity on

* This extraordinary consumption seems absolutely requisite in animals of such rapid growth. The old birds of this species weigh from eighty to ninety grains.

† The lesser species of birds, who are so frequently fed, seldom or ever mute but immediately after they are fed, by which means the fæces are never left on the nest, but are instantly carried away by the parent bird.

the wings ; to aid which the legs are also extended behind, as in the Heron and Bittern ; others fly with extended neck, but are obliged to throw out their legs behind, as in the Duck, Goose, and other water-fowl. All aquatic birds and waders walk or run in the ordinary manner, placing one leg before the other alternate ; but the greater part of the smaller land-birds hop, or rather jump along, as if their legs were tied together. The Stare, the Lark, and Wagtail are walkers, and are never seen to hop, as it is termed ; whereas the genus of Pies mostly walk, but will frequently hop. Amongst the singularity of manners perhaps there is none more extraordinary than that which seems peculiar to a few species, by some called Pulverizers, which is that of dusting themselves ; observable only in the gallinaceous tribe, the Sky Lark, Wood Lark, and House Sparrow. These are frequently seen in hot weather to roll themselves in the dust, and by means of their wings and legs throw it all over their bodies. For what purpose it is intended is difficult to ascertain. Some have imagined it is to destroy the pediculi with which these birds abound ; but as all other birds are troubled with lice, and do not pulverise, the opinion does not seem to be well founded. Others have supposed that it is to cool them, and that such birds do not wash ; but in this also they are mistaken, for no bird bathes more frequently than the Sparrow.

The legs and feet of aquatic birds are wonderfully formed for accelerating their motion in that element, which is their greatest security. The bone of the leg is sharp, and vastly compressed sideways ; the toes, when the foot is brought forward, close in behind each other in such a manner as to expose a very small surface in front, so that in the action of swimming very little velocity is lost in bringing the legs forward : this is very conspicuous in the Diver. Some aquatic birds are web-footed before the whole length of the toes, as in the Ducks ; others only half the length of the toes, like the Avoset ; some again have all four toes webbed, as in the Corvoraⁿt ; others whose feet are furnished with a fin-like membrane on each side the toes ; these are either plain, as in the Grebe, or lobed, as in the Coot and Phalarope. There are also some who swim and dive well, whose toes are long and slender, and not furnished with webs or fins, such as the Water Hen and Rail : but these live as much on land as in water. The Gulls and Terns, although web-footed, seem incapable of diving ; the latter, indeed, we never observed to settle on the water ; the former are so buoyant that they float elegantly on the surface. The Avoset, whose feet bespeak it an inhabitant of the water, does not seem to have the power of swimming ; the Water Ouzel, on the other hand, has not the least appearance of an aquatic, nor can it swim ; but it will dive, and remain a long time under water. The serrated claw in the Heron and Goatsucker is a singular structure, which we have not discovered the use of. The bill, as well as the feet of birds, makes one of the strong natural divisions ; but these are described under the head of each genus.

The superior velocity with which aquatic birds swim under water has not wholly escaped notice ; but it is not entirely produced by the action of the wings, which are sometimes used as fins to accelerate the motion, but is occasioned by the pressure of the water above. In swimming on the surface a bird has two motions ; one upwards, the other forwards, at every stroke of the feet ; so that when covered with water that force which was lost by the upward motion is all directed to the progressive, by which it is enabled to pursue its prey or to escape an enemy with incredible speed.*

* The otter and water rat swim much faster under water than upon the surface.

Having now gone through the greater part of the singularities which are peculiar to each particular species or genus, we shall close this introduction with some remarks on consummation. The testes of the male lie within the body close to the spine, and require minute inspection to discover them in the winter, even in large birds; at the approach of spring these gradually increase till they become vastly larger than their former size. In land birds the male has no visible external parts of generation; the impregnation therefore of the female can only be accomplished by cohesion and absorption; but it is otherwise in aquatic birds, who most frequently copulate in the water; their genital parts are very conspicuous at the time of coition; by such formation the prolific matter is secured. Had this class of birds been formed like those of the land, their prolificacy would have been uncertain by reason of the interposition of the water.

The following sheets have been entirely drawn from our own observations, and compiled from the notes of twenty years' search and attention to the habits of this beautiful part of the creation in most parts of this kingdom. The wood, the mountain, and the barren waste, the craggy rock, the river, and the lake, are never searched in vain; each have their peculiar inhabitants, that enliven the scene and please the philosophic eye.

Ten thousand warblers cheer the day, and one
The live-long night; nor these alone, whose notes
Nice-finger'd art must emulate in vain;
But cawing Rooks, and Kites that swim sublime
In still repeated circles, screaming loud;
The Jay, the Pie, and e'en the boding Owl,
That hails the rising moon, have charms for me.

COWPER.

To the numerous friends who have assisted to enrich my museum, and enabled me to describe many rare birds, I beg leave to acknowledge my public obligations; and in particular to my much-esteemed friends Dr. Latham and Mr. Boys. To the publications of the former on Ornithology this work is greatly indebted for the description of, and remarks on, some few of the scarcer birds, and whose excellent arrangement of birds into genera we have followed.

INTRODUCTION TO SUPPLEMENT.

Since the publication of the 'Ornithological Dictionary' we have continued our observations upon the characters and habits of British birds with the usual ardour and indefatigable research, the result of which has been a very considerable addition to our knowledge in that branch of Natural History.

It might appear arrogant in us to enlarge upon the advantages Science may have derived from the discoveries we have made, but we may venture to say that a considerable portion of new and interesting matter will be found concerning the economy, habits, changes, and variations of species not before published; and that descriptions of many new and rare birds will be observed to enrich the following pages.

There yet remains much to be done in order to complete the history of the birds of Great Britain, and which is daily swelling our notes; but as the additional matter has already increased upon our hands so much as to exceed the size of the original work, it was thought more advantageous to the public to give it in its present state, than to wait an indefinite time, till it had arrived at a more considerable bulk. By withholding individual information general knowledge is suspended. Science is materially advanced by the promulgation of the sentiments of individuals, and poor indeed must be the resources of those from whom nothing is to be learned.

We have kept in view those points in Ornithology on which there seems to have been various opinions, in order that no opportunity might be suffered to escape which could tend to clear up existing doubts. We have strictly attended to the changes in the plumage of birds incidental to age, to sex, and to season, and have taken the advantage of preserving alive every species that could be obtained, where any material change was expected, or where the manners required more particular attention. By this means we have been able to prove, in several instances, that what were before described as two or three distinct species are actually only one, and in other cases we have indubitably ascertained that what had been considered as varieties of the same species are perfectly distinct.

By the kind communications of numerous scientific friends from one extremity of the kingdom to the other, we trust this addition to the original work, accompanied with copious scientific and provincial synonyms, will form the most complete history of British birds extant. In all the important parts of information, where ocular demonstration could not be obtained, we have, as usual, referred to the authority; and if we have by accident omitted to state the advantage we have derived from the assistance of any of our friends, we beg leave in this place to request that an apology and general acknowledgment may be accepted.

We are not aware that anything has been omitted that could contribute towards the completion of the subject up to this date; but we by no means infer that we have obtained all the knowledge individuals may possess with regard to particular species. If we have differed from other naturalists upon some intricate parts of native Ornithology, we shall be happy to stand corrected by those who may offer stronger evidences in support of a different opinion. Truth is the goal at which we aim; it is the essence of all human knowledge; and therefore, where facts could be produced, whether in opposition to the opinion of others or at variance with any former opinion of our own, we have not scrupled to notice them, being all equally liable to err.

We know that some species have been placed in collections of British birds which are not to be found in this work; but without authentic information upon the subject we are not justified in recording such upon the bare authority of a catalogue. We shall be happy to obtain sufficient authority for giving such additions to the Fauna of Great Britain; at the same time caution is required in the admission of subjects without the fullest evidence of their having been killed at large in the kingdom. It is well known that several species of birds have been captured within these realms that can have no claim to originality, nor even to migratory accident; such circumstances therefore must be attributed to their escape from confinement. Some of these we shall have occasion to mention in the progress of this work.

We have now only to solicit the same indulgence from the public which we formerly experienced, not doubting that the generous critic and truly scientific physiologist will look favourably on the errors occasioned by a slip of

the pen or by typographical delinquency. From those whose pen sips no other drink than gall we have no more expectation of favour than from the hand of an assassin continually imbrued in blood ; their trades are somewhat congenial ; each stab in the dark, and are too frequently actuated by similar motives.

G. MONTAGU.

Knowle, June, 1813.

REMARKS.

The characteristic distinctions of each genus will be found annexed to the first of the class ; and if the name of a bird sought for terminates with the name of a genus, look for that ; thus, FINCH, GOLD, instead of GOLDFINCH.

If a bird consists of two names, neither of which is the name of a genus, such as WOOD PIGEON, it will be found under the head of WOOD or PIGEON, which will refer to DOVE, RING, for RING DOVE.

If the generic characters of a bird, such as the STINT, is wanted, it will refer to PURRE as the proper name, where it will be found to be of the SANDPIPER genus ; then look for SANDPIPER for the generic characters.

EDITOR'S PREFACE.

To Colonel Montagu's admirable Introduction I have not a sentence to add as regards the natural history of British birds: nevertheless it seems desirable to give some account, however brief, of my editorial stewardship. In the first place, I desire explicitly to state that I have taken nothing from the text of the original work; and in the second place, I have added scarcely anything of my own: in no instance have I overlaid the original with my own observations, altered the author's obvious meaning to suit my own views, or attempted to controvert his assertions because at variance with my own more limited experience: nevertheless important additions have been made, which I will endeavour to explain.

1st. Observation and discovery are incessantly at work; and these daily add to our store of knowledge: it is no more probable that Science will remain stationary than that this earth will discontinue its rotation: both events are possible, but so improbable that they may not enter into our calculations: hence the voluminous additions made by Colonel Montagu to his original labours; between 1802, the date of the Dictionary, and 1813, the date of the Supplement, he collected new materials more than equal in bulk to the original work: these are now incorporated. In 1833, twenty years subsequent to Montagu's Supplement, Mr. Selby produced his '*Illustrations of British Ornithology*,' and in this admirable work he added twenty-four species to those previously recorded as inhabitants of Britain. Mr. Yarrell published the first edition of his '*History of British Birds*' in 1843; a second edition appeared in 1846, and a third and final edition in 1856. In these three editions no less than fifty-nine additions were made to the number of species described by Selby, and eighty-three to those described by Montagu. The '*Zoologist*' has added twenty-one species, and the '*Ibis*' two species, not included in either of our systematic works. It must, however, be stated, in fairness to those gentlemen whose researches have contributed so largely to the enormous addition of one hundred and six species since the time of Montagu, that the records and descriptions of many of these appeared first in the '*Zoologist*,' and were transferred from thence to the admirable work of Mr. Yarrell; but I most willingly give that work the credit of all these additions, on account of its systematic character. From these several sources are derived the whole of my editorial additions, as regards number of species.

2nd. Immediately following the English name of each bird, is a reference to a figure in the third edition of Yarrell's '*History*;' that work is not selected on account of the accuracy of the figure, which is generally commendable, but because of the completeness and high character of the work itself: Bewick's figures are referred to by Montagu, and of these representations it is impossible to speak too highly: many of the birds he has depicted I have never seen living, and therefore can pronounce no opinion as to the truthfulness of their positions, but a large proportion of the birds figured by Bewick are

familiar to all, and the figures are more like instantaneous photographs of living creatures than the result of pencil-work in an artist's studio. They are almost miraculous, and show how forcibly the form and action of each bird must have impressed itself on the draughtsman's memory. Of the letterpress of the work which bears Bewick's name the truest kindness to that honoured memory will be shown by passing it over in silence.

3rd. Following the reference to Yarrell's figure of the bird, is one to Hewitson's figure of the egg: the accuracy of these figures, carefully drawn and exquisitely coloured, leaves nothing to be desired. The third edition of the 'Oology' is cited in every instance.

4th. In the descriptions of the rarer species, I have quoted from the 'Zoologist' additional instances of their occurrence: many similar records occur in the 'Field' newspaper, but are not cited when the communications are anonymous.

All these additions are distinguished from Colonel Montagu's text by editorial brackets, and in every instance the source whence they have been derived is carefully indicated.

Notwithstanding the pains I have taken to collect and incorporate these various records, I am bound in fairness to state that I regard a great number of the species now added, as well as of those described by Montagu, as not having the slightest claim to the title of British birds. I confess this seems something like building a house of cards and blowing it down again. My duty, however, seems to me very plain. Like my great predecessor, I have collected and arranged these records; and, like him, I express the opinion that in a purely scientific point of view, they are utterly worthless. The time seems to have arrived when the conscientious compiler must eliminate all these interlopers.

I believe the utmost injury has resulted to Science in this country from the desire to multiply the number of our species: naturalists have sought to effect this in more ways than one: in many instances the differential characters of age, sex and season have been urged on our attention; but in still more, the productions of other countries have been recorded as our own. The dealer holds himself excused in this: but with the NATURALIST, properly so called, truth is the paramount object of search; and he regards with repugnance, I may almost say abhorrence, every attempt at imposition.

In cases where additional synonymes or authorities occur in the Supplement, they have been incorporated with the others; but any additional species or remarks are retained under the respective heads of Supplement and Appendix.

With these brief observations, which I trust will at any rate receive the candid consideration of some of my readers, I commit my book to their care, comforting myself with the reflection that the desire to be useful has been the prompting cause of my laborious but agreeable undertaking.

EDWARD NEWMAN.

ORNITHOLOGICAL DICTIONARY.

A.

Aberdevine.—See Siskin.

[**Accentor.**—A genus of birds, the characters of which are: "Beak of moderate length, strong, straight, conical and pointed; the edges of both mandibles compressed; upper mandible notched near the point. Nostrils basal, naked, pierced in a membrane of considerable size. Wings: the first feather almost obsolete, the second nearly as long as the third, the third the longest in the wing. Legs strong; three toes before, and one behind; the outer toe joined at its base to the middle toe; the claw of the hind toe by much the longest, and the most curved."—*Yarrell*, i. 249.]

[**Accentor, Alpine.**—*Accentor alpinus*, *Yarrell*, i. 249; *Hewitson*, i. 96.—"The beak is black at the point, and yellowish white at the base; the irides hazel: head, neck, and ear-coverts brownish grey; feathers of the back brown, with longitudinal central patches of darker blackish brown; rump greyish brown; wing primaries blackish brown, the centre of each tertial still darker, edged on both sides with reddish brown, and tipped with dull white; both the small and large wing-coverts reddish brown, varied with black, and tipped with a spot of white; upper surface of tail-feathers dark brown tipped with buff; chin, throat, and front of the neck dull white, with a small black spot on each feather; chest dark grey; the breast and flanks varied with chestnut-coloured patches: under tail-coverts dark greyish brown, edged with dull white; under the surface of tail-feathers ash-grey, tipped with dull buffy white: legs and toes orange-brown; claws black. Length of bird described six inches and a half. From the carpal joint of the wing to the end of the longest wing-feather three inches and five-eighths: the first feather very short, the second feather longer than the fourth, the third the longest in the wing. The females do not

differ in plumage from the males, except that their colours are not so bright."—*Yarrell*, i. 249. "The nest is composed, like that of the hedge sparrow, of moss, dry grass, and wool, lined with hair. The eggs are four or five in number, and, like those of the allied species, of a beautiful spotless blue, but rather more intense in their colouring."—*Hewitson*, i. 96. At p. 566 of the 'Zoologist' the capture of an Alpine Accentor at Teignmouth, in Devonshire, is recorded by the Rev. W. S. Hore. At p. 5958 of the same journal two specimens are mentioned by Mr. John Porter as having been shot on the downs near Lewes, in Sussex, on the 26th of December, 1858. At p. 6377 the occurrence of three specimens near Plymouth is recorded by Mr. John Gatcombe: two of these were shot on the 10th of January, 1859. And at p. 6889 another is reported by Col. Newman to have occurred at Cheltenham, but no date is given.]

[**Accentor, Hedge.**—*Accentor modularis*, *Yarrell*, i. 253; *Hewitson*, xxvii. 97.]
Hedge Warbler.—*Motacilla modularis*, *Lin. Syst.* i. p. 329, 3; *Gmel. Syst.* ii. p. 952; *Ind. Orn.* ii. p. 511, 13. *Curruca Eliotæ*, *Raii Syn.* p. 79, A. 6; *Will.* p. 157. *Magnanima Aldr.* *Will.* p. 157. *Corruca sepiaria*, *Bris.* iii. p. 394, 12; *Ib.* Svo, p. 420. *Traine-buisson Mouchet*, ou *Fauvette d'hyver*, *Buf.* v. p. 151. Hedge Sparrow, *Br. Zool.* i. No. 150; *Ib.* fol. t. S. 1, f. 3, 4; *Arct. Zool.* ii. p. 418, H.; *Will. Angl.* p. 215; *Albin*, iii. t. 59; *Ib. Song Birds*, t. p. 81; *Lath. Syn.* iv. p. 419, 9; *Lewin, Br. Birds*, iii. t. 102; *Walc. Syn.* ii. t. 232; *Pult. Cat. Dorset.* p. 9. Provincial: Titling; Dunnoek.—This well-known species, commonly called Hedge Sparrow, needs little description. The length is five inches and three-quarters; weight near six drams. Bill dusky; irides light hazel. Head and neck brown, mixed with ash-colour; back and wing-coverts darker brown, edged with rufous-brown; throat and breast

dull ash-colour; belly dirty white; sides and vent tawny-brown. The female has less ash-colour about the head and breast. The Hedge Warbler is found in all parts of England; has a pleasing song, which it begins with the new year, if the weather is mild; breeds early, making a nest in March, composed of green moss and wool, and lined with hair, which is placed in some low evergreen shrub, thick brush, or cut hedge; frequently builds in faggot piles. The eggs are four or five in number, blue; their weight about twenty-eight grains. This bird is one of the few of the Warbler tribe that remains with us the whole year. Its food is insects and worms, but, like the Redbreast, will in defect of these pick up crumbs of bread; and seems to prefer situations near the habitation of man. The Cuckoo frequently makes choice of this bird's nest for the purpose of depositing its egg. Is said to be migratory in France, leaving that country in spring, a very few excepted.

Ailsa-cock.—See Puffin.

Alk.—See Auk, Blackbilled; and Razorbill [or rather—Auk, Razorbilled.]

Allamotti.—See Petrel, Stormy.

Allan.—See Gull, Arctic.

Alp.—See Finch-bul.

[Ammer, Yellow.—See Bunting, Yellow.]

Amzel.—See Ouzel, Ring; and Blackbird.

Annet.—See Kittywake.

Arctic-bird.—See Gull, Arctic.

Arsfoot.—See Grebe, Tippet, and Little.

Assilag.—See Petrel, Stormy.

Avoset.—A genus of birds, the characters of which are: Bill long, slender, very thin, depressed, bending upwards. Nostrils narrow, pervious. Tongue short. Legs very long. Feet palmated. Back toe very small.

Avoset, Scooping.—[Avocet, Yarrell, ii. 671; Hewitson, excii. 339.] *Recurverostris Avocetta*, Linn. *Syst.* 156, 1; *Gmel. Syst.* ii. p. 693; *Bris.* vi. p. 538, t. 47; *Ib.* 8vo, ii. p. 504; *Raii Syn.* p. 117, A. 1; *Will.* p. 240, t. 60; *Will. Angl.* p. 321. *L'Avocette*, *Buf.* viii. p. 466, t. 38. Scooping Avoset, *Br. Zool.* ii. No. 228, t. 80; *Lath. Syn.* v. p. 293, 1; *Ib. Sup.* p. 263. *Avocetta*, *Ind. Orn.* ii. p. 786, 1; *Don. Br.*

Birds, t. 66; *Lewin, Br. Birds*, vi. t. 202; *Walc. Syn.* ii. t. 165; *Pult. Cat. Dorset.* p. 16. Provincial: Butter-flip; Scooper; Yelper; Picarini; Crooked-bill; Cobler's-awl.—The length of this species to the end of the tail is eighteen inches; to the end of the toes twenty-two: weight thirteen ounces. Bill black, recurved at the point, flexible like whalebone; irides dusky. The upper part of the head, and half the hind part of the neck black; the cheeks and whole under parts of the bird are pure white; outer scapulars, middle coverts of the wings, and greater quill-feathers black; the ridge of the wings, greater coverts, back, and tail white; legs bluish grey; toes webbed about half their length. The Scooping Avoset is the only species found in England. It breeds in the fens of Lincolnshire, and on Romney Marsh in Kent. In winter they assemble in small flocks of six or seven, and frequent our shores, particularly the mouths of large rivers, in search of worms and marine insects, which they scoop out of the mud or sand. It lays two eggs about the size of those of a pigeon, white, tinged with green, and marked with large black spots; is said to be very tenacious of its young; when disturbed at this season will fly round in repeated circles, uttering a note that resembles the word *twit* twice repeated. The feet of this bird seem calculated for swimming, but it has never been observed to take the water for that purpose. We remember one of this species being wounded in the wing, and floating with the tide for near a mile, when it was taken up alive without ever attempting to swim; so that the palmated feet seem only intended to support it on the mud.

Auk.—A genus of birds, the characters of which are: Bill strong, thick, compressed. Nostrils linear, placed near the edge of the mandible. Tongue almost as long as the bill. Toes, three forward webbed; none behind.

Auk, Blackbilled.—*Alca Pica*, *Lin. Syst.* i. p. 210, 2; *Gmel. Syst.* ii. p. 551. *Mergus Bellonii*, *Raii Syn.* p. 119, 2. *Utania*, *Will.* p. 243, t. 64; *Ib. Angl.* p. 324. *Le Petit Pengoin*, *Buf.* ix. p. 396. Blackbilled Auk, *Br. Zool.* ii. No. 231; *Ib.* fol. 137; *Arct. Zool.* ii. No. 426; *Lath. Syn.* v. p. 320, 6. *Alca Torda*, *β.*, *Ind. Orn.* ii. p. 793, 5. *Alca minor*, *Bris.* vi. p. 923, t. 8, f. 2; *Ib.* 8vo, ii. p. 383; *Walc. Syn.* i. t. 85. Provincial: Alk or Oke.—The weight of this bird is about eighteen ounces; length fifteen inches. The bill is black, of the shape and size of that of the Razorbill; smooth, or void of furrows, in some; others possess three distinct

furrows, as in a specimen now before us; that nearest the base white; irides hazel. The top of the head, taking in the eyes. part of the neck, back, wings, and tail are black; the lesser quill-feathers tipped with white; the side of the head, fore part of the neck, and whole under side of the body white; legs brown-black. Dr. Latham, in his 'Synopsis,' mentions his suspicion that this is no other than the Razorbill immatured; and, in his 'Index Ornithologicus,' gives it as the young of that bird. We cannot, however, but differ in opinion from that excellent ornithologist, by late observations on the young of the Razorbill, before and after they could fly, which differ only from the parent bird in having no furrows in the bill; being destitute of the white line from the bill to the eye, and no white on the secondary quill-feathers; but the whole head and upper part of the neck is black; which is the essential difference between that bird and the Blackbilled Auk. This is only found on our coasts in winter. The Razorbill breeds with us, and retires in the autumn, at which time none are to be found with the white cheeks and throat amongst the myriads that haunt our cliffs. It is hardly possible, then, to conceive that the young, who are in their first feathers so like the old ones, should become more unlike them in winter, which is contrary to nature; for observation has taught us, that all birds become more like their parents at every moulting; so that to make these birds one and the same species, we must conclude both old and young change their plumage in winter: but this we have no reason at present to believe. And indeed it is probable that whatever change may take place, that singular line in the matured Razorbill, running from the bill to the eye, never varies; and which constitutes one of the greatest characteristic distinctions. The black part of the plumage of this bird is invariably deeper coloured than in the Razorbill, particularly about the head. From these observations we are inclined to give each a separate place in this work as distinct species.

SUPPLEMENT.—In order to strengthen our former opinion concerning the distinction we conceive to exist between this and the Razorbill, and as far as possible remove any discordance in the opinion of others, it will be proper to detail our more recent observations on the bird in question. In the year 1802, on the 23rd of January, a variety of this bird was shot on the south coast of Devon. It weighed between sixteen and seventeen ounces: the furrow at the base of the bill was white: from the base of the upper mandible to the eye was an obscure line of white

feathers: the forehead and crown black: sides of the head behind the eyes, extending round the nape dingy white: the upper part of the body and wings, as usual, black: sides of the chin speckled dusky: the feathers of the throat white, slightly tipped with dusky: neck, breast, and upper part of the belly slightly tipped with sooty-brown, giving the feathers a grey appearance, as if they had been soiled by some extraneous matter. Another variety was shot on the 3rd of February. This weighed twenty ounces: the length sixteen inches: breadth twenty-eight inches: the bill was furrowed, and had one white line across each mandible on both sides: inside of the mouth yellow: the irides hazel: the eleven first quills were all black, the rest tipped with white, about sixteen in number: from the bill to the eye an obscure line of speckled feathers: legs quite black, and in other respects like the last. A third specimen, killed on the 16th of February, 1808, had its bill destitute of furrows, and not the smallest appearance of any white line between the bill and the eye. There is nothing very remarkable in the trachea of this species; it is rather compressed, and the last ring at the divarication is very firm and bony. From the preceding description of the variety to which this bird is incident, we might be led to conclude that all the intermediate stages might be found between this and the Razorbill, that would reduce them to the same species; but that is not the case. The weight and length of this bird are invariably much less, and the dark colour of the head and neck is never observed to possess that rusty tinge, the character of the Razorbill in all seasons. It will also be observed, that in the young of the Razorbill, from the time it shows its nestling feathers to the time of its autumnal migration, the whole head and upper part of the neck are dusky. But there is a stronger mark of distinction than even these, observable in their habits, for we are informed by Fabricius, in his 'Fauna Groenland,' that these birds are in greater plenty in that country, during the breeding season, than the Razorbill, and that they disperse in winter. If this is really the case, and there is no reason to doubt such good authority, it being impossible to be mistaken in the bird, the matter is clearly decided; for if the Blackbilled Auk was really no other than the young Razorbill immatured in plumage, and continuing so till after the breeding season of the second year, surely such imperfect birds would be equally as plentiful amongst our swarms of Razorbills, during summer as in Greenland: whereas, on the contrary, no such occur-

rence has been recorded, nor a specimen of the Blackbilled Auk killed on the southern parts of the coast of England till the month of November, a period long after the others have departed. Besides we affirm, that out of many hundreds, perhaps thousands, we have shot of both the Razorbill and Foolish Guillemot, on various parts of the coast of England in the breeding season, neither the Blackbilled Auk nor the Lesser Guillemot ever occurred. Whatever therefore may be the little varieties of both these birds which bring them a shade nearer to those of which they have been by some naturalists considered as only the young, we should recollect, that though they have not been discovered to breed within the islands of Great Britain, yet they are described by northern physiologists as resorting to the arctic regions for that purpose, and disperse into lower latitudes during the icy months, when those seas are frozen. It is then that the northern parts of Britain receive abundance of them in company with the Lesser Guillemot, and a few spread over the southern parts. Thus these birds supply the place of the Razorbill and Foolish Guillemot, who leave us to seek a more southern clime during the inclement season. What separates the Rook and the Crow but their habits, for not a feather is different? It is their manners and note that detect them. How many are there that still seem to doubt the distinction between the Corvorant and Shag to be more than sexual? How are the Greater and Lesser Blackbacked Gulls to be known but by habits, since naturalists give great scope to variety in size as well as in plumage, for although there is sufficient distinction in the colour of the bill and legs, yet these require perhaps the maturation of several years? the manners and habits therefore of such nearly allied birds are, if they can be obtained, the best criterion of distinction. These and other similar species indigenous to our own country, within the means of our personal observation, teach us that habits are less erring than the usual marks of discrimination. Suppose for instance the Blackbilled Auk did actually put on the exact plumage, and other markings of the Razorbill in the breeding season (but which is not found to be the case), yet if the former should only visit us in the winter, and the latter only in the summer, who could doubt of their actual distinction, independent of their difference in size? As therefore we have such good authority for this species inhabiting Greenland in abundance in the summer months, and that they actually breed there, we must not consider the little variety sometimes observed in their

feathers to be a step towards that maturity which would stamp the true character of the Razorbill; for we know others of this class, as well as that of the Guillemot, vary considerably in plumage, and none more than the Black Guillemot, of which no less than seven or eight varieties are described, some of them so very different as to have been considered distinct species. Since then it has been ascertained that the Blackbilled Auk breeds within the arctic regions, and there, known by its different plumage, we may conclude it is at no season sufficiently like the Razorbill to admit of their being confounded. And we can have no doubt but that the Lesser Guillemot is as distinct from the common species, and breeds also in similar latitudes. We may therefore safely conclude, that those species which visit us in the winter migrate from the same northern regions, though each may have its limits or peculiar haunts; and, like better known species, may not be found to inhabit all situations alike. We have been rather diffuse on this subject in order to clear up existing doubts by personal experience. But we shall have occasion to touch upon it again under the head of Guillemot, Lesser, as well as under that of Auk, Razorbilled. [Nevertheless, I believe this to be the Razorbill in winter plumage.]

Auk, Common.—See Razorbill [or rather Auk, Razorbilled.]

Auk, Great.—[Yarrell, iii. 479; Hewitson, cxxix. 469.] *Alca impennis*, Lin. Syst. p. 210, 3; Gmel. Syst. p. 550. Penguin, *Raii Syn.* p. 118; Will. p. 242, t. 65; *Ib. Angl.* p. 322, t. 65; *Edw.* t. 147. *Alca major*, *Bris.* vi. p. 85, 1, t. 7; *Ib.* 8vo, ii. p. 382. Le grand Penguin, *Buf.* ix. p. 393, t. 29. Great Auk, *Br. Zool.* ii. No. 229, t. 81; *Ib.* fol. 136; *Arct. Zool.* ii. No. 424; *Lath. Syn.* v. p. 311, 1; *Ind. Orn.* ii. p. 791, No. 1; *Lewin, Br. Birds*, vi. t. 222; *Walc. Syn.* i. t. 86. —The length of this species is three feet. The bill is black, very strong, compressed, and marked with several furrows. The base of the upper mandible is covered with short velvet-like feathers; between the bill and the eye is a large patch of white; the head, neck, back, and wings glossy black; lesser quill-feathers tipped with white; legs black. The smallness of the wings renders them useless for flight, the longest quill-feather not exceeding four inches in length. These, however, are admirably adapted to its mode of life, and are of peculiar use in diving under water, where they act as fins; by which means it pursues its prey with astonishing velocity. This bird is only found in the

most northern parts of the kingdom; is said to breed in the isle of St. Kilda. Like the rest of this genus, it lays only one egg, white, sometimes irregularly marked with purplish lines, or blotched with ferruginous and black at the larger end; length six inches.

APPENDIX.—This species appears to have become extremely rare on the north coast of Britain. The natives in the Orkneys informed Mr. Bullock, in his late tour through those islands, that one male only had made his appearance for a long time, which had regularly visited Papa Westra for several years. The female (which the natives call the Queen of the Auks) was killed just before Mr. Bullock's arrival. The King, or male, Mr. Bullock had the pleasure of chasing, for several hours, in a six oared boat, but without being able to kill him, for though he frequently got near him, so expert was the bird in its natural element, that it appeared impossible to shoot him. The rapidity with which he pursued his course under water, was almost incredible.

Auk, Little.—[Yarrell, iii. 468; Hewitson, cxxvii. 465.] *Alca Alle*, *Lin. Syst.* i. p. 211, 5; *Gmel. Syst.* ii. p. 554. *Mergulus melanoleucos* rostro acuto brevi, *Raii Syn.* p. 125, A. 5; *Will.* p. 261, t. 59. Small black and white Diver, *Will. Angl.* p. 343; *Edw.* t. 91. Greenland Dove, *Albin*, i. t. 85. Le petit Guillemot, *Buf.* ix. p. 354. Little Auk, *Br. Zool.* ii. No. 233, t. 82; *Ibid.* fol. 137, t. H. 4, f. 1; *Arct. Zool.* ii. t. 429; *Lath. Syn.* v. p. 327, 11; *Ind. Orn.* ii. p. 795, 10; *Lewin, Br. Birds*, vi. t. 223; *Walc. Syn.* i. t. 88; *Pult. Cat. Dorset*, p. 17. *Uria minor*, *Bris.* vi. p. 73, 2; *Ib.* 8vo, ii. p. 378. Little black and white Diver, Greenland Dove, or Sea-Turtle, *Bewick, B. Birds*, ii. fig. p. 172. Provincial: in Zetland is called Rochie, Rotch, or Ratch.—In size this bird rather exceeds the Blackbird; length near nine inches. Bill black, short, strong, and somewhat rounded in shape. The plumage is generally black above and white beneath, with the tips of the secondary quill-feathers white; sometimes the scapulars are mixed with white; in others the head and neck is black. Whether any of these varieties are owing to sex or age is not ascertained: it is said the throat of the male is black. It is not frequently met with in England, but is common in Greenland, where it breeds, and is said to lay two eggs; if so, it differs from others of the genus, which usually lay but one; these are larger than those of a pigeon, of a bluish white.

SUPPLEMENT.—The birds of this species that visit Great Britain in the autumnal and

winter months, most certainly come from the more northern parts of Europe, like the preceding, and very few, if any, breed with us except in the northern parts of Scotland. They retire from the frozen shores of Greenland and Spitzbergen; but remain contented where they can obtain food from the liquid element, and consequently few migrate so far as the southern parts of England. Muller and Fabricius are evidences of the northern habits of this bird; the latter speaks of their being plentiful, and states that they lay two eggs the size of those of a pigeon, white tinted with blue. A variety is mentioned that is totally white, and another with a red breast. Since we last treated of this bird, three specimens have come under examination that were taken in the South of England in the winter; one on the 4th of December, in the year 1804, another on the 25th of November, 1805, and the third on the 17th of January, 1806. These were dissected in order to discover the sex, with a view to ascertain if there was any sexual difference in the plumage, it having been said that the throat of the male was black. The first of these proved to be a male, the description of which is as follows. Length eight inches and a half. Upper part of the head black, taking in the eyes (which are whitish); the sides of the head are white, which runs backward and forms a narrow band across the nape, sprinkled with dusky; but immediately above the eye is a small white spot: the whole under parts white; the chin and fore part of the neck speckled dusky; the intermediate part or throat pure white: scapulars with four or five white streaks, or marks disposed in longitudinal lines: the thighs are mixed with a few black feathers: the upper parts of the plumage are of the usual black colour, and the secondary quills tipped with white: legs and feet dusky. This was found dead near the coast in the South of Devon. The second was found dead near Bridgewater, in Somersetshire, and differed in nothing from the former but in sex. The third was taken alive in a pool of fresh water close to the estuary of Kingsbridge, in Devonshire, from which by reason of some defect it did not attempt to rise; and refusing all sustenance died the next day. In this there was no perceptible difference in plumage from the others, and consequently the sex was not attended to, or at least not noted. The little Auk has sometimes been found dead very remote from the sea. The Rev. Mr. Dalton, of Copgrove, near Knaresborough, in Yorkshire, assures us that both the *Alca alle* and *Procellaria pelagica* have been found near his house. Whether these were driven by storms, or attempted

to cross the land from one sea to the other, is difficult to determine. There can be no doubt that this species, and perhaps some others of the tribe of Auks and Guillemots, appear in a different plumage in winter than what they assume in summer, particularly about the head. Those who have described this species from specimens taken in the breeding season, have informed us that the head and neck are black; whereas those taken in winter have the throat, under part of the neck, and cheeks invariably white. This opinion has been confirmed by a physiological friend, the Rev. Mr. Fleming, whose station in Zetland has enabled him to attend to the habits of some of our more northern birds. This gentleman assures us, that the Little Auk visits Zetland in the winter, and that then they all have the white about the head and neck; but that specimens in his possession, shot in Greenland in the summer, had those parts black, with a small white spot over the eye, which last is common at all seasons. It is this periodical change of plumage that has caused so much controversy with respect to another species of this genus, as well as of some of the Guillemots, the white parts about the head and neck having been by some injudiciously considered as the criterion of infancy. But it is a most unnatural supposition that the young and the old birds should have a general separation in the autumn, because in the winter all that are noticed on our coasts possess more or less white on those parts. This circumstance alone should rather be adduced as a presumptive evidence that other birds of this kind have a periodical change of plumage twice in the year, since it is by no means a peculiar property. The Blackbilled Auk and Lesser Guillemot (both of which are only found in this country during the winter, when the others leave us, and which have similar markings about the head and neck to those of the Little Auk) probably have those parts black, on their return to the arctic regions to breed. But of this more is said in its proper place.

[Auk, Razorbilled.]—Razorbill.—[Yarrell, ii. 476; Hewitson, cxxviii. 468]. Alca Torda, *Lin. Syst.* i. p. 210, 1; *Gmel. Syst.* ii. p. 551; *Ind. Orn.* ii. p. 793, 5; *Bris.* vi. p. 892, t. 8, f. 1; *Ib.* 8vo, ii. p. 83. Alca Hoieri, *Raii Syn.* p. 119, A. 3; *Will.* p. 243, t. 64, 65. Le Pingoin, *Buf.* ix. p. 390, t. 27. Razorbill, Auk, Murre, *Br. Zool.* ii. No. 230, t. 82; *Ib.* fol. 136; *Edw.* t. 358, f. 2; *Lath. Syn.* v. p. 319; *Ib. Sup.* p. 264; *Lewin, Br. Birds.* vi. t. 224; *Don. Br. Birds.* iii. t. 64; *Walc. Syn.* i. t. 84; *Pult. Cat. Dorset.* p. 17. Auk, Murre, Falk, Marrot, Scout, *Bewick,* ii. t. p. 164.

Provincial: in Zetland is called Hiogga; Sea-crow; Bawkie; Alk, or Oke; Falk.—This species of Auk weighs about twenty-seven ounces; length eighteen inches. Bill two inches long from the corner of the mouth, much compressed sideways; three-quarters of an inch deep at the largest part, much arched, and hooked at the end of the upper mandible; it is furnished with three transverse furrows; the middle one is white, and crosses the whole bill; irides light hazel. The head, chin, throat, and whole upper parts, are dusky black, with a strong tinge of a rusty hue on the sides of the head and throat; the quill-feathers are also dashed with cinereous on the outer webs; the greater coverts and secondaries tipped with white, forming a narrow band across the wing; from the ridge of the upper mandible is a narrow line of white feathers, which continue to the eye on each side; the under parts from the breast are white; the tail is cuneiform, consisting of twelve pointed feathers, the two middle of which exceed the rest considerably in length; legs dusky black. We have, in the former part of this work, expressed an opinion that this and the Blackbilled Auk are distinct species, contrary to the opinion of so able an ornithologist therein mentioned; for which we have given reasons. The gradation in plumage and in the marks on the bill that author mentions in his 'Synopsis,' which he considers as the different stages of the young of this bird before it arrives at maturity, would have shaken our opinion; but we have recently procured the young in the month of July, before they could fly, which differed in nothing from the old birds except in wanting the furrows on the bill. From this circumstance we can have little doubt but that they are distinct species. (See Auk, Blackbilled.) The Razorbill is not seen with us in winter, but repairs to our rocky coasts in the spring, and begins to deposit its single egg the beginning of May (which is of a dirty white, blotched and spotted with brown and dusky), on the projecting shelves of the highest cliffs, where, in some situations, they may be seen hundreds in a row, but not, as we have been informed, cemented to the surface; for we have frequently taken them up, and laid them again in the same spot. A violent gale of wind sometimes sweeps away whole ranks. The egg is of a prodigious size in proportion to the bird, being about the size of that of a Turkey, of a longer shape. The principal food of this bird is small fish, particularly sprats, with which it feeds its young, taking three or four at a time in its bill, with the tails hanging out. The eggs of this and the

Foolish Guillemot are an article of trade in several of the isles off the coast of Scotland, and are used for refining sugar. They are also eaten by the natives there, as well as in other parts; to procure which they are suspended by a rope, and let down from the top of the cliffs; others climb up and down by the help of a crook fastened to a pole: many perish in this dangerous employment. This bird is not so plentiful as the Guillemot; and it is remarkable that although they breed in the same cliffs they rarely are found to lay on the same ledges or shelves of the rock, but keep their breeding-places distinct, even where they swarm like bees about a hive.

SUPPLEMENT. — Having in our own opinion adduced incontrovertable reasons, under the head of Auk, Blackbilled, to show that it is perfectly distinct from this, we shall candidly enumerate our observations from personal experience. It will be seen in the former part of the 'Ornithological Dictionary,' that in the young of this species taken in the month of July, before they could fly, no difference was observable in plumage from the adult. It is true we have since had repeated ocular proofs of this fact, but we acknowledge to have had our astonishment excited by a young specimen brought to us alive on the 4th of August, 1802. This was larger than those we had usually obtained (some of which had not any white from the bill to the eye), but it was still incapable of flying, the quills not having arrived at maturity. The bill was destitute of furrows, but the line of white feathers from the bill to the eye was as conspicuous nearly as in adults: the upper part of the head and cheeks black; the throat speckled black and white; on the upper part of the neck before, and on the sides, several white feathers were observable amongst the black, and upon lifting up the feathers on those parts, a great many young white feathers were seen emerging through the skin. Now by comparing the plumage of this bird with that of the young of inferior age and size, and both with the adult, and with the Blackbilled Auk, we shall find circumstances with respect to plumage not reconcileable but by considering them the same species, subject to variety, were it not for other incontrovertible facts to the contrary. To a collector only of these subjects it might appear, that a certain degree of gradation in plumage was apparent (being ignorant of habits, weight, and measurement), since in the most infant plumage the early young resemble the parent in the whole head and neck being black, and only differing in the want of the white line to the

eye. At a further advanced age (but before the quill-feathers are perfected), the white line from the bill to the eye is very conspicuous, and the white feathers on the throat and neck appearing in spots, it might be inferred that the cheeks would next become spotted, and lastly, that the black on these parts would wholly disappear, and thus unite the two into one species. If indeed the union rested upon plumage alone, the appearance of the white line of feathers from the bill to the eye would be unfavourable to the cause, because in no one instance have we observed an appearance of such a mark in the Blackbilled Auk till after the month of December, and very obscurely in the month of January. Besides in all the Foolish Guillemots taken in the winter, not the least difference is observable in their plumage from what it is in the summer months. But to that bird, whose habits are similar, we refer for further particulars. It is indeed extremely difficult to account for some of the changes observed in the plumage of particular birds; but it certainly appears very unlikely that the Razorbill, who at first is destitute of such a mark, and afterwards in the month of August, before it could fly assumes this white mark, should again discharge it in October or November, to appear in the dress of the Blackbilled Auk; and again acquire it in the month of March, when they first appear as Razorbills on our rocky coasts. But even if this most singular and uncommon change of plumage (no less than four times within the space of eight or nine months) was admitted to be effected by the Razorbill, the other species has been traced to its breeding place, and possessing habits of distinction: and it is well known, that until birds arrive at an adult state of plumage, they are incapable of breeding. That many birds during the whole period of their lives change part of their plumage spring and autumn, is well known; but we do not recollect any instance where the young assume the most perfect summer plumage of the parent bird, to change it again for the winter dress, such as adult birds are frequently observed to effect, except in a few instances where the inhabitants of the snowy regions assimilate the colour of their plumage to their situation. The instance of some of our well-known birds will serve to exemplify the fact. The Grey and White Wagtails both change a part of their plumage after the breeding season; the black feathers on the throat are replaced by white ones. The Golden Plover is destitute of the black on the fore part of the neck and breast, in the winter, which characterizes it in the breeding

season; but neither the young of this, nor of either of the Wagtails, partake of these parts of the summer plumage of their parents, till they commence the task of preparing for a progeny of their own the succeeding summer. Thus the young of these, and many other species of birds, are at first clothed similar to the parent birds in their autumnal change, and with them continue in one uniform plumage during the ensuing winter. This is a natural and common change; but similar changes are innumerable in those birds where there is a material sexual distinction in the plumage. In such cases it is an invariable rule, that the young of both sexes at first appear in the dress of their female parent, and that the male attire is in some the work of only a few months, while in others perhaps two or more years may be required to perfect it. There would be no difficulty in supposing that the old Razorbills throw off the black feathers on the sides of the head, throat, and fore part of the neck, as well as the white feathers that constitute the line from the bill to the eye, on the approach of winter, it being nothing more extraordinary than we notice in the Wagtails, and a variety of other birds: but we cannot reconcile the circumstance of so unusual a change, as it is requisite the Razorbill should make (as before stated) to connect it with the Blackbilled Auk as one species. In some

of the birds which are confined to those regions where, for one-half of the year at least, the surface of the earth is covered with boundless snow, an autumnal change in the plumage of both old and young takes place. Here we perceive the Ptarmigan invariably effect this curious, and we may add most providential change; for if the young of those birds at first assumed their snowy winter plumage, while yet the surface of the ground was not consonant with their colour, few would escape the piercing eye of the Falcon or the Eagle, in the lofty and exposed situations they are found to inhabit. It has therefore been wisely ordered that these should at first appear like their parents in a mottled plumage, similar to the lichen-covered rocks they frequent, and continue in this dress till the approach of winter, when old and young become equally as white as the surrounding snow. These are changes incidental to the habits of particular species, and are facts well known to those who explore the secrets of nature: but we cannot imagine an unnatural change of plumage, for which we have no precedent, in order to connect two species, when other obstinate facts must infallibly keep them distinct. We shall now dismiss this subject with a reference to the Auk, Blackbilled; and Guillemot, Lesser and Foolish.

Awl.—See Woodpecker, Green.

B

[Baillon's Crake.—See Crake, Baillon's.]

Bald Buzzard.—See Osprey.

Bald Coot.—See Coot.

[Bank Martin.—See Martin, Sand.]

[Barbary Partridge.—See Partridge, Barbary.]

[Barred Woodpecker.—See Woodpecker, Lesser Spotted.]

Bargander.—See Shieldrake.

Barker.—See Snipe, Spotted.

Barley-Bird.—See Siskin.

[Barn Owl.—See Owl, White.]

[Bartailed Godwit.—See Godwit, Common.]

[Bartram's Sandpiper.] See Sandpiper,
[Bartram's Tattler.] Bartram's.]

Bass-Cock.—See Puffin.

[Batty Bird.—See Heron, Little White.]

Bawkie.—See Auk, Razorbill.

Beam-Bird.—We are at a loss to find what bird Mr. Willughby means under this denomination. He says it is found in Yorkshire, and called the Beam-Bird, from its nesting under beams in out-buildings. This gentleman, however, calls it Beccafigo, or Fig-eater. Mr. Pennant has considered it as the *Motacilla Hippolais* of Linnæus; but his description, which is as follows, by no means answers to that bird. "Less than the Blackcap. The inside of the mouth is red; the head, neck, back, and wings are of an olivaceous ash-colour; the quill-feathers darker, edged with olive; the inner coverts of the wings yellow; breast white, tinged with yellow; the belly silvery white; the tail dusky; the legs bluish." Pettychaps, *Br. Zool.* 149. Most certainly this description does not correspond with either the Greater or Lesser

Pettychaps. From the habit we should be led to believe it might be the Spotted Flycatcher, which in some places is called by the name of Rafter, from its nesting on or under rafters in old buildings; whereas the Pettychaps invariably repairs to woods and hedges for the purpose of nidification. [Mr. Yarrell gives Beam-Bird as a provincial name of the Flycatcher. See Flycatcher, Spotted.]

Bean Crake.—See Gallinule Crake.

[Bean Goose.—See Goose, Bean.]

[Bearded Tit.—See Titmouse, Bearded.]

Bee-Bird.—See Flycatcher, Spotted.

Bee-eater.—A genus of birds, the characters of which are: Bill quadrangular, a little incurvated, sharp-pointed. Nostrils small, placed near the base. Tongue slender, in some species fringed at the end. Toes, three forward, one backward; the outer toe somewhat connected with the middle one.

Bee-eater, Common. — [Yarrell, ii. 222; Hewitson, lxiv. 254.] *Merops apiaster*, *Lin. Syst.* i. p. 182, 1; *Gmel. Syst.* i. p. 460; *Raii Syn.* p. 49, 3; *Will.* p. 110, 10; *Ind. Orn.* i. p. 269, 1; *Bris.* iv. p. 532; *Ib.* 8vo, ii. p. 194. *Le Guépier*, *Buf.* vi. p. 480, t. 23. Bee-eater, *Will. Angl.* p. 147; *Albin.* ii. t. 44; *Lath. Syn.* ii. p. 667, 5; *Ib. Sup.* p. 119; *Lin. Trans.* iii. p. 333; *Shaw, Nat. Miscel.* t. 162; *Lath. Syn. Sup.* ii. p. 148, No. 1, *Br. Miscel.* t. 69; *M. & F.* —The Common Bee-eater is the only one, out of twenty-three known species, that has ever made its appearance in England. As we never had an opportunity of examining more than one which was killed in this country, which varied but little from the description given by Latham in his 'General Synopsis,' we shall take the liberty of borrowing it from that author. It measures from bill to tail ten inches. The bill is an inch and three-quarters in length, and black; the base of the upper mandible covered with dirty white feathers; the irides are red; the forehead is of a blue-green colour, behind it green; the top of the head chesnut, tinged with green; hind-head and upper part of the neck chesnut, growing paler towards the back; from the bill to the hind-head is a black stripe, passing through the eyes; the back and scapulars are very pale yellow, tinged with both chesnut and green; rump and upper tail-coverts blue-green, with a yellow tinge; the throat is yellow; the under part of the body blue-green,

growing paler towards the belly; the lesser wing-coverts are dull green; the quills, for the most part, sea-green without, and many of the inner ones rufous; the first very short, the second longest of all; the tail is wedge-shaped, and consists of twelve feathers, the shafts of which are brown above, and whitish beneath; the two middle feathers are sea-green with a shade of rufous; the rest the same, but margined with cinereous within; the two middle feathers exceed the outer ones by three-quarters of an inch; the legs are of a reddish brown, claws reddish black. This bird does not appear to have been noticed in England till within these few years. In the third volume of the 'Linnean Transactions' an account is given of one of this species having been shot (for the first time in Great Britain) in July, 1794, near Mattishall in the county of Norfolk; which specimen was exhibited before the Linnean Society. A flight of about twenty was seen in June; and the same flight probably (much diminished in number) was seen passing over the same spot in October following. Since the above period we have been credibly informed more than one have been killed in England. The *Merops apiaster* is an inhabitant of various parts of the European continent. They are not uncommon in the south of France and in Italy, as well as in the islands of the Mediterranean. It has also been seen in Germany, and in Sweden, but no where so plentiful as in the southern parts of Russia, particularly about the rivers Don and Wolga, in the banks of which they build their nests, perforating holes to the depth of half a foot for that purpose. Are said to be gregarious as well in the breeding season as in their migrations, excavating the clayey banks so near to each other as to appear like a honeycomb. In the autumn they migrate in large flocks to the more southern latitudes. These birds appear in small flocks at Gibraltar in March, but are said to remain there only a few hours. The nest is composed of moss; the eggs are six or seven in number, perfectly white, about the size of those of a Stare. Its name has doubtless been taken from that insect, of which it is partially fond; but it also feeds on most winged insects, which it takes on wing, like the Swallow.

SUPPLEMENT. — This species is common in Egypt, where it is called *Me-linoorghi* (Bees' Enemy) and is eaten for food. At the Cape of Good Hope it is called *Gnat-snapper*; and is a guide to the Hottentots by directing them to the honey, which the bees store in the clefts of the rocks. It probably breeds in some parts of Spain and Portugal, as we

are assured by an officer that it was not uncommon about Badajos, where he observed a considerable number flying about like Swallows, but that they frequently pitched, and assembled together in trees in the gardens. This was in the spring of the year 1811, while the allied army was encamped before Badajos.

[Belted Kingfisher.—See Kingfisher, Belted.]

Bernacle.—See Goose, Brent; and Goose, Bernacle.

[Bewick's Swan.—See Swan, Bewick's.]

Bilcock.—See Rail, Water.

[Billybiter.—See Titmouse, Blue.]

Bitter-Bum.—See Bittern.

Bittern.—[Yarrell, ii. 571; Hewitson, lxxxiii. 316.] *Ardea stellaris*, *Lin. Syst.* i. p. 239, 21; *Gmel. Syst.* ii. p. 646; *Raii Syn.* p. 100, A. 11; *Will.* p. 207, t. 50, 52; *Lath. Syn. Sup.* ii. p. 300, No. 7; *Bewick, Br. Birds*, 11, t. p. 47. *Le Butor, Buf.* vii. p. 411, t. 21. Bittern, *Br. Zool.* ii. No. 174; *Ib.* fol. 711, t. A. 1; *Will. Angl.* p. 282; *Albin.* i. t. 68; *Hayes, Br. Birds*, t. 19; *Lath. Syn.* v. p. 56, 17; *Ib. Sup.* p. 234; *Ind. Orn.* ii. p. 680, 18; *Lewin, Br. Birds*, iv. t. 146; *Walc. Syn.* ii. t. 127; *Pult. Cat. Dorset.* p. 14. *Botaurus, Bris.* v. p. 444, 24, t. 37, f. 1; *Ib.* 8vo. ii. p. 327. Provincial: Bittour; Bumpy-coss; Butter-bump; Miredrum; Bog-bumper; Bitter-bum; Bumble.—This species of Heron is rather less than the common Heron; length about two feet and a half. The bill is four inches long, of a brown horn-colour above; the lower mandible, and base of the upper, greenish; irides yellow. The feathers on the top of the head are black; those on the hind-head, neck, and breast are long and loose; the plumage, in general, is of a dull pale yellow, elegantly variegated with spots, and bars of black; the greater coverts and quill-feathers ferruginous, regularly barred with black; tail short; legs pale green; toes and claws very long and slender; the middle claw serrated on the inner edge. The female is rather less, the plumage not so bright, and the feathers on the neck not so long and flowing as in the male. The Bittern is by no means a plentiful species. In the breeding season it is only found in the less-frequented reedy marshes, and swampy moors well clothed with rushes, where it forms a nest on some tump, by collecting a quantity of sedge or other coarse plants together. It lays four or five eggs of a

light olive-green colour, inclining to cinereous. At this season the male makes a singular bellowing noise, vulgarly supposed to be produced by the bird putting his bill into a reed. It is roused with difficulty from its lurking-place, flies heavily, and frequently lights again at a small distance; so that it becomes an easy prey to the sportsman. We are informed, however, that sometimes it soars to a prodigious height in the air, with a spiral ascent, making at the same time a singular noise. In the winter these birds leave the more mountainous swamps, where it is probable the greater part breed, and become more scattered in the low moist situations, and in severe weather are found in the sedgy banks of rivers and streams of water. It is, however, become much more scarce than formerly, since its flesh has been accounted a delicacy; and the poulterers value it at not less than half a guinea. The principal food of this bird is small fish, frogs, and insects; the warty lizard also becomes its prey, as we have found by dissection.

SUPPLEMENT.—The occasion of the bellowing noise made by this bird, particularly in the breeding season, is supposed to be a loose membrane at the divarication of the trachea, capable of great distention, and which can be filled with air and exploded at pleasure. Doctor Latham informs us, that Mr. Lamb had observed this structure in several he dissected. Whether this membrane has a direct communication with the trachea, independent of the lungs, is not noticed. If it is only an enlargement of the membrane, that in many birds is observed within the thorax, close to the clavicles, it is a part of that conformation which constitutes the air cells so peculiar to birds. The *aspera arteria* of those we have dissected had nothing very remarkable, and certainly had no communication with the interior of the body but through the lungs. If this membrane is a part of the bronchiæ of the trachea, ours were not capable of any great extension; the interior part of the divarications is wholly membranous of a very fine texture; and the exterior sides are furnished with very slender cartilaginous bars, for they do not surround the bronchial tubes of the trachea. This membranous structure of the part in question is by no means uncommon in other species. In fact the propagation of sound, and different notes in animals, is at present very imperfectly understood; and the curious conformation observed in the trachea of some species of birds, rather puzzle than confirm any hypothesis upon the subject. If we were to reason mechanically, we might conclude that the labyrinth at the lower extremity, or the

enlargement in the middle of the trachea of some birds, especially the semi-osseous chambers in the Mergansers, and some species of Ducks, were intended as condensers to assist in the compression of the air for augmenting the sound; but experience informs us this is not the case, for some birds possessing a labyrinth have weak voices, exemplified in the Mallard or male of the common Duck. But as sound is produced by birds from the lower extremity of the trachea, and not from the larynx, the condensation of air before that part cannot promote the force of the expulsion of it through the soniferous organ, but only serves to modulate the tone. As we have touched upon this subject in another place, it is unnecessary to enlarge upon it in this.

[Bittern, American.—See Heron, Freckled.]

Bittern, Little.—[Yarrell, ii. 565; Hewitson, lxxxiii. 315.] *Ardea minuta*, Lin. Syst. i. p. 240, ♂; Gmel. Syst. ii. p. 646; Ind. Orn. ii. p. 683, 27; Edw. t. 275; Lath. Syn. Sup. ii. p. 301, No. 8; Bewick, Br. Birds, 11, t. p. 51. Little Bittern, Br. Zool. App. p. 537, t. 8; Arct. Zool. ii. No. 359; Lath. Syn. v. p. 65, 27; Ib. Sup. p. 235; Lewin, Br. Birds, iv. t. 147; Walc. Syn. ii. t. 128; Don. Br. Birds, iii. t. 54; Pult. Cat. Dorset, p. 14. Le Blongios, Buf. vii. p. 395. *Ardeola nœvia*, Bris. v. p. 500, 47, t. 40, f. 2; Ib. 8vo, ii. p. 342. Provincial: Boonk; Longneck.—This beautiful species of Heron is scarce larger than a Fieldfare in the body. The length, to the end of the tail, is fifteen inches. The bill two inches long, dusky at the point, yellow on the sides. The top of the head, back, and tail black, glossed with green; the fore part of the neck, breast, and thighs buff colour; belly and vent white; at the shoulders a large chesnut spot; the larger coverts of the wings whitish; the lesser coverts yellowish buff; quill-feathers black; legs and toes dusky green; thighs feathered to the knees; middle claw serrated on the inner side. The above is the description of the male. The female is supposed to be the *Ardea minuta*, Lin. Syst. 240, 26. It differs from the other sex in the plumage of the upper part of the body being brown, margined with pale rufous; beneath, the feathers are the same, but paler, and more deeply margined. The eggs are said to be white, about the size of those of the Blackbird, four or five in number, which are placed on the ground upon a few dried flags. The Little Bittern is a very rare bird with us. Few instances only are recorded of its being killed in England. A male was shot near Bath in the autumn of 1789, perched on the stump

of a tree on the bank of the Avon. It is more frequent in some parts of the European continent, particularly in Switzerland.

SUPPLEMENT.—A female of this rare species was shot contiguous to the river Creden, in Devonshire, in the month of May, 1808. It was only wounded in the wing and was kept alive for two days; and it was observed to sit with its neck contracted like the common Heron, but with the bill pointing upwards. Upon dissection, about forty eggs were counted in the ovaries, some of which were so considerably enlarged, as to induce an opinion that a brood would have been produced in this country, especially as a male was afterwards shot not very distant, and had been previously seen near the same place. A third was also killed in the same neighbourhood during that summer. Mr. Comyns, who gave us the above information, has two of these birds in his collection. It is found in some parts of Asia, particularly in Arabia; and if a little variety of plumage may be admitted, is an inhabitant of New Holland; this differs merely in having a few lengthened black spots down the fore part of the neck; such has been observed in the marshes about Port Jackson in December, and is called by the natives Duralia. Mr. Fleming informs us, that one was shot at Sanda, in the Orkneys, in the winter of 1805.

Bittour.—See Bittern.

Blackbird.—[Yarrell, i. 221; Hewitson, xxv. 91.] *Turdus merula*, Lin. Syst. i. p. 295, 22; Gmel. Syst. ii. p. 831; Raii Syn. p. 65, A. 1; Will. p. 140, t. 37; Ind. Orn. i. p. 340, 50. Merle, Buf. iii. p. 330, t. 20; Bris. ii. p. 227, 10; Ib. 8vo, i. p. 221. Blackbird, Br. Zool. No. 109, t. 47; Ib. fol. 92; Arct. Zool. ii. p. 345; Albin. i. t. 37; Will. Angl. p. 190; Lath. Syn. iii. p. 43, 46; Ib. Sup. p. 141; Lewin, Br. Birds, ii. t. 61; Walc. Syn. ii. t. 210; Pult. Cat. Dorset. p. 10. Provincial: Amsel.—This well-known species of Thrush needs little description. The male is wholly of a deep black, when it has attained maturity, which is not till towards the return of spring, at which time the bill and orbits of the eye are yellow: the young and females are of a dark rusty brown; the bill and eye-lids dusky. The song of the Blackbird is a shrill kind of whistle of various notes, which it commences early in the spring. It is an early breeder, and prepares a nest composed externally of green moss, fibrous roots, and other like materials; the inside is plastered with earth and afterwards lined with fine dry grass; the

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nest is usually placed in a thick bush, or against the side of a tree, or on a stump in the side of a bank. It lays four or five light blue eggs, thickly covered with pale ferruginous-brown spots, mostly at the larger end; which are hatched in about fourteen days incubation. Its food is principally worms and shelled snails; these last are most dexterously broken against a stone in order to get at the animal; all kinds of insects as well as fruit are eagerly sought after. In confinement they readily eat crumbs of bread, and flesh either raw or otherwise. It is never observed to migrate with us, or to congregate; but is at all seasons a solitary species, preferring woods and enclosed situations.

Blackbird, Michaelmas.—See Ouzel, Ring.

Blackcap.—See Titmouse, Great; Titmouse, Marsh; and Gull, Blackheaded.

Blackcap.—[Yarrell, i. 326; Hewitson, xxxiv. 126.] *Motacilla atricapilla*, Lin. *Syst.* i. p. 332, 18; *Gmel. Syst.* ii. p. 970. *Atricapilla* feu *Ficedula* Aldrov, *Raii Syst.* p. 79, A. 8; *Will.* p. 162, t. 41. *Sylvia Atricapilla*, Ind. Orn. ii. p. 508, 6. La Fauvette à tête noire, *Buf.* v. p. 125, t. 8, f. 1. **Blackcap**, *Br. Zool.* i. No. 148; *Ib.* fol. 101, t. 8, f. 5; *Arct. Zool.* ii. p. 418, F; *Will. Angl.* p. 226; *Lath. Syn.* iv. p. 415, 5; *Lewin, Br. Birds*, iii. t. 116; *Walc. Syn.* ii. t. 234; *Pult. Cat. Dorset.* p. 9. *Curruca atricapilla*, *Bris.* iii. p. 380, 6; *Ib.* 8vo, i. p. 416. Provincial: Mock-nightingale; Nettle-creeper; Nettle-monger. — This species of warbler weighs about four drams and a half: length near six inches. The bill is brown; irides dark hazel. The upper part of the head in the male is black, the hind part of the neck cinereous-brown; back greyish brown, with a tinge of green: the quill-feathers and tail dusky, edged with dull green; breast and upper part of the belly light ash-colour; legs lead-colour. The female is distinguished from the other sex by the crown of the head, which is of a dull rust-colour; she is also superior in size. The Blackcap is a migrative species, visiting us early in the spring, and retiring in September; it frequents woods and thick hedges, and seems particularly partial to orchards and gardens, where it delights us with its charming melodious song, which is very little inferior to that of the Nightingale, except in variety of notes. It makes a nest in some low bush or shrub, composed of dried stalks, generally of goose-grass, put together with a little wool, and sometimes a little green moss on the outside; the inside is lined with fibrous roots, upon which are frequently placed a few long

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hairs. The eggs are four or five in number, of a pale reddish brown, mottled with a deeper colour, and sometimes sprinkled with a few ash-coloured spots; their weight about thirty-five grains. On the first arrival of this bird it feeds greedily on ivy-berries, but forsakes that food as soon as the vernal sun has roused the insect tribe.

[**Blackchinned Grebe.**—See Grebe, Little.]

Blackcock.—See Grouse, Black.

Blackcock, Spotted.—See Grouse, Black-spotted.

Black Game.—See Grouse, Black.

[**Blackheaded Bunting.**—See Bunting, Reed.]

[**Blackheaded Gull.**—See Gull, Black-headed.]

Blacktailed Godwit.—See Godwit, Red.

[**Blackthroated Diver.**—See Diver, Blackthroated.]

[**Blacktoed Gull.**—See Gull, Blacktoed.]

[**Blackwinged Gull.**—See Gull, Laughing.]

[**Blackwinged Stilt.**—See Plover, Long-legged.]

Blue-Cap.—See Titmouse, Blue.

[**Blue Darr.**—See Tern, Black.]

[**Blueheaded Wagtail.**—See Wagtail, Blue-headed.]

[**Bluethroated Warbler.**—See Warbler, Bluethroated.]

[**Bluwinged Shoveller.**—See Shoveller.]

Boatswain.—See Gull, Blacktoed. SUPPLEMENT.—There appears to be a bird which is observed to breed on the Black-rock, on the coast of France, belonging either to the Gull, or Tern genus, which the British sailors have denominated Boatswain-bird. One of his Majesty's ships of war being stationed off that place, gave an opportunity for a party to land, and collect the eggs, which were in great abundance. An officer preserved some of these eggs, which were given to us; and upon comparison they appear to be nearest allied to those of the Terns, but are larger, though not so large as the egg of the smallest species of Gull: nothing there-

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fore can induce a belief that so rare a bird as the Blacktoed Gull can be in such abundance on a neighbouring coast. It is however probable that the bird in question is either the Sandwich, or Gullbilled Tern.

Bog-bumper.—See Bittern.

[Bohemian Chatterer.] See Chatterer, Bo-
[Bohemian Waxwing.] hemian.]

Bonxie.—See Gull, Skua.

Boonk.—See Bittern, Little.

[Bottle Tit.—See Titmouse, Longtailed.]

Bottletom.—See Titmouse, Longtailed.

Bottle-nose.—See Puffin.

Bouger.—See Puffin.

[Bramble Finch.—See “Brambling or Bramble.”]

Brambling.—See Bunting, Mountain.

Brambling or Bramble.—[Yarrell, i. 527; Hewitson, xlix. 194.] *Fringilla montifringilla*, Lin. Syst. i. p. 318, 4; Gmel. Syst. ii. p. 902; Raii Syn. p. 88; Bris. iii. p. 155; Ib. 8vo, i. p. 349; Will. p. 187, t. 45; Ind. Orn. i. p. 439, 7. Le Pinçon d'Ardennes, Buf. iv. p. 124. Brambling, or Mountain Finch, Br. Zool. No. 126; Ib. fol. 108, t. V. f. 4; Arct. Zool. ii. p. 381, E.; Albin, iii. t. 64; Will. Angl. p. 254, t. 45; Lath. Syn. iii. p. 261, 13; Hayes, Br. Birds, t. 36; Lewin, Br. Birds, ii. t. 80; Walc. Syn. ii. t. 218; Don. Br. Birds, iv. t. 85; Pult. Cat. Dorset. p. 12. Provincial: Kate.—This species of Finch is rather larger than the Chaffinch. Length about six inches. The bill is yellow, tip black; irides dusky. The head, hind part of the neck, and back black; some of the feathers edged with rusty brown and ash-colour, which last predominates on the back of the head and side of the neck; the throat, breast, and upper coverts of the wings, ferruginous-orange; middle coverts yellowish white; the greater coverts black, tipped with orange; quill-feathers black, edged with yellow on their exterior webs; on three or four of the primaries a spot of white runs through the whole of the exterior web, and forms an oblique bar when the wing is closed; the belly and rump white; on the sides above the thighs are a few round black spots; the tail is a little forked, the exterior feather white on the outer web, the others black, except the two middle, which are edged and tipped with ash-colour; legs greyish brown. The

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female is much less bright in the colour of the plumage: the side of the head and back of the neck is grey; on the latter are two dusky lines passing from the head downwards; the top of the head and back are dusky, each feather deeply margined with grey, which gives those parts a pretty mottled appearance; the rufous on the breast and wings is very faint, but the markings correspond with those of the other sex. We have not been able to discover that this bird has ever bred with us, but they are frequently seen in the winter, in large flocks, upon the coast of Kent and Sussex when the weather is severe, and have been so exhausted as to suffer themselves to be taken up. They are also found in the interior parts of the kingdom at that season, flying in company with Chaffinches and Yellowhammers. By observation on those we have kept in confinement, it is a hardy, bold bird, feeding on most kinds of seed usually given to caged birds; is said to be particularly fond of beech mast. It is common in many parts of the European continent, but most probably breeds only in the northern parts; is said to build in fir-trees, and form a nest with moss, lined with wool and feathers, and to lay four or five yellowish spotted eggs.

Brambling, Greater.—See Bunting, Tawny.

Brambling, Lesser.—See Bunting, Mountain.

Brantail.—See Redstart.

[Brancher.—See Goldfinch.]

[Brantail.—See Redstart.]

[Brent Goose.—See Goose, Brent.]

[Bridled Guillemot.—See Guillemot, Ringed.]

Broadbill.—See Shoveler, Bluewinged.

[Broadbilled Sandpiper.—See Sandpiper, Broadbilled.]

Brook Ouzel.—See Rail, Water.

[Brownheaded Gull.—See Gull, Black-headed.]

[Brunnich's Guillemot.—See Guillemot, Brunnich's.]

Bud-picker.—See Finch-bul.

[Buffbacked Heron.—See Heron, Little White.]

BUFFBREASTED SANDPIPER.

[Buffbreasted Sandpiper. } See Sandpiper,
[Buffbreasted Tringa. } Buffbreasted.]

[Buffcoloured Egret.—See Heron, Squacco.]

[Buffelheaded Duck. } See Duck, Buffel-
[Buffelheaded Garrot. } headed.]

[Buffon's Skua.—See Skua, Buffon's.]

[Bullfinch, Common.—See Finch, Bul.]

[Bullfinch, Pine.—See Grosbeak, Pine.]

Bull's-eye.—See Purre.

[Bulwer's Petrel.—See Petrel, Bulwer's.]

Bumble.—See Bittern.

Bumpycocks.—See Bittern.

Bunting. — A genus of birds, the characters of which are: Bill strong and conic, the sides of each mandible bending inwards: a hard knob in the roof of the upper mandible.

Bunting, Blackheaded. — See Bunting, Reed.

Bunting, Cirl. — [Yarrell, i. 520; *Hewitson*, xlviii. 190.] *Emberiza Cirlus*, *Lin. Syst.* i. p. 311, 12; *Gmel. Syst.* ii. p. 879; *Raii Syn.* p. 93, 4; *Will.* p. 196; *Ind. Orn.* i. p. 401, 10; *Lin. Trans.* vii. p. 276; *Lath. Syn. Sup.* ii. p. 199. Le Bruant de haye, *Buf.* iv. p. 347; *Plan. Enl.* 653, f. 1, 2. Cirl Bunting, *Lath. Syn.* iii. p. 190, 26. *Emberiza sepiaria*, *Bris.* iii. p. 263, 2; *Ib.* 8vo, i. p. 383. — The length of this species is six inches and a half; weight about seven drams. The bill is of a bluish lead-colour above, paler beneath; irides hazel. The crown of the head, nape of the neck, and upper part of the breast, is of a fine olive-green, the first streaked with dusky; from the upper mandible through the eye a dusky stroke; above and beneath the eye a bright yellow one; throat black, slightly tipped with brown, running into a bar under the yellow on the cheek; beneath this is a gorget of beautiful bright yellow; the back and scapulars are of a fine chesnut-brown, the former marked with dusky streaks, the margin of the feathers with olive; rump olive-brown; upper tail-coverts inclining to chesnut; the smaller wing-coverts olive-green; greater coverts dusky, their outer webs chesnut-brown; greater quills dusky, edged with green on the exterior webs; smaller quills chesnut, dusky down their middle; across the breast is a

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band of chesnut, mixed with yellow; belly and under tail-coverts yellow, the latter dusky on the shafts; sides more inclining to brown; the under wing-coverts bright yellow; the two middle feathers of the tail chesnut-brown, the rest black, except the two exterior on each side, which have an oblique bar of white from the tip half way; and the outmost feather is white throughout the whole of the exterior web; the legs are brown; claws dusky. The female in general weighs half a dram less than the male. The upper part of the head is olivaceous-brown, streaked with dusky; over the eye a dull yellow streak, passing down the side of the head; cheeks brown, on which is a yellowish spot; on each side the lower mandible is a broken streak of dusky, passing downwards; chin and throat dull yellow, the latter streaked with dusky; the back-part and sides of the neck and breast olivaceous-brown, with dusky streaks; belly and sides pale yellow, with large dusky streaks on the latter; the upper part of the body and wings like the other sex, but the colours less bright. We first discovered this species near Kingsbridge in the winter of 1800, not uncommon amongst flocks of Yellow Buntings and Chaffinches, and procured several specimens of both sexes, killed in different places six or seven miles from that place. They are indigenous to Devonshire, but seem to be confined to the southern parts of that county contiguous to the coast, having found them extending as far as Teignmouth, at both of which places we found their nests; but have never observed them far inland. It generally builds in furze, or some low bush; the nest is composed of dry stalks, roots, and a little moss, and lined with long hair and fibrous roots. The eggs are four or five in number, cinereous-white, with irregular long and short curved dusky lines, terminating frequently with a spot at one end; size rather inferior to those of the Yellow Bunting, to which it bears great resemblance. These birds pair in April, and begin laying early in May. The female might readily be mistaken for that sex of the Yellow Bunting at a little distance, but is materially different when compared, especially in the chesnut-colour of the upper parts of this bird. The note is also similar to that of the Yellow Bunting, but shorter, not so shrill, and the latter part not drawn out to such a length. It is remarkable that so common a bird as the Cirl Bunting seems to be in the west of England, should have so long escaped the notice of British naturalists; but in all probability this has been occasioned by their locality. It is said to be only found on the continent in

the warmer parts of France and Italy; so with us it seems confined to the mildest part of England; but the winter of 1800, which was severe in Devonshire, did not force them to seek a warmer climate, but, on the contrary, they continued gregarious with other small birds, searching their food amongst the ploughed lands.

SUPPLEMENT.—Since the publication of the 'Ornithological Dictionary,' we had the honor of laying before the Linnean Society, some further information respecting the natural history of this bird, which was published in the 7th vol. of their 'Transactions;' to that work therefore we refer the curious reader, and shall only remark one or two circumstances for the information of those who may not have the means of benefiting by such reference. Having taken the young of this bird, it was found that insects were their most partial food, especially the Common Grasshopper. When they could peck, the smaller seeds were acceptable, and canary the favorite; of grain, wheat and barley were rejected, but oats were greedily devoured after they had dexterously and quickly deprived them of the outer coat. The monotonous song of the male was incessant, and so shrill and piercing as to be offensive: it resembles so much the vociferous call-notes of the Lesser White-throat (*Sylvia sylvicola*), that it requires more than ordinary knowledge in the language of birds not to be deceived. The female has only a simple plaintive note. Since the paper on this subject was honored with a place in the 'Transactions' before recited, we have made the following remarks, which serve to prove this bird not to be so extremely local as was at first considered. An ingenious observer of the native birds around Bridgewater, Mr. Anstice (a gentleman to whom we are under many obligations for valuable information, and take this opportunity of public acknowledgment), assured us, that in the summer of 1803, he shot a male of this species near that town, which he knew to be that bird by the figure in the 'Ornithological Dictionary;' and since that he has favoured us with several specimens from the same quarter. In April, 1805, in a tour eastward, we observed a pair of Cirls in the high road between Bridgewater and Glastonbury: this is the utmost of their range east we have hitherto been able to ascertain. To the westward it has been clearly traced to Falmouth, in Cornwall; a specimen was in the collection of Colonel George, of Penryn, which was shot near that place, as the Colonel informed us. It has been also observed in some of the interior parts of Devon, especially about Ashburton.

Bunting, Common.—[Yarrell, i. 504; Hewitson, xlvii. 186.] *Emberiza miliaria*, Bewick, *Br. Birds*, i. t. p. 145; *Lin. Syst.* i. p. 308, 3; *Gmel. Syst.* ii. p. 868; *Raii Syn.* p. 93, A. 1; *Will.* p. 195, t. 40; *Ind. Orn.* i. p. 402, 12. Le Proyer, *Buf.* iv. p. 355, t. 16. Bunting, *Br. Zool.* No. 118; *Ib.* fol. iii. t. W. f. 7; *Arct. Zool.* ii. p. 366, B.; *Albin, Br. Birds*, ii. t. 50; *Will. Angl.* p. 267, t. 40; *Lewin, Br. Birds*, ii. t. 74; *Lath. Syn.* iii. p. 171; *Walc. Syn.* ii. t. 213; *Don. Br. Birds*, iii. t. 50; *Pult. Cat. Dorset.* p. 11. *Cynchramus*, *Bris.* iii. p. 292, 10; *Ib.* 8vo, i. p. 390.—Provincial: Bunting-lark; Ebb.—The weight of this species is nearly two ounces; length seven inches and a half. Bill brown; irides dark hazel; head and upper parts light brown, inclining to olive; the under parts yellowish white, with a dusky stroke down the shaft of each feather, except on the belly, which is quite plain; quill-feathers dusky, with lighter edges; tail somewhat forked and dusky; the legs are of a dull light yellow. Male and female alike. The Common Bunting seems to delight in champaign countries abounding with corn, and is rarely found in uncultivated parts, or grass fields, distant from arable land. In the winter these birds become gregarious, and sometimes visit the farmers' yards. When it sings (if it can be called a song) it generally assumes the loftiest branches of a bush, or some low tree; or even perched on the top of a dock it cheers its patient incubating mate with a screaming, inharmonious note. The nest is placed on the ground, formed externally of straw, lined with fibrous roots or dry grass, sometimes finished with long hairs. The eggs are generally four in number, of a dirty white, spotted and veined with reddish brown and ash-colour; their weight about one dram. These birds are sometimes brought to market, and sold for larks, to which they are little or nothing inferior, but are easily distinguished by the form of the bill, and the tooth-like knob in the roof of the mouth, by the most common observer.

SUPPLEMENT.—Is observed in small flocks as far north as Zetland in the winter, but retires in the spring.

Bunting, Greenheaded.—[Yarrell, i. 527; Hewitson, xlviii. 191.] *Emberiza chlorocephala*, *Gmel. Syst.* ii. p. 887. *Emberiza Tunstalli*, *Ind. Orn.* i. p. 418, 69. Greenheaded Bunting, *Lath. Syn.* iii. p. 211, 61; *Lewin, Br. Birds*, ii. t. 76; *Brown, Ill.* p. 74, t. 30.—This species has the head and neck dull olive-green; back and wing-coverts dusky brown, mixed with black; paler on the rump; the rest of the wings,

breast, and belly deep brown; tail brown, forked; legs yellowish. A bird of this description was caught in London, a figure of which is given in Brown's 'Illustrations of Zoology.' Dr. Latham mentions another in the collection of Mr. Tunstall; but, in his 'Index Ornithologicus,' he seems to doubt its being a distinct species, in which we most readily agree, as no other instances appear to be recorded than those above mentioned. From which circumstance we are inclined to believe this bird is no other than an accidental variety of the female Yellow Bunting; one of which we have, with the whole head and neck greenish yellow. [This is the Ortolan of Selby, Jenyns, &c.]

[**Bunting, Lapland.**—*Plectrophanes lapponica*, *Yarrell*, i. 490; *Hewitson*, xlv. 182.—"Bill yellowish brown, palest towards the base of the under mandible. Head and all the other parts of the body pale wood-brown, tinged with yellowish grey; the shafts of the feathers being blackish brown. Greater wing-coverts and secondary quills, blackish brown, deeply margined with chestnut-brown, the tips being white. Quills dusky, with paler edges. Above the eyes is a broad streak of pale wood-brown. Cheeks and ear-coverts wood-brown; the latter mixed with black. From the corners of the under mandible, on each side of the throat, is a streak of blackish brown. Throat yellowish white. Lower part of the neck and breast sullied white, with numerous dusky spots. Belly and vent white. Flanks with oblong dusky streaks. Tail dusky; the exterior feathers having the outer web, and half of the inner one, sullied white, the next to it with a small wedge-shaped white spot near the tip. Legs and toes brown. Claws not much curved; the hind one nearly straight, and longer than the toe. The following is the description of the adult male, as given in the 'Northern Zoology':—'Head, chin, throat, and upper part of the breast, velvety black, margined with white; from the ears a broad stripe of reddish white, from the upper eye-lid of each side, joins the white bordering of the ears; and there are rudiments of another in the middle of the bright chestnut nape. Rest of the upper plumage pale reddish brown, each feather striped in the middle with blackish. Wing-coverts with two obsolete white bands; primaries hair-brown, their exterior edges whitish. Belly and under tail-coverts dusky white; sides of the breast and flanks spotted with black. Bill bright lemon-yellow, tipped with black. Legs pitch-black.' The female differs in having the wing greyish; the black plumage of the head and breast edged

with pale brown and grey; and the chestnut feathers of the nape fringed with white. The white stripes are duller."—*Selby*, i. 283. Mr. Selby calls this bird a rare visitant: it is an inhabitant of the Arctic regions, but occasionally migrates, or perhaps more properly straggles, southward, both in the old and new Continents: some half-dozen instances are on record of its occurrence in England.]

Bunting, Mountain.—*Emberiza Montana*, *Gmel. Syst.* ii. p. 867; *Ind. Orn.* i. p. 398, 3. Lesser Mountain Finch, or Brambling, *Will. Angl.* p. 255; *Morton's North.* p. 423, t. 13, f. 1. Mountain Bunting, *Br. Zool.* No. 123; *Ib.* fol. 113; *Lath. Syn.* iii. p. 165, 3.—This species is described to have the bill short, strong, and yellow, the point black; the forehead is dark chestnut, lighter on the hind part of the head and cheeks; the hind part of the neck and back ash-coloured; the latter more spotted with black; throat white; breast and belly waved with flame-colour; at the setting-on of the wing grey; the five first feathers blackish brown, the rest white, the point of each dashed with brown; the three outer tail-feathers white, the rest dark brown; feet black; the hind claw as long again as the others: the breast of the female is of a darker colour than that of the male. Linnaeus seems to have considered this bird as a variety of the Snow Bunting; others have given it as a distinct species: on this subject we dare not hazard an opinion, never having had an opportunity of examining the bird in question. It is said to be found in Yorkshire and Northamptonshire, as also in Lincolnshire.

SUPPLEMENT.—The doubts which have existed respecting the distinction between the Mountain, the Tawny, and the Snow Buntings, have induced us to pay as much attention to the subject as opportunity afforded. It is true the scarcity of these birds in the southern parts of England does not afford frequent opportunity of examination, but a sufficient number has been obtained to relieve our mind from any doubts on the subject; our observations therefore will be found under the respective species in question. Two birds which appear to belong to this species were sent to us by Mr. Anstice, who shot them on the Mendip hills, in severe snowy weather. This gentleman remarked that he first noticed this bird about ten years before, and had twice since in similar weather observed large flocks which continued many days near the same place, alighting on the ground at short intervals of flight, in a hurried, and apparently distressed state, and generally bent their

course from north-west to south-east. These two birds differ greatly in plumage, but which appears to be merely a sexual distinction. The largest, which is considered the male, answers tolerably well to the description originally given, but as there are some particulars not noticed, it may be proper to more fully describe so obscure a species from the specimens before us. The bill is yellow, with the point dusky: the forehead and part of the crown chesnut, gradually decreasing backwards, becoming only a tinge of that colour on the hind head: on the cheeks a paler patch of the same: the back part of the neck, scapulars, back, and rump, cinereous-grey mixed with dusky, particularly on the back, where the middle of the feathers possess more of the last colour: the upper tail-coverts are whitish, the largest immediately impeding the tail dusky, broadly margined with grey: the whole under parts white, except a ferruginous bar on the upper part of the breast, very obscure in the middle: the six first quill-feathers dusky, slightly edged with grey on the outer webs, and on the points of the three last: the seventh has part of the inner web white half way from the base, and a slight streak of the same down the outer web close to the shaft: the eighth like the last, but the outer web is white, with dusky spots; from the ninth to the twelfth all white on the inner web, and down the outer web close to the shaft, with a dusky margin; the two succeeding, all white; those next the body dusky-black, bordered with ferruginous: the smaller coverts are mottled dusky black, and cinereous, the feathers being deeply margined with the latter; the last row of these next to the greater coverts is tipped with white, forming a narrow band across the wing: the coverts immediately impeding the quills much the same, tinged with ferruginous: the tail somewhat forked, the six middle feathers dusky-black, margined with pale ferruginous-brown, the fourth on each side the same, with a white stripe down the inner web near the shaft; the two outer all white, except half the outer web towards the tip, which is dusky: legs and claws black, the hind claw slightly hooked and nearly double the length of any other. The supposed female shot in company with the above is somewhat less, bill and legs the same. The forehead and crown deep chesnut-brown; cheeks the same but rather paler: the rest of the head above, back of the neck, scapulars, back, rump, and tail-coverts ferruginous-brown, more or less mottled with dusky, as the middle feathers are more or less of that colour, and of which the upper part of the back is

most predominant, and least on the upper tail-coverts: chin and throat dirty white: upper part of the breast crossed by a band of dull chesnut, above which the feathers are pale tipped with dusky, giving a speckled appearance to that part; the rest of the under parts sullied white: the wings are nearly similar in marking to those of the male, especially the smaller coverts, but the white in the quill-feathers is less, not one of which is without some dusky toward their tip, and the brown parts incline to ferruginous; the spurious wing like that of the male, but not so full a black: the tail is dusky, with a ferruginous tinge on the lighter borders; the two outer feathers like those of the other sex, but the fourth from the centre wants the white on the inner web close to the shaft. This species, which appears to be less frequent than the two others with which it is confounded, is rather less than the Tawny Bunting, and is essentially different in plumage from those now before us; and might at once be distinguished by the smaller coverts, which as well as the greater part of the wings, except the prime quills, are plain white in the Tawny; but if all other distinctions were wanting, the superior breadth of the tail-feathers, as well as those of the wings, and the second feather of the wing being the longest in the Tawny, are fixed and determinate characters of distinction. In the Mountain Bunting the two first feathers of the wing are nearly of the same length. That both these are perfectly distinct from the Snow Bunting cannot be doubted, if the colour of the bill alone was in general consulted, independent of the material difference in markings; sometimes however the bill is yellowish at the base, as may be observed by the following description. [For which see Bunting, Snow, SUPPLEMENT.—This bird is now regarded as identical with the Snow Bunting.]

[Bunting, Ortolan.—See Bunting, Green-headed.]

Bunting, Reed. — [Yarrell, i. 509; Hewitson, xlvii. 187.] *Emberiza Schoeniclus*, *Lin. Syst.* i. p. 311, 17; *Gmel. Syst.* ii. p. 881. *Passer torquatus*, *Raii Syn.* p. 93, A. 3. *S. Arundinaceus*, *Will.* p. 196; *Ind. Orn.* i. p. 402, 13. Reed Bunting, *Br. Zool.* No. 120; *Ib.* fol. 112, t. w.; *Arct. Zool.* ii. p. 368, E.; *Albin.* ii. t. 51; *Hayes, Br. Birds*, t. 35; *Lewin, Br. Birds*, ii. t. 75; *Lath. Syn.* iii. p. 173, 9; *Ib. Sup.* p. 157; *Walc. Br. Birds*, t. 214. Ortolan de roseaux, *Buf.* iv. p. 315; *Bris.* iii. p. 274, 5; *Ib.* 8vo, i. p. 386. Provincial: Reed Sparrow; Water Sparrow.—The weight of this species is near five drams and a half;

length six inches. The bill is dusky; irides hazel; the head, chin, and throat black; at the corner of the mouth commences a white ring which grows broader behind the ears, and encircles the head; the breast and belly white; the sides grey, marked with a few dark brown strokes; the back is black, deeply bordered with reddish brown, interspersed with grey, which grows more conspicuous towards the rump; quill-feathers, and coverts of the primaries dusky, edged with tawny red; the tail is black; the two middle feathers deeply bordered with rufous, the two exterior on each side marked obliquely with white towards the end; the shafts and tips black. The female is rather less; the head is rufous-brown streaked with dusky; from each side of the under mandible a dusky line passes under the neck, where it joins and forms a band of that colour; behind the eye a light coloured stroke; the breast is streaked with reddish brown; the rump plain olive-brown; it has no white ring round the head as in the male. The young male birds do not assume their full black head till the ensuing spring; nor is the white ring so conspicuous. It is somewhat extraordinary that the manners and habits of so common a bird should remain so long in obscurity; even modern authors tell us it is a song bird, that it sings after sunset; and describe its nest to be suspended over the water, fastened between three or four reeds. There can be no doubt, however, that the nest, as well as the song of the Sedge Warbler, have been taken and confounded for those of this bird; for as they both frequent the same places in the breeding season, that elegant little warbler is pouring forth its varied notes, concealed in the thickest part of a bush; while this is conspicuously perched above, whose tune is not deserving the name of song; consisting only of two notes, the first repeated three or four times, the last single and more sharp. This inharmonious tune it continues to deliver with small intervals from the same spray, for a great while together when the female is sitting. The nest is most commonly placed on the ground near water; sometimes it builds in a bush some distance from the ground; at other times in high grass, reeds, sedge, or the like, and even in furze at a considerable distance from any water; in all these situations we have met with it, but never fastened or suspended as authors have related. The nest is composed of stalks of grass, or other dry vegetable substances; sometimes partly moss, and lined with fine grass; frequently finished with long hair. The eggs, which are four or five in number,

weigh about thirty-six grains, and are of a dirty bluish white, or purplish brown, with numerous dark-coloured spots and veins, much resembling those of the Chaffinch. We shall here remark that the eggs of very distinct species of birds are sometimes very similar, and not easily ascertained; they are also subject to considerable variation; the nest is a much greater mark of distinction; the materials with which they are composed seldom vary.

Bunting, Snow.—[Yarrell, i. 495; *Hewitson*, xlv. 184.] *Emberiza nivalis*, *Lin. Syst.* i. p. 308, 1; *Gmel. Syst.* ii. p. 866; *Ind. Orn.* i. p. 397, 1; *Thornton's Tour*, p. 134; *Bewick, Br. Birds*, i. p. 152. *Hortulanus nivalis*, *Bris.* iii. p. 285, 9; *Ib.* 8vo, i. p. 388. *L'Ortolan de neige*, *Buf.* iv. p. 329. *Pied Mountain Finch*, *Albin.* iii. t. 71. *Snow Bunting*, *Br. Zool.* i. No. 122, t. 50; *Arct. Zool.* ii. No. 222; *Edw.* t. 126; *Walc. Br. Birds*, ii. t. 210; *Lath. Syn.* iii. p. 161, A. B. C.; *Ib. Sup.* p. 157; *Lewin, Br. Birds*, ii. t. 71. *Pied Chaffinch*, *Albin.* iii. t. 54. *Provincial: Snow-bird; Snow-flake; Snow-fowl; Oat-owl.*—This species is superior in size to the Chaffinch; weight about one ounce and a quarter. The bill is black; the forehead and crown white, mixed with black on the hind head; back black; rump white; greater quill-feathers black, at the base white; secondaries white, with a black spot on their inner webs; bastard wing and ends of the greater coverts white; the whole under parts, from chin to tail, pure white; the middle feathers of the tail black; the three outer ones white, with a dusky spot near their ends; legs black. The plumage of this species is subject to very great variety; in some the white on the upper parts is more predominant. These birds appear in the north of Scotland in large flocks during the winter. Some few are said to breed upon the highest mountains with the Ptarmigans, and, like those birds, probably change their plumage with the seasons. It is rarely seen in the south of England. The eggs are said to be reddish white, spotted with brown.

SUPPLEMENT.—In order that a comparison may be made, and the species more easily identified, we have thought proper to give a fuller description of the Snow, the Tawny, and the Mounting Buntings, from recent specimens. The bill, in the specimen now before us, is yellowish, with the tip black. The whole head, neck, upper part of the back, and all the under parts pure white, except a tinge of rust-colour on the forehead and back of the head; the rest of the back, scapulars, and tertials black, margined with rufous-white: the upper tail-coverts white: the

alula spuria black; the prime quills black half way from their points, except on the inner webs of some, their base and the whole of the secondaries pure white; greater and smaller coverts quite up to the ridge of the wing white: the three outer feathers of the tail white, except a small spot of black on the exterior web of the first, and the points of the shafts of the two others; the rest are more or less black, margined, and tipped with white: legs, toes, and claws black; the hind claw slightly hooked. So very rarely does this bird migrate to the southern parts of England, that in the many years we have attended to the subject, no one instance has occurred, and yet, if the bird has not been mistaken, there is reason for believing it may breed in the Scottish Highlands. Colonel Thornton, in his sporting tour in that country, says snow-fleaks were seen upon the summit of a Ptarmigan mountain, August the 29th. Mr. Fleming says it is common in Zetland in the winter only.

APPENDIX.—In a late edition of Pennant's 'British Zoology,' the editor has brought the Tawny and the Snow Buntings together, as birds of the same species, the first in the summer, the other in the winter plumage. This, however, cannot be the case, since the Tawny Bunting is only found in the southern parts of England in winter. We have given our opinion upon this subject in the preceding pages, and, therefore, shall only notice here, that other persons continue to be of an opinion that the Snow, the Tawny, and the Mountain Buntings are only varieties of one species: and it is proper to remark, that that excellent practical ornithologist Mr. Foljambe, in a letter to the author, is of this opinion. This gentleman says, "a few years ago, I shot more than forty from the same flock, during severe weather in the month of January, hardly any two of which exhibited precisely the same plumage, but varied from the perfect Tawny to the Snow Bunting in its whitest state; the feathers of those of the intermediate state being more or less charged with white." On the other side of the question, another ornithological friend, Mr. Anstice (who presented us with specimens of the Mountain Bunting), assures us that he examined the flock from which he shot these birds and several others, with a pocket telescope, and found no difference amongst them, but such as the different sexes produced with which we were favoured. That in two other instances he observed similar flocks in severe weather. It is also remarkable, that in no instance have any birds, in the plumage of the Snow or Mountain

Buntings, appeared so far westward as Devonshire, to our knowledge, although the Tawny seems to be by no means uncommon in the winter; many of which have come under examination from different parts of the county. Is it not possible that the different species may occasionally congregate, as observable in other well known birds, and consequently may have been shot from the same flock? Happy as we should be to reduce the subjects in natural history to their proper limits, we cannot at present be perfectly satisfied that the distinctions we have pointed out (which appeared in those few specimens we examined) are not permanent characters, at least between the Mountain Bunting and the other species. We have less scruple in considering the possibility of the Snow and the Tawny Buntings being of the same species, since we have witnessed the extraordinary changes in the plumage of some of the northern birds. Those who have an opportunity of procuring these birds in great abundance, would do well to collect them at different times of the year, especially the earliest and the latest that appear in this country, with a view to obtain specimens in those intermediate changes of plumage incidental to season, which would probably bring the subject of controversy to a final decision. [See editorial notes to Mountain Bunting and Tawny Bunting.]

Bunting, Tawny.—*Emberiza mustelina*, Gmel. Syst. ii. p. 867. *Emberiza glacialis*, Ind. Orn. i. p. 398, 2; *Bewick, Br. Birds*, 1, t. p. 154. *Montifringilla calcaribus* *Alaudæ major*, *Raii Syn.* p. 88, A.; *Will.* p. 187, t. 77. Great pied Mountain Finch, *Will. Angl.* i. p. 255, t. 77; *Albin.* iii. t. 71. Tawny Bunting, *Br. Zool.* i. No. 121; *Ib.* fol. 112, f. 6; *Lath. Syn.* iii. p. 164, 2; *Lewin, Br. Birds*, ii. t. 72; *Walc. Syn.* ii. t. 211; *Don. Br. Birds*, ii. t. 27. Provincial: Greater Brambling.—This bird has by some been called Sea Lark and Brambling. The length of this species is six inches and three-quarters. Bill short, yellow, point black; crown of the head tawny; the neck the same, but lighter; under part white, in some dashed with yellowish marks, and the breast dull yellow; the back and scapulars black-edged, with pale reddish brown; rump and upper tail-coverts part white and part yellow; the six first quill-feathers dusky, white at the base; the next seven become gradually whiter; the two next wholly white; the rest of the quills and bastard wings are black, edged with rufous-brown; the greater coverts above the secondaries are white, forming a bed of that colour on the wing; the four middle tail-feathers black, edged

with white; the three outer ones white, the two first with a small dusky spot on the outer web; the third on both webs at the tip; legs black; hind claws very long. This appears to be a rare species, but has been sometimes met with in the northern parts of England.

SUPPLEMENT.—This species does not by any means appear to be so rare in the southern parts as either of the preceding; many have come under examination in a fresh state within these few years, and one alive, which we shall have occasion to speak of again; but first to give a more perfect description of a male now before us, which was shot on the coast of south Devon, not very distant from the Start, on the 20th of October, 1802. Weight six drams and a quarter: length seven inches. Bill yellow, point black: the top of the head tawny, with a few dark chesnut spots: neck pale dull yellow, the lower part before becoming of a bright tawny: chin and throat white: back and scapulars black, the feathers deeply margined with tawny, giving them a spotted appearance: rump tawny: two or three of the upper tail-coverts white: breast and all beneath white: the eight first quills are white at their base, the black part (which is more or less slightly tipped and margined with white) occupies nearly the whole of the two or three first, and running oblique across the others, forms only a black tip to the eighth feather; from the eighth to the fourteenth are pure white, except a small dusky spot on the tips of the ninth and tenth; those close to the body, and their coverts black, deeply margined with tawny: the greater and smaller coverts of those quills which are white are of that colour, extending quite to the ridge of the wing: the greater coverts of the primaries are, like them, white, tipped with black: alula spuria black; the first and second quill-feathers are the longest, and the latter rather exceeds the other: the three outer feathers of the tail on each side are white, except the tips of the outer webs of the two first, and the whole tip of the third, which are black, edged with yellowish white; the fourth has only a little white at the base; the others are black, margined at the tip with pale tawny: legs and claws black, the hind claw not much hooked, nor much longer than the middle one. The secondary quill-feathers, and all the coverts above them, up to the ridge of the wing being white, makes a very large and conspicuous bed of that colour down the wing. Other male birds shot in succeeding years, both in Devonshire and Somersetshire, some of which were killed in the depth of winter, very nearly corresponded with the above, but in some

instances more inclined to tawny. The female was taken alive by a bird-catcher at Plymouth, in the winter of 1807, and was bought by Mr. Prideaux, of that place, who kept her in a cage for some months, and afterwards presented her to us. She was fed with mixed seeds, but preferred that of Canary, with which she became so excessively fat, that it was probably the occasion of fits, in one of which she died, after a confinement of seven or eight months. She always continued shy to the last; by day seldom moving from the perch but to feed, but by candle light was constantly running backwards and forwards at the bottom of the cage, in the manner of a Lark, but would occasionally hop. She uttered a shrill note of alarm when frightened, but it was a mere monotonous chirp. This sex is readily distinguished by having less tawny about the head, and particularly by having all the greater coverts of the wings black, tipped with white, and the lesser coverts black and grey mottled, as well as less white in the quill-feathers. [This bird, like the Mountain Bunting, is now regarded as identical with the Snow Bunting].

Bunting, Yellow.—[Yarrell, i. 615; *Hewitson*, xlvii. 188.] *Emberiza Citrinella*, *Lin. Syst.* i. p. 309, 5; *Gmel. Syst.* ii. p. 870; *Raii Syn.* p. 93, A. 2; *Will.* p. 196, t. 40; *Ind. Orn.* i. p. 400, 7. *Le Bruant*, *Buf.* iv. p. 342, t. 8. Yellow Bunting, *Br. Zool.* No. 119, t. 50; *Ib.* fol. p. 112; *Arct. Zool.* ii. p. 367, C.; *Albin.* i. t. 66; *Will. Angl.* p. 268, t. 40; *Lath. Syn.* iii. p. 170; *Lewin, Br. Birds*, ii. t. 73; *Walc. Syn.* ii. t. 212; *Don. Br. Birds*, v. t. 119. *Emberiza flava*, *Bris.* iii. p. 258, 1; *Ib.* 8vo, i. p. 382. Provincial: Yellowhammer.—The weight of this species is about seven drams; length six inches. Bill dusky bluish; irides hazel; the crown of the head, throat, and belly are of a beautiful bright yellow; the back part and sides of the head tinged with green; the breast in some is marked with reddish brown; quill-feathers dusky, the primaries edged on their exterior webs with greenish yellow, the secondaries with rusty brown, those next the body, the greater coverts, and back dusky, deeply margined with the same, the latter dashed with green; the rump and upper tail-coverts tawny-red; the tail a little forked, dusky, edged with greenish yellow; the two outer feathers marked with white on the exterior webs; legs yellow-brown. The female has much less yellow about the head, and the colours in general less vivid. The Yellow Bunting is subject to some variety in plumage. We have a specimen in which the whole head and neck is of a light yellow; some of the

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quill-feathers and scapulars white; and the under parts and rump pale yellow. The young birds have no yellow about them when first they leave the nest. This is one of the most common indigenous birds of this country; if it was more rare its beauty would be less disregarded. Its song, however, is as little attractive as that of the Common Bunting, possessing only a repetition of the same note five or six times successively, terminating in one more lengthened and shrill. In winter it assembles in flocks with other granivorous birds, and picks up the scattered grain dispersed by the bountiful flail, and not by the master of the hoarded sheaves, who knows too well the value of his auriferous store. It does not breed till late in the spring. The nest is generally placed near the ground, in some low bush or hedge. It is composed of straw and various dried stalks, and lined with fine dry grass, finished with long hair. The eggs differ somewhat in colour and size; some are nearly white, others have a purplish hue, but are more or less marked with hair-like streaks, terminating with a roundish speck; the number from three to five, but usually four; their weight from thirty to forty-seven grains.

[Burgomaster.—The young of the Great Blackbacked Gull.]

[Burrow Duck.—See Shieldrake.]

Bustard.—A genus of birds, the characters of which are: Bill strong, a little incurvated. Toes, three before, none behind. Legs long, and naked above the knees.

Bustard, Great.—[Yarrell, ii. 428; Hewitson, lxxiii. 285.] *Otis Tarda*, *Lin. Syst. i.* p. 264, 1; *Gmel. Syst. ii.* p. 726; *Raii Syn.* p. 58, A. 1; *Will. p.* 129, t. 32; *Bris. v.* p. 18, 1; *Ind. Orn. ii.* p. 658, 1; *Rural Sports*, 11, t. p. 383; *Shaw, Zool. Lect. t.* 72; *Bewick, Br. Birds*, 1, t. p. 326. *Outarde*, *Buf. ii.* p. 1, t. 1. Great Bustard, *Br. Zool. i.* No. 98, t. 44; *Ib.* fol. 87, t. N.; *Arct. Zool. ii.* No. 186; *Will. Angl. p.* 178, t. 32; *Edw. t.* 79, 80; *Albin. iii.* t. 38, 39; *Lath. Syn. iv.* p. 796; *Ost. Men. p.* 33, 34, M. F.; *Lewin, Br. Birds*, iv. t. 139; *Walc. Syn. ii.* t. 173; *Pult. Cat. Dorset. p.* 6. — This is the largest of the British birds, sometimes weighing as much as thirty pounds. The bill is dusky; irides light hazel; head and neck ash-coloured, inclining to brown on the top of the head; the lower part of the neck behind almost bare of feathers; the back and lesser coverts of the wings elegantly barred with black and light rust-colour; greater coverts pale cinereous; quills black, slightly tipped

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with white; belly white; the tail consists of twenty feathers, the middle ones are of a light rust-colour, barred with black; the two outer ones almost white, with two or three small bars of black; legs dusky brown. The female weighs about ten or twelve pounds. The crown of the head is deep orange-brown, crossed with transverse black lines; the rest of the head brown; lower part of the neck before ash-coloured, in other respects like the male, except in not having the long tuft of feathers growing from each side of the lower mandible, so conspicuous in that sex when arrived at maturity. The male has also a very capacious pouch, situated along the fore part of the neck, the entrance of which is under the tongue, capable of holding several quarts of water; it is said not less than seven. The size, however, of this pouch, or bag, seems to be somewhat exaggerated, for we think it impossible the bird could fly with such an addition of weight before its wings, which would throw it out of the centre of gravity. We see the Heron, and many other birds, obliged to extend their legs behind, and contract their necks when flying, in order to balance themselves on wing. Seven quarts of water is nearly equal to fourteen pounds weight, and certainly more than the bird could carry in that situation. The pouch, however, is large, as may be seen in the Leverian Museum. This, however, is only discoverable in adults, as it is most likely intended for the purpose of furnishing the female and young, in the breeding season, with water, which, in general, is only to be procured at a distance, upon the dry and extended downs they inhabit. The Bustard is only found upon the large extensive plains, and are almost extinct, except upon those of Wiltshire, where they are become very scarce within these few years. It is an extremely shy bird, and difficult to be shot. Young ones have frequently been taken by the shepherds' dogs before they are capable of flight; and their eggs are eagerly sought after for the purpose of hatching under hens. Half-a-guinea is no unusual price for an egg, and ten or twelve guineas a pair for young birds not full grown. A person at Tilshead, contiguous to the downs in Wiltshire, has reared a great many in this way; and the consequence will be a total extinction in a few years. These birds pair early in the spring. The female lays two eggs on the bare ground, which are about four weeks hatching. The young follow the dam soon after they are excluded from the egg, but are not capable of flying for some time. The egg is larger than that of a Turkey, of an olive-brown colour, blotched with pale ferruginous and

ash-coloured spots. Their food is green corn, the tops of turnips, and various other vegetables, as well as worms; but they have been known to eat frogs, mice, and young birds of the smaller kind, which they can swallow whole. The Bustard is not properly migratory with us; it only leaves its usual haunts in very severe winters, when the downs are covered with snow for some time; pressed by hunger it repairs to the more enclosed and sheltered situations in small flocks, and even strays to a great distance. In the winter of 1798 one was killed near Plymouth in Devonshire, and two others the following year in the same county, as well as in other places, to our knowledge. These occasional migrations always proved fatal; so large an object soon attracting notice, it rarely escapes the number of pursuers. These birds were formerly found in the Wolds of Yorkshire, and even as far north as Scotland. It is common in some parts of Russia, and the deserts of Tartary, as also in some parts of Germany.

SUPPLEMENT. — One of this species shot in Devonshire in the year 1804, and taken to Plymouth market, was bought by a Publican for a shilling; an evident proof that refined luxury had not found its way so far westward from the metropolis, since a poulterer in London would have demanded two or three guineas for it. But so rare a wanderer was not stamped with its real value, where it was unknown, and the Landlord perhaps considering it fit for a secondary table, fairly speculated upon the cost of a dish that perhaps did not exceed one half-penny in the pound, and had it dressed for the dinner of some riders. These itinerant gentlemen being as ignorant as the natives, of the prize set before them, and perceiving upon dissection the difference in the colour of the pectoral muscle from the other part of the breast (a circumstance not unusual, especially in the Grouse kind), voted it improper food, and ordered it from table. Some neighbouring gentlemen happening to sup at the inn the evening after, and hearing of the circumstance, desired they might be introduced to this princely bird, and partook of it cold at this repast. The above story was related to us by a gentleman of property and strict veracity, residing in the county. Could this bird have been likened to any known species of game, for which there is so much demand, it might have proved a treasure to the captor; for the Lesser Bustard was offered for a very reduced price in the same market, not many years since, when some person pronounced it a Heath fowl (a bird inhabiting some parts of Devon), and the price instantly rose to five shil-

lings, which a friend who afterwards sent it to us did not hesitate to give. The Great Bustard has decreased so rapidly within these twenty years, that in a few years more not a vestige of them will remain in these realms. The shepherds with whom we have conversed lately, declare they have not seen one in their most favourite haunts, upon the extensive downs of Wiltshire, for the last two or three years, where we have often contemplated this noble bird with so much pleasure, and regarded them as an object well worth every attempt to cultivate in their native plains; for all the artful means tried to keep and domesticate them, so as to procure increase, have proved abortive. The length of their days is so reduced in that state, that few have exceeded two or three years, and have never shewn any inclination to breed. [The gular pouch of the Bustard has latterly been the subject of severe investigation; and although it may be rash absolutely to deny its existence in all cases, yet it may safely be said that there is no conclusive evidence in its favour.]

Bustard, Little. — [Yarrell, ii. 452; Hewitson, lxxiii. 287.] Otis Tetraz, *Lin. Syst.* i. p. 264, 3; *Gmel. Syst.* ii. p. 725; *Ind. Orn.* ii. p. 659, 3; *Nat. Miscel.* xiv. t. 573, fem.; *Bewick, Br. Birds*, 1, t. p. 330. Otis Minor, *Raii Syn.* p. 59, 2; *Will.* p. 129, t. 32; *Bris.* v. p. 24, 2, t. 2, f. 1, 2. Petite Outard, *Buf.* ii. p. 40. Field Duck, *Albin.* iii. t. 41. Little Bustard, *Br. Zool.* i. No. 99; *Arct. Zool.* ii. p. 321, A.; *Edw.* t. 251; *Lath. Syn.* iv. p. 799, 2; *Ib. Sup.* p. 226; *Lewin, Br. Birds*, iv. t. 140; *Walc. Syn.* ii. t. 174. — This species is about the size of a Pheasant; length seventeen inches. The bill is light brown; the crown of the head black, mixed with ferruginous; sides of the head, chin, and throat, rufous-white; the neck black, encircled with an irregular band of white on the upper part, and another near the bottom; the back, scapulars, and wing-coverts ferruginous, mottled with brown, and crossed with fine irregular black lines; greater quills black, white at the base; secondaries white; breast and belly white; the tail consists of eighteen feathers, the four middle ones are tawny, barred with black, the rest white; legs grey. The neck of the female is of the same colour as the back; the breast rufous-white, streaked with dusky; in other respects like the other sex. The Little Bustard has been found rarely in England, three or four instances only, and those all females, except one, which seems to be accounted for by its being polygamous, and that there are more of that sex. It is found in many parts of the European continent, particularly in France, where it

is frequently taken for the table, and esteemed as a delicacy. The eggs are said to be of a green colour, four or five in number. In the Supplement to the 'General Synopsis' mention is made of one having been shot in Sussex that had the plumage of a female, but proved otherwise on dissection; probably a bird of the first year.

SUPPLEMENT. — Bewick makes mention of two specimens he had seen, that were shot in England, both females; one of which was taken on the border of Newmarket heath. Another was shot near Romsey, in January, 1809, as we are informed by Doctor Latham, which was also a female. In the middle of October, 1810, we observed one of these birds in a turnip field, in Devonshire, but it would not suffer us to approach near enough to shoot it, but it appeared in feminine plumage. To these another female may be added, that is now in our museum. This was shot near Torrington in Devonshire, in December, 1804, and was taken to Plymouth market, where it was sold for a female Black Grouse, but fortunately fell into the hands of Mr. Prideaux, a gentleman who, knowing it to be a rarity, snatched it from the all-devouring jaw of the epicure, for the purpose of placing it in its present situation. As this is the only fresh specimen that ever came under our examination, a more particular description than what we were before enabled to give may not be unacceptable. The weight was twenty-five ounces: length sixteen inches and a half: breadth thirty-five. Bill dusky brown: irides pale crimson: behind the eye a space bare of feathers: upper part of the head, hind neck, and whole upper parts, including the smaller coverts of the wings, are a mixture of pale ferruginous and black, disposed on each feather in lines and bars, in a most elegant manner: the row of coverts immediately impending the tail white, with transverse black bars, the tips white; on the fore part of the neck the markings are more distinct, and the ferruginous occupies the middle of each feather; but towards the breast the markings change, and the black becomes undulated in distinct transverse lines on that part, continuing the same down the sides: the cheeks streaked with dusky: the throat is plain yellowish white: belly, vent, and thighs white: sides of the under tail-coverts barred with black: the four first quill-feathers dusky half way from their tips, their base white: the six next white, except a large black spot at their tips, and a very small black mark on their shafts; the eleven following white, with two or three black bars on each, most on the

outer webs, and a small spot of the same at their tips: the tertials next to the body are similar in colour and markings to the back and scapulars, and nearly as long as the prime quills: the coverts of the secondary quills white, barred with black: the tail consists of eighteen white feathers closely spotted with irregular small markings of black, with three conspicuous bars of the same; the light part of the four middle feathers inclines to ferruginous; at the base of all the white predominates: legs yellowish brown and scaly; the toes dusky brown, connected together at the base by a small membrane; claws of the same colour. Along the back of the neck is a considerable space bare of feathers, but covered with down; on the breast the down at the base of the feathers is of a pale rose-colour. This appeared to be a young bird, yet the ovaries were sufficiently conspicuous. There was nothing remarkable in the trachea, but the stomach (which had nothing of the nature of that of granivorous birds) was of a most unusual size, distended by various herbs, reaching from the gullet to the vent. Nothing but vegetables were observed, and of that a great variety, but particularly some species of trefoil. From this conformation of the stomach, we may conclude the bird to be wholly graminivorous; and in all probability the Great Bustard is precisely of the same nature. The extraordinary size and membranaceous texture of the stomach of this bird, is by no means favourable to the opinion advanced by an able comparative anatomist, in the second part of the 'Philosophical Transactions' for 1810. The author of the paper alluded to has considered grass as the substance, of all others that are employed for food, which requires the most preparation; and that according to the usual economy of nature, the ruminating animals which live principally on this substance, have organs adapted for the purpose of extracting the utmost possible nourishment from their food. It is not our intention in this place to enter into a discussion upon the organs of digestion in quadrupeds, but as we find there are some animals who are equally graminivorous with those who have the powers of ruminating, and whose stomach is extremely different, it requires to be ascertained whether the stomach alone in ruminant animals affords the means of extracting a superior portion of nourishment; or whether by a second mastication the food is not better prepared, by its extreme comminution, to yield more expeditiously its nutrimentous contents than can be effected in the stomach of a horse, who has not the power of grinding

his food a second time, the mastication of which is imperfectly performed, and coarsely submitted to the organs of digestion. Comminution of graminous food appears to be more essential, in the opinion of this author, than any other powers nature has assigned for the purpose of digestion. With this view he seems to have examined the gizzards of such birds as are in the habit of grazing, in order to compare them with the same organ belonging to birds that are not considered as graminivorous; and we are told a marked distinction appeared between the goose and the turkey. We are informed the stomach of the turkey is altogether less muscular; its parts appear to possess less motion on each other, and do not come in contact; whereas in the goose the muscular fasciculi are peculiarly powerful, and the opposite sides move on each other, and rub down the food, very much like the manner in which this is done by the grinding teeth of ruminating animals. With all due deference to the professional abilities of this writer, we must take leave to remark that the comparison between the two birds in question is by no means conclusive, since they are both equally graminivorous and granivorous, for the turkey by nature in its native transatlantic wilds subsists entirely on plants for three-fourths of the year, and in a domestic state requires no other food. It is true both the turkey and the goose greedily devour grain, and various other seeds occasionally, and appear to prefer it; and consequently, we may reasonably conclude, nature has given them both muscular gizzards, not for the purpose of grinding herbaceous food, but to triturate and comminute substances that may occasionally offer themselves, and which must otherwise cause a stoppage, or pass off undigested, as corn is commonly observed to do with horses, if it is not broken by the grinding teeth. Had this anatomical writer examined the stomach of a truly graminivorous bird, we have no doubt he would not have considered that a superior muscular strength in the stomach was necessary for the comminution of herbaceous food, since (as we have noticed) the stomach of the Little Bustard appears to be divested of sufficient muscular action to comminute its food by compression. From the structure of the stomach of this bird, which is one of the very few that is truly graminivorous, we are naturally led to conclude that the leaves and tenderer parts of plants are readily macerated, and prepared in the stomach by the conjoint action of the gastric juice and the animal heat, more than by friction. The vast distention of the stomach in this bird,

charged with such a large quantity of herbaceous food, rendered it impossible for the coats of the stomach to come sufficiently near to perform attrition; nor were there any gravel stones perceived, to assist such action. May we not therefore fairly infer that grass and other herbs are, under certain circumstances, rendered easy of digestion, and yield their utmost possible nutriment without trituration in the stomach? The stomach of the Little Bustard is not furnished with that strong cartilaginous substance apparent in more omnivorous birds, and in particular those who occasionally feed on grain and other hard substances that require breaking, and comminuting by strong muscular pressure and friction; but is more analogous to that of carnivorous birds, except that it is vastly superior in size. The stomach of the Cock of the Wood, or Wood Grouse (*Tetrao urogallus*), and other species of the same genus we have examined, are very similar to that of the Turkey, and these feed principally on the tops of heath, birch, pine, and other green vegetables; but as these are not tender, but of a ligneous quality, their stomachs are always found to contain a large portion of gravel or grit, in order to facilitate the comminution of their food. Why grass and other green vegetables should not be dissolved or comminuted in the stomach of carnivorous birds and quadrupeds, as well as in graminivorous, is a matter worthy the attention of the enlightened anatomist we have here referred to, since we find that the stomach of those birds which are truly graminivorous have no more muscular power than that of a carnivorous or piscivorous bird. What then causes the digestive faculties in the former to be so much more powerful (for these can digest flesh and even bone to a certain degree as well as grass) than those of the latter, who are incapable of decomposing such, although the dissolution of the hardest bones are effected by the solvent powers of the fluid secretion in the stomach of some? This is daily exemplified in the dog, who either ejects the grass, medicinally taken into the stomach, or passes it whole or unaltered through the intestinal canal, and yet converts into nourishment the most solid bone. We have been led into this partial discussion, in order to promote a further enquiry into so curious a subject, and because we think the physiological writer alluded to has built his hypothesis upon the comparison of improper subjects. In another place we shall probably have occasion to enlarge upon this topic, and therefore, with these hints, we shall take our leave of it for the present. The Little Bustard is said to be

found as far north as Lapland (Acerbi's 'Travels.')

[Bustard, Macqueen's.—Otis Macqueenii, *Yarrell*, ii. 457. — "Forehead, sides of the head, upper part of the back of the neck buff, pencilled with black; crest-feathers white at the base, and black for the remainder of their length; nape and base of the neck whitish; on the sides of the neck a series of plumes gradually increasing in length, the upper two-thirds of which are black; of the remainder some are white, others black, and some both black and white; upper surface isabella-brown, or sandy buff, minutely pencilled with black, the pencillings increasing in breadth and intensity here and there so as to form irregular bars across the feathers, these darker markings becoming larger and more conspicuous as they proceed posteriorly; rump without these darker pencillings; upper tail-coverts and tail similarly marked and crossed by bands of grey, which increase in size towards the tip; the tail is moreover washed with rufous, and terminated with buffy white; wing-coverts buffy white, pencilled with black; first five primaries white at the base, and black for the remainder of their length; the other primaries and the secondaries black, with a transverse mark of white at the tip; throat white; neck and breast light; under surface of the wing and abdomen white; lower part of the flanks and under tail-coverts white, pencilled and barred with blackish brown; irides yellow; bill blackish horny, except at the base, which is yellowish; legs greenish yellow."—*Yarrell*, ii. 459. At page 2065 of the 'Zoologist' is the only record with which I am acquainted of the occurrence of this bird in England, by Mr. Roberts, of Scarborough: it is as follows:—"Occurrence of the Houbara in Lincolnshire. —A short time ago I sent a notice to the 'Zoologist' (page 1969) to the effect that I had obtained a male Little Bustard, which was shot at Kirton Lindsey, in this neighbourhood; but having since become better acquainted with the Bustard family, I am convinced of my error, and I beg leave to correct it (as it turns out to be the Otis Houbara, a bird new to Britain). On inquiry of Mr. G. Hansley, from whom I received the bird, if he could furnish any particulars respecting it, he sent me the following note:—"I shot the bird in a stubble field on Kirton Cliff. I did not see it until it got up within twenty yards of me, and I cannot hear of its having been seen in the neighbourhood before." I feel quite sure that this bird has never been confined; its wing and tail are in the greatest perfection, not a feather

broken or dirty; its craw was full of caterpillars, beetles and small snails." Mr. G. R. Gray subsequently suggested that this bird had been brought with others from Africa by Mr. Fraser and allowed to escape,—a suggestion which elicited the following "Further Note on the Bustard shot in Lincolnshire. — Since the publication of the note (*Zool.* 2065) a diligent inquiry has been instituted into the right of this bird to be admitted into our list, as a voluntary visitor of this kingdom: the result shows that not one of Mr. Fraser's birds has escaped, and therefore that that mode of accounting for its occurrence is fallacious: no evidence exists against the supposition that its passage hither was voluntary. I have just received a note from its owner, Mr. Higgins, who states that, on examination by Mr. Gould, the bird turns out to be *Otis Macqueenii*, a native of Persia and Western India. A doubt exists whether these two closely-allied birds (*Macqueenii* and *Houbara*) are really distinct; but the subject is now under the notice of competent ornithologists, and will be again resumed in these pages." Mr. Yarrell settled the question by subsequently publishing the description quoted above, and calling the bird *Otis Macqueenii*.]

Bustard, Thickkneed.— [*Yarrell*, ii. 465; *Hewitson*, lxxiv. 288.] *Charadrius* (*Edicnemus*, *Lin. Syst.* i. p. 255, 10; *Gmel. Syst.* ii. p. 689; *Raii Syn.* p. 108, A. 4—105, A. 6; *Will.* p. 216—227, t. 58. *Otis* (*Edicnemus*, *Ind. Orn.* ii. p. 661, 11. Great Plover, *Bewick, Br. Birds*, 1, t. p. 333. Le grand Pluvier, *Buf.* viii. p. 105, A. 6; *Bris.* v. p. 76, 12, t. 7, f. 1. Stone Curlew, *Albin.* i. t. 69; *Will. Angl.* p. 306, 293, t. 58, 57. Thickkneed Bustard, *Br. Zool.* i. No. 100; *Ib.* fol. 127; *White's Selb.* 4to, p. 43—88; *Lath. Syn.* iv. p. 806, 9; *Lewin, Br. Birds*, iv. t. 141; *Walc. Syn.* ii. t. 163. Provincial: Norfolk Plover. — The weight of this species is about seventeen ounces; length eighteen inches. The bill is almost two inches long, dusky at the point, yellow at the base; irides and orbits pale yellow. Behind the eye a small space bare of feathers, of a yellowish green, mostly concealed by the ear-coverts; the feathers on the head, neck, and whole upper parts dusky down their middle, deeply bordered with pale tawny-brown; above and beneath the eye is a pale stroke; a band of the same across the coverts of the wings; the quills black; the two first marked with a broad bar of white across each web; the seventh and eighth slightly tipped with white; breast and belly yellowish white, the former marked with longitudinal dusky streaks; the tail consists of

twelve feathers deeply tipped with black, except the two middle ones; the three outer are barred with black and white, the others with brown; legs long, yellow; toes short; the outer toe connected to the middle one, as far as the first joint, by a membrane; claws black. This is a migrative species, making its first appearance with us the latter end of April, or beginning of May, when the male is heard to make a very loud shrill note, particularly in the dusk of the evening. It frequents open, hilly situations, mostly large corn-fields, heaths, or warrens. It makes no nest, but lays two eggs on the bare ground; these are of a light brown colour, blotched and streaked with dusky; their weight about an ounce and a half. Their food is principally insects and worms, but are said to devour mice, frogs, and toads. In the autumn they assemble in small flocks, preparatory to their departure, and are seldom seen with us after the beginning of October. We do not recollect having seen this bird in the north of England, nor in the western counties farther than Dorsetshire; but is not uncommon to many of the southern and eastern parts.

SUPPLEMENT.—We do not recollect an instance of this bird having been observed in the northern parts of the kingdom; and the same is noticed by Mr. Bewick, who published his works at Newcastle. Neither is it frequent so far west as Devonshire, and still more rare in Cornwall; and is not, we believe, found to breed in either of those counties, but only occasionally observed from some accidental cause. No instance to our knowledge is recorded of its wintering with us, but in the beginning of February, 1807, one of these birds was shot in the most southern part of Devon, which we saw. It was a female, and probably the mate of one that had been shot near the same place, about a fortnight before. In this unusually mild winter, these birds had found their way to the most southern point of land in the kingdom (the Lizard excepted), the start promontory, where they were contented with a sufficient supply of their usual food, without crossing the channel to a warmer climate. This and many other instances of the genial warmth of that part of Devon may be produced, especially the partial residence of the Lesser Pettychaps and the Ruff, which will be particularly noticed in their places.

Butcher-Bird, Cinereous. } See Shrike,
Butcher-Bird, Greater. } Cinereous.

Butcher-Bird, Least. — See Titmouse, Bearded.

Butcher-Bird, Redback. — See Shrike, Redback.

Butter-Bump. — See Bittern.

Butterflip. — See Avoset.

Buzzard. — Several species of the Falcon genus go under this denomination. See Buzzard, Common; Osprey; Buzzard, Honey; Moor Buzzard.

Buzzard, Common. — [Yarrell, i. 89; Hewitson, xiv. 38.] *Falco Buteo*, Lin. *Syst.* i. p. 127; *Gmel. Syst.* i. p. 265; *Raii Syn.* p. 16, A. 1; *Will.* p. 38, t. 6, 1; *Ind. Orn.* i. p. 23, 47; *Bris.* i. p. 406; *Ib.* 8vo, p. 206. La Buse, *Buf.* i. p. 206, t. 8. Buzzard, *Br. Zool.* i. No. 54, t. 25; *Ib.* fol. t. A. 3; *Arct. Zool.* ii. p. 224, 1; *Will. Angl.* p. 70; *Albin.* i. t. 1; *Lath. Syn.* i. p. 48; *Ib. Sup.* p. 14; *Lewin, Br. Birds.* i. t. 6; *Walc. Br. Birds.* i. t. 6; *Pult. Cat. Dorset.* p. 3. Provincial: Puttock. — This species of Falcon is subject to great variety in plumage; the males are generally of a lighter colour than the other sex, and the irides seem to correspond, having seen some almost grey upon the back and wings whose irides were light grey. The one now before us is a female; weight thirty-eight ounces, length one foot nine inches, breadth four feet one inch. The bill is black, bluish towards the base; cere yellow; irides yellow hazel; the upper part of the head, cheeks, and upper part of the breast light rust-colour; the middle of the feathers dark brown; the lower breast blotched with yellowish white; the throat and back of the head white, streaked with yellowish brown; the back of neck, scapulars, and coverts of the wings tipped and edged on the two last with pale rust-colour and dirty white; belly white, sparingly spotted with rust-colour; the thighs rusty brown, barred with a deeper shade; the greater quills dusky black towards their ends, with a shade of ash-colour on the exterior webs; the interior webs of the primaries white towards the base, the others barred with dark ash-colour; the tail is marked alternately with six or seven bars of dusky and pale rust-colour, that near the end is broad and dusky; the whole are tipped with white, and have a dash of cinereous; legs yellow. The Buzzard is one of the most common species of Falcon we have; it is a sluggish, inactive bird, slow in flight, and seldom remains long on wing, except in the breeding season, when it will soar to a prodigious height, spirally ascending. It makes a nest in the fork of a tree with large sticks, and lines it with wood, hair, and other substances; some-

times takes possession of a deserted crow's nest. The eggs are two, and not unfrequently three in number, rather larger than those of a hen, of a dirty white, most commonly spotted with rust-colour, chiefly at the larger end. This bird never pursues its prey on the wing, but is contented with young hares, rabbits, and feathered game, of which it is a great destroyer; or if old ones are wounded they become an easy prey. In defect of such delicious food it will eat carrion, and even worms and beetles.

[Buzzard, Honey. — *Yarrell*, i. 98; *Hewitson*, xv. 40.] *Falco apivorus*, *Lin. Syst.* i. p. 130, 28; *Gmel. Syst.* i. p. 267; *Raii Syn.* p. 16, 2; *Will.* p. 39, t. 3; *Ind. Orn.* i. p. 25, 52; *Bris.* i. p. 410; *Lath. Syn. Sup.* ii. p. 35, No. 32; *Bewick, Br. Birds*, i. t. p. 18; *Shaw, Zool.* vii. p. 114. *La Bondrée, Buf.* i. p. 208. Honey Buzzard, *Br. Zool.* i. No. 56; *Ib.* fol. 67, t. A. 4, & A.* 4; *Arct. Zool.* ii. p. 224, I.; *Will. Angl.* p. 78, t. 3; *Albin*, i. t. 2; *Lewin, Br. Birds*, i. t. 1; *Lath. Syn.* i. p. 52; *Sup.* p. 14; *White, Selb.* p. 109; *Pult. Cat. Dorset.* p. 2; *Walc. Syn.* i. t. 7. Provincial: Capped Buzzard. — This species of Falcon weighs about one pound ten ounces; length twenty-three inches; breadth four feet one inch. The bill and cere dusky; irides bright yellow. The head is brown, tinged with ash-colour; the feathers at the base of the bill small and close, without hairs, as in most of the Hawk tribe; all the other parts above are of a deep brown colour; the chin whitish; breast and belly light brown, marked with brown bars, tinged with rust-colour; the tail brown, with two broad bars of dusky brown, one of which is very near the end; legs strong, and of a dull yellow. The bird from which this description is taken was killed in Lord Carnarvon's park at Highclere in Berkshire, and presented to us by that nobleman. At the time it was shot it was skimming over a large piece of water; but whether it was male or female we have not noted, though we believe the latter. The Honey Buzzard seems to vary considerably in their markings; that mentioned in the 'British Zoology' was white beneath, with dusky strokes pointing downwards; on the tail was three broad dusky bars, between which were two or three of the same colour but narrower. *Linnæus* remarks that the tail has but one cinereous bar, and the tip white. *Albin's* bird has no bar on the tail; that described in *Latham's 'Synopsis'* agrees pretty nearly with the above. This appears to be a very rare species. *Dr. Latham* remarks that, in the many years he has been a collector, one specimen only came to him fresh.

The name seems to have been given to this bird from its feeding on the larvæ of Wasps, and perhaps Bees, the first of which, *Willughby* informs us, he found in its nest. It builds in a tree, like the Common Buzzard. The egg is said to be in colour like that of the Kestrel, dirty white, blotched all over with rust-colour. *Mr. White* mentions one egg only to be found in the nest, and which contained the embryo young; says it is smaller, and not so round as that of the Buzzard, dotted at each end with small red spots, and surrounded in the middle with a broad bloody zone. [A most interesting account of two pairs of Honey Buzzard breeding in England is published in the 'Zoologist' for 1844, page 437; it is from the pen of *Mr. J. P. Wilmot*: from this paper it appears that the nest has been discovered at Henley-on-Thames, and at Stoneleigh Abbey, the seat of Lord Leigh, near Birmingham; the nests were very large ones, and were built, the one in the fork of a beech tree, the other in the fork of an oak; the materials in both instances were sticks of considerable size, intermixed with smaller twigs with the leaves on, the lining composed of green leaves and wool. These birds generally appear to lay two eggs only, a less number than is laid by the Hawk tribe generally.]

SUPPLEMENT. — A few years since, the *Rev. Mr. Holdsworth* (a very intelligent observer of nature), who resides contiguous to a large piece of fresh water called Slapton Ley in South Devon, close to the sea, noticed a large species of Hawk skimming over the water in pursuit of the larger dragon flies (*Libellulæ*), which it seized with its talons, and took them from thence with its beak. This bird was observed to frequent the lake daily for a long time, for the purpose of preying on these insects, and *Mr. Holdsworth's* account of the bird induces us to believe it was the Honey Buzzard. This species is said to be found in the open parts of Russia and Siberia, where woods are near, and that it feeds on small lizards and caterpillars, both smooth and hairy, all of which have been taken from its stomach. Our later observations serve to confirm our former opinion of the very great scarcity of this species in England. [Modern experience does not corroborate *Colonel Montagu's* observations; the records from time to time point to the Honey Buzzard as the commoner bird.]

Buzzard, Moor.—See Moor Buzzard.

[Buzzard, Roughlegged. — *Yarrell*, i. 104; *Hewitson*, xiv. 39.] Roughlegged Falcon. — *Falco lagopus*, *Gmel. Syst.* i. p. 260; *Ind. Orn.* i. p. 19, 33; *Shaw, Zool.* vii.

p. 145. Roughlegged Falcon, *Br. Zool. App. t. 1*; *Arct. Zool. ii. p. 200, 92*; *Lewin, Br. Birds, i. t. 14*; *Lath. Syn. i. p. 75*; *Ib. Sup. p. 18*; *Walc. Syn. i. t. 14*. Greenland Falcon, *Arct. Zool. ii. p. 220, E*.—This species measures upwards of two feet in length; the wings are long, and reach near to the end of the tail when closed. The bill is dusky; cere and irides yellow. The head, neck, and breast yellowish white, streaked with brown, those on the breast large; the lower part of the sides above the thighs, and belly, except a line down the middle, dusky brown; the scapulars and wing-coverts blotched with dusky brown, the former mixed with yellowish white, the latter inclining to ferruginous; the quill-feathers white at the base, dusky black at the ends; the outer webs dashed with cinereous, shafts white; the tail is brown one-third from the end, across which are two faint bars of dusky black, the rest white, with a few spots across the upper part, resembling a broken bar, of brown; the tip white; upper tail-coverts white, streaked with brown; the legs are covered with pale dull yellow feathers down to the feet, spotted with brown; thighs the same; feet yellow; claws black. This bird appears to be subject to some variety. That described by Mr. Pennant, shot near London, had the extreme half of the tail brown, tip with dirty white. Another, shot in Suffolk, had the tail of a cream-coloured white; near the tip is a brown bar above an inch in breadth; above that another, half an inch broad; and above these each feather had a spot upon it in the middle, mimicking, when spread, a third bar; the two outer feathers on each side are marked with a few irregular spots of brown on the outer webs, almost the whole of their length. This bird was less than the former, measuring only one foot ten inches. The

Roughlegged Falcon is a native of the more northern parts, and is rarely met with in England. That from which the first description is taken was picked up dead on the coast of Kent in the winter of 1792, presented to us by Dr. Latham, and now in my museum. Said to be a native of Denmark.

SUPPLEMENT. — Doctor Shaw is of opinion that the Dusky Falcon of the 'Arctic Zoology' is only a variety of this bird; and why should not the Booted Falcon, originally described by Brisson, be another variety? Its being rather smaller may be occasioned by sex. We know that the Roughlegged Falcon is subject to considerable variety, and that the Booted Falcon seems to stand singly on record, unless La Buse Gantée of Levaillant (which Dr. Latham, in his second Supplement to his 'Synopsis,' refers to for the Booted Falcon) be a variety of that species. It should seem M. Beckstein is of opinion this variety is only the young male of the Roughlegged Falcon. Levaillant gives this bird as an inhabitant of the Cape of Good Hope, but acknowledges that he has seen a species in Lorrain, in France, very similar, "and which is very probable," says Dr. Latham, "as we have the bird in some of the counties in England." This remark of our friend, whose ornithological credit stands so deservedly high in estimation, may stamp an opinion that the Booted Falcon as well as the Roughlegged Falcon is a native of England; whereas we have the Doctor's authority for saying that the variety found in England similar to that observed in Lorrain is probably the male, or variety of the lagopus, as suggested by Beckstein. Upon future investigation it will probably be found that *Falco pennatus* and *lagopus*, with their incidental varieties from sex and age, will be referred to one species.

C.

[Calandra Lark.—See Lark, Calandra.]

Calaw or Caloo.—See Duck, Longtailed.

Caperkally.—See Grouse, Wood.

[Capped Petrel.—See Petrel, Capped.]

[Carr Swallow.—A name of the Black Tern.]

[Caspian Tern.—See Tern, Caspian.]

[Castaneous Duck.—See Duck, Ferruginous.]

Cargoose.—See Grebe, Great Crested.

Chack, Check, Chacker, or Chack-Bird.—See Wheatear.

[Chaffinch.—See Finch, Chaf.]

Chalder or Chaldrick.—See Oystercatcher.

Chanchider.—See Flycatcher, Spotted.

[Channel Goose.—A name of the Gannett.]

Chatterer.—A genus of birds, the characters of which are: Bill straight, convex,

bending towards the point; near the end of the upper mandible a small notch. Nostrils hid in reflexed bristles. Middle toe connected to the outer at the base.

Chatterer, Bohemian. — [Yarrell, i. 413; *Revue et Magasin de Zoologie*, *Fevrier*, 1860, p. 64, pl. 2, fig. 4, figure of egg.] *Ampelis garrulus*, *Lin. Syst.* i. p. 297, 1; *Gmel. Syst.* ii. p. 838; *Ind. Orn.* i. p. 363, 1; *Nat. Miscel.* t. 135. *Garrulus bohemicus*, and *Silk-tail*; *Raii Syn.* p. 85, A.; *Ib.* p. 174; *Will.* p. 90, t. 20. *Le Jaseur de Boheme*, *Buf.* iii. p. 429, t. 26. *Bombycilla bohemica*, *Bris.* ii. p. 333, 63; *Ib.* 8vo, i. p. 250. *Waxen Chatterer*, *Br. Zool.* i. No. 112, t. 48; *Ib.* fol. 7, t. 1, C.; *Arct. Zool.* No. 207; *Edw.* t. 242; *Lath. Syn.* iii. p. 91, 1; p. 93, 1, A.; *Lewin, Br. Birds*, ii. t. 65; *Ost. Mem.* t. 15; *Walc. Syn.* ii. t. 204; *Don. Br. Birds*, i. t. 11; *Pult. Cat. Dorset.* p. 11. — This is the only species of the genus ever met with in this country, and that not very frequently. The length of this bird is about eight inches; the size near that of a Starling. The bill is black; irides purplish; the head and upper parts vinaceous brown, dashed with ash-colour, lightest on the rump; the feathers on the crown of the head are long, and form a pointed crest reclining backwards, of a chesnut-colour; over the eye is a black streak passing from the bill to the hind head; chin and throat black; breast and belly pale purplish ash-coloured brown, lightest towards the vent; the greater coverts of the primaries black, tipped with white; greater quills black, the three first tipped white, the others with yellow on their outer margins; the secondaries tipped on the outer web with white, terminating in flat horny appendages the colour of red sealing-wax, the number of which varies in different specimens; in that now before us there are five on one side, and six on the other; but are sometimes found as many as eight; the tail is black, tipped with yellow, and dashed with ash-colour at the base; the under coverts of the tail chesnut; legs black. The female is said to want the red appendages at the end of the quill-feathers, as also the yellow on the wings: all those, however, which have come under our inspection, killed in England, had those characters; but it was not ascertained whether any of them were females. Dr. Latham, who has considered the American species, or *Carolina Chatterer*, as only a variety of this, says both sexes have the wings of a plain colour, and the female has no appendages to the quill-feathers. Mr. Pennant informs us these birds appear annually about Edinburgh, and feed on the berries of the mountain-ash. We have received it

out of Staffordshire, and have known others killed in the more southern counties in the autumn or winter. It is supposed these birds breed in the more northern parts, and are said to nest in the holes of rocks. [The nest and eggs of the Chatterer have since been found in abundance in Sweden by several naturalists, and among them the late lamented John Wolley. Every particular of this interesting discovery, by Mr. A. Newton, is given in the 'Ibis' for January, 1861, and is reprinted in the 'Zoologist' for 1862, p. 7837. The nest is built on the boughs of the spruce and Scotch firs, some only nine feet from the ground; it is a large deep nest, made principally of black tree-hair (lichen), with dried spruce twigs outside, partially lined with a little sheep's grass and one or two feathers. The eggs are four or five, six, and even seven in number (five is the average), and a good deal resemble those both of the Hawfinch and Woodchat. Mr. Wolley says they have an indescribable glow of colour about them; the figures scarcely do justice to them: they are of the most delicate, pale, almost invisible olive-green, tinged with rosy, and are spotted and blotched with dark brown or almost black.]

SUPPLEMENT.—This species has occurred as far west as Devonshire, one having been shot in the park of Lord Boringdon, at Saltram. [In the 'Zoologist' for 1850 are records of 586 Chatterers killed in different parts of Great Britain in the winter of 1849—50, nearly all of them on our eastern coast.]

Chauk.—See Crow, Redlegged.

Cherry-sucker.—See Flycatcher, Spotted.

Chicker.—See Wheatear.

Chiff-chaff, or Chip-Chop.—See Petty-chaps, Lesser.

Chimney Swallow.—See Swallow, Chimney.]

Chough.—See Crow, Redlegged.

Chirl Bunting.—See Bunting, Chirl.]

Clakis.—See Goose, Bernacle.

Clattergoose.—See Goose, Brent.

Coally-hood.—See Finch, Bul.

Cob.—See Gull, Great Blackbacked.

[**Cob.**—A name of the male Swan.]

Cobble.—See Diver, Imber and Speckled.

Cobler's-awl.—See Avoset.

Cobweb.—See Flycatcher, Spotted.

Cock of the Wood or Mountain.—See Grouse, Wood.

Cockandy.—See Puffin.

Coddymoddy.—See Gull, Winter.

[Cole Tit.] } See Titmouse, Cole.
Colemouse. }

[Colin, Virginian.—See Grosbeak, White-winged, under which the first notice of this bird is incidentally given. See also Quail, American.]

Colk.—See Duck, Eider.

[Collared Pratincole.—See Pratincole, Austrian.]

Coot.—A genus of birds, the characters of which are: Bill short, thick, with a callous extending up the forehead. Nostrils narrow and pervious. Toes furnished with broad scalloped membranes.

Coot, Common.—[Yarrell, iii. 138; Hewitson, cvii. 380.] *Fulica atra*, Lin. Syst. i. p. 257, 2; *Gmel. Syst.* ii. p. 702; *Lath. Syn. Sup.* ii. p. 328. *Fulica leucorex*, *Gmel. Syst.* ii. p. 703, 21. *Fulica æthiops*, *Ib.* ii. p. 704, 22. — *atra*, *Raii Syn.* p. 116, A. 1; *Will.* p. 239, t. 59; *Bris.* vi. p. 23, t. 2, f. 2; *Ib.* 8vo, ii. p. 365; *Ind. Orn.* ii. p. 77, No. 1. Le Foulque, ou morelle, *Buf.* viii. p. 211, t. 18. Common Coot, *Br. Zool.* ii. No. 220, t. 77; *Ib.* fol. 132, t. F.; *Arct. Zool.* ii. No. 416; *Will. Angl.* p. 319, t. 59; *Albin*, i. t. 83; *Walc. Syn.* ii. p. 167; *Lath. Syn.* v. p. 275, 1; *Ib. Sup.* p. 259, 1, A and B; *Lewin, Br. Birds*, v. t. 195; *Don. Br. Birds*, v. t. 106; *Pult. Cat. Dorset.* p. 416. Provincial: Bald Coot.—This species sometimes weighs as much as thirty ounces; length eighteen inches. The bill and callous on the forehead pale flesh-colour; irides hazel. The whole plumage is black, except on the belly, which is of a dusky ash-colour; and a line of white on the ridge of the wing; legs and toes dark green. The Coot is a very common bird in this country; it breeds in many of our lakes, rivers, and large ponds, forming a nest of flags amongst the reeds and other aquatic plants close to the surface of the water. The eggs are six or seven in number, of a dirty white, sprinkled over with small deep rust-coloured spots. Many of

these birds never forsake their breeding-places, even in small pieces of water; and notwithstanding are frequently roused, they are not to be compelled to fly farther than from one side to the other. The vast flocks which are seen in Southampton river, and other salt-water inlets, in winter, most probably breed farther north; at least a great part of them. At this season of the year it is commonly sold in our markets, frequently ready picked. They look exceedingly white, but the flavour is rather fishy. Most authors give as a specific character a yellow band, or garter, on the bare part above the knee. This, however, does not always hold good, and may depend on the season or sex.

SUPPLEMENT.—The Coot is said to breed in great abundance in the Isle of Sheppey, where the inhabitants will not suffer the eggs to be taken, as the birds are a great article of food, and are skinned previous to dressing. These birds place their nest amongst the flags upon the surface of the water, but by heaping a large quantity of the same materials together, raise the fabric sufficiently above water to keep the eggs dry. In this buoyant state, a sudden flood attended by a gale of wind has been known to drive them from their moorings, and we are assured by an intelligent observer of nature that he has seen a nest floated from one side of a large piece of water to the other, with the bird upon it.

Coot-foot Tringa.—See Phalarope.

Coot, Greater.—*Fulica aterrima*, Lin. Syst. i. p. 258, 3; *Gmel. Syst.* ii. p. 703, 3; *Ind. Orn.* ii. p. 778, 2. *Fulica major*, *Raii Syn.* p. 117, 2; *Will.* p. 239, t. 51. La grande Foulque, ou la Macroule, *Bris.* v. p. 28, 2, t. 2, f. 2; *Ib.* 8vo, ii. p. 366; *Buf.* viii. p. 120. Greater Coot, *Br. Zool.* ii. No. 221; *Will. Angl.* p. 320; *Lath. Syn.* v. p. 277, 2; *Walc. Syn.* ii. t. 168. — This is larger than the Common Coot, and the plumage of a deeper black; in other respects it so much resembles that bird, that some doubts may be entertained of its being a distinct species. Said to differ in the colour of the callous on the forehead, and in the band or garter above the knee, the former being white, the latter red. It is rarely met with in England, but is said to be found in Lancashire and in Scotland; not uncommon in some of the northern parts of the continent. [Now known to be identical with the Common Coot.]

Coot, Moor.—See Gallinule, Common.

Coot, Weesel.—See Smew, Redheaded.

[Corbie Crow.—See Crow, Carrion.]

Cormorant. } See
Cormorant, Great Black. } Corvorant.

Cormorant, Green. — See Corvorant and Shag.

Corncracker. } See
[Corncrake.] } Gallinule Crake.
Corncreak, or Creak. }
Corndrake. }

[Cornish Chough.] } See
Cornish Daw. } Crow, Redlegged.

Corvorant [Common. — *Yarrell*, iii. 484; *Hewitson*, cxxx. 471.] A species of the Pelican genus, the characters of which are: Bill strong, strait, and either hooked or sloping at the point. Nostrils either wanting or placed in a longitudinal furrow. Face naked. Gullet naked, capable of great distention. Toes four, all webbed together. — *Pelicanus Corbo*, *Lin. Syst.* i. p. 216, 3; *Gmel. Syst.* ii. p. 573; *Ind. Orn.* ii. p. 886, 14. *Corvus aquaticus*, *Raii Syn.* p. 122, A. 3; *Will.* p. 248, t. 63. Le Cormoran, *Buf.* viii. p. 310, t. 26. Cormorant, *Will. Angl.* p. 329, t. 63; *Albin*, ii. t. 81. Corvorant, *Br. Zool.* ii. No. 291; *Ib.* fol. 159, t. I. 1; *Lath. Syn.* vi. p. 593, 13; *Lewin, Br. Birds*, vii. t. 263; *Walc. Syn.* i. t. 92; *Pult. Cat. Dorset.* p. 21; *Bewick, Br. Birds*, 11, t. p. 381. Crested Corvorant, *Id.* 11, t. p. 388. *Phalacrocorax*, *Bris.* vi. p. 511, 1, t. 45; *Ib.* Svo, ii. p. 495. Provincial: Sea Crow; Great Black Corvorant; Cole Goose; Skart; Green Cormorant; Brougie; Norie. — The Corvorant is subject to much variety, both in size and colour. The specimen from which the following description is taken was the largest we ever saw. It weighed eight pounds; length three-feet three inches; breadth four feet eleven inches; the length of the bill five inches, hooked at the point; irides green. The chin, and round the base of the bill to the eyes, bare and yellow; the head and neck black; back greenish black, glossed with purple, each feather bordered with fine deep black; scapulars and coverts of the wings the same, dashed with ash-colour; the whole under parts black, except a small patch of white on the throat; quills dusky black; the tail is rounded, and consists of fourteen feathers, which is the great characteristic distinction of this species from the Shag. We have seen twenty or thirty Corvorants together: in some the upper parts are dusky, dashed over with ash-colour; the under parts of the neck and breast light brown; the belly dirty white; in some the feathers of the head are a little elongated, forming a short pendant crest, and a patch of white on the thighs. This variety of markings are, per-

haps, common to this species, without any regard to age or sex. We have, however, upon dissection, generally found the females lightest coloured. The Corvorant breeds on most of our rocky coasts, sometimes in consort with the Shag. We have seen, on the coast of Wales, an insulated rock covered with their nests, which are composed of sticks and sea-weed. The eggs are generally three in number, colour white, weight about two ounces. It frequently builds on the very summit of the highest rocks impending the sea; the Shag rarely so high. In the winter it is frequently found in fresh-water rivers, at a considerable distance from the sea. We have seen eight or ten together far up the river Usk, perched upon a tree. The Shag is never observed to quit the neighbourhood of the sea. It is a great destroyer of fish; and by frequent diving the wings become so wet as to incapacitate its flying, when it walks out of the water, and extends the wings to the wind in order to dry them. It is said this bird has been trained and used for fishing, in the manner hawks have for fowling; and in order to prevent their swallowing the prey, a collar was put round the neck.

SUPPLEMENT. — Different opinions still exist amongst naturalists with respect to the crested Corvorant and crested Shag; some maintaining the opinion that they are distinct from the common species, while others consider them as only varieties of those two species. We are, however, enabled to clear up this matter beyond all dispute, proving by incontrovertible facts that the crested Corvorant is no other than a variety of the common species. One of these birds was shot in the river Avon, in Devonshire, and presented to us by a valuable friend and scientific ornithologist (the Rev. Mr. Vaughan), on the 27th of February, 1805. The length of this bird (now in our museum) is three feet: the weight six pounds one ounce: and upon dissection proved to be a female, made particularly evident by four of the ova being considerably enlarged. In the beginning of April, in the year 1808, another of these birds was taken alive, near Bridgewater, and sent to us by our friend Mr. Anstice, of that place. These two birds were so exactly similar that the following description is equally applicable. The bill about four inches and a quarter in length from the gape, dusky above, the base of the under mandible whitish; irides green: the bare skin under the bill and chin dusky speckled with yellow: under the eye a bare sub-triangular spot of bright yellow, taking in the bill at the corner of the mouth, and finishing the angle on the lower mandible: from

the bill to the eye the skin is dusky black: the crown, and back part of the head and neck, fine glossy bluish black, changeable to greenish or violet, and mixed with slender white feathers half way down the neck; from the hind-head downwards for three or four inches the feathers are considerably elongated, and form a crest destitute of any white feathers: behind the eye commences a white band, nearly an inch in breadth, that surrounds the throat, immediately behind the bare skin; behind this again is another narrower band of changeable bluish black, that separates the hoary part of the neck (constituted by the mixed black and white feathers) from the pure white band; the back, scapulars, coverts of the wings, and secondary quills, bronze or changeable greenish brown, each feather bordered with glossy blue-black: the under parts of the body bluish black, changeable to green: on each thigh a large patch of pure white. The sex of the specimen sent to us alive has not been ascertained, as it is now, in December, 1809, in perfect health, but has completely been divested of all the marks that characterized the crested Corvorant; being destitute of the crest, the white band on the throat, the hoary neck, and the white on the thighs; in fact, is completely metamorphosed into what we always suspected, the common Corvorant. It continued its first plumage till the regular moulting season, the autumn of 1808, when it gradually disappeared, and the feathers replaced by the usual plain ones: and the second moulting, now completely effected, is similar in every respect to the last. From this fortunate capture therefore we are enabled to decide so long-contested a dispute; and from which we may fairly infer that the two supposed species of Shags are mere accidental varieties. The possession of this bird has given us much of its history we were previously unacquainted with. It is extremely docile, and of a grateful disposition, without the smallest tincture of a savage or vindictive spirit, and by no means possessing the bad qualities a celebrated writer would induce us to believe, by making it personify Satan. The bird in question was surprised by a Newfoundland dog, belonging to a fisherman, under the banks of a rivulet that ran into the Bristol Channel; it was taken home, and not being in the accustomed plumage, was reported to be a curious and unknown species. As soon as Mr. Anstice heard of it he went to see the bird, and found that in the small space of time it had been made captive (about a week) it was perfectly familiarized, and making one in the family circle round the fire, suffering the caresses of the children,

who were very unwilling to part with it. That mode, however, by which all earthly matters are obtained, and by which kingdoms are lost and gained, succeeded, and it was conveyed to us by the coach, being placed in a basket. As soon as it arrived and was liberated, it followed the servant who released it, and was offered every sort of food at hand, all of which was equally refused; not even raw flesh was acceptable, and no fish could then be procured to satisfy its hunger (having been twenty-four hours on its journey), in consequence we crammed it with flesh, which was taken very reluctantly; but even with this rough handling, its formidable bill was not made use of offensively. After feeding it was placed on a stool, in an adjoining room to the library, where it sat perfectly contented, and adjusted its disconcerted plumage. Observing it so perfectly reconciled to its new abode, and having retired to the library, leaving both doors open, with intention of returning, we were astonished, in a few minutes, to see the stranger walk boldly into the room, while in conversation with a friend, and, coming towards us with the greatest confidence and familiarity, joined us at the fire-side, where it reassumed the task of pluming and dressing its feathers. From hence we removed this bird to an aquatic menagerie, to which it was carried without offering the least offensive resistance, but the sight of water made it restless, and when liberated it instantly plunged in and dived incessantly for a considerable time, in hopes of prey; and after searching every part of the pond without obtaining a single fish, it appeared to be convinced there were none, and never made any other attempt for three days, during the whole of which time it was crammed with flesh, not being able to procure any fish. It is almost incredible to see with what dexterity this bird dives and seizes its prey; knowing its own powers under water, if a fish is thrown in at a great distance, it frequently dives immediately, and pursues its course under water, in the line to the spot it was observed to fall, with vast celerity, and, if the water is clear, takes the fish with certainty, and frequently before it falls to the bottom. If the fish happens to be of the flat kind, it is invariably turned in the bill, so as to reverse its natural position, by which means only could such be got within the bill. In this case the dilatable skin under the bill is of great use, but it by no means deserves the appellation of a pouch, not being capable of more distention than any part of the œsophagus; nor can it be used as a reservoir for provision, either for the bird's own use or for the purpose of carrying food to its

young. The quantity of fish this bird will swallow at a meal is astonishing; three or four pounds twice a day are readily devoured, the digestion being excessively rapid. If by accident a large fish sticks in the gullet, it has the power of inflating that part to its utmost, and while in that state the head and neck are shaken violently, in order to promote its passage. This is a property we never observed in any other bird, but is probably common to the rest of the tribe, or such as are destitute of nasal apertures. That all birds have a communication between their lungs and the cavity of their body surrounding the viscera, more or less, is well known; but as there is no passage into the œsophagus but by the mouth, to effect this inflation, a violent compression of the body becomes necessary at the same time the bill is closed, and the air is forced back into the mouth and pressed into the gullet. It is observable in the act of fishing, this bird always carries the head under water, in order that it may discover its prey at a greater distance, and with more certainty than could be effected by keeping its eyes above the surface, which is agitated by the air, and rendered unfit for visual purposes. All fishes are invariably turned in the bill, so as to present the head foremost; and when an Eel (the most favourite food) is captured, and not seized favourably for gorging, and the resistance of such slippery prey renders it impossible to be turned in the bill, then the fish is thrown up to some distance, and most dexterously re-caught in a more favourable part, and instantly swallowed. Another action seems also peculiar to this bird, and perhaps its congeners. That is a most violent beating of the water with its wings, without moving from the spot; and each beating is succeeded by a shake of the whole body, and ruffling of all the feathers, at the same time covering itself with the water. This singular action is repeated ten or twenty times with small intervals of rest; and afterwards it repairs to a tump, or some elevated place on shore, and spreads or flaps its wings till they are dry. It lives in perfect harmony with a Whistling Swan, a Bernacle Goose, various sorts of Ducks, and other occasional birds, but if it perceives a Gull with a piece of fish it instantly gives chase: if, however, the Gull has time to swallow it, no resentment is offered; the sight of it created the desire of possession, and that desire ceases with its disappearance. If it gets out it never attempts to ramble, but, walking direct to the house, enters the first open door without deference to any one, regardless even of a dog, and in

fact is troublesomely tame. There was a specimen of this variety in the late Leverian Museum, and Mr. Bewick has described and figured another from the collection of Mr. Tunstall, which he refers to the Crested Shag of the 'British Zoology,' but that cannot be, since Mr. Pennant's bird is said to be less than the common Shag, and to have only twelve feathers in the tail, whereas this bird has fourteen. Müller, in his 'Zoologiæ Danicæ Prodomus,' has placed this and some of its congeners amongst the Procellaria, or Petrels; but from those it is so essentially different in conformation, as well as habits, as to render them perfectly incongruous. We think, however, that the Corvorant and Shag, and their strict affinities, should constitute a distinct genus from the Gannet and the true Pelicans, being as different in many essentials of structure as in their habits. But for further particulars we refer to the article Gannet.

[Corvorant, Crested.—The Crested Corvorant, as well as the Crested Shag, are supposed to be nothing more than the Common Corvorant and Common Shag in adult nuptial plumage.]

Coulterneb.—See Puffin.

Cracker.—See Duck, Pintailed.

[Crake, Baillon's.—See Gallinule, Baillon's.]

[Crake, Gallinule.—See Gallinule, Crake.]

[Crake, Little.—See Gallinule, Little.]

[Crake, Spotted.—See Gallinule, Spotted.]

[Crake, Olivaceous.—See Gallinule, Olivaceous.]

Crane.—[Yarrell, ii. 530; Hewitson, lxxxi. 308.] *Ardea Grus*, *Lin. Syst.* i. p. 234, 4; *Gmel. Syst.* ii. p. 620; *Bris.* v. p. 374, 6, t. 33; *Ib.* 8vo, ii. p. 307; *Raii Syn.* p. 95, A. 1; *Will.* p. 200, t. 48; *Ind. Orn.* ii. p. 674, 5; *Bewick, Br. Birds*, ii. t. p. 29. *La Grue*, *Buf.* vii. p. 287, t. 14. Common Crane, *Br. Zool.* ii. *App.* p. 534, t. 6; *Arct. Zool.* ii. p. 453; *Will. Angl.* p. 274, t. 48; *Albin.* ii. t. 65; *Lath. Syn.* v. p. 40, 5; *Lewin, Br. Birds*, iv. t. 143; *Walc. Syn.* ii. t. 124.—This species of Heron weighs near ten pounds; length five feet. The bill is above four inches long, of a greenish black; the forehead is covered with black down, or hairs; the hind part of the head bare and red, with a few scattered hairs; on the nape is a bare place ash-coloured; the sides of the head and hind part of

the neck white; between the bill and eyes, beneath them, and the fore part of the neck, blackish ash-colour; the lower part of the neck, and the rest of the body, fine ash-colour, darkest on the tail-coverts; the quill-feathers and greater coverts black; bastard wing the same; from the pinion of each wing, nearest the body, springs a large tuft of unwebbed feathers, curled at the ends, which can be erected at will, but most frequently hang over and cover the tail. There seems no doubt that this bird was by no means uncommon formerly in our fens; but only one or two instances are recorded by our later writers of its having been killed in this kingdom. It is common in many parts of the European continent and Asia, migrating with the season. It breeds in the more northern parts. It is said to fly remarkably high in its passage, even out of sight; but that their passing is known by the noise they make, which is louder than any other bird: this is attributed to the formation of the windpipe, which is of a very singular structure: it enters the keel of the sternum, or breast-bone, which is formed with a large cavity to receive it; from thence it returns, after being twice reflected. But we refer our readers to Dr. Latham's Essay on the 'Tracheæ of Birds,' published in the fourth volume of the 'Linnean Transactions.' This bird is said to make its nest in the marshes, and to lay two bluish eggs. [The following most interesting account of the breeding of the Crane in Lapland is from the pen of the late lamented Mr. John Wolley, and is extracted from the 'Ibis,' vol. i. p. 191:— "This great marsh, called 'Iso uoma,' is mostly composed of soft bog, in which, except where the bog-bean grows, one generally sinks up to the knees, or even to the middle; but it is intersected by long strips of firmer bog-earth slightly raised above the general level, and bearing creeping shrubs, principally of willow and dwarf birch, mixed in places with *Ledum palustre*, *Vaccinium uliginosum*, *Andromeda polifolia*, *Rubus chamæmorus*, besides grasses, carices, mosses, and other plants. There were also a few bushes or treelets of the common birch, and these quite numerous in some parts of the marsh. Walking along one of these strips, in a direction where the pair of Cranes was said to be often heard, I came upon a nest which I was sure must be a Crane's. I saw one bit of down. The nest was made of very small twigs mixed with long sedgy grass; altogether several inches in depth, and perhaps two feet across. In it were two lining-membranes of eggs, and on searching amongst the materials of the nest I found fragments of the shells. We had

not gone many yards beyond this place, when I saw a Crane stalking in a direction across us amongst some small birch trees, now appearing to stoop a little, and now holding its head and neck boldly up as it steadily advanced. Presently the lads called out to me they had found some young Cranes. As I ran towards them, a Crane, not the one I had previously seen, rose just before me from among some bushes which were only two or three feet high, and not twenty yards from the place where the lads had been shouting at least for a minute or two. It rose into the air in a hurried, frightened way. There was nothing just at the spot where it got up, neither eggs nor young. I then went up to where the two little Cranes were found. They were standing upright, and walking about with some facility, and making a rather loud 'cheeping' cry. They seemed as if they could have left such eggs as Cranes were supposed to lay only a very few days. I say supposed, for in England we know nothing of the eggs which are called Cranes', but which may have come from any part of the world. They were straightly made little things, short in the beak, livid in the eye, thick in the knees, covered with a moderately long chestnut or tawny-coloured down, darker on the upper parts, softening away into paler underneath. As I fondled one of them it began to peck playfully at my hands and legs, and when at length I rose to go away it walked after me, taking me, I supposed, for one of its long-legged parents. I had only just before been plucking from it some bits of down to keep; for valuable as I knew it to be in a Natural History point of view, I could not make up my mind to take its life. As soon as I saw its inclination to follow, I took to double-quick time, and soon left it far behind. Its confidence was the more remarkable, as all the time we were with it the old Cranes were flying round near the ground, at some distance from us, their necks and feet fully stretched out as usual, but with a remarkable sudden casting up of the wings in a direction over the back after each downward stroke, in place of the ordinary steady movement. At the same time they were making a peculiar kind of low clattering or somewhat gurgling noise, of which it is very difficult to give an intelligible description, and now and then they broke out into a loud trumpeting call not unlike their grand ordinary notes, which, audible at so great a distance, gladden the ears of the lover of nature. The following year, 1854, on the 20th of May, I went with only Ludwig, my servant-lad, to look for the Crane's nest in 'Iso uoma.' We saw no birds, and the spot where the nest had been the preceding year was

not easy to find in so extensive a marsh. So we quartered our ground, working carefully up one strip of harder ground and down the next. After some hours of heavy walking I saw the eggs—joyful sight!—on an adjacent slip in a perfectly open place. The two eggs lay with their long diameters parallel to one another, and there was just room for a third egg to be placed between them. The nest, about two feet across, was nearly flat, made chiefly of light-coloured grass or hay loosely matted together, scarcely more than two inches in depth, and raised only two or three inches from the general level of the swamp. There were higher sites close by, and many of them would have seemed more eligible." The Crane continues to be a bird of excessive rarity in Britain. At p. 2352 of the 'Zoologist' the late Mr. John Wolley records having seen a specimen of the Common Crane on the mainland of Shetland, on the 14th of August, 1848. At p. 2600 of the same journal the capture of a female Crane in Oxfordshire is recorded by Revs. Andrew and Henry Matthews in the spring of 1829. At p. 2771 Mr. J. H. Gurney mentions a specimen of the Common Crane as having been shot at Martham, in Norfolk, in December, 1849. At p. 3234 Mr. Ellman reports having obtained a male of this bird, shot near Pevensey, in Sussex, in May, 1849. At p. 4512 Mr. Borrer records having seen one in the Museum at Chichester, which had been shot the day before, at Pagham, in Sussex. And lastly, at p. 8005, there is a notice of Mr. Abbott having received a specimen of the Crane, shot at Hartlepool, but no date is given.]

SUPPLEMENT.—A few years since, a small flock appeared in the harvest time, at Tingwall, in Zetland, one of which was shot. They were observed to feed on corn, a very unusual food for such birds.

Crane.—See Shag.

[Crane, Numidian. — *Grus Virgo*, Gould, *Birds of Europe*, Part 20.—This beautiful species stands three feet three inches in height, and its figure is elegant and slender. The prevailing colour is the most delicate blue-grey; the crown of the head, the cheeks, the upper part of the neck, and some long pendant feathers situated at the base of the neck, as well as the tips of the primaries, are black: from behind the eye, on each side of the head, there arises a tuft of long white feathers, which form a sort of drooping crest: the beak is black at the base, but the remainder is of an ochreous-yellow colour. The sexes are very nearly alike, and the young present scarcely any difference in colour.

This species is very common in the North of Africa, and abounds in Egypt at the overflowing of the Nile; it is also found on the shores of the Caspian and Black Seas, and the Aral and Baikal Lakes. Many specimens have been killed on the shores of the Adriatic, and a few in the Islands of the Mediterranean, one in Piedmont, and one near Aubonne in Switzerland. They frequent the banks of rivers and the shores of seas and lakes, feeding principally on fish and reptiles. These birds are very commonly kept in confinement, and soon get tame and sociable. Buffon says that one lived twenty-four years at Versailles, and several instances have occurred of their breeding in captivity. In the *Zoologist* for 1863, at p. 8692, is the following record of the occurrence of two of these birds in Orkney:—"A fine male bird, in beautiful plumage, the Demoiselle or Numidian Crane (*Grus Virgo*), was shot on Thursday, the 14th of May, 1863, at Deerness, east Mainland, Orkney, and has since been preserved for Mr. Reid, bookseller, of Kirkwall. Two of the birds were seen at Deerness for some days, and were pursued and shot at several times. When one was killed, the other flew over to the neighbouring Island of Copinshay, and was not afterwards seen by the Deerness folks, who describe the flight and walking of this remarkable bird as something very graceful. It appeared in good condition, weighing about five pounds. The gulls and lapwings continually attacked the two strangers whenever they walked or winged their way over the grass and oat fields, and they were frequently heard to utter a hoarse scream when thus persecuted. Nothing was found in the stomach of the one killed but a few oats, and a few of the same grains were also adherent to the tongue. A day or two after the first had been shot, its companion returned to Deerness from Copinshay, and was again seen in the fields, probably in search of its mate. Several parties endeavoured to stalk it, but without success.—*John o' Groat's Journal*."

Crank-Bird.—See Woodpecker, Least-spotted.

[Cravat Goose.—A name of the Canada Goose.]

Creeper.—A genus of birds, the characters of which are: Bill slender, incurvated. Toes three before, one behind. Claws hooked and long. Tail of twelve stiff sharp-pointed feathers.

Creeper, Common.—[Yarrell, ii. 170;

CRESHAWK.

Hewitson, lxii. 243.] *Certhia familiaris*, *Lin. Syst.* i. p. 184, 1; *Gmel. Syst.* i. p. 469; *Ind. Orn.* i. p. 280, 1. *Certhia*, *Bris.* iii. p. 603, 1; *Ib.* 8vo, ii. p. 2; *Raii Syn.* p. 47, A. 5; *Will.* p. 100, t. 23. Grimpereau, *Buf.* v. p. 481, t. 21, f. 1. Common Creeper, *Br. Zool.* i. No. 92, t. 39; *Ib.* fol. p. 82, t. K.; *Arct. Zool.* ii. No. 174; *Albin.* iii. t. 25; *Lath. Syn.* ii. No. 701; *Ib. Sup.* p. 126; *Lewin, Br. Birds*, ii. t. 55; *Walc. Syn.* i. t. 54; *Pult. Cat. Dorset.* p. 5. Provincial: Tree-creeper; Tree-climber.—This is the only species of the genus in England; its weight about two drams; length five inches; bill half an inch long, slender and curved; irides hazel. The upper part of the head and neck are prettily marked with streaks of black and yellow-brown; above each eye is a stroke of white; back, rump, and scapulars, inclining to tawny; quills dusky, mostly tipped and edged with white, or very light brown: the coverts are varied with dusky brown and yellowish white, the last of which forms a sort of bar across the wing; the breast and belly are of a silvery white; the tail consists of twelve sharp-pointed stiff feathers, of a tawny brown. Some authors have described this bird as possessing only ten feathers in the tail, which is a mistake. This bird is perpetually climbing up the body and limbs of trees in search of insects, its only food. It makes a nest in some hole, or behind the bark of some decayed tree, composed of dry grass and the inner bark of wood, loosely put together, and lined with small feathers. The eggs are from six to eight in number (not twenty, as some assert), weight about eighteen grains; these are white, minutely speckled with bright rust-colour. During the time of incubation the female is fed by the other sex, whenever she quits her nest in search of food. The note of the Creeper is monotonous and weak, several times repeated in a deliberate manner; but is rarely heard in winter. At this season it is constantly active in search of food, which is chiefly the larvæ of insects, found under moss, and in the crevices of the bark; which is procured in sufficient abundance to subsist it during that season.

Crshawk.—See Kestrel.

[**Crested Corvorant.**—See Corvorant, Common.]

[**Crested Lapwing.**—See Lapwing.]

[**Crested Lark.**—See Lark, Crested.]

[**Crested Tit.**—See Titmouse, Crested.]

[**Crested Shag.**—See Shag, Crested.]

CROSSBILL.

Crocker.—See Gull, Blackheaded.]

Crookedbill.—See Avoset.

Crossbill [Common.—*Yarrell*, ii. 1; *Hewitson*, liv. 212.] *Loxia curvirostra*, *Lin. Syst.* i. p. 299, 1; *Gmel. Syst.* ii. p. 843; *Ind. Orn.* i. p. 370, 1. *Loxia*, *Bris.* iii. p. 329, t. 17, f. 3; *Ib.* 8vo, p. 401; *Raii Syn.* p. 86, A.; *Will.* p. 181, t. 44. Le Bec croisé, *Buf.* iii. p. 449, t. 27, f. 2. Crossbill, or Shield-apple, *Br. Zool.* i. No. 115, t. 49; *Ib.* fol. 106, t. U. f. 2; *Arct. Zool.* ii. No. 208; *Will. Angl.* p. 248, t. 44; *Edw.* t. 303; *Albin.* i. t. 61; *Lath. Syn.* iii. p. 106, 1; *Lewin, Br. Birds*, ii. t. 66; *Walc. Syn.* ii. t. 205; *Pult. Cat. Dorset.* p. 11; *Don. Br. Birds*, ii. t. 39.—This species of Grosbeak weighs about an ounce and a half: length near six inches and a half: bill strong, both mandibles convex, and crossing each other at the points, which are hooked; colour brown; eyes small; irides dusky. The plumage of the male varies from a beautiful red to orange-colour on the head, neck, breast, back, and rump; the wing-coverts rufous-brown; quills and tail dusky; vent almost white; under tail-coverts spotted dusky; tail forked; legs short; claws strong. The females also vary somewhat in colour. In general they are of a dull olive-green on those parts where the male is red; but the feathers on the back are mottled with dusky; the wings and tail similar to that of the male, but not so dark. We have observed the crossing of the mandibles are not constantly on the same side. The Crossbill is not known to breed with us, but is more or less found amongst our fir plantations, from June to the latter end of the year, feeding on the seed, by dexterously dividing the scales of the cone, for which purpose the bill is admirably adapted. It is sometimes found in our orchards in autumn, and will readily divide an apple to get at the kernels. In the year 1791 we were informed by a birdcatcher at Bath that he had taken an hundred pair in the months of June and July: the greater part were males, which were generally sold for five shillings each. Many are taken with a call-bird and birdlime; others are caught by a horse-hair noose fixed to a long fishing-rod. So intent are these birds when picking out the seeds of the cone, that they will suffer themselves to be taken by the noose being put over the head. They are discovered by the twittering noise they make while feeding. This bird is said to be a constant inhabitant of the northern parts of Europe; breeds early in the month of March, on the tops of the pine-trees. In confinement it seems to have much the

actions of a Parrot, climbing up the wires of a cage by the claws and beak. Mr. Pennant mentions a variety he received out of Shropshire, superior in size, with the bill remarkably thick and short, and more incurvated than in the common kind; the ends more blunt. [Colonel Montagu does not give any instance of the Crossbill's breeding in Britain; but since his account was written, the nests, eggs and young of the Crossbill have been found on several occasions; at Boynton, near Burlington, in Yorkshire, in 1829; at Epping, in Essex, by Mr. Doubleday; at Cirencester, in 1839, by Mr. Brown; in the Holt Forest, in Hampshire, by Mr. Long, in the same year; and in pine woods on the banks of the Findhorn, by Mr. Hancock, in 1850: all these instances are noticed in Hewitson's 'Oology.' In the 'Zoologist' for 1843, at page 189, occurs the following note, from the pen of Mr. J. Lewcock, a birdstuffer at Farnham:—"Four or five years ago the Scotch firs in the Holt Forest were cut out to allow more room for the growth of young oaks; when the trees were thrown, four nests of the Crossbill were found in their topmost forks; the nests and eggs had much the appearance of those of the Greenfinch. Since the firs were cut down I am not aware that a single Crossbill has been seen in the Forest." And again, in the volume for 1849, at page 2526, is a paper by Mr. J. Duff, affording conclusive evidence of the Crossbill breeding in the county of Durham.]

[Crossbill, American Whitewinged.—*Loxia leucoptera*, *Yarrell*, ii. 33. "Young birds have the beak of dark horn-colour; towards the point the upper mandible is so compressed that the edges are almost united; the lower mandible rather lighter in colour; the feathers at the base of the beak, near the nostrils, greyish white; irides dark brown; head, neck, and back dull greenish grey, mottled with a darker tint, which pervades the centre of each feather; the rump tinged with greenish yellow; the under surface of the body is of a lighter grey, longitudinally streaked with dusky brown; the shoulders mottled with two shades of dull greyish brown; both sets of wing-coverts dull black, with white tips, forming two conspicuous bars across the wings; all the quill-feathers nearly black; the primaries and secondaries with very narrow lighter-coloured edges; the tertials edged and tipped with white; the tail forked, the feathers dull black, with very narrow light-coloured edges; under tail-coverts in the centre almost black, with greyish white sides and ends; legs and toes brownish black; the claws shining black. The male in the plumage of his

second year has the head, neck, part of the back, rump, and under surface of the body, crimson-red; the base of each feather dark grey; the quill and tail-feathers darker than in the younger bird, almost uniform black; both sets of wing-coverts tipped with white; the tertials also being tipped with white; a dark mottled band passes across the back. A male, older than the preceding bird, had passed apparently from the crimson state to orange-yellow on the head, the upper part of the back, and under surface of the body; the rump lemon-yellow; wings and tail-feathers as in the crimson-coloured male. The female is at first like the young bird, but afterwards loses the striated appearance on the under surface of the body, and attains a lemon-yellow colour on the rump, and over a portion of the breast. The whole length of the adult bird is five inches and three-quarters; from the carpal joint to the end of the wing, three inches and a half; the first three primaries very nearly of equal length, and the longest in the wing; the fourth feather shorter than the third, but much longer than the fifth. The hind claw stout, and longer than the hind toe."—*Yarrell*, ii. p. 37. The two species of Whitewinged Crossbill were first separated as British in the 'Zoologist' for 1848, at p. 2300, up to which time one species only was known to have occurred in this country: it is not very certain to which species the following records may with certainty be applied. In the 'Zoologist' for 1843, at p. 142, Mr. Rodd records the occurrence of a Whitewinged Crossbill at Lariggan, near Penzance: at p. 221 of the same volume Mr. Jerdon mentions the occurrence of a specimen near Jedburgh, in February, 1841. In the volume for 1845, at p. 1190, Mr. E. B. Fitton records that he picked up a specimen, apparently just washed on shore, on the 17th of February of that year: during the following year, 1846, there are no less than three similar records—the first at p. 1247, at Mickleover, near Derby, on the 21st of November, by Mr. R. J. Bell; the second at p. 1498, from the pen of Mr. C. B. Hunter, states that four or five of these birds were seen and one procured on the 10th of May, at Thetford, in Norfolk; and the third, at p. 1551, states, on the authority of Mr. James Cooper, that several specimens were killed near Walton House, some ten miles east of Carlisle. In the volume for 1847 Mr. James B. Hodgkinson states that nine specimens were killed that year near Bampton, in Cumberland. In the volume for 1849, at p. 2419, Dr. Bree mentions that a specimen of *Loxia bifasciata* was shot out of a flock feeding on fir-cones at

Drinkstone, in Suffolk, by the Rev. E. Burt. In the volume for 1859, p. 6631, Mr. Thomas Edward, of Banff, states that a large flock of *Loxia leucoptera* visited Banff, alighting on what are called the Castle trees: they appeared quite exhausted, many of them dropping from the trees; none of these have been preserved, and I incline to think they were the European *bifasciata* rather than the American *leucoptera*.]

[Crossbill, European Whitewinged.—*Loxia bifasciata*, Yarrell, ii. 27.—“In the youngest bird I have seen, the upper mandible is dark brown; the under mandible pale brown, short, and but little crossed over beyond the upper: head, neck, back, and wing-coverts greyish green; the points of both sets of wing-coverts tipped with white, but the colour is not so bright, and the space occupied by it is of smaller extent than in older birds; the rump greenish yellow; wing-primaries greyish black; tertials tipped with dull white; tail-feathers greyish black, with narrow margins of yellowish white; tail slightly forked; under surface of the neck greyish white, streaked with darker grey; belly uniformly grey, the vent lighter in colour; under tail-coverts greyish black in the middle, surrounded with dull white; under surface of tail-feathers grey; legs and toes dark brown; claws shining black; hind claw not longer than the hind toe. An adult male has the top of the head, the neck above, the upper part of the back, and the rump, mottled with brick-red, orange and greyish brown; primaries and tail-feathers almost black; the wing-coverts and tertials with the usual white marks; under surface of the body reddish orange; the feathers about the vent, the under tail-coverts, and the under surface of the tail-feathers, as in the younger bird. An older male has both the mandibles very short; the top of the head and the rump bright brick-red; the back a mixture of bluish grey and dull brick-red; chin, neck, and breast uniform pale red; wing and tail-feathers decidedly black, with bright white tips and yellowish white edgings. Females resemble young males, but soon lose the striated markings on the under surface of the body, attaining the yellow on the rump. The whole length of this species is six inches and one-quarter; the wing from the bend, three inches and three-quarters; the second quill-feather rather the longest in the wing; the claw of the hind toe not longer than the toe itself, and in some instances not quite so long.”—Yarrell, ii. p. 31.]

[Crossbill, Parrot.—*Loxia pityopsittacus*,

Yarrell, ii. 23. “A young bird of the year, in the possession of Mr. John Leadbeater, had the beak of a blackish horn-colour; the head, neck, lower part of the back, and all the under surface of the body, greyish white, thickly streaked longitudinally with dark greyish brown: the rump, neck, and breast slightly tinged with yellow; wing-coverts dark brown, both sets tipped with pale brown; wings and tail-feathers blackish brown, also tipped with pale brown; legs lead-colour; claws black. An older male, after his first moult, had the head, back, rump, and upper tail-coverts, the throat, neck, and breast tile-red; darkest on the back, lightest on the rump; the feathers of the back and breast still retaining many of the dusky brown streaks which mark the first plumage; the beak dark brown, the under mandible reddish brown at the base; the irides hazel; wings, quill-feathers, and tail uniform dark brown; legs, toes, and claws also dark brown. Mr. Bartlett's bird was a red male, in the moult when killed, and all the new feathers then coming were of a greenish yellow. The female does not at any time differ greatly from the young male of the year, before assuming his second suit. The upper parts are greenish ash with patches of brown; throat and neck grey, clouded with yellowish brown; the rest of the under surface ash-colour, varied with yellowish green: rump yellow; vent and under tail-coverts greyish white, the base of each feather greyish brown. The whole length of a male in red plumage is seven inches and five-eighths. Extent of wings twelve inches. From the carpal joint to the end of the longest quill-feather not quite four inches: the wing in its form and relative length of the quill-feathers resembles that of the Common Crossbill; the first quill-feather is the longest; the second quill-feather a very little shorter than the first; the third a little shorter than the second, and the fourth feather one-quarter of an inch shorter than the third.”—Yarrell, ii. p. 25. At p. 2770 of the ‘Zoologist’ for 1850 I have recorded that Mr. Gardiner showed me, in the flesh, a specimen of the Parrot Crossbill killed on the 21st of January, at Harrow-on-the-Hill; and in the volume for the following year, at p. 3145, Mr. Alfred Newton records the occurrence of two fine red males, one in Norfolk, the other in Suffolk. In the volume for 1859, p. 6329, a Parrot Crossbill was seen in the flesh, in Mr. Swaysland's shop in Brighton; it was caught at Bognor, on the 2nd of November, by a birdcatcher, in clap-nets. In the volume for 1862, at p. 7844, Captain Guise records the occur-

rence of three specimens in the neighbourhood of Cheltenham; and in the same year, at p. 8032, Dr. Bree states that three specimens were obtained near Colchester on the 21st of February. It is desirable to notice here that a great deal has been written, although to little purpose, on the amazing diversity of colour exhibited by the several species of Cross-bill: age, sex and season are doubtless the main causes of this diversity; but it has hitherto been found impracticable to assign to each of these causes its exact influence.]

Crow.—A genus of birds, the characters of which are: Bill strait, strong. Nostrils covered with reflected bristles. Tongue bifid at the end. Toes, the outer connected to the middle one as far as the first joint.

Crow, Carrion.—[Yarrell, ii. 82; Hewitson, lviii. 222.] *Corvus corone*, *Lin. Syst.* i. p. 155, 3; *Gmel. Syst.* i. p. 365; *Ind. Orn.* i. p. 152, 4; *Shaw, Zool.* vii. p. 345; *Lath. Syn. Sup.* ii. p. 108. *Cornix, Raii Syn.* p. 39, A. 2; *Will.* p. 83; *Bris.* ii. p. 12, 2; *Ib.* 8vo, p. 157. *La Corneille, Buf.* iii. p. 45, t. 3. Carrion Crow, *Br. Zool.* i. No. 75, t. 34; *Ib.* fol. p. 75; *Arct. Zool.* ii. No. 135; *Albin.* ii. t. 21; *Will. Angl.* p. 122, t. 18; *Lath. Syn.* i. p. 370, 3; *Lewin, Br. Birds.* i. t. 34; *Walc. Syn.* i. t. 33; *Pult. Cat. Dorset.* p. 4. Provincial: Gor Crow; Minden Crow; Black-nibbed Crow.—This species weighs about nineteen ounces; length eighteen inches; bill black; irides dusky. The whole plumage black, glossed above with a purplish blue; legs black. Distinguished from the Rook by the bill, which is rather more convex towards the end; and the nares, or reflected bristles, at the base being always perfect; but these are only obvious in adults. In young birds the note is the only criterion of distinction, which in this is much more hoarse than that of the Rook. The Crow feeds on flesh, insects, and grain; but is particularly fond of carrion. It frequently attacks the eyes of dying animals, and destroys weakly lambs; it will also pursue birds on wing when pressed by hunger. We once saw this bird in pursuit of a Pigeon, at which it made several pounces, like a Hawk; but the Pigeon escaped by flying in at the door of a house. We have also seen it strike a Pigeon dead from the top of a barn. It is also a great destroyer of young game and poultry. It is a bold bird, always at war with the lesser species of Hawks; nor does the Kite, the Buzzard, or the Raven approach its nest without being attacked and driven away. Even the Peregrine Falcon is insulted at that

season, who frequently at one pounce brings it to the ground. These birds keep in pairs all the year; seldom congregate but to regale on some carcase, or in winter to roost; will frequently hide their food till hunger is more pressing. The nest is generally placed in the forked branch of a tree; is composed of sticks plastered with earth, on which are laid various soft materials, such as wool and hair. The eggs are four or five in number, of a greenish colour, spotted with dusky and ash-colour; their weight about five drams.

SUPPLEMENT.—It has been said that a pair of these birds made their nest on the vane upon the top of the Exchange at Newcastle, and of course was continually turning as the wind directed. Mr. Bewick states it to be the Rooks that made their nest for many years in that singular situation. In many animals we perceive a strong instinctive impulse that nearly approaches to reason; if it cannot be called reflection, it is a compound instinct, not very remote from mental operation. When we observe an animal eat, we consider it as a simple mechanical action, originating from momentary impulse, occasioned by sensations of hunger, a stimulus of the organs of repletion to support vitality, the first law of all animate beings. If after an animal has satisfied its hunger it seeks a secure place wherein to deposit the remainder for a future demand, it seems to be the effect of some impression nearly allied to reflection, and differing from the former, inasmuch as it bespeaks a forethought, an impression arising from some motive power, distinct from that occasioned by the stimulus of immediate want. But what shall we call that which directs such animals to a degree of discrimination in the choice of a place for the better security of their intended future repast? Surely it is a step beyond instinct, and must be considered as a limited reflection, because no momentary impulse exists. We were naturally led into this train of reflection by observing two Crows by the sea-shore busy in removing some small fish (the refuse of a fisherman's net) from the edge of the flowing tide, and conveying them one by one beyond the usual flux of the tide, or just above high-water mark, and there deposit them under the larger stones or broken rocks, after having most amply satisfied the immediate calls of hunger. The Crow, like the Magpie, is extremely garrulous at the sight of a fox or other small quadruped, and frequently gives information to the sportsman of the track of the hunted animal. It will strike at a hare nearly half grown, and by repeatedly

buffeting make a prey of the exhausted animal. In a summer evening's ramble we observed one of these birds make repeated pounces at something in a field, where the grass was nearly a foot high, and at the same time some animal was seen to erect itself upon the hind legs, and stoutly defend itself. After a contest of some minutes, curiosity prompted to discover what the animal was, and upon nearer approach discovered it to be a young hare. A similar circumstance, but of a very different animal, occurred, in which the Crow met with his match. Taking a morning's ride, several Crows were heard in a neighbouring field to be very clamorous; judging that they had seen something that induced them to give the alarm call, and assemble all their congeners within hearing, we rode to the spot, where we arrived just in time to witness a feat of activity and intrepidity that afforded inexpressible delight. Many and repeated pounces were made at some diminutive animal on the ground, but what, the little grass there was prevented us from seeing: however, in a few minutes a small creature was observed to meet a Crow in its descent, who had been more bold than the rest, and made a nearer approach; and a consequent struggle ensued on the ground, but of short duration. At this crisis we approached, and found that a Weasel had seized a Crow by the neck, and had killed it, but ran from its prey, and took shelter in a neighbouring hedge till we had retreated to some distance, when the little animal returned and dragged the Crow under cover of the bushes. The Carrion Crow and the Rook are both found as far north as Zetland, but are only occasional visitants. The Hooded Crow is common and stationary, as well as the Raven.

Crow, Black-nebbed.—See Crow Carrion.

Crow, Bunting. }
Crow, Dun. } See Crow, Hooded.

Crow, Gor.—See Crow, Carrion.

Crow, Great Corbie.—See Raven.

Crow, Hooded.—[Yarrell, ii. 86; Hewitson, lvi. 224.] *Corvus Cornix*, Lin. Syst. i. p. 156, 5; Gmel. Syst. i. p. 366, 5; Ind. Orn. i. p. 153, 7. *Cornix cinerea*, Raii Syn. p. 39, A. 4; Will. p. 88, t. 18 & 77; Bris. ii. p. 19, 4. La Corneille mantelé, Buf. iii. p. 61, t. 4. Royston Crow, Will. Angl. p. 124, t. 18, 77; Albin. ii. t. 23. Hooded Crow, Br. Zool. i. No. 77; Ib. fol. p. 76, t. D. 1; Arct. Zool. ii. p. 251, D.; Lath. Syn. i. p. 374, 5; Ib. Sup. p. 77;

Lewin, Br. Birds, i. t. 36; Walc. Syn. i. t. 35; Don. Br. Birds, v. t. 117; Pult. Cat. Dorset. p. 5. Provincial: Dun Crow; Scare Crow; Bunting Crow.—This species weighs about twenty-two ounces; length twenty-one inches; bill black, in size and shape like the Carrion Crow; irides dusky. The head, under side of the neck, the point of the breast, wings, and tail are of a glossy bluish black; belly, back, scapulars, and upper side of the neck are of a light ash-colour; legs and claws black. The Hooded Crow visits the southern parts of this kingdom in October, and retires northward to breed in the beginning of April; is found in some parts of Scotland during the summer; and we have received its eggs from Ireland, in some parts of which it continues the whole year. The nest and eggs are similar to those of the Common Crow. In England these birds are principally found near the sea-coast, where the various animal matter thrown up by the tide afford a constant supply of food. It is also seen in considerable abundance upon some of our downs, or in the open champaign parts, where it feeds on grain, worms, and carrion. Ten or a dozen are not unusually seen perched together in the neighbourhood of a dead sheep, patiently watching till the shepherd's dog has filled his paunch, and, retiring to his master's coat, is slunk in deep repose. Like the last species, it attacks the eyes of sickly animals. We have seen it make repeated attacks upon the eyes of weakly sheep, and generally succeed if the animal is incapable of rising. Mr. Pennant informs us this is the only species of genuine Crow in all the Hebrides, Orkneys, and Shetlands, the Carrion and the Rook being unknown there. It is not uncommon in Germany; is also found in Russia and Siberia.

Crow, Market Jew.—See Crow, Red-legged.

Crow, Minden.—See Crow, Carrion.

Crow, Mire.—See Gull, Blackheaded.

Crow, Night.—See Goatsucker.

Crow, Redlegged.—[Yarrell, ii. 58; Hewitson, lvi. 218.] *Corvus graculus*, Lin. Syst. i. p. 158, 18; Gmel. Syst. i. p. 377; Ind. Orn. i. p. 165, 41. Lath. Syn. Sup. ii. p. 115, No. 16; Bewick, Br. Birds, 1, t. p. 80; Shaw, Zool. vii. p. 378. *Coracias*, seu *Pyrrhocorax*, Raii Syn. p. 40, A. 6; Will. p. 86, t. 19; Bris. ii. p. 3, t. 1, f. 1. Le *Coracias*, Buf. iii. p. 1, t. 1. Cornish Chough, Albin. ii. t. 24; Borlas, Cornw. p. 249, t. 24; Will.

Angl. p. 126, t. 19; *Hayes, Br. Birds*, t. 6. Redlegged Crow, *Br. Zool.* i. No. 80, t. 35; *Ib.* fol. p. 83, t. L.; *Lewin, Br. Birds*, i. t. 41; *Lath. Syn.* i. p. 401, 39; *Walc. Syn.* i. t. 40; *Pult. Cat. Dorset*, p. 5. Provincial: Cornish Daw; Cornwall Kae; Killigrew; Chauk; Daw; Market Jew Crow. — This species weighs about fourteen ounces; length near seventeen inches. The bill is longer and more slender than in any of the genus, a little curved, of a deep orange-red, much resembling red coral, and is remarkably brittle; irides hazel. The plumage is wholly black, glossed with purple; legs and feet red; claws black, strong, and much hooked. The female differs in not being so large, and in the bill being shorter; the plumage in both sexes is alike. This bird with us seems to be chiefly confined to Devonshire, Cornwall, and Wales, where it is found on most of the bold rocky shores. It has been seen on the cliffs of Dover, supposed to have escaped from confinement, and stocked those rocks. But we believe the breed in those parts is again lost. Mr. Pennant observes that it is found in some parts of Scotland, and in the Hebrides. It is seldom seen at any great distance from the sea-coast, where it breeds in the rocks and caverns, and not unfrequently in ruined towers. A pair of these birds had for many years bred in the ruins of Crow Castle, in the vale of Llangollen in Denbighshire; by accident one of them was killed, and the other continued to haunt the same place for two or three years, without finding another mate. The nest is composed of sticks, and lined with a great quantity of wool and hair. The eggs are generally five in number, of a dull white, sprinkled with light brown and ash-coloured spots, most at the larger end; their weight about three drams and a half. The note of this bird is somewhat like that of the common Jackdaw, but more shrill. Its food is grain and insects, but in confinement will greedily feed on flesh; becomes extremely tame and docile, active, and crafty; will hide part of its food, and not unfrequently things of value. We are told houses have been set on fire by its carrying away lighted sticks in its bill. Some are said to acquire black legs in autumn. This, however, does not appear to be the case in England. With us they remain all the year, and rarely shift their quarters: in other parts they should seem migratory, as it has been observed in Egypt to attend the inundation of the Nile in the months of September and October; is found also upon the Alps; and is said to be met with in Persia.

SUPPLEMENT. — Is said to be common about all the high rocks of the southern

latitudes of Siberia; also about Mount Caucasus, as well as the mountains of Persia; and that in the first year the bill and legs are black. This circumstance is very extraordinary, and may be attended with some doubt as to the identity of the bird, since the red bill and legs, attained the first year, is with us orange from the nest. We have had one of these birds alive for some years; he is extremely docile, but his mischievous qualities and shrill notes have occasioned his confinement within the walls of the garden. His curiosity is beyond bounds, never failing to examine any thing new to him: if the gardener is pruning, he examines the nail-box, carries off the nails, and scatters the shreds about. Should a ladder be left against the wall, he instantly mounts and goes all round the top of the wall, and, if hungry, descends at a convenient place, and immediately travels to the kitchen window, where he makes an incessant knocking with his bill till he is fed or let in; if the latter, his first endeavour is to get up stairs, and if not interrupted goes as high as he can, and gets into any room in the attic story; but his intention is to get upon the top of the house, for it is the nature of this bird to affect elevated situations. He is excessively fond of being caressed, and would stand quietly by the hour to be smoothed; but resents an affront with violence and effect, by both bill and claws, and will hold so fast by the latter that he is with difficulty disengaged. Is extremely attached to one lady, upon the back of whose chair he will sit for hours; and is particularly fond of making one in a party at breakfast, or in a summer's evening at the tea-table in the shrubbery. It is remarkable that when at liberty he is never observed to go upon the grass by choice, and it requires very strong temptation to induce him to step off the gravel. His natural food is evidently the smallest insects; even the minute species he picks out of the crevices of the walls, and searches for them in summer with great diligence. The common grasshopper is a great dainty, and the fern-chaffer (*Scarabeus horticola*) is another favourite morsel; these are swallowed whole; but if the great-chaffer (*Melolontha*) be given to him, he places it under one foot, pulls it to pieces, and eats it by piece-meal. Worms are wholly rejected, but flesh, raw or dressed, and bread he eats greedily; and sometimes barley with the pheasants, and other granivorous birds occasionally turned into the gardens, and never refuses hempseed. He seldom attempts to hide the remainder of a meal; eats little at a time, and at certain times he appears to

regurgitate like ruminating quadrupedes. Whether this is a part of his last meal that may be in a reservoir under the tongue, as in the Rook, or whether it proceeds from the craw, we have not the means at present to determine; but the act of regurgitation is marked by reiterated motions of the head, like a bird that has something stuck in his bill and wanting to swallow it. When full fed, and he is offered food, it sometimes appears to urge that motion, as if he was trying to find if more could be conveniently taken. With a very considerable share of attachment he is naturally pugnacious, and the hand that the moment before had tendered him food and caresses will repent an attempt to take him up. To children he has an utter aversion, and will scarcely suffer them to enter the garden. Even strangers of any age are challenged vociferously; he approaches all with daring impudence, and so completely does the sight of strangers change his affections for the time, that even his favourites and best benefactors cannot touch him with impunity in these moments of evident displeasure.

Crow, Royston.—See Crow, Hooded.

Crow, Scare.—See Crow, Hooded; and Tern, Black.

Crow, Sea.—See [Auk, Razorbilled]; Corvora; Gull, Skua; and Gull, Black-headed.

Cuckow, or Cuckoo.—A genus of birds, the characters of which are: Bill somewhat arched. Tongue short. Tail composed of ten feathers. Toes, two backward, two forward.

[**Cuckoo, American Yellowbilled.**—*Coccyzus Americanus*, *Yarrell*, ii. 209. — "The beak is as long as the head; both mandibles slightly curved, the upper one brownish black, inclining to yellow at the base; the under mandible yellow, except at the extreme point, which is nearly black; the irides hazel; the top of the head, back of the neck, the back, the wing-coverts, quill-feathers, and the two central tail-feathers, yellowish brown; the inner webs of the primary quill-feathers chestnut; the tail-feathers on each side of the central pair black; the others black, broadly tipped with white; the outer feather white on the external web; the tail graduated; chin, throat, neck in front, breast, belly, and under tail-coverts, greyish white; the flanks and thighs pale brown; legs, toes, and claws, greyish lead-colour. The whole length of the bird is

about twelve inches. From the carpal joint to the end of the wing, five inches and five-eighths; the first quill-feather more than an inch shorter than the second; the second shorter than the third or fourth, but equal to the fifth; the third feather longer than the fourth, and the longest in the wing." — *Yarrell*, ii. 214. Two specimens of this bird have occurred in Ireland—one near Youghal, in the county Cork; the other at Old Connaught, near Bray: one in Cornwall, of the precise locality of which we have no information; and one on the estate of Lord Cawder, in Wales. The species is a native of North America, and only appears here as an accidental straggler.]

Cuckow, Common.—[*Yarrell*, ii. 194; *Hewitson*, lxiii. 251.] *Cuculus canorus*, *Lin. Syst.* i. p. 168, 1; *Gmel. Syst.* i. p. 409; *Raii Syn.* p. 23; *Will.* p. 6, t. 10, 27. *Bris.* iv. p. 105, 1; *Ind. Orn.* i. p. 207, 1; *Phil. Trans.* lxxviii. p. 219 (*Jenner*); *Shaw, Zool. Lect.* i. t. 60; *Bewick, Br. Birds*, i. t. p. 108; *Lath. Syn. Sup.* ii. p. 133; *Coucou, Buf.* vi. p. 305. Common Cuckow, *Br. Zool.* i. No. 82, t. 36; *Ib.* fol. 80, t. G.G. 1; *Arct. Zool.* ii. t. 266, A.; *Will. Angl.* p. 97, t. 10, 77; *Albin*, i. t. 8; *Hayes, Br. Birds*, t. 17, 18; *Lewin, Br. Birds*, ii. t. 42; *Lath. Syn.* ii. p. 509, 1; *Ib. Sup.* p. 98; *Walc. Syn.* i. t. 43; *Don. Br. Birds*, ii. t. 41; *Pult. Cat. Dorset.* p. 5. Provincial: Gowk.—The Common Cuckow is the only British species; it weighs about four ounces and a half; length fourteen inches. The bill is black, yellowish at the base of the under mandible; inside of the mouth red; irides yellow; the head and whole upper part of the bird dark ash-colour; throat, under side of the neck, and upper breast, of a pale ash-colour, the latter in some inclining to rufous-brown; lower breast and belly white, marked with transverse undulated black lines; the quill-feathers are dusky, the inner webs barred with oval white spots; the tail consists of ten feathers of unequal length, the two middle ones black, dashed with ash-colour, and tipped with white; the rest are black, marked with white spots on each side the shaft; in some the lateral feathers have white spots only on their interior webs, but are all tipped with white. The female is rather less, and in general differs from the other sex in the neck and breast being of a tawnyish brown, barred with dusky, and the coverts of the wings marked with light ferruginous spots; the markings on the tail and quill-feathers much like the male, only the edges of the spots are inclining to reddish brown; the legs of both sexes short and yellow. The outer tail-feather

and the first quill-feather are remarkably short. We believe this bird does not entirely throw off its nestling feathers till the second year's moulting; for in three specimens before us, killed the same season (two males and a female), the thirteenth and three succeeding quill-feathers, and the three greater coverts impending them, are barred with brown and ferruginous. This bird comes to us early in the spring, and almost invariably leaves us by the first of July; the females may sometimes remain somewhat later, not having deposited all their eggs. We have killed this sex as late as the twenty-sixth of June, from which we took a matured egg, which weighed forty-four grains, the colour white, sprinkled with two shades of ash-coloured spots, mostly at the larger end. The male generally comes to us earlier, and leaves us again before the other sex. The food of the Cuckow is chiefly insects, particularly caterpillars, or the larvæ of the Lepidopterous insects of all kinds, and not only the smooth sort, as have been imagined, for we have seen the stomach of this bird more than once lined with the hairs of the rougher sort. It is well known this singular bird makes no nest, but deposits its eggs in the nest of some small bird. For the illustration of the natural history of this species we are much indebted to Mr. Jenner, who, in a letter to Mr. John Hunter, published in the 'Transactions of the Royal Society,' has given much light on the subject. We must therefore refer our curious reader to that work; and also to the Introduction to this, where the curious phenomena belonging to this bird are more copiously treated of. It has been asserted that the Cuckow does not leave us till the latter end of September, or beginning of October; but such as are seen so late are the young of that year, or an accidental old one that may have been wounded. We have, indeed, been told it has been heard in winter; and we have known the young killed so late as November; but doubtless these were prevented remigrating by some defect. We have also been told its well-known cry has been heard in the summer at midnight, when the moon has shone, the note of the male; the female makes only a chattering noise. The young Cuckow is not the least like the old birds in plumage; it is brown, mixed with ferruginous and black. The foster-parent of this bird feeds it long after it has left the nest, and in order to receive its nourishment it usually lays down on one side, in order that the small bird may reach its mouth, and frequently extends one wing for the bird to pitch on to perform that office. We have known these birds sur-

vive the winter in confinement, fed on raw meat.

SUPPLEMENT. — The egg of this bird is very little known; even many able ornithologists have mistaken that of some other bird for it. Sepp has fallen into this error, and has figured the egg of the Goatsucker for it. There are some insects and worms that appear to be rejected by most birds. The Thrush most greedily devours the *Limax* of the *Helix nemoralis*, but will not eat a naked *Limax*; this is left for the Duck, which is almost the only bird that will swallow that slimy morsel. Few birds but the Titmice will devour the larvæ of the cabbage Butterflies; and none that we have noticed make a repast on the hairy species of caterpillars but the Cuckow, who is a general devourer of all kinds of Lepidopterous larvæ, more especially the rough sort. It is therefore probable that the early remigration of this bird is the defect of this favourite food, the greater part having by that time enclosed themselves preparatory to a change. Of the many Cuckows we have dissected in the months of May and June, the stomach has always been found to contain more or less of the hairs of caterpillars, and sometimes quite full of them. Many attempts have been made to keep this bird, but it rarely lives beyond the first winter, and most frequently dies in the winter months. We have, however, known one or two instances of its surviving the frigid season, but never more than twelve months; nor could we ever learn that in confinement it acquired its mature plumage and vernal song. A young Cuckow was brought to us in the month of July, just as it could fly, and, by the greatest care and attention of a young lady, kept alive till the 14th of December. It had been two or three times ill of a dysentery, but by giving it chalk and ginger, in small quantities, was recovered. No change in the plumage had taken place when it died. It was extremely choice in its food; nothing appeared to be acceptable as a substitute for insects but raw flesh, and it preferred beef to any other. Flies, when they could be procured, were quite a regale, but its most favourite repast was any species of hairy caterpillars. These it seized with avidity, shook them to death, and softened them by passing them through the bill backward and forward several times, till they were perfectly relaxed and pliant, and then it would swallow whole the largest of the larvæ of the Egger or Drinker moths (*Phalæna quercus* and *potatoria*). It is remarkable that for two months after this bird was captured it never attempted to feed itself by pecking, but, like a nestling

bird, would open its mouth to be fed with raw flesh from the fair hand of its mistress, like one of Bruce's Abyssinian chiefs gorging brind from the hand of the ladies of distinction, and even to the last moment preferred being fed in that manner, rather than be at the trouble of picking up its food. It was always pugnacious, which it shewed by elevating its back, lifting its wings, and striking with the bill; but would suffer to be handled and caressed by the young lady, its kind benefactress, and appeared to like the warmth of her hand to its feet. Of strangers it was extremely fearful, and would flutter against the cage to avoid them. Notwithstanding the feet of the Cuckow appear to be formed for climbing, like those of the Woodpecker, yet it was evident this bird had no such power, but the disposition of the toes gives a very powerful grasp. As the young of the Cuckow differs so materially in the first year's plumage from the adult, it may not be improper to give a description for the information of those who may wish to know the distinction. The irides are greyish: the whole upper part of the plumage is a mixture of dusky black and ferruginous, in transverse bars, except the forehead and a patch on the back of the head, which (in this specimen) is white; and the tips of the scapulars are pale: the feathers of the whole under parts are sullied white, with distant transverse bars of dusky black; in general each feather possesses two or three bars: the sides of the neck and breast tinged with rufous: the lateral feathers of the tail, and the inner webs of the quills, more or less barred with white: the coverts of the tail, which, as well as those on the rump, are unusually long, dashed with cinereous, and slightly tipped with white. In the 'Gentleman's Magazine' for April, 1806, a curious story is related, where it is supposed that the foster parents of the young Cuckow, not being capable of furnishing a sufficient supply of food, call to their assistance the whole race in the neighbourhood. "I have seen" (says this natural historian) "an instance in this neighbourhood of this feathered monster being occasionally fed by upwards of twenty Titlarks." Another relation is that "forty-eight Wagtails were frequently counted; all employed in bringing food to a young Cuckow." Extraordinary as is the circumstance of the parent Cuckow making no provision for its offspring, yet the many and repeated opportunities we have had of attending to the rearing of young Cuckows by its foster parents alone, will not allow us to add the above phenomenon to its history. It is true the Wagtail and Titlark will frequently assemble about

a young and helpless Cuckow, but it is to insult him by loud vociferations, mistaking him for a Hawk; and thus by notes of alarm assemble all their tribe within call, as Swallows do when a bird of prey appears. [In the 'Zoologist' are many interesting records respecting the Cuckoo, indeed so many that I am compelled to dismiss them in a very summary manner. In the volume for 1843, at page 352, is a notice of a young Cuckoo being found in the nest of a Reed Warbler (*Sylvia arundinacea*): some of the eggs of this bird were found lying among the coarse herbage beneath the nest. Several instances are recorded of young Cuckoos being brought up tame from the nest. In the volume for 1844, p. 655, is a record by Miss Barclay of a Cuckoo kept in confinement during the winter: this highly interesting communication is as follows:— "We have in our possession a Cuckoo taken from the nest of a Wagtail last summer. When first brought to us it was in the beautiful plumage of the young bird; but being unavoidably confined in a small cage for a few weeks, the tail and wing-feathers were much shattered, and they have never since been sufficiently renewed to restore its powers of flight. A few ash-coloured feathers, such as characterize the adult bird, are now beginning to show themselves on the neck and back. Though fully fledged when we obtained it, it was a very helpless creature, and its clamorous cries could only be pacified by frequent meals of egg, boiled hard, small pieces of raw meat, and bread and milk. It would sit on the perch, throwing its head back, with its wide orange-coloured beak open, and its wings quivering, awaiting each mouthful to be put down its throat with a quill; yet he soon became expert in catching his food, if dropped over his head. He now feeds like any other bird, from a saucer placed in his cage, and also devours with avidity small worms, caterpillars, spiders, &c., beating the larger ones from side to side, while holding them in his beak, before he swallows them. As the cold weather came on we found him very sensitive to the change of temperature, and when allowed to hop about the room he usually found his way to the fender, where, with wings extended and head erect, he delighted to bask before the fire. At night he was placed in a basket covered with baize. The winter being mild was probably much in his favour, for when the weather was frosty he would sit the chief part of the day moping on his perch, which we covered with list to increase the warmth to his feet. The return of spring has now enlivened him again, and his favourite

position is in a window exposed to the full warmth of the sun. In his habits he is very bold, never showing any signs of fear, but seems incapable of affection, throwing himself into an attitude of defence, and fiercely pecking at any one who attempts to touch him. His disposition is unsociable, and when a tame dove alights near him he utters an angry chattering note, and will not rest until he has driven the intruder away. This expression of displeasure is his only note, excepting on three or four occasions, when he has been heard to utter a loud sound like the sharp bark of a little dog." In the volume for 1846, at p. 1394, is another note on the same subject, by Mr. Streatfield: in this instance the young Cuckoo was found in a Titlark's nest, and was so voracious that in one day it ate sixty-five butterflies and the whole of a boiled hen's egg. In the volume for 1860, at p. 7104, is a third anecdote of the same kind, from the pen of the Rev. Arthur Hussey, as follows:—"I am enabled to give the biography, unluckily but a short one, of a Cuckoo which was taken late last summer from the nest of a Greenfinch, and came into possession of a shoemaker's wife, a great petter of birds, in the village of Staverton, Northamptonshire. I first heard of the bird early in January, from a lady, my sister, who had seen it a few days previously. It was fed upon meat and eggs, was brought up, unconfined, in the living-room of the cottage, where it perched as near the fire as practicable, and was as tame as a cat, one or two of which animals were its companions and playfellows. The night was passed in a box covered up, close to the fire-place. When the Cuckoo was visited by my informant it appeared like a young bird not fully fledged, but its mistress stated it to be then moulting, and that it had been well feathered some time before. That the Cuckoo had survived the severe cold of last December was a circumstance to afford some hope of preserving it through an English winter, though, on the other hand, the fact of its moulting during that season was unfavourable to such a prospect. However, the bird lived some time longer, but I heard a few weeks ago that it had died (appropriately?) on the 1st of April, so that this experiment to acclimatize a Cuckoo, if promising at the commencement, has not succeeded better than others." In the volume for 1847, at 1638, is a record by Mr. Slater that he watched a pair of Titlarks throw their own young out of the nest in which a young Cuckoo had been hatched. Many naturalists have noticed the fact of small birds attending on the Cuckoo; the first of these is recorded in

the volume for 1849, at p. 2589; in this instance the attendant bird was a Titlark, and when the Cuckoo was shot the Titlark came and settled on its body. The question how the parent Cuckoo conveyed its egg to the nest of another bird has often been discussed, and has been definitely settled at p. 3145, by Mr. Harper, of Norwich, who writes thus:—"On the morning of the 14th of April I was out shooting with a friend, for the purpose of obtaining specimens in Ornithology, and having arrived at the point of the river called the Alder Carr, situated midway between Norwich and Thorpe, I heard from an adjoining tree the well-known note of a Cuckoo, which I observed perched at a distance of twenty yards. I was about to fire, when over my head sailed another, with something between its mandibles. My curiosity was excited, and, leaving the other to speed on its way, I followed in a boat the flying Cuckoo, which I saw alight in an adjoining meadow. I reached the bird within twenty yards, and observed it in the act of progressing, in a similar way to the crawling of a Parrot, by the side of a drain, with the substance still in its beak; after traversing some distance it stopped short, and at the same time I fired. Upon nearing it I found the substance before mentioned to be its egg, I am sorry to say broken, but still quite satisfactory to me that such was the case. Upon dissection I found the cloaca contained another egg of nearly the same size, but without the calcareous envelope. I think in all probability this bird was searching for a nest, perhaps that of the Meadow Pipit (*Anthus pratensis*), for the depositing of its egg." Instances of the Cuckoo singing by night have been recorded over and over again in the 'Zoologist' and other periodicals; the circumstance is by no means uncommon, but the records must be received with caution: the facility with which this favourite call-note is imitated induces many a youngster to repeat it at all seasons of the year.]

[Cuckoo, Great Spotted. — *Cuculus glandarius*, *Yarrell*, ii. 205.—"The adult male bird has the beak bluish black; the irides yellow; the head and cheeks dark ash-colour; the feathers on the top and back of the head considerably elongated, forming a conspicuous crest; the back, scapulars, wing-coverts, rump, and upper tail-coverts, greyish black; most of the wing-feathers, wing and tail-coverts, with more or less white at the end; the tail-feathers graduated, the two in the centre brown, the outer feathers darker, but all are tipped with white; throat and chest red-

dish white; abdomen, under wing and under tail-coverts, pure white; legs, toes, and claws bluish black. The whole length of a specimen in the Museum of the Zoological Society is fifteen and a half inches, of which the middle tail-feathers alone measure eight inches, the outer tail-feather but four inches and three-quarters; wing from the anterior bend eight inches; the fourth primary the longest in the wing. Considerable differences are observed in the plumage of this species, depending upon age. Mr. Gould says the plumage of middle age differs from that of the adult in having the head and crest of a much darker colour, and the whole of the upper surface more inclining to reddish brown, with slight reflections of green; the primaries are rufous, tinged with greenish brown towards the points, which are pure white; the throat and chest are light reddish brown; the under surface as in the adult male."—*Yarrell*, ii. 208. Two instances only of the occurrence of this bird in the British Islands are recorded—the first in the 'Annals of Natural History,' at Clifden, on the west coast of Ireland; the second in the 'Zoologist' for 1851, at p. 3046, near Stackpole Court, in Pembroke-shire. Mr. James Teary, who makes the communication, says, "I first noticed it on the top of an ash tree, in the act of feeding on some small insects on the wing." This was the specimen figured by Mr. Yarrell, who gives a somewhat different habitat. This bird is a native of North Africa. All that we know of its propagation is given in the 'Zoologist' for 1853, at p. 3987:—"On the 2nd of March, last year, I for some time attentively watched the motions of a Greater Spotted Cuckoo in a garden near Thebes, in Upper Egypt. At last I saw it slip into a large nest, placed upon a rather low *Salicaria* tree. After rather more than a quarter of an hour, out it flew again, and straightway departed from the garden. I climbed up to the nest, and found it to belong to the Egyptian *Corvus Cornix*, and containing altogether six eggs. One of the Crow's eggs had been recently broken. Among them I at once recognized two smaller eggs, belonging to some other bird, but nearly resembling those of a Crow in size and colour. When I arrived at the boat I perceived that these agreed well with the pieces of the egg extracted from the oviduct of the female Cuckoo before mentioned; and at the same time, in this respect, they confirmed the observations of Herr Pffarr Baldamus, namely, that the egg of the Cuckoo (speaking of *Cuculus canorus*) is always of the colour of the eggs of the nest in which the parasite lays her own; for the eggs of the Greater Spotted Cuckoo

were quite the same in colour, though not in size, as those of the Crow. They were like the eggs of our Magpie, only more rounded and not quite so long. This discovery would have been quite sufficient to settle the question of the mode of reproduction of this Cuckoo, but on the 12th of March it was still further confirmed. In one of the village gardens, thickly planted with trees, as is particularly the case in Egypt, I was summoned to the chase by the clear-sounding, but at the same time inharmonious, cry of an old Cuckoo,—"kiekkiek, kiek-kiek." I obtained both the old birds, and soon found a young one also, which was being fed and provided for by Hooded Crows. After this I began to ascend to all the Crows' nests, and in one of them, in the before-mentioned wood near Siut, was really so fortunate as to find another Cuckoo's egg on the 19th of March."—*A. C. Brehm*; translated by *P. L. Sclater*.]

[Cuckoo's Mate.—See Wryneck.]

Cuddy.—See Gallinule, Common.

[Cuneate-tailed Gull.—See Gull, Cuneate-tailed.]

Curlew.—A genus of birds, the characters of which are: Bill long, incurvated. Face covered with feathers. Nostrils linear. Tongue short, sharp-pointed. Toes connected, as far as the first joint, by a membrane.

Curlew, Brazilian.—SUPPLEMENT.—This bird, the *Scolopax Gaurauna* of Linnaeus, *Numenius Gaurauna* (Brazilian Whimbrel) of Latham, is said to have been taken in England. In the seventeenth volume of the 'Naturalist's Miscellany' there is a figure given entitled Brazilian Curlew, which was shot in Anglesea, about the end of September, 1806; and is said to be preserved in the collection of Miss Hester Meyrick, of Beaumaris. Whatever may have been the opinion of those who first examined the bird in question, which perhaps was in a putrid state, as was the case when it came to the hands of the lady above mentioned, there is certainly nothing in the figure that can warrant an opinion that it can possibly represent the brown bird which the Brazilian Whimbrel is generally described to be; nor has it any of the white markings on the neck, and other characters that distinguish that species. The author of the 'Miscellany' very justly remarks, "that it cannot escape the attention of every naturalist that, excepting in the generic particular of the naked front, this bird bears a very striking

general resemblance, both in size and colour, to the *Tantalus igneus* and *Tantalus Falcinellus*, the former of which has been occasionally observed in this country." It must, however, be observed that the generic distinction between the Ibis and Curlew is but obscure in some species, for the very small bare space between the eye and the bill, in the *Tantalus igneus*, might readily be overlooked, especially as it is of a dark colour, like the surrounding feathers; in two specimens now before us it is scarcely obvious through the glass of the cases. From the description we have been favoured with from Miss Meyrick (who says that the bird came to her in so putrid a state that the circumstance of the bare space was not observable, and that the hind toe was long as represented in the figure referred to), not a doubt exists in our mind that it was that variety of *Tantalus igneus* called the Green Ibis, hereafter described. It is remarkable that where characters were so much wanting to designate the two genera of *Tantalus* and *Numenius* (for the latter is certainly distinct from *Scolopax*, though blended by Linnæus), that the length and situation of the hind toe should not have occurred; Linnæus himself overlooked this character, which appears so materially to separate the *Tantalus* from either the *Numenius*, *Scolopax*, or *Tringa*, all of which have a short hind toe, not situated at the heel so as to tread flat upon, but placed higher, and in general scarcely bearing more than the claw upon the ground. On the contrary, the *Tantalus* has a long hind toe affixed to the heel; a complete continuation of the foot for bearing on the ground its whole length, in order to support the body. As a professor of British Zoology, we trust (as we are now writing professedly on the subject of British birds) that what we have said will be taken in good part by those who may differ in opinion with us, being all equally liable to error. It is our duty to discover, as far as we are able, what really belongs to the natural history of the empire, and to express our doubts, where such exist upon reasonable grounds.

Curlew, Common.—[*Yarrell*, ii. 610; *Hewitson*, lxxxvii. 322.] *Scolopax Arquata*, *Lin. Syst.* i. p. 242; *Gmel. Syst.* ii. p. 655. *Numenius Arquata*, *Ind. Orn.* ii. p. 710, 1; *Bewick, Br. Birds*, 11, t. p. 54; *Shaw, Zool. Lect.* 1, t. 77. *Numenius*, *Raii Syn.* p. 103, A. 1; *Will.* p. 216, t. 54; *Bris.* v. p. 311, 1; *Ib.* 8vo, ii. p. 289. Le Courlis, *Buf.* viii. p. 19. Common Curlew, *Br. Zool.* ii. No. 176, t. 63; *Ib.* fol. 118; *Arct. Zool.* p. 462, A.; *Will. Angl.* p. 294, t. 54; *Albin.* i. t. 79; *Lath. Syn.* v. p. 119, 1;

Ib. Sup. p. 242; *Pult. Cat. Dorset.* p. 14; *Walc. Syn.* ii. t. 133; *Lewin, Br. Birds*, iv. t. 153. Provincial: Whaap, or Stock-Whaap.—This species is subject to vary considerably in size, weighing from twenty to upwards of thirty ounces; the length of the largest about twenty-five inches. The bill is from six to seven inches long, dusky black; irides hazel. The head, neck, scapulars, and coverts of the wings, pale brown, each feather black in the middle, and lightest at the edges; breast and belly white, marked with oblong black spots; lower part of the back white, with a few dusky spots; the tail and its upper coverts barred with yellowish white and black; quills black, spotted on the inner webs with white; the legs are long, of a bluish grey colour. Male and female much alike. The Curlew is common on most parts of our coast in winter, where it feeds on small crabs and other marine insects, and worms. At this season it is gregarious. In the spring these birds retire inland, and most commonly to the more northern parts of this kingdom, to breed. For this purpose the most retired situation is resorted to, either on the mountains amongst the heath, or in the extensive, unfrequented marshes. We have taken the young on the mountains in Northumberland, and in the low, swampy grounds in the isle of Mull in Scotland. It makes no nest, but deposits its eggs amongst the heath, rushes, or long grass, generally four in number, of a pale olive colour, marked with brownish spots. The young make use of their legs as soon as they are hatched, but cannot fly for a considerable time.

SUPPLEMENT.—There are not many of the shore birds, or such as inhabit the margins of waters, but what are capable in some degree of contending with that element if necessity requires; some can not only swim, but dive; a circumstance not unusual in the common sandpiper. But it must be confessed we were surprised to observe a domesticated Curlew flirt into a pond and swim across with great ease, and by no means as if alarmed. This we have repeatedly observed when he was driven, but he never took to the water by choice. It is reasonable to conclude that all the waders, or such as pick up their sustenance on the borders of water, can, under certain circumstances, partake of the nature of aquatics. The Curlew in his natural state is so remarkably shy, that he is with difficulty approached; but, like other birds wholly dependent for their daily subsistence, soon becomes docile. One that was shot in the wing, was turned amongst aquatic birds, and was at first so extremely shy that he was obliged to be crammed

with meat for a day or two, when he began to eat worms; but as this was precarious food, he was tempted to eat bread and milk like Ruffs. To induce this substitution, worms were put into a mess of bread mixed with milk, and it was curious to observe how cautiously he avoided the mixture, by carrying every worm to the pond, and well washing it previously to swallowing. In the course of a few days this new diet did not appear unpalatable to him, and in little more than a week he became partial to it, and from being exceedingly poor and emaciated, got plump and in high health. In the course of a month or six weeks this bird became excessively tame, and would follow a person across the menagerie for a bit of bread, or a small fish, of which he was remarkably fond. But he became almost omnivorous; fish, water-lizards, small frogs, insects of every kind that were not too large to swallow, and (in defect of other food) barley with the ducks was not rejected. This very great favourite was at last killed by a rat (as it was suspected), after a short life of two years in confinement; but he had in that time fully satisfied our enquiries into his natural habits. The bill of this bird is stronger than that of the Snipe, or Woodcock, and therefore can be inserted into harder ground, and by being slightly arcuated can sometimes be insinuated where a straight bill could not. By this useful instrument he also defends himself with courage, as we had frequent occasion to observe ours contend for food with the Shieldrakes, and even with the common Gull; keeping his antagonist at a distance by the length of this weapon. Few of this species breed in the southern parts of England, but we are informed that upon the higher hills of Exmoor it usually appears in the spring, and deposits its eggs amongst the heath.

[Curlew, Esquimaux; or Curlew, Small.—*Numenius borealis*, *Yarrell*, ii. 620.—“The bill is brownish black, the basal portion of the lower mandible flesh-coloured; irides dark brown; sides of the head yellowish brown, with brown streaks; upper part of the head brownish black, edged with reddish brown; neck considerably lighter, edged with dull white; upper parts blackish brown, with light edges; primary quills dusky brown, the shafts of the first four white, the others becoming darker, passing into pale brown; secondaries lighter; rump dark brown, with light edges; upper tail-coverts barred with dark and light shades; tail, of twelve feathers, ash-grey, with dark brown bars, edged and tipped with brownish white; throat and a streak over the eye nearly

white; foreneck light brown, with small longitudinal liver-brown markings; under wing-coverts chestnut, with irregular brown markings; breast and abdomen yellowish grey, tinged with brown; tarsi and feet dark green. The whole length is about fourteen inches; the bill two inches three lines; wing, from anterior bend, eight inches nine lines; tarsus one inch ten lines; middle toe almost one inch.”—*Yarrell*, ii. 623. A specimen of this American bird was shot in 1855 near Aberdeen.]

Curlew, Jack, or Half Curlew.—See Whimbrel.

Curlew, Knot.—See Whimbrel.

Curlew, Land.—See Bustard, Thick-kneed.

Curlew, Pigmy.—[Curlew Sandpiper, *Tringa subarquata*, *Yarrell*, iii. 50; *Hewitson*, lxii. 243.] *Scolopax pygmæa*, *Gmel. Syst.* ii. p. 655. *Numenius pygmæus*, *Ind. Orn.* ii. p. 713, 11; *Ib. Sup.* p. 291, nota o; *Gen. of Birds*, p. 64, t. 11; *Boys, Sandwich*, t. p. 850; *Walc. Syn.* ii. t. 135; *Lewin, Br. Birds*, iv. t. 155.—This species is described to be the size of a Lark; weight near two ounces; length eight inches and a half; the bill one inch and a half long, bent and black; the head, back, and coverts of the wings, mixed with brown, ferruginous, and white; primaries dusky, edged with white; breast, belly, and rump white; tail dusky; the exterior feathers edged with white; legs black. This is a very rare bird; only two seem to appear on record; one was killed in Holland, the other near Sandwich in Kent. In this specimen the edges of all the feathers were of a very pale oker instead of white, as Dr. Latham informs us, from whose works we have borrowed this description.

SUPPLEMENT.—A specimen of this very rare bird has been shot in England within these few years, and is now in the collection of Mr. Bullock, the proprietor of the Liverpool Museum. This bird does not appear to have any more claim to a place amongst the Curlews, than many others of the genus to which it properly belongs, for it is most certainly a *Tringa* and not a *Numenius*. The slight arcuation of the bill had doubtless attracted the particular attention of the original discoverer of the bird in question; but on this account no real grounds existed for separating it from the Sandpipers, which appear to be its true congeners. The Dunlin, the Purre, and the Purple Sandpiper, all have their bills slightly deflected, and perhaps fully as much as this bird,

in proportion to the length of that part. We might with as much propriety place some of the Godwits with the Avoset, for a similar reason that their bills reflect. This bird should therefore be removed to the genus *Tringa*, and, in order to prevent confusion, should retain its trivial name *pygmæa*. The comparative size which was originally given to this bird is by no means sufficiently large, nor corresponding with its superior weight to that of a Lark. It is rather superior in size to either the Dunlin or the Purre, and approaches so very nearly to the latter in one change of its plumage, that were it not for some trifling variation, and a little difference in the bill and legs, they might easily be confounded by a more than ordinary Ornithologist. Indeed so very nearly do these two birds approach each other, that, although we have no doubt of their distinction, it may be useful to particularize in what they essentially differ, in order that this species may be identified, and prevent that confusion which has probably so long existed, and lead to a more perfect knowledge of a bird that may be only considered as rare from its obscurity, caused by its great similarity to so plentiful a species as the Purre. The specimen from which the original description was taken, and the figure given in Mr. Boys's 'History of Sandwich,' is now before us. The most obvious distinction between it and the Purre, as permanent characters, consists in the superior slenderness of the bill and the legs, as well as in the length of the latter. A remarkable distinction is also observable in the thigh, which in this is bare of feathers for half an inch above the knee, whereas in the Purre that part is clothed to very near the knee joint. The plumage of the head and neck is more inclined to rufous-brown, and the breast is destitute of the dusky streaks on the shafts of the feathers observable in the Purre: the belly and sides are not of that pure white, and are wholly destitute of those minute spots so common on the sides of the Purre: the feathers on the back and scapulars of this specimen of *pygmæa* are margined with rufous-white;

but as these pale margins are frequent in young birds, and not in adults, it may not be permanent: the lower part of the rump and coverts of the tail are immaculate white: the tail is not so cuneiform as in the Purre, although the feathers are of a similar cinereous colour: in the wings there is scarcely a distinction between the two birds in their closed state. [This bird is now generally placed in the genus *Tringa*, and is usually called the Curlew Sandpiper: it is by no means of so uncommon occurrence as Colonel Montagu supposed; it has occurred nearly all round the coast of England, from Cumberland and Northumberland in the North to Hampshire, Sussex and Kent in the South. Mr. Thompson says it is a regular autumnal migrant in the North of Ireland.]

[Curlew Sandpiper.—See Curlew, Pigmy.]

Curlew, Stone. — See Bustard, Thick-kneed; and Whimbrel.

Curlew, *Tringa*.—See Curlew, Pigmy.

Cursorius. — SUPPLEMENT. — The *Cursorius* is now generally considered as distinct from the Plover genus, of which there are but two known species; the characters are: Bill round, incurvated near the end, and pointed. Mouth large. Nostrils ovate. Tongue sharp. Legs and feet formed for running; toes three, placed forwards; no back toe.

Cursorius Europæus. — SUPPLEMENT. — Plover, Cream-coloured, *Orn. Dict.* — We are assured by Mr. Dickinson that a specimen of this very rare bird was shot in North Wales, in the year 1793, by Mr. George Kingstone, of Queen's College, Oxford, a very accurate Ornithologist: the bird was preserved in the collection of the late Professor Sibthorp. [See Plover, Creamcoloured.]

Curwillet.—See Sanderling.

Cushat.—See Dove, Ring.

D.

Dab-Chick.—See Grebe, Little.

Daker-Hen.—See Gallinule Crake.

[Dalmatian *Regulus*.—See Wren, Dalmatian.]

[Dartford Warbler.—See Warbler, Dartford.]

Daw.—See Jackdaw.

Deviling.—See Swift.

Didapper.—See Grebe, Little.

Dipper.—See Ouzel, Water.

Dirten-Allan.—See Gull, Arctic.

Diver.—A genus of birds, the characters of which are: Bill strong, strait, pointed; upper mandible the longest, edges of each bending inwards. Nostrils linear, the upper part divided by a small cutaneous appendage. Tongue long and pointed, serrated on each side near the base. Legs thin and flat. Toes four in number, the exterior longest; the back toe small, joined to the inner one by a small membrane. Tail short; consists of twenty feathers, or more.

Diver, Black.—See Scoter; and Duck, Velvet.

Diver, Blackthroated.—[Yarrell, iii. 437; Hewitson, cxxiii. 451.] *Colymbus arcticus*, *Lin. Syst.* i. p. 221, 4; *Gmel. Syst.* ii. p. 587; *Ind. Orn.* ii. p. 800, 4; *Raii Syn.* p. 125, 7; *Will.* p. 259, t. 62; *Ib. Angl.* p. 343, t. 62. *Mergus gutture nigro*, *Bris.* vi. p. 115, 4; *Ib. 8vo.* ii. p. 391. Lumme, *Buf.* viii. p. 262. Blackthroated Diver, *Br. Zool.* ii. No. 241, t. 85, f. 2; *Arct. Zool.* ii. No. 444; *Edw.* t. 146; *Lath. Syn.* vi. p. 343, 4; *Lewin, Br. Birds.* vi. t. 229. Provincial: Northern Ducker; Speckled Loon.—The length of this species is two feet. Bill near two inches long, slender, black. The fore part of the head and throat black; hind part of the head and neck ash-colour; sides of the neck white, spotted black; on the fore part of the neck a large patch of black, changeable to purple and green in different lights; the back and upper parts black; scapulars marked with square spots of white; wing-coverts with round spots; breast and belly white; quills dusky; tail short and black; legs black, with a reddish cast on the inside. This bird is rarely found in England, but is not uncommon in the northern parts of Europe; said to inhabit the lakes of Siberia, especially those of the arctic regions, as well as North America, particularly Hudson's Bay. In some countries the skin is used for various sorts of clothing, and other purposes, being warm and exceedingly tough, which is common to all the genus. [The Lesser Imber of Bewick is the young of this species.]

Diver, Dun.—See Dun Diver.

Diver, Dun, Lesser.—See Merganser, Red-breasted.

[**Diver, Great Northern.**—See Diver, Northern.]

Diver, Greatest Speckled.—See Diver, Northern; and Diver, Speckled.

Diver, Imber.—*Colymbus Immer*, *Lin.*

Syst. i. p. 222, 6; *Gmel. Syst.* ii. p. 588; *Ind. Orn.* ii. p. 800, 2. *Colymbus maximus Gesneri*, *Raii Syn.* p. 126, 8; *Will.* p. 260, III. *Mergus major*, *Bris.* vi. p. 105, 1, t. 10, f. 1; *Ib. 8vo.* ii. p. 389. Le grand Plongeon, *Buf.* viii. p. 251. Ember Goose, *Sibb. Scot.* 21. Imber Diver, *Br. Zool.* ii. No. 238, t. 84; *Arct. Zool.* ii. No. 440; *Will. Angl.* p. 342; *Lath. Syn.* vi. p. 340, 2; *Pult. Cat. Dorset.* p. 17; *Walc. Syn.* i. t. 99; *Don. Br. Birds.* iv. t. 99; *Lewin, Br. Birds.* vi. t. 227. Great Ducker or Ember Goose, *Bewick*, 11, p. 185. Lesser Imber, *Bewick*, p. 187. Provincial: Imber; Greater Ducker; Cobble.—This species is less than the Northern Diver; it measures two feet in length. The bill is four inches long, of a dusky brown colour. The top of the head and back part of the neck brown; the forehead, sides of the neck, and cheeks, speckled with brown; the feathers on the back and wings are brown, with paler margins; the throat and upper part of the neck before are spotted black and white; the quills and tail brown, in some dusky black, the last edged with white; the whole under parts are white, with a little brown about the vent; legs dusky. The female is less bright in colour above, and dusky white beneath; the neck scarcely speckled at all. This is rather a scarce species in the south of England, but is sometimes met with in severe winters. It is more common in Scotland, and in the sea about the Orkneys; is found also in most parts of the north of Europe; said to inhabit Switzerland, particularly the lake Constance, where it is known by the name of Fluder. It makes a nest on the water, placed amongst the reeds and flags. It feeds on fish, after which it dives with great celerity, and is sometimes taken under water by a baited hook.

SUPPLEMENT.—Mr. Bewick, not being aware of the circumstance of this species varying so much in size, has given the female as a distinct species, under the title of Lesser Imber. We have both sexes of the Imber now before us, between which there is a very material difference in size, but little in plumage. The female is but a trifle larger than the Lesser Imber of Bewick, and in the plumage well accords. This bird (in excellent condition) weighed four pounds ten ounces; length two feet three inches, breadth three feet ten. The male weighed six pounds eight ounces; length two feet seven inches and a half; breadth four feet seven inches. In point of colour of the plumage there is very little difference, and as they are both recent and in high feather, a full description of the female will serve for comparison. Bill three inches

and a half long from the apex to the gape, of a bluish gray, dusky on the ridge; the upper mandible bending a trifle downwards, and longer than the under; irides yellowish hazel; the upper part of the head, and upper neck behind, cinereous-brown, but the brown predominates most on the latter; sides of the head, and sides of the neck, white, minutely speckled with cinereous-brown; the feathers on the lower part of the neck behind, back, scapulars, and all the wing-coverts except the largest row, black, deeply bordered with cinereous-grey: rump the same, but slightly margined: the whole under parts from chin to tail pure white, except a few grey feathers about the vent: the quills are dusky black, the primaries pale on the inner web; secondaries white on the margin of these webs quite to the tips, the whole more or less white at the base: the first row of larger coverts similar to the quills, without any white: the tail consists of eighteen black feathers, slightly tipped with white: legs dusky on the outside, bluish gray within and on the edges: inner toes like the inside of the leg, the exterior one corresponds in colour with the outside; the middle of the webs paler than that part nearest the toes. Mr. Bewick describes the female Imber to be of a dull brown on the upper parts, and dull white beneath. Such are probably young birds not arrived at full plumage. The Imber is by no means a common bird in the southern parts of England. The whole tribe are great devourers of fish, but they are incapable of swallowing such as the Corvorant gorges with ease; sprats, smelts, atherines, and others of similar size, it takes in great abundance; and they are frequently observed to attend shoals of such fishes. In one specimen of the Imber we dissected, there was an abundance of spotted gobies in the stomach. [This bird is the Northern Diver in immature plumage. See Diver, Northern.]

Diver, Lesser-toothed.—See Merganser, Redbreasted.

Diver, Little Black and White.—See Auk, Little.

Diver, Lough. }
Diver, Magpie. } See Smew.

Diver, Northern.—[Yarrell, iii. 428; Hewitson, cxxii. 449.] *Colymbus glacialis*, Lin. Syst. i. p. 221, 5; Gmel. Syst. ii. p. 588; Ind. Orn. ii. p. 799, 1. *Colymbus maximus caudatus*, Raii Syn. p. 125, A. 4; Will. p. 259. *Mergus major nævius*, Bris. vi. p. 120, 6, t. 11, f. 2. *Mergus nævius*, Bris.

vi. p. 118, 5; Ib. 8vo, ii. p. 392—391. L'Imbrim, Buf. viii. p. 258, t. 22. Greatest-speckled Diver, or Loon, Will. Angl. p. 341; Albin. iii. t. 93. Northern Diver, Br. Zool. ii. No. 327, t. 84; Ib. fol. 139, t. K. 2; Arct. Zool. ii. No. 439; Don. Br. Birds. iii. t. 58; Lath. Syn. vi. p. 337, 1; Pult. Cat. Dorset. p. 17; Walc. Syn. i. t. 90. Lewin. Br. Birds, vi. t. 226.—This species is the largest of the genus, sometimes weighing as much as fifteen or sixteen pounds; length near three feet and a half. The bill is black, four inches and a half long; irides purplish; the head and neck deep velvety black; on the throat are several parallel white lines, formed of raised feathers; on each side the neck a large portion of the same, almost uniting behind and before; the sides of the breast streaked with black and white lines; the back, scapulars, and wing-coverts are black, marked with white spots in a most elegant manner; those on the back and rump are small and round, the others are large and of a square form, disposed in rows; the quills and tail are black; the breast and under parts of the body white, with a few black streaks under the wings; legs black. The female is not so large, and the white markings on the neck are less distinct. The variation which has been observed in the plumage of these birds has very justly been considered to be owing to its not arriving at perfection till the second, or perhaps the third year. The Northern Diver is rarely met with in the southern parts of England. It seldom leaves the water; but instances are recorded of its having been taken alive on land. In the spring of the year 1797 one of these birds was taken near Penzance in Cornwall, at some distance from water. It appeared incapable of raising itself from the ground; it did not seem to have any defect, as it lived for six weeks in a pond, and was supplied with fish; but for want of a sufficient quantity was starved, as was apparent when we dissected it for preservation. It is not uncommon in Iceland and Greenland, where it breeds in the fresh waters, and is said to lay two large eggs, of a pale brown colour, in the month of June. Is plentiful in Norway, and some parts of Russia. In the latter country, as well as in some others, the skin is dressed and used for various sorts of clothing. It is tough, and well covered with soft down.

APPENDIX.—It should appear that the size of this species has been commonly exaggerated, or they must vary very materially, since those which have come under our examination did not exceed ten pounds, and an old or matured male measured only two feet eight inches. A young female, before the plumage was perfected,

weighed eight pounds six ounces, and measured two feet seven inches in length. This young female, killed in January, has the upper part of the head, back, and sides of the neck dusky black; back and scapulars black, obscurely marked with cinereous spots; in a few places the matured feathers appear on the scapulars of a deeper glossy black, marked with the clear white quadrangular spots as in the adult: the coverts of the wings, rump, and upper part of the thighs black, with numerous small, pure white spots: the sides of the lower neck and breast, continuing along the sides of the body under the wings, streaked black and white: the whole under parts of the bird, from chin to vent, white: the tail is short and rounded, consisting of twenty black feathers tipped with white. From this immature specimen we obtain the knowledge of the primary plumage, which is essential, because, with so little of the character of the adult, the bird might have been mistaken for some other species, had not the few square spots of white on the scapulars betrayed its title. A Northern Diver, taken alive, was kept in a pond for some months, which gave us an opportunity of attending to its manners. In a few days it became extremely docile, would come, at the call, from one side of the pond to the other, and would take food from the hand. The bird had received an injury in the head, which had deprived one eye of its sight, and the other was a little impaired, but, notwithstanding, it could, by incessantly diving, discover all the fish that was thrown into the pond. In defect of fish it would eat flesh. It is observable that the legs of this bird are so constructed and situated as to render it incapable of walking upon them. This is probably the case with all the Divers, as well as the Grebes. When this bird quitted the water it shoved its body along upon the ground like a Seal, by jerks, rubbing the breast against the ground; and returned again to the water in a similar manner. In swimming and diving, the legs only are used, and not the wings, as in the Guillemot and Auk tribes; and by their situation so far behind, and their little deviation from the line of the body, it is enabled to propel itself in the water with great velocity in a straight line, as well as turn with astonishing quickness. The thighs of the *Colymbus*, as well as of the *Podiceps*, are so closely connected with the body as scarcely to admit of any motion, and cannot be brought sufficiently forwards to enable them to walk; the principal action, therefore, is in the tarsi and phalanges, or those parts usually called the leg and foot. At the joint which connects the tibia to the femora, or

thigh-bone, there is a process at the head of the bone of considerable length, which, being firmly united with the side of the body, allows of very little motion in either of those joints; indeed the tibia is united to the body its whole length, so that the leg has scarcely any motion but at the part usually called the knee. The conformation of these bones in the *Colymbi* is most curious; the femoral joint, or bone of the thigh, is remarkably short, and stands at right angles with the body; upon this joint the tibia has a sub-rotary motion, which gives a very considerable turn of the foot, and enables the bird to steer its course with great ease and celerity under water, by the simple action of turning the foot more or less outwards. Ducks and most other aquatic birds throw out one leg and foot when they require to turn in the water; whereas the Divers derive the same advantage by a turn of the foot only. The Speckled Diver (*Colymbus stellatus*) we have also had alive, and found it to be as incapable of walking, and the whole of its structure is precisely the same as *Colymbus glacialis*. The cry of both these birds varies from a high pitch to a deep croak.

Diver, Redthroated. — [Yarrell, iii. 444; Hewitson, cxxiii. 453.] *Colymbus septentrionalis*, *Lin. Syst.* i. p. 220, 3; *Gmel. Syst.* ii. p. 586; *Ind. Orn.* ii. p. 801, 5; *Bewick, Br. Birds*, 11, t. p. 193. *Mergus gutturo rubro*, *Bris.* vi. p. 111, 3, t. 11, f. 1; *Ib.* 8vo, ii. p. 390. *Le Plongeon à gorge rouge*, *Buf.* viii. p. 264. Redthroated Diver, or Loon, *Br. Zool.* ii. No. 240, t. 85; *Ib.* fol. 140; *Arct. Zool.* ii. No. 443; *Edw.* t. 97; *Lath. Syn.* vi. p. 344, 5; *Pult. Cat. Dorset.* p. 17; *Walc. Syn.* i. t. 100; *Lewin, Br. Birds*, vi. t. 230; *Don. Br. Birds*, iv. t. 78. — This species weighs about three pounds; length near two feet and a half. Bill black, three inches long, and slender; irides hazel. The head and upper part of the neck before cinereous; the rest of the neck, running up behind almost to the head, is marked with longitudinal dusky and white lines; on the throat is a patch of chesnut-red; the upper part of the body, wings, and tail dusky; the feathers of the back and scapulars slightly margined with brown; the under parts of the body white; the sides under the wings and thighs streaked with dusky; vent brown; legs dusky on the outside, lighter within. The bird from which this description is taken was killed at Hastings in Sussex, in the winter of 1795, at which time a great many were seen on that coast. This, like others of the genus, seems subject to some variety, as we are informed some have the head and chin dotted with brown, and the

chestnut mark on the throat extends farther on the neck. Whether this variety is occasioned by age or sex is not ascertained. This bird is said to breed in the northern parts of Scotland, but rarely visits the southern parts of England, except in very severe seasons. In the breeding season it frequents the lakes, making a nest amongst the reeds and flags, and lays two eggs of an ash-colour, marked with a few black spots. Is found in most of the northern parts, common in Greenland and Iceland; in the latter it is said to make its nest amongst the grass on the shores contiguous to the water, composed of moss and grass, and lined with down. It is frequently taken in nets, by diving after the fish which are entangled. In the 'General Synopsis' mention is made of no less than fourteen having been taken by this means out of a single net at Hudson's Bay at one tide.

SUPPLEMENT.—Mr. Pennant noticed the male and female of this species in Sunderland, in the month of July ('Voyage to the Hebrides'). Mr. Fleming assures us it breeds on the more unfrequented lakes of Zetland, and from a circumstance that occurred some doubts arose whether this and the Blackthroated Diver might not be the same species, differing only in sex. This gentleman says in a letter to the author, "I surprised the two birds together on the verge of a lake, while they were intent upon a young unfeathered bird, and shot the Redthroated Diver with the young bird, which proved a female; the other escaped, but I was so near that I could not have been deceived as to the mark on the throat." Experience has shewn that some birds vary in plumage so much at different seasons, that species have been continually multiplied from this circumstance alone; but in this instance we are still inclined to believe these birds are really distinct. The Blackthroated Diver has been described by most naturalists as a distinct species, and appears to have been particularly noticed as an inhabitant of the arctic regions, where they breed and afterwards retire. It must, however, be admitted that the Blackthroated Diver is extremely rare on the coast of Britain, a circumstance that must favour the opinion that the black on the throat may vanish after the breeding season, and be substituted by the ferruginous feathers which characterize the Redthroated species. But it must also be remembered that this is not the only distinguishing mark, for if we attend to the descriptions of the two birds, there is a material difference in other parts of the plumage. It may, however, be urged that these are as likely to change with the

season as the feathers on the throat. We have given these hints as the result of the observations of a correct naturalist, in order to stimulate those who may have the means of clearly ascertaining the fact not to lose the opportunity. One of the principal objects of enquiry appears to be this,—Has the Blackthroated Diver been observed in winter? With respect to the Redthroated Diver being a distinct species, it has been asserted that both the sexes have the red throat as well in summer as in winter. Whether by dissection, or by what other means Mr. Pennant ascertained the two sexes in July, we are not informed, but that both sexes with the red throat are obtained in winter we have had ocular demonstration. The male is larger than the other sex, the colours brighter, and the red or ferruginous mark on the throat much larger. The redthroated species is by no means uncommon on the more southern coasts of Great Britain in the colder season, but does not appear to frequent fresh waters at that time of the year. Where any suspicions have arisen from persons of science, grounded upon observation, that cannot be opposed by fact, it is but fair to record it; and we must acknowledge that the Blackthroated Diver has never come to our hands at any season of the year, and is at present one of the few desiderata in our museum.

APPENDIX.—This bird, we have before noticed, breeds in Shetland. Mr. Bullock thinks it lays only two eggs, as he found that number in more than one nest in the Isle of Hoy. The egg is very oblong, of an olive-colour, blotched with dusky. The nest is usually made in swampy places on the banks of fresh-water lakes. One of the nests, which Mr. Bullock found, had just been plundered by an Arctic Gull, who had made a breakfast on one of the eggs.

[Diver, Ringnecked. — See Diver, Northern.]

Diver, Speckled. — *Colymbus stellatus*, Gmel. Syst. ii. p. 587, 17; Ind. Orn. ii. p. 800, 3. *Maximus caudatus*, Raii Syn. p. 125, A. 4? Will. p. 258, t. 61. *Colymbus caudatus stellatus*, Will. t. 62. *Mergus minor*, Bris. vi. p. 108, 2, t. 10, f. 2; Ib. 8vo, ii. p. 389. *Le petit Plongeon*, Buf. viii. p. 254, t. 21. Speckled Diver, or Loon, Br. Zool. ii. No. 239; Ib. fol. 139, t. K.; Arct. Zool. ii. No. 441; Albin. i. t. 82; Lath. Syn. vi. p. 341, 3; Pult. Cat. Dorset. p. 17; Walc. Syn. i. t. 101; Lewin, Br. Birds, vi. t. 228. First-speckled Diver, Bewick, 11, t. p. 189. Second-speckled Diver, Bewick, 11, t. p. 191. Provincial: Sprat

Loon; Greatest-speckled Diver; Cobble. —The weight of this species is about four pounds; length twenty-seven inches. Bill three inches long, of a pale horn-colour, ridge of the upper mandible dusky; irides yellowish brown. The head is dusky, speckled with grey; the hind part of the neck plain dusky; on the sides of the head under the eyes, the chin, and throat white; the fore part of the neck speckled with ash-colour; back and whole upper parts dusky, marked with numerous small oval white spots; quills and tail dusky; in some the latter is slightly tipped with white; the whole under parts of the body white, except on the sides under the wings, which are streaked with dusky; the thighs dusky brown; the vent and under tail-coverts mottled with grey; the tail consists of twenty-two unequal feathers, the outer ones not being half so long as the middle ones; legs dusky brown, inside greenish grey. The female is not so large, and the spots on the back and scapulars not so large and distinct. The Speckled Diver is the most common species found in this country. It is frequently seen in winter in our bays and inlets, and sometimes in fresh-water rivers and lakes. It is observed to attend the sprats in the river Thames, for which reason the fishermen called it Sprat Loon. This, like the rest of the genus, retires northward to breed; is said to be common about the Baltic and the White Sea. It lays two eggs in the grass upon the borders of lakes, the size of those of a Goose, dusky, with a few black spots. [The First and Second-speckled Divers of Bewick, here referred to the Speckled Diver by Montagu, are respectively the young bird of the year and the adult in winter plumage of the Redthroated Diver, which see.]

SUPPLEMENT. — An opportunity offered, in a tour we made through the fens of Lincolnshire, of noticing and comparing the rate at which this bird can swim, both on the surface and under water. As late as the twenty-fourth of May we observed one of this species fishing in a canal, and got very near him unobserved. He did not attempt to fly, but instantly dived, at which time we exerted ourselves to the utmost in a walk, in order to discover which gained upon the other, and soon found that immersed he gained considerably, and did not lose much when upon the surface, so that after exerting ourselves for above half a mile, without a prospect of cutting off his retreat, we were obliged to run in order to head him. If we compute the rate of walking for a short distance to be five miles an hour, the swimming of this bird upon the surface might be about four miles and a half, and

beneath the surface between six and seven. The general distance between the place of immersion and that of emersion appeared to be about eighty or ninety yards; and as there was neither current nor wind, and the line was quite straight and the foot-path good, it is probable the computation is not very incorrect. It is observable that all birds, and even quadrupeds, who reside much in water, are aware of their superior powers of velocity beneath the surface, for they invariably dive when pursued, or whenever speed is required, and only rise to the surface for renewed respiration.

Diving Pigeon.—See Guillemot, Black.

Dob-Chick.—See Grebes, Dusky, Eared, and Little.

Dob-Chick, Black and White.—See Grebe, Dusky.

Dob-Chick, Greater.—See Grebe, Tippet.

Dottrel.—[Yarrell, ii. 484; Hewitson, lxxvi. 293.] Charadrius Morinellus, Lin. Syst. i. p. 254, 5; Gmel. Syst. ii. p. 686; Ind. Orn. ii. p. 746, 17; Raii Syn. p. 111, A. 4; Will. p. 230, t. 55, 57; Bris. v. p. 54, 5, t. 4, f. 2, and p. 58, 6; Ib. 8vo, ii. p. 225, and p. 126; Bewick, Br. Birds, 1, t. p. 343; Rural Sports, ii. t. p. 456. Petit Pluvier, ou le Guignard, Buf. viii. p. 87. Dottrel, Br. Zool. ii. No. 210, t. 73; Ib. fol. 129, t. D.; Arct. Zool. ii. p. 487, A.; Will. Angl. p. 309; Albin. ii. t. 62, and t. 63; Lath. Syn. v. p. 208, 14; Pult. Cat. Dorset. p. 16; Walc. Syn. ii. t. 162; Lewin, Br. Birds, v. t. 186; Don. Br. Birds, ii. t. 42.—This species of Plover weighs about four ounces, sometimes five; length near ten inches. The bill is an inch long, dusky; irides hazel; the crown of the head black; forehead dusky and grey, mixed; a broad stroke of white from above the eye passes to the hind-head; cheeks and throat white; the neck of a cinereous-olive; back and coverts of the wings olive-brown, each feather margined with pale ferruginous; the breast is of a pale, dull orange, on the upper part of which is a transverse line of white, bordered above with a narrow one of black; belly black; vent and thighs rufous-white; the quills dusky brown; the shaft and outer web of the first feather white; the tail consists of twelve feathers, of an olive-brown, barred near the end with black, tipped with white; legs dusky. The female has the crown of the head brown, mottled with white, and the white line over the eye less conspicuous; the belly is mixed black and white; the white line on

the breast is wanting; and the colours in general more dull. Young birds have the whole under parts of the body of a very pale ferruginous-brown. The Dottrel appears to make this country a resting-place in its migratory flights to and from its breeding-place. It is seen on some of our downs, heaths, and moors from April to the beginning of June, and returns again in September, and remains till November. On the Wiltshire downs it resorts to the new-sown corn, or fallow ground, for the sake of worms, its principal food. They fly in families of five or six in the autumn, which we have observed to be the two old birds and their young; but sometimes a dozen or more flock together. It is a stupid bird, and easily shot; when disturbed will frequently extend one wing, and do not fly to a great distance. It doubtless goes northward to breed; but we do not find any one who mentions the nest or eggs. It is probable some may breed on the mountains in Scotland. We once saw them in pairs in that country, in the summer, sufficiently late to form such an opinion; and we are not singular in this conjecture. It is said to be not unfrequent on the Lapland alps, visits Sweden in May, and breeds in the northern parts of Russia and Siberia.

SUPPLEMENT.—It should seem that this bird has been seen in some parts of Great Britain throughout the year, the natural conclusion of which is that some actually breed with us; but no person, to our knowledge, has been fortunate enough to take their eggs, so as to be clearly identified by a competent judge. It is true a person of credit, who frequents the Mendip hills in Somersetshire, declares that they breed there, and that he has taken their eggs. Young birds are frequently shot, early in September, upon those hills and similar situations, but that is no proof of their breeding there, as the nestling plumage continues till towards the following spring, and is very different from the adult, being entirely destitute of the bands on the breast, and the ferruginous and black on the belly. Colonel Thornton in his 'Sporting Tour,' p. 104, says he killed a Dottrel on a highland mountain, August the 16th, and saw several brace. The same gentleman informed us that he saw Dottrels in pairs on the Grampian Mountains, but never saw a young bird (meaning a runner incapable of flight). From all accounts it is quite an alpine bird in the breeding season, and probably breeds with, and may be confounded with, the Golden Plover, in the highland swamps. It is very rare so far west as Devonshire, at least one only has come to our notice in many years; but probably they are occa-

sionally upon the higher mountains of Dartmoor, where the Golden Plover is said to breed. We suspect this last bird is sometimes mistaken, in its summer plumage, for the Dottrel, the eggs of which may have been taken on the Mendip hills.

Dottrel, Ring.—See Plover, Ring.

[**Double Snipe.**—See Snipe, Great.]

Doucker, Greater.—See Diver, Imber.

Doucker, Horned.—See Grebe, Crested.

Doucker, Northern.—See Diver, Black-throated.

Doucker, Small.—See Grebe, Little.

Dove.—A genus of birds, the characters of which are: Bill slender, weak, and strait at the base. Nostrils lodged in a soft protuberance. Tongue entire. Legs short. Toes divided to their origin.

Dove, Greenland.—See Guillemot, Black; and Auk, Little.

Dove, Ring.—[Yarrell, ii. 287; Hewitson, lxvii. 271.] *Columba Palumbus*, *Lin. Syst.* i. p. 282, 19; *Gmel. Syst.* ii. p. 776; *Ind. Orn.* ii. p. 601, 32; *Bris.* i. p. 89, 6; *Ib.* 8vo, i. p. 20. *Palumbus torquatus*, *Raii Syn.* p. 62, A. 9; *Will.* p. 135, t. 35. Le Pigeon ramier, *Buf.* ii. p. 531, t. 24. Ring Pigeon, *Br. Zool.* i. No. 102; *Ib.* fol. 89, t. O.; *Arct. Zool.* ii. p. 329, B.; *Will. Angl.* p. 185, t. 35; *Hayes, Br. Birds*, t. 15; *Albin.* ii. t. 46; *Lath. Syn.* iv. p. 635, 29; *Ib. Sup.* p. 198; *Pult. Cat. Dorset.* p. 7; *Walc. Syn.* ii. t. 187; *Lewin, Br. Birds*, iv. t. 129. Provincial: Quest; Cushat; Wood Pigeon.—This species weighs about twenty ounces; length eighteen inches. The bill yellowish; irides light yellow. The head, coverts of the wings, and scapulars, are of a deep bluish ash-colour; the neck and breast vinaceous, beautifully glossed with green and copper-colour, changeable in different lights; on each side the neck is a large patch of glossy white, which almost joins behind; the back and tail ash-colour, the latter black at the end; vent and thighs white, tinged with ash-colour; the bastard wing almost black, behind which a few of the coverts are white, forming a line down to the greater quills, which are dusky, edged with white; the legs are feathered much below the knee, which, with the feet, are of a purplish red. There is little or no distinction in the plumage of the sexes; but the female is not quite so large. This bird is indigenous to this

island; and it is doubtful whether it migrates farther than from the northern to the southern parts. In winter they assemble in large flocks, and constantly resort to woods to roost in the highest trees, especially those of the ash. The great numbers that are seen together at this season has given rise to an opinion that many come to us from the more northern parts of the world; but if we consider how dispersed all birds are in the breeding season, it is easy to imagine the number appears greater when locally assembled. Early in the spring it begins to pair, at which time the male is seen to fly in a singular manner, alternately rising and falling in the air. It forms a nest of a few small sticks loosely put together, through which the eggs may frequently be seen; these are two in number, white, and exactly oval, larger than those of the common Pigeon. Like that species, both sexes assist in making their nest; and the male sometimes relieves the female in sitting. The nest is sometimes placed amongst brush-wood, and in hedges, or large hawthorn bushes; but more frequently in the fork of a tree, or against the body, when surrounded with ivy, and particularly in fir-trees. Their food is grain and seeds of all kinds. In the autumn they devour acorns and beech-nuts greedily, swallowing them whole. In defect of these and grain it eats turnip-greens and young clover, or green corn and ivy-berries. We have been at considerable pains to endeavour to domesticate this bird; and though we have tamed them within doors, so as to be exceedingly troublesome, yet we never could produce a breed, either by themselves or with the tame Pigeon. Two were bred up together with a male Pigeon, and were so tame as to eat out of the hand; but as they showed no signs of prolificacy in the spring, were suffered to take their liberty in the month of June, by opening the window of the room in which they were confined, thinking the Pigeon might induce them to return to their usual place of abode, either for food or to roost; but they instantly took to their natural habits, and we saw no more of them, although the Pigeon continued to return. We shall here mention a curious assemblage we once bred up, and lived together in perfect amity: a common Pigeon, Ring Dove, White Owl, and Sparrow Hawk; of which the Ring Dove was master.

Dove, Rock.—*Columba CEnas*, *Lin. Syst.* i. p. 279, 1, β .; *Gmel. Syst.* ii. p. 769; *Raii Syn.* p. 62, A. 10; *Will.* p. 136. t. 35; *Ind. Orn.* ii. p. 589, 1; *Bris.* i. p. 86, 5. Stock Pigeon, or Stock Dove, *Br. Zool.* No. 100, t. 45; *Ib. App.* p. 605; *Arct. Zool.* ii.

p. 329, A.; *Albin.* ii. p. 46; *Ib.* iii. t. 44; *Lath. Syn.* iv. p. 604, 1; *Ib. Sup.* p. 197; *Will. Angl.* p. 185; *Pult. Cat. Dorset.* p. 7; *Walc. Syn.* ii. t. 86; *Lewin, Br. Birds.* iv. t. 128; *Don. Br. Birds.* v. t. 107; *White, Selb.* p. 98, 110. Provincial: Rockier.—Ornithologists seem to differ in opinion concerning the Rock and Stock Pigeon; though it appears most conceive them to be distinct species. In those described under such names there seems to be so much similitude, except what may be expected from a species half reclaimed, and frequently returning to their natural wild habits again, that we cannot but consider them as one and the same species. The Rock Dove is considered to be the origin of our tame Pigeons, as it is said to possess the white on the lower part of the back, in which part the Stock Dove is described to be ash-coloured, and that this last is rather larger. But these variations we have observed in Pigeons killed in their native haunts amongst the rocks on our coasts; and our dove-cote Pigeons frequently have no white on the back. It is therefore probable many of our common species, after having been bred in a pigeon-house contiguous to such rocky situations, return to their natural habits, and there produce some variation in colour. The bird now before us we killed on the cliffs in Cauldy Island, in South Wales. It weighed eleven ounces; length thirteen inches and a half; breadth twenty-two. The bill is brown, inclining to purplish red, point dusky; irides light yellow. The head dark bluish ash-colour; neck and breast glossed with green and copper, as viewed in different lights, most conspicuous on the sides and back of the neck; the upper part of the back and wing-coverts pale ash-colour; across the middle of the greater coverts is a broad band of black, and another of the same on the ends of the secondary quills, running into each other on those feathers nearest the body; the greater quills are dusky, dashed with ash-colour, the outer ones darkest, and all of them most so towards the tips, slightly edged on their exterior webs with white; the lower part of the back white; the rump and tail dark bluish ash-colour, the ends of the latter black; the two exterior feathers whitish on the outer webs towards the base; the sides under the wings, and under wing-coverts, white; the belly bluish ash-colour; legs red. In another specimen, killed in the same place, the upper part of the back, and the whole of the wing-coverts, are mottled with black and light ash-colour, without any regular bands across the wings. In every other respect it resembled the first; but this was rather larger, weighing twelve ounces; length

fourteen inches. It was a female, and was shot as she flew from her nest. This must, however, be considered as a variety; for in the more remote parts, where the breed is pure, the bars on the wings seem to be a characteristic mark, and common to both sexes. These birds have sometimes appeared in prodigious flocks in winter, frequenting our beech woods for the sake of the mast or seed of that tree. These flights, however, are less numerous and less frequent of late years. Sometimes they are seen in company with our common Pigeons at the barn-doors in severe winters; and are said to be known by their inferior size and darker colour. This bird generally breeds in caverns on our coasts, and in ruined edifices; and, we are told, sometimes nidificates in the holes of decayed trees. Perhaps these last have been called Stock Doves, supposing them a distinct species. Mr. White informs us, in his 'Natural History of Selborne,' that Stock Doves formerly abounded in the beech woods near that place; and that amongst them were seen little parties of small blue Doves, which were there called Rockiers. However this may be, we are inclined to believe it is the same species, with some little variety. All the beautiful varieties of Pigeons under the denomination of Carrier, Pouter, Nun, Owl, &c., are supposed to be derived from this species by domestication.

SUPPLEMENT.—The Pigeon, both in the wild and domestic state, is considered as wholly granivorous; necessity, however, compels them to pluck the leaves of some plants in the winter, when seeds or grain are not to be obtained. This is not, however, the only substitute, for they greedily devour some species of testaceous Limaces, especially *Helix virgata*, which so plentifully inhabits the dry rocky hills contiguous to where this bird breeds in its natural wild state. This species of *Helix* was so abundant with us, that on the lawn a foot could not be planted in the summer without crushing a dozen or two. The introduction, however, of Pigeons, very unexpectedly has been the means of nearly extirpating them, for they not only regale themselves, but feed their young with this tender and nutritious food, the shell of which not only acts as a gentle stimulus to the delicate stomach of the infant race, but when ground to a powder becomes an absorbent, and corrects the acrimonious quality of their other food. [It is the opinion of Mr. Selby and other modern ornithologists that Colonel Montagu has combined two species under this name; the reader will therefore please to read the two descriptions immediately following, in connexion with the foregoing. It has

been thought desirable to add the synonyms in this instance,—a plan not previously adopted where editorial additions have been made.]

[Dove, Rock. — *Columba livia*, Yarrell, ii. 298; Hewitson, lxvii. 271. "*Briss. Ornith.* v. i. p. 82, sp. 3; *Lath. Ind. Ornith.* v. 2, p. 590, sp. 2, var. B. *Colombe Biset*, Buff. *Ois.* v. 2, p. 498; *Id. Pl. Enl.* 510; *Temm. Pig. et Gall.* v. 1, p. 125; *Id. edit. fol. pl.* 12; *Id. Man. d'Ornith.* v. 2, p. 446. *Haus-taube*, *Bechst. Naturg. Deut.* v. 3, p. 971; *Meyer, Tasschenb. Deut.* v. 1, p. 288. *Biset* and *White-rumped Pigeon*, *Lath. Syn.* 4, p. 605, 2, A. *Rock Dove*, *Mont. Ornith. Dict.*; *Id. Supp.* The *Wild Pigeon*, *Bewick*, 1, p. t. 267. The *Common Pigeon*, or *Wild Dove*, *Low's Faun. Orcad.* p. 52. *Provincial: Rockier*.—Bill blackish brown. Irides pale reddish orange. Head and throat deep bluish grey. Sides of the neck and upper part of the neck, and upper part of the breast, dark lavender-purple, glossed with shades of green and of purple-red. Lower part of the breast and belly blue-grey. Upper part of the back and wing-coverts pale pearl-grey. Greater coverts and secondaries barred with black, and forming two broad and distinct bands across the closed wings. Lower part of the back white. Rump and tail-coverts bluish grey. Quills grey at the base, but passing into bluish grey towards their tips. Tail deep bluish grey, with a broad black bar at the end. Legs pale purplish red. Wings, when closed, reaching to within half an inch of the end of the tail. In Britain it is found in various cliffs along the wide extent of our shores, of which I may here mention those of *Caldy Island*, in *South Wales*, and is also a never-failing resident in the wild precipices of the *Orkneys*, breeding in the caves, which are there numerous and of large dimensions; and where, according to *Low*, it retires to the inmost recesses, beyond the situations chosen for incubation by the *Auks*, *Gulls*, and other aquatic fowls. It is very numerous in the rocky islands of the *Mediterranean*, where it also lives and breeds in caverns on the shore; and is equally abundant in the north of *Africa*, especially in the island of *Teneriffe*, where it is met with in incredible numbers."—*Selby*, i. 410.]

[Dove, Stock. — Yarrell, ii. 293; Hewitson, lxvii. 273. "*Columba Aenas*, *Linn. Syst.* i. p. 279, i. B.; *Gmel. Syst.* i. p. 769, sp. 1; *Lath. Ind. Ornith.* v. 2, p. 589, sp. 1; *Briss. Orn.* v. 1, sp. 6; *Rati Syn.* p. 62, A. 10; *Will.* p. 136, t. 35. *Colombe colombin*, *Temm. Pig. et Gall.* v. 1, p. 118; *Id. edit. fol. pl.* 11; *Id. Man.*

d'Ornith. v. 2, p. 445. Holtz Taube, *Bechst. Naturg. Deut.* v. 3, p. 957; *Meyer, Tassenb. Deut.* v. 1, p. 287; *Frisch. Vog.* t. 139. Derbosh Duif, *Sepp. Vog.* v. 5, t. p. 407. Stock Pigeon, *Br. Zool.* 2, *App.*; *Arct. Zool.* 2, p. 329, A.; *Will. (Angl.)*, p. 185; *Lath. Syn.* 4, p. 604, 1; *Id. Supp.* p. 197.—Head and throat deep bluish grey. Sides of the neck glossed with different shades of green and purple; the feathers shorter, more distinct, and stiffer than those of the Rock Dove. Lower parts of the neck and breast paler lavender-purple. Belly, thighs, and under tail-coverts bluish grey, with a slight purplish tinge. Back deep bluish grey. Wing-coverts paler, and some of the greater ones spotted and barred with black, but not forming any defined bar, as in the above-mentioned species. Quills blackish grey; the outer webs, near the base of the feathers, passing into bluish grey. Lower part of the back and tail-coverts bluish grey. Tail bluish grey, with a broad black bar at the end; and having the outermost feather margined with white. Wings, when closed, reaching to about half the length of the tail. Irides brownish red. Legs and toes bright cochineal-red. The female scarcely differs from the male bird, except that the iridescent reflections upon the neck are not so bright. This bird is a constant inhabitant of woods, breeding in the hollows of old and pollard trees. The eggs are white (and two in number). They feed upon all grain and seeds, and for their winter supply have recourse to the same diet. They are very abundant in the southern parts of Europe, but always found to inhabit woods in the interior of each country. In Germany, and in some parts of France, they are regularly migratory. They occur also in Africa, but do not extend to the southward of the tropic.—*Selby*, i. 408. This bird has a propensity for building its nest in rabbit-burrows, and on the ground under furze-bushes; these instances, however, must be considered as abnormal; they occur principally on the heaths of Norfolk and Suffolk.]

Dove, Stock.—This appears to be no other than the preceding species. See Dove, Rock: [also the Editorial note appended thereto.]

Dove, Turtle.—[*Yarrell*, ii. 309; *Hewitson*, lxvii. 275.] *Columba Turtur*, *Lin. Syst.* i. p. 284, 32; *Gmel. Syst.* ii. p. 786; *Raii Syn.* p. 61, A. 2; *Will.* p. 134, t. 35; *Bris.* i. p. 92, 7; *Ib.* 8vo, i. p. 21; *Ind. Orn.* ii. p. 605, 47. *Turtur auritus*, *Raii Syn.* p. 184, 26. *Tourterelle*, *Buf.* ii. p. 545, t. 25. *Tourterelle de Portugal*, *Buf.* ii. p. 556. *Turtur lusitanicus*, *Bris.* i. p. 98, 9; *Ib.*

8vo, i. p. 23. Common Turtle, *Br. Zool.* No. 103, t. 45; *Ib.* fol. 88, t. 88; *Albin.* ii. t. 45—t. 48; *Hayes, Br. Birds*, t. 14; *Will. Angl.* p. 183, t. 35; *Lath. Syn.* iv. p. 644, 40, var. A. B. C. D.; *Ib. Sup.* p. 199; *Pult. Cat. Dorset.* p. 7; *Walc. Syn.* ii. t. 188; *Lewin, Br. Birds*, iv. t. 130.—This elegant little species weighs rather more than six ounces; length twelve inches. The bill is brown; irides reddish yellow; a bare space beneath and behind the eyes of a purplish red. The top of the head and upper part of the neck behind cinereous; on each side of the neck is a patch of black feathers, tipped with white; the back is brown, dashed with ash-colour, lightest on the margin of each feather; scapulars and wing-coverts black, deeply margined with ferruginous-brown; quills dusky brown, with light edges; the forehead and chin dull white; breast pale vinaceous; belly and under tail-coverts white; the sides above the thighs ash-colour; upper coverts of the tail dusky, edged with brown, and dashed with ash-colour; the tail is black, tipped with white, except the two middle feathers, which are wholly of a dusky brown; the outer feather is much shorter than the rest, and white on the exterior web; legs purplish red. The female, in general, is not quite so bright in colour, and is rather less than the male. The Turtle visits the southern parts of England in the spring, and remigrates the beginning of September. It chiefly inhabits thick woods, where it makes a nest in a tree, composed of sticks. The eggs are two in number, and white. These birds seem to be more plentiful in Kent than in any other county. Dr. Latham observes they are seen in that district to frequent the pea-fields in flocks of twenty or more as soon as the peas begin to ripen. We have also seen small flocks in the month of August on Romney Marsh, which were said to visit annually the same spot about that season. It is found, though rarely, as far westward as Devonshire; but we believe not far northward. This species appears to be subject to some variety. In the 'General Synopsis' mention is made of four or five; if so, it is found in China, Manilla, Portugal, Java, and other parts. But some of these are given as distinct species by other authors. In the Introduction to this work we have noticed the singular glands situated under the craw of this bird, secreting a lacteal fluid; probably common to all this genus. The young of this species do not throw out the black feathers on the neck the first year; and the bare space about the eyes is of a gray colour.

Dove, Turtle, Spottednecked.—This ap-

pears to be a mere variety of the Common Turtle. The difference consists in the whole side of the neck being black, and instead of those feathers being tipped with white, there is a round spot of white on each very near the end. Dr. Latham says this bird was shot in Buckinghamshire, and that he observed one of these amongst some birds that came by the last expedition to the South Seas; but as it was in a parcel wherein was some which belonged to the Cape of Good Hope, it is possible that this might come from that place.—*Lath. Syn.* iv. p. 645, 40, A.; *Ind. Orn.* ii. p. 606, 47, 2.

Duck.—A genus of birds, whose characters are: Bill broad, depressed; the end furnished with a horny substance termed a nail; the edges of the mandibles pectinated. Nostrils small, oval. Tongue broad, fringed near the base. Toes, three before, webbed; one behind.

Duck, African.—See Teal, African.

[**Duck, American Scaup.**—*Yarrell*, iii. 349.—See Pochard, Paget's.]

Duck, Atteal or Attile.—See Pochard.

[**Duck, Bahama.**—*Anas bahamensis*, *Catesby's Carolina*, *Anas urophasianus*, *Vigors, Zoological Journal*, iv. 337. *Dafila urophasianus*, *Eyton*. *Urophasianus Vigorsii*, *Beechey's Voyage*. In the 'Zoologist' for 1853, at p. 3840, it is recorded that a specimen of this West-Indian Duck was shot in December, 1851, near the Bass Rock: it was doubtless an escape from confinement.]

Duck, Bimaculated.—[*Selby*, lv. & lv.*] *Anas glocitans*, *Gmel. Syst.* ii. p. 526; *Ind. Orn.* ii. p. 862, 75. Bimaculated Duck, *Br. Zool.* ii. No. 287, t. 100, f. 2; *Lath. Syn.* vi. p. 521, 75.—The length of this species is twenty inches; bill deep lead-colour; nail black; irides brown: the crown of the head brown, changeable with green, ending in a streak of brown at the hind-head, with a small crest; between the bill and the eye a round ferruginous spot; another spot of the same, but larger and oblong, behind each ear; throat of a fine deep purple; the rest of the head bright green, continued in streaks down the neck; the breast light ferruginous-brown, waved with black; wing-coverts ash-coloured; lower coverts streaked with rust-colour; scapulars cinereous; quills the same, inclining to brown; secondaries fine green, ending in a shade of black edged with white; twelve feathers in the tail, the two middlemost black, the others

brown, edged with white; tail-coverts deep changeable green; belly dusky, finely granulated; legs small, yellow; webs dusky. Mr. Pennant informs us a bird of this description was taken in a decoy. Said to inhabit part of Siberia and Lake Baikal. [In the 'Zoologist' for 1847, at page 1698, Mr. R. F. Tomes records the purchase of a specimen of this Duck in Leadenhall Market, on the 9th of December, 1846: see also p. 2026. On the 1st of December, 1849, Mr. Gardner, of Holborn, showed me a specimen in the flesh, as recorded in the 'Zoologist' for 1850, at page 2652: it was obtained in the fens of Lincolnshire. This was considered a good species by Mr. Vigors, Mr. Selby, and other eminent ornithologists. Mr. Selby gives two admirable figures of it, as cited above. On the contrary, Temminck ignores the species altogether, and most ornithologists consider it a hybrid; some, between the Pintail and Wigeon; and others, between the wild Duck and Teal.]

Duck, Black.—See Scoter.

Duck, Brownheaded.—See Golden-eye.

[**Duck, Buffelheaded.**—*Fuligula albeola*, *Yarrell*, iii. 377.—“In the adult male the bill is bluish black, narrow and small; irides hazel; forehead, lore, chin, throat, and sides of the neck bluish black, tinged with rich purple and green; behind the eye, on the ear-coverts, and thence upwards to the crown of the head, and backwards to the occiput, a triangular patch of pure white; the feathers of the head elongated, forming a crest which is elevated at pleasure; lower part of the neck white; back, rump, and tertials black; scapularies, wing-coverts and secondaries white; primaries greyish black; tail-coverts and tail-feathers pale ash-grey; breast, belly, and all the under surface of the body white; legs, toes, and membranes yellow. Whole length fifteen inches. From the carpal joint to the end of the longest quill-feather six inches and three-quarters. The female is smaller than the male; the head and neck ash-brown, with a patch of white behind the eye; upper part of the back greyish brown, lower part black; wing-coverts, primaries and tertials dark greyish brown; secondaries white; tail ash-grey; breast and belly dull white; vent and under tail-coverts greyish white; legs and toes bluish black; whole length thirteen inches; wing six inches and one-quarter. Young males in the first autumn resemble females. The trachea described by Mr. Audubon is ‘five inches long, much flattened, its rings unossified, its diameter at the top two lines and three-quarters,

towards the lower part three lines, having scarcely any appearance of dilatation at the part which is so excessively enlarged in the Golden-eyed Duck, which, in form and habits, is yet very closely allied."—*Yarrell*, iii. 377. Mr. Paget, in his 'Natural History of Yarmouth,' records, at p. 11, that a specimen of this North-American Duck was shot near Yarmouth in the winter of 1830: it has no claim to a place in the list of British birds.]

Duck, Burrow.—See Shieldrake.

Duck, Castaneous.—*Anas nyroca*. [See Duck, Ferruginous.] APPENDIX.—No bird has puzzled the British Ornithologist more than the Ferruginous Duck of Mr. Pennant, but which has by most naturalists been considered as the female of some other species. In the preceding [succeeding] pages [64—65] it will be seen that we had considered *Anas nyroca* as the male of *Anas ferruginea*, but from a fortunate examination of a recent pair of the *nyroca*, in the collection of Mr. Foljambe, we are inclined to be at variance with our former opinion. Our aim is to elucidate, and therefore candour obliges us to acknowledge where our former conjectures have not in our present opinion been verified. At the time the article Duck, Ferruginous, went to the press, we had never seen the female *nyroca*, but strongly suspected these birds would be found to differ only in sexes. Whether the Ferruginous Duck of Mr. Pennant is the *nyroca* in any state of change in plumage, or whether it is the female *Anas dispar*, as Dr. Latham suspects, we are really at a loss to determine, but certainly it cannot be, by its description, the female *nyroca* now before us. In the 'Arctic Zoology' we find, in the description of the Red Duck, a little difference from that of the Ferruginous Duck of the 'British Zoology,' to which it refers, but neither is sufficiently like the female *nyroca* to suffer our former conjecture to pass without expressing considerable doubt of its belonging to that species, and we still have to hunt for the *Anas rufa* of the 'Fauna Suecica,' unless it should hereafter prove to be a young bird of *nyroca* in its first plumage. To Mr. Foljambe we are particularly indebted, not only for sending us both sexes of *Anas nyroca* for examination, but for some valuable remarks concerning this species. From the information of this accurate naturalist, this bird is not so uncommon in the London market as might be expected, since it has only of late been considered as British. Seven or eight have been examined by Mr. Foljambe, several of which were fresh, and varying a good deal in

plumage; some having no white either in the wings or under parts of the body, probably young birds. The description of the male of this bird has been given at Duck, Ferruginous; we shall therefore only add some particulars of that sex, which the kind communication of Mr. Foljambe has enabled us to do. On the 6th of December, 1812, three of this species were bought in Leadenhall-market, two of which were females, and which rather exceeded the male in size. The weight of one female was thirty-six ounces; that of the other only a quarter of an ounce less: the length eighteen inches; breadth the same. The male weighed thirty-three ounces and three-quarters, and measured in length sixteen inches and a half. There is very little difference in plumage between the male specimen belonging to Mr. Foljambe and that in our collection, but, being in better feather, it is observable that on the lower part of the neck the fine chestnut-colour is interrupted by a dusky ferruginous collar, which, passing behind, becomes blended and uniform with the colour of the back: from the vent to the tail-feathers pure white: the rump and upper tail-coverts dusky black, coming down on the sides in the line of the vent, forming a strong contrast with the white feathers beneath. The female very much resembles the other sex in plumage, but the colours not quite so strong, especially the chestnut on the breast, and the white beneath is not so pure: the white on the chin is not so extended, nor is there any black that borders the white on the sides behind the vent: the legs as well as the toes are paler. The irides of both sexes are yellow. This species belongs to the diving family of the Ducks, all of which have short wings that scarcely reach beyond the base of the tail when closed. Independent of the description of Mr. Pennant's Ferruginous or Red Duck being so much at variance with the female *nyroca*, no one can contemplate the figure given of it, but must conceive that the head, neck, breast, and upper parts of the body are spotted and barred, although the description mentions no spots, but only that those parts are fine reddish brown. We have more than once received from our ornithological friends the female Wigeon in its autumnal plumage (which is sometimes very rufous) for Mr. Pennant's Ferruginous Duck; and we must confess that by uniting the figure and description together, we have at this time a female Wigeon that may be said to have the head, neck, breast, and upper parts of the body fine reddish brown; and these parts are spotted and mottled as the figure in the 'British Zoology' represents.

The weight of the Ferruginous Duck also corresponds with the Wigeon and not with the nyroca: the colour of the bill and legs also appears to agree with that of the Wigeon. Under all these circumstances we have been induced to consider the *Anas nyroca* as probably distinct from the ferruginea, and have therefore given it the English name prefixed. The advantage derived from attending to the trachea in aquatic birds, which are found to vary so extremely in plumage, has been shewn in several instances, and we have now another opportunity of proving how essential it is to attend to the conformation of that part. The following is a description of the trachea and its labyrinth, which was extracted from a male Castaneous Duck, and which will be found to differ from any thing of the kind hitherto described. The trachea of this species somewhat resembles that of the Scaup Duck, but it greatly decreases in size at both extremities, and the bony or cartilaginous rings surround it in all parts; whereas in the Scaup the trachea scarcely decreases at the upper extremity, and the under side for its whole length, except near the labyrinth, is membranaceous, the bony rings not extending over that part. This characteristic distinction of the Scaup has not, we believe, been before noticed. The diameter of the trachea of the nyroca is in the middle nearly half an inch, and at the lower extremity not above one-eighth of an inch. In the labyrinthic part there is also some affinity between these two Ducks, but that of the Scaup is very superior in size, and the orea, or bony box behind the tympanum, is vastly more tumid. In both there is a bony arch which crosses the tympanum, but the back of the tympanum in the nyroca Duck is nearly all bone, except a little on the left side; whereas, in the Scaup, that part is also covered with a thin membrane, intersected with fine ramifications of bone.

Duck, Clucking.—See Duck, Bimaculated,

Duck, Common or Wild.—[*Yarrell*, iii. 265; *Hewitson*, cxiii. 407.] *Anas Boschas*, *Lin. Syst.* i. p. 205, 40; *Gmel. Syst.* ii. p. 538; *Ind. Orn.* ii. p. 850, 49. *Anas fera*, *Bris.* vi. p. 318, 4; *Ib.* 8vo, ii. p. 447. *Canard sauvage*, *Buf.* ix. p. 115, t. 7, 8. Wild Duck, *Br. Zool.* ii. No. 279, t. 97; *Ib.* fol. 175; *Arct. Zool.* ii. No. 494; *Will. Angl.* p. 308, t. 72, 75; *Albin*, ii. t. 10; *Ib.* i. t. 99; *Lath. Syn.* vi. p. 489, 43; *Pult. Cat. Dorset.* p. 21; *Walc. Syn.* i. t. 77; *Don. Br. Birds*, v. t. 124; *Lewin, Br. Birds*, vii. t. 246; *Lath. Syn. Sup.* 11, p. 351; *Lin. Trans.* 4, p. 112, No. 17, t. 13, f. 10 (the Trachea). Provincial: Stock Duck.—

The male bird, Mallard or Drake, as it is called, weighs about two pounds and a half; length near twenty-three inches. The bill is of a yellowish green; irides hazel; the head and upper part of the neck deep glossy green, bounded below with a white circle, which almost surrounds the neck; the lower part of the neck before and breast dull purplish chestnut; the back is brown; the sides and scapulars white, marked with numerous small undulated lines of brown; the rump, upper and under tail-coverts, black; on the wing-coverts is a transverse streak of white, edged with another of black; beneath which is the speculum, of a fine purplish or violet-blue, on the secondary quills, which are shaded to a black near the ends, and tipped with white, and forms another narrow line of this last colour on the wings; the belly is pale grey, minutely speckled with light brown in undulated lines; the tail consists of twenty feathers, the four middle ones are of a glossy greenish black, and curve upwards in a singular manner, and so connected as to appear only as two feathers; the others are strait, pointed, and of a greyish brown, margined with white. The female is not so large, and of a rusty brown, spotted with dusky black; the speculum on the wings is like the male; but none of the tail-feathers are curved; the legs of both sexes are orange. The Duck breeds on many of our rivers and lakes; sometimes at a considerable distance from the water. It scrapes together a little of such vegetables as are contiguous for a nest, and lays from ten to eighteen eggs of a bluish white. At the time of incubation the female plucks the down from her breast to line the nest, and frequently covers the eggs when she leaves them. It frequently happens that a large variety of this bird is caught in our decoys, or shot by the sportsmen; but these are only half-domesticated Ducks, which are obliged to leave the canals or pieces of water belonging to private persons when they become frozen. These are called Rouen Ducks. It is observable in most kinds of birds whose young leave the nest as soon as hatched, that they deposit their eggs on the ground. There are, however, some instances in which this species, the Shield-rake, and perhaps others, occasionally vary in this particular. We have been assured, by a person of undoubted veracity, that a half-domesticated Duck made a nest in Rumford Tower, hatched her young, and brought them down in safety to a piece of water at a considerable distance. Others have been known to breed in trees; and we recollect the nest of this bird being found in the head of an old

pollard willow impending the water, from whence the young might readily drop unhurt into their natural element. Wild Ducks pair; but when domesticated one male will serve several females. The number that breed in this country is small in comparison, since the extensive marshes and fens have been drained and cultivated; and it is probable the greater part of those caught in our decoys in winter come to us from the more northern parts at that season. Mr. Pennant mentions thirty-one thousand two hundred having been taken in one season in decoys in the neighbourhood of Wainfleet. And it appears on record that no less than two thousand six hundred and forty-six Mallards, or Drakes, were taken in two days near Spalding. These appear to have been young birds before they could fly, called Flappers.

SUPPLEMENT.—The bony labyrinth at the lower end of the trachea of the male of this species, is an evident proof that such a conformation is not given for the purpose of augmenting the voice of birds, as every one knows the Mallard's note is remarkably low, and nothing to compare to that of the Duck. Dr. Latham remarks that the male Muscovy Duck will not unfrequently produce with the common species. Observing at a farm-house some Ducks that had the appearance of being a mixed breed between these two species, enquiry was made, and the farmer assured us he had seven young ones, the sire of which was of the Muscovy breed; two of these, of apparent different sexes, were obtained. These hybrid birds bear a greater resemblance to the common than to the Muscovy species. The bill has a little reddish colour at the base, but there is no bare space about the eyes as in the Muscovy, nor has the male the curled feathers in the tail like the common Mallard. The size of the male is vastly superior to that of the female; the former is black on the crown of the head and the upper part of the body, glossed with purple and violet; the rest of the plumage is white. The female is quite white except a single spot on the head. They have not the note of the common species, at least the female note is as inaudible as that of the other sex. The male hybrid is observed to be frequently amorous, both with his own mate and with Ducks of the common sort, but the female never laid any eggs. We cannot perceive any thing in the appearance of the young of other Ducks with which the male had congress, that proves them to be the fruit of such connexion; and the Ducks were not debarred access to males of their own species. That the male hybrid possesses a strong stimulus to love

in the spring, is evident, for the want of other connexion induced him to worry a female Whistling Swan so much, that they were obliged to be separated. The Common Duck, as well as other wild fowl, becomes scarcer every year in a country like this, where agriculture makes so leading a feature; few comparatively remain to breed with us since the more extensive fens have been drained and converted into pasture. The great fenny tracts in Lincolnshire do not produce a dozen broods of wild fowl at present, where half a century back as many thousands were hatched. In a tour through that country during the incubating season, we observed that the Mallards congregated while the Ducks were sitting; it is therefore probable that, like the domestic ones, they are mostly polygamous. Many instances are recorded of the common Duck depositing her eggs at a considerable height from the ground. One mentioned by Mr. Tunstall, at Etchingham, in Sussex, was found sitting upon nine eggs, on an oak tree twenty-five feet from the ground. The author of the 'Rural Sports' also records an instance of a Duck taking possession of the deserted nest of a Hawk in a large oak. To these we may add, upon the assurance of a gentleman of the strictest veracity, that of a large flock of half-domesticated Ducks; one deposited her eggs in the principal fork of a large elm tree near his house, and brought her young down in safety, notwithstanding a Magpie had made a nest on the top of the same tree. Thus Mag was found to live in friendship with his neighbour in the first story, and sought for plunder further from home.

Duck, Cuthbert. } See Duck, Eider.
Duck, Dunter. }

Duck, Dusky and Spotted. — See Duck, Harlequin.

Duck, Eider or Edder. — [Yarrell, iii. 298; Hewitson, cxv. 414.] *Anas mollissima*, *Lin. Syst.* i. p. 198, 15; *Gmel. Syst.* ii. p. 514; *Ind. Orn.* ii. p. 845, 35. *Anas S. Cuthberti*, *Raii Syn.* p. 141, A. 3. F.; *Will.* p. 278, t. 77, F. *Anser lanuginosus*, *Bris.* vi. p. 294, 13, t. 29, 30; *Ib.* 8vo, ii. p. 440. *Oie à duret*, *Eider*, *Buf.* ix. p. 103, t. 6. Great Black and White Duck, *Edw.* t. 98, M. and F. *Eider*, or *Cuthbert Duck*, *Br. Zool.* ii. No. 271, t. 95; *Ib.* fol. 152, t. Q.; *Arct. Zool.* ii. No. 480; *Will.* *Angl.* p. 362, t. 76; *Lath. Syn.* vi. p. 470, 29; *Ib. Sup.* p. 274; *Walc. Syn.* i. t. 66; *Lewin, Br. Birds*, vii. t. 244; *Bewick, Br. Birds*, ii. t. p. 314. Provincial: Colk; Dunter Duck. — This species is nearly double the size of the common Duck;

length twenty-two inches. The bill is black; the top of the head is black, taking in the eyes, and continuing in a line on each side, where the feathers project on the bill almost as far as the nostrils; below the nape of the neck, on each side, the feathers are of a pale green; the rest of the head, neck, breast, back, scapulars, and wing-coverts are white; some of the coverts are long, and somewhat curved at the ends, falling over the quills, which are black; the under parts from the breast are black; tail black; legs dull green. In some the base of the wings and middle of the back is black. These birds do not arrive to maturity in plumage till the third, or perhaps the fourth year. In the first the back is white, and the usual parts, except the crown, black; but the rest of the body is variegated with black and white. In the second year the crown of the head is black, and the neck and breast spotted black and white. Other varieties have also been observed. The female weighs about three pounds and a half; the general colour of the plumage reddish brown, barred with black; the hind part of the neck marked with dusky streaks; on the wings are two bars of white; belly deep brown, indistinctly marked with black; tail dusky; legs black. The Eider Duck is rarely if ever seen in the south of England; it breeds in the north of Scotland, particularly on the western isles, and on the Farn islands on the coast of Northumberland, in the months of June and July. It lays five or six eggs of a pale greenish olive-colour. The nest is made on the ground, composed of marine plants, and lined with down of exquisite fineness, which the female plucks from her body. Sometimes a sufficient quantity is taken from one nest to fill the crown of a hat, the weight of which is not more than three-quarters of an ounce. This is a considerable article of trade from the more northern countries. Its excessive lightness and elasticity admirably fits it for the purpose of stuffing quilts. We have known the young taken from the Farn islands in hopes of domesticating them; but all attempts proved ineffectual, probably for want of proper food. Is said to feed principally on shell-fish. It is found plentiful in all the northern parts; Dr. Latham observes even in the highest latitudes yet discovered.

SUPPLEMENT.—This species rarely occurs in the southern parts of the kingdom; one, however, was shot in the winter of 1807, on the coast of South Devon; it was a female, and as it differed somewhat from that described in the former part of this work, we shall insert an accurate description of it in this place:—Larger than

the common Duck. The bill dusky, nail horn-colour: irides yellowish. The whole plumage of a dusky colour, mixed with ferruginous: the head and neck pale brown, more or less dashed with ferruginous and dusky streaks: back, scapulars, and smaller coverts of the wings dusky black, each feather margined with ferruginous-brown: quills dusky, palest on the inner webs and points of the secondaries (but no white band or bar on the wing, as usually described): the breast and whole under parts a mixture of pale ferruginous and dusky in small specks and streaks: the tail short, cuneiform, and of a dusky brown colour: legs and feet dusky black; the hind claw remarkably hooked. The feathers on the front project unusually on the sides of the bill, being on that part an inch forwarder than on the top, leaving the bare bill only about an inch in length. The excessive velocity with which some birds are capable of flying, may be estimated by the observations of Major Cartwright on the flight of the Eider Duck on the coast of Labrador, which he found by repeated experiment to be ninety miles an hour. If then the Eider (which is by no means remarkable for swiftness) is found to pass over a space equal to ninety miles in an hour, what may be expected of the Falcon and some other birds? But more on this subject will be found elsewhere. We are told it is no uncommon circumstance for two female Eider Ducks to lay in the same nest, set alternately, and sometimes together. The natives of Iceland and other northern countries rob the nests of these birds several times of the down, which they pluck from their bodies to cover their eggs in their absence, and thereby prevent their parting with their heat, during their excursion at sea in search of food. Thus instinct has taught these feathered philosophers that no substance within their reach could possibly have answered the end so completely; for the very light, elastic, fibrous substance of down is almost a non-conductor of heat, and consequently prevents the ready dispersion of caloric, which becomes entangled amongst its fibres, and as it were shuts the passages from the surrounding atmosphere for a great length of time. In the same manner a heated ball or a bottle of water covered with a blanket, or put into a thick flannel bag, may be made to retain its heat vastly longer than if exposed to the circumambient air; and if surrounded with Eider down in form of a quilt, a still greater time would elapse before its temperature could assimilate with that of the atmosphere. Eider down (which is so much used amongst the opulent in the more civilized parts of the northern world)

has not in itself any additional heat (as is vulgarly imagined) beyond other substances, for it would equally preserve ice from thawing as it would heated water, or eggs from cooling, upon the sole principle of its being a bad conductor of caloric, and consequently would cut off a ready communication between the ice and the warmer air. Coverings for beds, quilted or stuffed with Eider down, keep the body warm by interposing an obstacle to the expenditure of animal heat, by shutting the avenues to the colder air, which in a frigid climate so rapidly carries off the caloric. For a similar purpose are blankets used in our more moderate climate, and the finer the wool of which they are manufactured, and the more shaggy they are, the better will they answer the purpose for which they are intended. It is a mistaken notion that only Eider down is used for the purposes above mentioned. It is true all the down which is taken by the natives of the more northern regions is sold for such, but many others of the Duck tribe afford down not inferior to that of the Eider, but none in such great abundance: these however are mixed together and carried to market without discrimination.

Duck, Ferruginous. — [Yarrell, iii. 339; Hewitson, cxvii. 425.] *Anas rufa*, *Faun. Suec.* No. 134. *Anas ferruginea*, *Gmel. Syst.* ii. p. 528; *Ind. Orn.* ii. p. 866, 84. Red Duck, *Arct. Zool.* ii. No. 576, N. Ferruginous Duck, *Br. Zool.* ii. No. 285, t. 99; *Lath. Syn.* vi. p. 526, 17. Red-breasted Duck, *Lewin, Br. Birds*, vii. t. 224. *Anas nyroca*, *Gmel. Syst.* ii. p. 542; *Ind. Orn.* ii. p. 869. Tufted Duck, Var. A., *Lath. Syn.* vi. p. 541, No. 79. Olive-tufted Duck, *Br. Miscel.* 1, t. 21. — This species weighs twenty ounces. The bill is long and flattened; a little rounded at the base; colour pale blue. Head, neck, and whole upper parts of the body reddish brown; throat, breast, and belly the same, but paler; legs pale blue; webs black. Mr. Pennant informs us this bird was killed in Lincolnshire. It is the only specimen on record in England; but is said to be found in Denmark and Sweden. No mention is made respecting the difference of sexes, or whether that above described was male or female. [In the 'Zoologist' for 1848, p. 2230, Mr. F. W. Johnson records the purchase of a fine specimen of the Ferruginous Duck in Leadenhall market: in the same work, for 1849, the Revs. A. and H. Matthews record, at p. 2539, the occurrence of three specimens in Oxfordshire: in the volume for 1850 Mr. Rudd, of Redcar, records, at p. 2773, the capture of one specimen in a decoy in that

neighbourhood: and lastly, at p. 2803, Mr. Rising states, that a fine male was shot on the 16th of April, 1850, on a marsh near Great Yarmouth.]

SUPPLEMENT. — Till lately we never had met with any species of Duck which could be referred to the ferruginous originally described by Mr. Pennant, and which was without doubt a female. A specimen which we suspect is the male, shot in the north of England (we believe in the Humber), is now before us; a description of which cannot fail to be interesting to the Ornithologist. Length about nineteen inches: bill rather long, and deep at the base, flattish at the point, and of a dark lead-colour, with the nail black. Head and neck small, of a dark ferruginous: the lower part of the neck behind, back, scapulars, coverts of the wings, and upper coverts of the tail dusky brown, with a slight tinge of ferruginous: on the chin is a small spot of dirty white: the lower part of the neck before, and the whole breast chestnut; beneath which the body is white to the thighs, which, with the part between them as far as the vent, are brown, minutely speckled, becoming black about the vent; behind that, including the under tail-coverts, white: the feathers on the sides under the wings, extending to the thighs, are bright ferruginous: the primary quills are whitish at their base, dusky at the tips and on the outer webs, becoming less so as they approach the secondaries, which are wholly white except the points, and form a white speculum on the wing when closed: the tertials, and the coverts immediately impeding the secondaries, are dusky, bronzed with green: the other darker parts of the plumage partake more or less of metallic lustre in some points of view, especially the scapulars: the under scapulars are white: the tail is a trifle cuneiform, consisting of fourteen dusky brown feathers slightly tinged with ferruginous: feet rather large, which with the webs and legs are lead-colour: the middle toe rather longer than the outer one: claws black. The eyes appeared to have been yellow; but the sex could not be ascertained; the brightness of the plumage, however, should indicate the gender to be masculine. We really suspect this to be the male of the Ferruginous Duck of the 'British Zoology,' and copied from that work by all succeeding writers. It is most certainly the Olive-tufted Duck of the 'British Miscellany;' and we think there can be no doubt that it is the *nyroca* of Gmelin. It must be confessed many of the Duck tribe are still in great obscurity, as it is well known that some species differ so essentially in their plumage at different ages and seasons, that

naturalists have been, and will continue to be, at variance with each other, and occasionally with themselves. Thus the nyroca was originally considered by Doctor Latham as one of the varieties of the Fuligula, but in the latter works of that author it is given as a distinct species. The description given of var. A. of the Tufted Duck in 'Latham's Synopsis,' accords so nearly with this that we are induced to consider it as such. Upon the whole, therefore, the *Anas ferruginea* and *nyroca* appear evidently one and the same species, the former being of the feminine, the latter the masculine gender. Doctor Latham expresses a doubt whether *ferruginea* is not the female of *Anas dispar*, but we trust he will now be inclined to accord with our opinion, and bring together all the synonyma of *nyroca* as the male, and those of *ferruginea* as the female, under the English appellation of Ferruginous Duck.

Duck, Field.—See Bustard, Lesser.

[Duck, Gadwall.—See Gadwall.]

[Duck, Golden-eye.—See Golden-eye.]

Duck, Great Black.—See Duck, Velvet.

Duck, Great Black and White.—See Duck, Eider.

Duck, Greyheaded.—See Morillon.

Duck, Greyheaded.—See Duck, King.

Duck, Harle.—See Dundiver.

Duck, Harlequin.—[Yarrell, iii. 365; Hewitson, cxviii. 433.] Male:—*Anas histriónica*, *Lin. Syst. i. p. 204, 35*; *Gmel. Syst. i. p. 534*; *Phil. Trans. lxii. p. 417*; *Ind. Orn. ii. p. 849, No. 45, M. F.* *Anas torquata*, *Bris. vi. p. 362, 14*; *Ib. 8vo, ii. p. 457*. Le Canard à collier, *Buf. ix. p. 250*. Dusky and spotted Duck, *Edw. t. 99*. Harlequin Duck, *Arct. Zool. ii. No. 490*; *Lath. Syn. vi. p. 484, 38*. Female:—*Anas minuta*, *Lin. Syst. i. p. 204, 36*; *Gmel. Syst. i. p. 534*. *Anas torquata*, *Gmel. Syst. i. p. 514*. *Querquedula freti* Hudsonis, *Bris. vi. p. 469, 41*; *Ib. 8vo, ii. p. 483*. Le Canard brun, *Buf. ix. p. 252*. La Sarcelle brune et blanche, *Buf. ix. p. 287*. Little brown and white Duck, *Edw. t. 157*. Harlequin Duck (female), *Lath. Syn. vi. p. 485, 38*.—We are enabled with certainty to add this species of Duck to the list of British birds from the authority of Mr. Sowerby, in whose collection of the more rare English birds we had an opportunity of examining both sexes, which were

killed on the domain of Lord Seaforth, in Scotland, a few years since, and presented to him by that nobleman. The great Linnaeus had considered the female of this species as distinct from his *Anas histriónica*, and has given it under the name of *Anas minuta*. Gmelin has followed him, but not without expressing his doubts. Various other authors have considered the sexes as distinct species; but later observations have clearly proved, beyond doubt, that the *Anas minuta* is no other than the female Harlequin Duck. This species is about the size of the Wigeon, but shorter; length seventeen inches; weight about twenty ounces. Bill small, an inch and a half long, and black; irides hazel; from the base of the bill to the eye a white patch; crown of the head black, bounded by a ferruginous streak; neck black, on each side of which is a white line pointing downwards; above that is a white spot; round the breast is a white band, marked with dots of black behind; this is bounded by a black one; between this and the wings is a transverse line of white; the breast bluish ash-colour; back dusky brown, with a purplish hue; rump bluish black; belly and thighs black; sides dull orange-yellow; wings and tail deep ash-colour; legs black. The Harlequin Duck, like most of the genus, appears to be subject to considerable variety, from the description of various authors. The breast in some is marked with semilunar stripes of white; the tail is brown, and some of the quill-feathers tipped with white; and the spot between the bill and eye yellow. The female is less, measuring about fourteen inches in length; the forehead, and between the bill and eye, is white, with a spot of the same behind the ear; the rest of the plumage above is generally of a dusky brown; upper part of the breast and rump inclining to rufous; the lower part of the breast and belly barred with pale rufous and white; the lower belly and thighs with rufous and brown; legs dusky. This bird is an inhabitant of the more northern parts of the world. It is found in Russia, Iceland, and Greenland, and as far as Kamtschatka; in America from Carolina to Newfoundland, and at Hudson's Bay. Is said to frequent bays and rivers during the summer months, and to be fond of shady places, making its nest on shore amongst shrubs; particularly about the most rocky and rapid torrents. It dives admirably in search of small shell fish, on which it feeds, as well as on spawn and the larvæ of gnats. Has been found frequently in the small rivulets of Hudson's Bay ninety miles inland; most probably frequenting such places in preference to large rivers during the

breeding season. It flies swift, and to a great height, so that it is not easily taken. The note is a sort of whistle. Lays ten or twelve eggs, like those of the Pigeon. In autumn, when the young are capable of flying, they migrate southward, to pass the winter in the open sea; and is probably not uncommon on the northern coasts of Scotland. [In the 'Zoologist' for 1847, at page 1697, Dr. Battersby records that a small flock of these Ducks frequented the bay at Torquay in the winter of 1846-7; two specimens, a male and female, were obtained during the month of February, 1847. In the volume for 1850, at p. 2949, Mr. Briggs records that a pair of them bred on the pool in Melbourne garden, in Derbyshire, in 1849.]

Duck Hawk.—See Falcon, Peregrine; and Moor Buzzard.

Duck, Hookbilled.—This is a mere variety of the common domesticated Duck. The only difference is in the bill, which is longer, and bent downwards. There is also another variety with divided toes, not connected by a membrane or web.

Duck, King.—[Yarrell, iii. 310; Hewitson, cxv. 417.] *Anas spectabilis*, Lin. Syst. i. p. 195, 5; Gmel. Syst. i. p. 907; Ind. Orn. ii. p. 845, 36. Le Canard à tête grise, Buf. ix. p. 253. *Anas freti Hudsonis*, Bris. vi. p. 365, 15; Ib. 8vo, ii. p. 458. Grey-headed Duck, Edw. t. 154. King Duck, Arct. Zool. ii. No. 481; Lath. Syn. vi. p. 473; Lewin, Br. Birds, vii. t. 245.—This species is not much inferior in size to the Eider Duck. The bill is almost two inches long, of an orange-colour; at the base of the upper mandible is a ridged protuberance, flat on the top, and compressed on the sides, but divided into two, the elevated parts velvety black, passing on each side to the eyes; the crown of the head and nape are pale ash-colour; at the base of the upper mandible the feathers are pea-green, passing backwards on each side the neck, and taking in half the eye; beneath which, and round to the chin, the feathers are of a dirty white; but here the two colours are blended, and the white is lost by degrees in the green; under the chin is a black mark, diverging like the letter V inverted; the rest of the neck and breast are whitish; the middle of the back, the belly, and vent black; wings dusky, on the middle of the coverts a patch of white; quills black; the secondaries curve downwards over the quills; the shafts deep ferruginous, on each side the outer ones a patch of white; the tail is cuneiform, short, and black; legs dusky. The female is less; the protuberance on the

bill not so large, nor so high-coloured, but the feathery ridge on the top is broader; the whole plumage brown, the middle of each feather dusky; six of the lesser quills are tipped with white, which forms a line of white on the wing; the rest of the quills and tail brown. The young birds do not get the gibbosity of the bill, nor the males their mature plumage, for some years. These birds are subject to vary a little in their several changes, both with regard to the colour of their bill and plumage; is sometimes found with a little white on the hind part of the head and on the back. The King Duck resides chiefly in the northern parts; are plentiful at Hudson's Bay, where they breed on the sides of pools and rivers. The nest is made of sticks and moss, lined with down plucked from their own body. The eggs are five or six in number, rather less than those of the Goose, of a whitish colour. It is not unfrequent in the north of Siberia and Kamtschatka, and common in Greenland, where the down is accounted of equal value to that of the Eider Duck, the flesh excellent, and the gibbous part of the bill a delicacy. The skins sewed together are used for winter garments. These birds are not uncommon on the coasts of Norway; and we are assured by Mr. Pennant and others that it sometimes frequents the Orkney Isles, which has induced us to give it a place in this work.

APPENDIX.—We are assured by Mr. Bullock that he found this bird breeding in Papa Westra, one of the Orkney Islands, in the latter end of June. It lays six yellowish white eggs, rather less than those of the Eider Duck, and, like that bird, covers the eggs with its own down. The nest was on a rock impending the sea. The female (according to Mr. Bullock's account) much resembles that sex of the Eider.

Duck, Little Brown and White.—See Duck, Harlequin.

Duck, Longtailed.—[Yarrell, iii. 357; Hewitson, cxviii. 431.] *Anas glacialis*, Lin. Syst. i. p. 203, 30; Gmel. Syst. ii. p. 529; Ind. Orn. ii. p. 864, 82; Bewick, Br. Birds, ii. t. p. 363. *Anas hyemalis*, Lin. Syst. i. p. 202, 29. *Anas caudacuta* Harleida, Raii Syn. p. 145, 14; Will. p. 290. *Anas longicauda islandica*, Bris. vi. p. 379, 17; Ib. 8vo, ii. p. 460. *Querquedula ferroensis*, Bris. vi. p. 466, 40, f. 2; Ib. 8vo, ii. p. 482. Canard à longue queue, Buf. ix. p. 202. Sarcelle de Ferroe, Buf. ix. p. 278. Swallow-tailed Shieldrake, Will. Angl. p. 364. Long-tailed Duck, Br. Zool. ii. No. 283; Ib. fol. 156, t. Q. 7; Arct. Zool. ii. No. 501; Ib. Sup. p. 76; Edw. t. 280 &

t. 156; *Lath. Syn.* vi. p. 528, 73; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 73; *Lewin, Br. Birds.* vii. t. 262; *Don. Br. Birds.* v. t. 111. Provincial: Sharp-tailed Duck; Caloo or Calaw.—This species is about the size of a Wigeon; length twenty-two inches, including the long feathers of the tail. The bill is black; down the middle and across the tip orange; irides red. The fore part and sides of the head are reddish grey; on each side the neck, just below the head, is an oval black spot; the hind part of the head, the throat, and remaining part of the neck and breast, white; back and rump black; sides of the upper tail-coverts white, the middle black; the lower belly and vent white; the scapulars white, long, and pointed; the wings chiefly black, with a mixture of chesnut; the four middle tail-feathers are black, the others white; the two middle ones are narrow, and exceed the others three inches and a half; legs of a dull red; claws black. Such is the description of the male; but in some the black parts are more or less of a chocolate-colour, and the spot on the neck occupies half of it; the length of the tail also varies. The female has been described by some authors for a different species. The bill, however, which is the same in this sex, seems to be an unerring guide. The sides of the head are white, behind 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 like the male; legs dusky reddish brown. This sex is also subject to some variation; most commonly the middle tail-feathers are not much longer than the rest. It is rarely met with in England, but is frequent in the north of Scotland and the Orkneys in winter, where they assemble in large flocks; common in Sweden, Lapland, and Russia. Is said to breed in Greenland and at Hudson's Bay; makes a nest of grass near the sea, and lays ten or more bluish white eggs. The down of this bird is said to be as valuable as that of the Eider Duck. The trachea of this species is said to be of a singular structure, having three openings covered with a thin membrane.

SUPPLEMENT.—This species very rarely visits the southern coast of England, but in its autumnal migration from the arctic regions is contented to winter in the northern parts of Scotland. One instance only (a female) has occurred to us in the south, and that was shot in Devonshire. We are assured by Mr. Fleming that it is common in Zetland from October to April. Mr. Neill, in his 'Tour through Orkney and Shetland,' says this bird is called by the whimsical name of "Coal and Candle

Light," from a fancied resemblance of its long and plaintive winter-call to these words. This gentleman is quite sure that the name of Caloo is given to this bird, and not the Pintail, as stated in Dr. Barry's 'History of Orkney,' having received stuffed specimens from thence. The female in our possession has no other resemblance to the other sex than the large oval spot on each side of the neck just below the head, which in this bird is dusky. Weight fourteen ounces: length fifteen inches and a half: irides light hazel: bill is bluish, with the ridge and nail black: the forehead is dusky, spreading as it passes backwards on the crown and back of the head: the sides of the head before the eyes light brown, growing paler about the eyes, and becoming white in an angle nearly an inch behind each eye; beneath the white is a large oval patch of dusky; under this is a patch of white: the back of the neck, as well as the front, from the chin downward grey-brown, darkest above and on the chin: the back of the neck below the lateral white spot is dusky brown, becoming dusky black on the back and rump, slightly glossed with purple: the scapulars are pale brown, with the margin of some of the feathers cinereous: the coverts of the wings dusky black: primary quills the same: secondaries tinged with ferruginous, which increases on the tertials, and glossed with purple: the feathers on the wings beneath are dusky: the fore part of the neck below the lateral white patch is dusky brown, shaded to a grey, mixed with pale ferruginous-brown on the upper part, and sides of the breast: the lower breast, belly, vent, and under tail-coverts white: the tail is cuneiform, consisting of fourteen dusky brown feathers, the outer ones lightest and edged with white; the colour of these feathers beneath is cinereous: legs and toes bluish grey; the webs and the feet beneath dusky.

APPENDIX.—We are assured by Mr. Foljambe that he lately had an opportunity of examining three fresh specimens, two old males, and one young bird of the same sex, destitute of the long feathers in the tail. In all these the legs were lead-colour, pale along the toes and ridge of the legs; the sides of the legs and webs dusky black; the bill of the matured birds deep orange in the middle, and black at the base and extremity. In the young bird the bill was lead-colour, with a slight tinge of yellow in the middle; the point black. The trachea of this species is of a very singular structure; it rather increases in size at each extremity; at the lower end, close to the labyrinthic part, one side

is flattened, and instead of the bony rings continuing round of their full breadth, this part is crossed with four distant linear bones as fine as a thread, which support a delicate transparent membrane three-quarters of an inch in length, and almost three-eighths of an inch broad at the base: below this ribbed membrane projects the bony part of the labyrinth, with a tympanum of a kidney-shape, placed transverse to the trachea, the middle of which is flat and membranaceous, but more opaque than is usual: the opposite side of the labyrinth is depressed; from the bottom of this part the two branchiæ originate.

[Duck, Membranaceous.—*Malacorhynchus membranaceus*. In the 'Zoologist' for 1854, p. 4213, Mr. Andrews records that a specimen of this South-Australian Duck was shot in February, 1854, in Dingle Bay, Castlemain Harbour; there were five others in company: they had doubtless escaped from confinement.]

Duck, Olive-tufted.—See Duck, Ferruginous.

Duck, Pintail.—[*Yarrell*, iii. 258; *Hewitson*, cxiii. 403.] *Anas acuta*, *Lin. Syst.* i. p. 202, 28; *Gmel. Syst.* ii. p. 528; *Ind. Orn.* ii. p. 864, 81. *Lath. Syn. Sup.* ii. p. 354; *Lin. Trans.* iv. p. 110, t. 13, f. 6 (Trachea); *Bewick, Br. Birds*, ii. t. p. 360; *Anas caudacuta*, *Raii Syn.* p. 147, A. 5; *Ib.* 192, 13; *Will.* p. 289, t. 72. *Anas longicauda*, *Bris.* vi. p. 369, 16, t. 34, f. 1, 2; *Ib.* 8vo, ii. p. 459. *Canard à longue queue*, *Buf.* ix. p. 199, t. 13. *Tritzihoa*, *Raii Syn.* p. 175. *Sea Pheasant*, or *Cracker*, *Will. Angl.* p. 376, t. 73; *Albin.* ii. t. 94, 95. *Pintail*, *Br. Zool.* ii. No. 282; *Ib.* fol. 156, t. Q. 8; *Arct. Zool.* ii. No. 500; *Lath. Syn.* vi. p. 526, 72; *Pult. Cat. Dorset.* p. 21; *Walc. Syn.* i. t. 72; *Lewin, Br. Birds*, vii. t. 261. *Provincial: Winter Duck*.—The weight of this species is about two pounds; length twenty inches. Bill black, bluish on the sides; irides dark. The head and upper part of the neck before rufous-brown; the sides of the head glossed with purple; lower part of the neck before white, running up on each side to the hind-head, divided by a brown line down the back of the neck; nape dusky, glossed with purple; breast and belly white; back and sides of the breast marked with numerous small undulated black and white lines; the scapulars black; the inner ones long, pointed, and margined with greyish white; smaller coverts of the wings fine ash-colour; the greater coverts of the secondary quills tipped with bay; the greater quills dusky

brown; lesser quills glossy purplish green on their outer webs, black near the ends, tipped with white; the two middle feathers of the tail are three inches longer than the rest, narrow, pointed, and black; the others dusky, edged with white; vent black; legs dusky, inclining to lead-colour. The female is somewhat less; the head and neck rusty brown, streaked with dusky; the back and scapulars dusky brown, transversely marked with narrow white bars across each feather; the speculum in the wing something like the male, but less conspicuous; the under parts light rusty brown, mottled with a deeper shade; the tail is brown and cuneiform; the two middle feathers crossed with one or two pale lines, but are not much longer than the next; the number of feathers is sixteen. The male of this species is furnished with a labyrinth. This bird is frequently taken in our decoys in winter, and sold by the name of Sea Pheasant; most plentiful in the north of England and Scotland, especially the Orkneys. It does not breed with us, but retires more northward for that purpose; probably in Russia and at Hudson's Bay, where it is common. It is also found in China. The flesh is much esteemed for its fine flavour.

SUPPLEMENT.—By the kind assistance of a nobleman who did us the honour to present us with some aquatic birds taken in his decoy, we have been enabled to ascertain some most important facts in the history of this species. The males, which have been domesticated for several years, gave us an opportunity of observing that they moult twice in the year, assuming at one period a very near resemblance to the female, which at other times is known to be so extremely dissimilar. In the month of June, or beginning of July, these birds commenced their change of plumage, and by degrees, after making a singular mottled appearance, especially on the part of the body which was white before, became, by the first week in August, entirely of a brown colour. The beautiful bronze on the head, the white streak on each side of the neck, and all the white beneath, as well as the elegant scapulars, had all entirely vanished, and to all appearance a sexual metamorphose had taken place. But this change was of short duration, for about the latter end of September one of the males began to re-assume the masculine attire; the white on the under parts of the body, streaks on the neck and scapulars, and some bronze on the head were evident, and by the middle of October this bird was again in full plumage. The other had then only begun to change, and did not become perfect till the middle of November. That such

change is not the effect of confinement is evident from their excellent health, and having the range of a pond fenced off with some land attached to it that is planted with shrubs and trees. But to clearly decide that such a change actually takes place in a perfect state of nature, a friend to whom we are under many obligations for ornithological assistance (the Rev. Mr. Holdsworth) shot a male Pintail in the month of December, that had not completed his perfect male plumage. The following is the description of a Pintail after he had thrown off the masculine plumage; taken on the 19th of August. Bill as usual: top of the head, and from thence down the back of the neck, dusky and pale ferruginous, intermixed in minute streaks, paler on the forehead; sides of the head and throat brown, with minute dusky specks tinged with ferruginous; the front and sides of the neck brown, with dusky black spots, which are minute on the upper part, becoming larger by degrees downwards, where they are also more distinct: the breast and belly very pale brown, with more distant dusky spots: the back and scapulars dusky black, with pale margins, each feather having a transverse bar of white near the tip; the longer scapulars are only margined with rufous-white, and some are powdered with white: the rump like the back, but these feathers gradually lose the white bar as they approach the tail, so that the tail-coverts are only margined with white: the feathers on the sides of the body being large, have broad margins, with the middle dusky black, in which is either a ferruginous-white bar, or two spots, one on each side of the shaft: the prime quills dusky grey as usual: the speculum changeable green, or copper, tipped with white, a violet bar dividing the green from the white: the first tertial is brown on the inner web, grey on the outer near the shaft, and a broad margin of violet; the rest of the tertials are brown dashed with cinereous, black near the shafts: the coverts of the wings plain dark cinereous, the largest series tipped with bay: the tail consists of sixteen dusky feathers dashed with cinereous, gradually becoming darker towards the middle feathers, which rather exceed the next in length, making the tail regularly cuneiform: vent and under tail-coverts rufous-white, with distant black spots. This double moulting in so short a time, peculiar to some species of birds, is a most curious and extraordinary circumstance that seems to bid defiance to all human reasoning. That some birds should change their plumage with the season is evidently a gift of nature to accommodate

their colour to their habits, as in the Ptarmigan that changes his mottled plumage in the autumn for that of white, in order that he may rest secure upon the bosom of the snow during winter. But there is no such evident reason for a double change in the short space of two or three months in the same season. The fact however now established will doubtless lead to discovery. It accounts for the Red-breasted Shoveler being only the common Blue-winged species, in the intermediate change of plumage; and it is probable all the males of that species would be found in the latter end of the summer or beginning of the autumn to assume more or less the female attire, with that rufous tinge which has occasioned its being considered a distinct species. A Shoveler of this description now in our museum was shot in August (see Shoveler). The Pintail has bred in confinement: and Lord Stanley informs us he has a hybrid brood between the female Pintail and a male Wigeon (see Wigeon). The male Pintails in our menagerie, for want of the other sex, shewed inclination to pair with a female Scaup, till by accident she made her escape, and since that we were surprised to observe these birds court a Bernacle Goose, a bird so much larger. One also paired with a tame Duck, but which appeared too large for a union; more than twenty eggs which the Duck laid (part of which she sat on, and the rest put under a hen) evidently were not fecundated. The notes of the Pintail are extremely soft and inward; the courting note is always attended with a jerk of the head; the other greatly resembles that of a very young kitten. In the spring the male Pintail indicates his softer passions by suddenly rising his body upright in the water, and bringing his bill close to his breast, uttering at the same time a soft note. This gesticulation is frequently followed by a singular jerk of the hinder part of the body, which in turn is thrown up above the water.

Duck, Red.)	See
Duck, Redbreasted.)	Duck, Ferruginous.

[Duck, Redcrested Whistling. — *Fuligula rufina*, *Yarrell*, iii. 329. — "In the adult male the beak is vermilion-red; the nail white; the irides reddish brown; the whole of the head, and the upper part of the neck all round, rich reddish chestnut; the feathers on the top of the head considerably elongated, forming a conspicuous crest; the back of the neck below, and the upper tail-coverts dark brown; the back and a portion of the scapularies, wing-coverts, and tertials, yellowish brown; a

white patch on the carpal joint of the wing, and another over the joint; greater coverts ash-brown; wing-primaries and tail-feathers greyish brown; the secondaries with the outer webs white, forming a speculum; front of the neck, breast, belly and under tail-coverts rich dark brown; the sides and flanks white; legs and toes vermilion-red, interdigital membrane almost black. The whole length is twenty-two inches. From the carpal joint to the end of the first quill-feather, which is the longest in the wing, ten inches and a half. The female is without a crest; the top of the head dark brown; cheeks, throat, and sides of the neck greyish white; upper surface of the body pale rufous-brown; point of the shoulder and the speculum greyish white; breast reddish brown; the other parts of the under surface greyish brown; beak and legs reddish brown. The windpipe of the male is about nine inches in length; the tube is narrow in diameter at the middle and near the end, but enlarged at the commencement and again below the middle."—*Yarrell*, iii. 329. In the 'Zoologist' for 1844, at p. 576, Mr. Gurney reports the occurrence of the Redcrested Whistling Duck at Hornsea Mere, in Norfolk: the specimen was a male in adult plumage. In the volume for 1854, at p. 4166, I have noticed that an extremely fine adult male, bought in the London markets, was brought me in the flesh.]

Duck, Rouen.—A variety of the Common Duck, of a larger size; plumage the same. Being half-domesticated, it frequently returns to its natural wild habits, where it breeds with the wild species; is frequently killed in our rivers and decoys, and mistaken for those of a larger size.

[**Duck, St. Cuthbert's.**—See Duck, Eider.]

Duck, Scaup.—[*Yarrell*, iii. 343; *Hewitson*, cxvii. 426.] *Anas Marila*, *Lin. Syst.* i. p. 196, 8; *Gmel. Syst.* ii. p. 509; *Ind. Orn.* ii. p. 853, 54. *Glaucium minus striatum*, *Bris.* vi. p. 416, 26, A.; *Ib.* 8vo, ii. p. 470. *Fuligula Gesneri*, *Raii Syn.* p. 142, A. 6; *Will.* p. 279. Scaup Duck, *Br. Zool.* ii. No. 275, t. 100; *Ib.* fol. p. 153, t. Q.; *Arct. Zool.* ii. No. 498; *Lath. Syn.* vi. p. 500, 49; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 60; *Lewin, Br. Birds*, vii. t. 250; *Anas frænata*, *Mus. Carls.* fasc. ii. t. 38 (female); *Lath. Syn. Sup.* ii. p. 351; *Lin. Trans.* iv. p. 128, t. 14, f. 3, 4 (trachea); *Bewick, Br. Birds*, ii. t. p. 339. White-faced Duck, *Br. Miscel.* ii. p. 5, t. 62. Provincial: Spoon-bill Duck.—The length of this species is about twenty-one inches; weight sometimes as much as thirty-five

ounces. The bill is broad, and not so much compressed as usual in this genus; colour bluish lead; nail black; irides light gold-colour. The head and upper part of the neck black, glossed with green, and from being well clothed with feathers appears large; the lower part of the neck and breast black; back and scapulars pale grey, undulated with innumerable small transverse lines of black; the wing-coverts the same, but minutely small; lower part of the back, rump, and vent black; the primaries are dusky, lightest on their inner webs, and black at the ends; the secondary quills, except a few next the body, are white, tipped with black, forming a broad bar of white across the wing; the under part of the body is white, sprinkled between the thighs with dusky; the tail is composed of sixteen dusky black feathers; legs lead-colour. In some we have seen the white in the wing is edged with rust-colour; it is also subject to other varieties. The female is not distinguishable from the male in plumage. The Scaup Duck is not uncommon in most parts of this kingdom in winter, and is frequently found in fresh waters. Is supposed to take its name from feeding on broken shells, called scaup. This, like most of the genus, breeds in the more northern parts; is common in Russia, Sweden, Norway, and Lapland; is found at Hudson's Bay in the warmer months.

SUPPLEMENT.—In the former part of this work we had fallen into the same error with many more enlightened naturalists, having stated that the female was not distinguishable by its plumage from the male; but the fact is that the dissimilarity is so great as to have caused the female to be considered a distinct species. As such it has been figured in the 'British Miscellany,' under the title above referred to. Dr. Latham, in his second Supplement to the 'General Synopsis,' describes the female to differ in having the head dark brown, and at the base of the bill a band of white nearly half an inch broad, passing quite round the forehead, cheeks, and throat. Mr. Tunstall and Mr. Boys were both of the same opinion. In the Catalogue of Sussex Birds, given by Mr. Markwick in the Fourth Vol. of the 'Transactions of the Linnean Society,' we find the following correct observation, under the article Scaup Duck:—"On the 27th of January, 1795, my servant, in company with another person, fired amongst a flock of these birds consisting of nearly an hundred: he brought me a male and female; the latter proved to be the *Anas frænata* of Dr. Sparman's *Museum Carlsonianum*." In confirmation of such opinions, we have been fortunate within a few years in

obtaining four or five specimens of this White-fronted Duck, by the kind assistance of Mr. Anstice, of Bridgewater, three of which were sent to us alive; one of these, now living, has been six years in the menagerie. From the same quarter a live male Scaup has been made the companion of the former for two years, a circumstance that enables us most clearly to decide that they are without doubt both the same species, differing only in sex. Their manners are similar, as well as the conformation of the several external parts, bill, legs, colour of the eyes, and number of the tail-feathers. They associate together apart from all others, make the same grunting noise, and both have the same singular toss of the head attended with an opening of the bill, which in the spring is continued for a considerable time while swimming, and sporting on the water. This singular gesture would be sufficient to identify the species were all other distinctions wanting. During the summer months, when the larvæ of various insects are to be found in the mud at the bottom of the pond, these birds are continually diving; but they are perfectly contented with barley, and are become so tame as to come to the edge of the water for a bit of bread. Of all the aquatic birds we have had, that have been taken alive from their natural wild habits, none have appeared so familiar as the Scaup; and after feeding a few days with bread soaked in water, they take to eating barley freely. This species is never taken in a decoy, and rarely observed upon fresh water, except where large rivers disembogue into the sea, or in lakes close to the sea. The manner in which our specimens were taken was accidentally thus:—On some parts of our flat coast where the tide recedes for a considerable distance, the fishermen place their nets in a semicircular form at low water, so that on the return of the water at the next ebb, all the fishes within the vortex of the net are cut off, and with them sometimes a Scaup, or a Scoter. These birds finding some resistance, attempt to avoid the obstacle by diving, and by such continued efforts are at last incapable of flying, and are easily taken alive, except they get entangled in the net under water, and are drowned, which sometimes happens. We shall now record a minute description of the female Scaup, and rectify a mistake we had fallen into in the former part of this work, where it is said that the Scaup has sixteen feathers in the tail. This circumstance has since been attended to in both sexes, and ascertained to possess only fourteen. In point of size the female is not much inferior to the male. The weight of the one

under examination is twenty-one ounces: length eighteen inches and a half. The bill, like that of the male, is very broad, a trifle dilating at the end, and from being considerably compressed, appears to reflect a little, and is of a dusky lead-colour, punctured round the nail, which last is black: irides bright yellow: the head is large and well clothed with chocolate-brown feathers, those on the crown longest; round the base of the bill is a band of yellowish white, occupying the space of half an inch next to the upper mandible, decreasing from thence to the chin: the neck is brown: breast the same, tinged with tawny: upper part of the back dusky, the ends of the feathers greyish: the lower back, and coverts of the wings, dusky black, tinged with changeable green: scapulars the same, minutely speckled with grey, and mixed with some plain dark brown feathers: the four first prime quills dusky black, the others becoming grey on their outer webs; the ten secondaries are white, with dusky tips; the next is black, speckled with white near the shaft: the tertials are plain dusky black, slightly bronzed: belly dirty white: sides inclining to brown, darker over the thighs: between the legs, and from thence to the tail, mottled with pale yellowish brown, the feathers behind the vent finely barred with the same colour: the tail, and the feathers on the rump contiguous, dusky brown, the former rather short and rounded: legs and toes dusky lead-colour, the webs darkest. We have observed that the females become much more powdered with grey on the back, scapulars, and wing-coverts with age. One very fine specimen, much larger than the above, which was captured in the month of May, had the head and neck very full of feathers of a fine chocolate-brown: the breast, and round the lower part of the neck behind, of a fine olivaceous-brown; and the two middle feathers of the tail much darker than the rest. This bird, which came alive to us, did not appear in health, and had large swellings on the joints of some of the toes, so that it could scarcely walk; indeed at best this species is ill calculated for pedestrian excursions. After lingering a few days it died; and upon dissection the ova were found to be numerous, but not much dilated. The cause of death appeared to be in the lungs, and in the membrane that separates them from the other viscera; this last was much thickened, and all the cavity within was covered with mucor or blue mould. It is a most curious circumstance to find this vegetable production growing within a living animal, and shows that where air is pervious, mould will be found to obtain, if it meets with sufficient moisture, and a

place congenial to vegetation. Now the fact is that the part on which this vegetable was growing was decayed, and had no longer in itself a living principle; the dead part therefore became the proper pabulum of the invisible seeds of the mucor transmitted by the air in respiration; and thus nature carries on all her works immutably under every possible variation of circumstance. It would indeed be impossible for such to vegetate on a living body, being incompatible with vitality, and we may be assured that decay must take place before this minute vegetable can make a lodgement to aid in the great change of decomposition. Even with inanimate bodies the appearance of mould or any species of Fungi is a sure presage of partial decay and decomposition.

Duck, Sharptailed.—See Duck, Long-tailed.

Duck, Smaller Redheaded.—See Golden-eye.

[Duck, Steller's Western.—*Somateria dispar*, *Yarrell*, iii. 306.—“Bill and legs black. Irides pale brown. Upon the forehead is a band of pistachio-green, and upon the nape of the neck is another of the same colour, passing backwards into black, and forming a short occipital crest. Crown of the head, cheeks, and upper part of the neck white. Chin, throat, and an irregular spot behind the eyes, black. Middle part of the neck surrounded by a collar of black, which is continued down the back to the tail. Lower portion of the neck, part of the scapulars, and the lesser wing-coverts white. Breast, belly, and abdomen chestnut-brown, becoming darker as it approaches to the vent, which latter, and the under tail-coverts, are black. Tertiaries long and curved; the inner web narrow, and, with the shaft, white; the outer web broad and black. Quills and tail brownish black; the latter more elongated and pointed than in the rest of this genus.”—*Selby*, ii. 361. In the ‘*Zoologist*’ for 1846, at p. 1249, Mr. R. J. Bell records that a specimen of this Duck was shot at Filby, in Yorkshire, on the 15th of August, 1845: the bird was a male assuming its winter plumage.]

[Duck, Tree.—*Dendronessa sponsa*.—In the ‘*Zoologist*’ for 1848, at p. 2067, Mr. Curtler records that a specimen of this American Duck was shot at Tenbury, in Worcester: this was doubtless an escaped bird.]

Duck, Tufted.—[*Yarrell*, iii. 353; *Hewitson*, cxviii. 430.] *Anas Fuligula*, *Lin.*

Syst. i. p. 207, 45; *Gmel. Syst.* ii. p. 543; *Ind. Orn.* ii. p. 868, 90; *Will.* p. 280, t. 73. *Anas cristata*, *Raii Syn.* p. 142, A. 7. *Glau-cium minus*, *Bris.* vi. p. 411, 26, t. 37, 1; *Ib.* 8vo, ii. p. 469. *Morillon, Buf.* ix. p. 227, 231, t. 15. Tufted Duck, *Br. Zool.* ii. No. 274; *Ib.* fol. 153; *Arct. Zool.* ii. p. 573, G.; *Albin.* i. t. 95; *Will. Angl.* p. 365, t. 73; *Hayes, Br. Birds*, t. 26; *Lath. Syn.* vi. p. 540, 79; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 78; *Lewin, Br. Birds*, vii. t. 257; *Lath. Syn. Sup.* ii. p. 355; *Lin. Trans.* iv. p. 117.—This species weighs about twenty-five ounces; length seventeen inches. The bill is near two inches long, of a bluish lead-colour, broadest towards the point; nail black; irides dark yellow. The head, neck, upper part of the breast, and whole upper part of the body, black; the two first tinged with changeable violet and green; on the back of the head a pendant crest of very narrow feathers, sometimes two inches long; the back and scapulars are very minutely speckled with grey, not distinguishable at a small distance; the three or four first greater quills black on their outer webs, the rest more or less white towards the base; the secondaries, except four or five next the body, white, tipped with black, and slightly edged with the same; lower breast and belly glossy white; above the thighs, and behind the vent, black; the tail is somewhat cuneiform, and consists of fourteen black feathers; the whole upper parts of the bird have a slight tinge of violet, when viewed in some particular lights; legs and feet dusky black. This bird is subject to much variety in size and colour; will sometimes weigh as much as thirty-one ounces, others not above twenty-two; and the black on the breast is intermixed with brown, as well as the plumage in general being of a rusty brown: such are probably birds of the first or second year. The female resembles the other sex in markings; but where that is black this is of a rusty brown; the sides are also brown, which in the male are white; and the head wants the crest. This, however, is sometimes the case in young male birds. The Tufted Duck is not uncommon with us in winter; is frequently seen in our fresh waters as late as the latter end of March; are difficult to shoot by reason of their incessant diving. It is often brought to market and sold for Widgeon. Is found in all the northern parts of Europe as far as Norway, and throughout Russia. *Scopoli* has noticed a variety as large as a Mallard, with a yellowish bill; and another, of a less size, with a band or speculum on the wing of shining green, above which is a rufous one, and beneath a black band. It is much to be doubted if these

are the same species; such does not seem to have been noticed in England; and indeed the green speculum in the wing of the latter should forbid it, as this in general is a pretty clear mark of distinction in the Duck tribe. The male of this species possesses a labyrinth.

SUPPLEMENT.—Many of this species are shot in fresh water, but it is too great a diver to be taken in the decoy. It is sometimes destitute of the tuft or pendant crest, and in that case has been made distinct. Is frequently shot on Slapton Ley in South Devon, a large piece of water close to the sea, and is by the natives called Black Wigeon. In the month of December, when the aquatic testaceous Limaces have retreated under the mud in the deep, we have found this bird with its craw full of *Helix putris*.

Duck, Velvet.—[*Yarrell*, iii. 314; *Hewitson*, cxvi. 419.] *Anas fusca*, *Lin. Syst. i.* p. 196, 6; *Gmel. Syst. ii.* p. 507; *Ind. Orn. ii.* p. 848, No. 44. *Anas nigra major*, *Raii Syn.* p. 141, A. 4; *Will.* p. 278, t. 70; *Bris. vi.* p. 423, 29; *Ib. Svo. ii.* p. 472. *Turpan, Buf. ix.* p. 291? *Grande ou double Macreuse, Buf. ix.* p. 242. Great black Duck, *Will. Angl. p.* 363, t. 70. Velvet Duck, *Br. Zool. ii.* No. 272, t. 96; *Ib. fol.* 152; *Arct. Zool. ii.* No. 482; *Ib. Sup. p.* 75; *Lath. Syn. vi.* p. 482, 37; *Ib. Sup. p.* 274; *Pult. Cat. Dorset. p.* 20; *Walc. Syn. i.* t. 58; *Lewin, Br. Birds, vii.* t. 247; *Lath. Syn. Sup. ii.* p. 350; *Lin. Trans. iv.* p. 119, t. 15, f. 3—7 (Trachea). Provincial: Black Diver; Double Scoter; Great Black Duck. —This is rather larger than the common Drake; length about twenty inches. The bill broad, with a black knob at the base; the rest of the bill is yellow; the nail red; the edges all round black. The plumage is black, inclining to brown on the belly; under each eye is a white mark passing backwards in a streak; across the middle of the wing is a band of white; legs red; claws black. The female is more inclining to brown, and the protuberance on the bill is wanting. This species much resembles the Scoter, only that bird has no white feathers about it, and the colour of the bill is somewhat different. In the windpipe of this bird is a singular bony swelling the size of a small walnut, situated about two-thirds of the length from the larynx; immediately under the larynx is another oblong bony cavity of nearly an inch in length; at the divarication the parts become bony, but not greatly enlarged. This is peculiar to the male sex. It is sometimes seen on our coasts in winter, but not common; and we believe never found in fresh water. Frequents Hudson's Bay in summer, where it breeds;

said to make a nest of grass, and to lay from six to ten white eggs. Not uncommon in Russia and Siberia.

[**Duck, Western.**—See Duck, Steller's Western.]

[**Duck, Whistling.**—See Duck, Redcrested Whistling.]

[**Duck, White-eyed.**—See Duck, Ferruginous.]

Duck, Whitefaced, or Whitefronted.—See Duck, Scaup (female).

Duck, Whitethroated.—**SUPPLEMENT.**—In the Second Vol. of the 'British Zoology,' Table 98, a figure is given of a black Duck, with the forehead, round the base of the bill, the throat, and part of the neck before white; to which the above title is prefixed without any description or reference whatever. We are however inclined to think it is a variety of the Scoter, having seen a female of that species with a whitish throat. See Scoter.

[**Duck, Wild.**—See Duck, Common or Wild.]

Duck, Winter.—See Duck, Pintail.

Dulwilly.—See Plover, Ringed.

Dun-Bird. } See Pochard.
Dun-Cur. }

Dun Diver.—*Mergus castor*, *Lin. Syst. i.* p. 209, 4? *Gmel. Syst. ii.* p. 545, 2; *Ind. Orn. ii.* p. 829, 2. *Mergus cirratus longiroster*, *Raii Syn.* p. 134, A. 2; *Will.* p. 253, t. 64. *Merganser cinereus*, *Bris. vi.* p. 254, t. 25; *Ib. Svo. ii.* p. 428. Le Harle femelle, *Buf. viii.* p. 236. Dun-diver, or Sparkling Fowl, *Br. Zool. ii.* No. 260, t. 92, f. 2; *Arct. Zool. ii.* No. 465; *Albin. i.* t. 87; *Will. Angl. p.* 333, t. 64; *Lath. Syn. vi.* p. 420, 421, A; *Lewin, Br. Birds, t.* 232; *Pult. Cat. Dorset. p.* 19; *Walc. Syn. i.* t. 80; *Don. Br. Birds, iii.* t. 65.—This species of *Merganser* weighs about thirty-eight ounces; length twenty-five inches. The bill near three inches long, narrow, of a dull, purplish red; the upper mandible hooked at the end; nail black; the edges finely serrated; irides purplish. The upper part of the head ferruginous-brown; the rest of the head and upper part of the neck bright ferruginous; the feathers on the nape much elongated; chin and throat white; the lower part of the neck before, and sides of the breast, ash-colour and white mixed; the lower part of the neck behind, the back, wing-

coverts, scapulars, and tail fine ash-colour; greater quills black; six of the secondaries are white at their ends; the greater coverts immediately impending them marked the same; the rest of the quills are pale ash-colour; breast and belly fine yellowish buff; the tail consists of twenty feathers; legs and feet red-orange. This bird is subject to variety; in some the lower part of the neck before, the breast, and middle of the belly white. Various have been the opinions concerning the Dun Diver; some have considered it as the female of the Goosander; others make it a distinct species. Both these birds have, upon dissection, been found to possess a labyrinth, or enlargement of the bottom part of the windpipe; a formation hitherto only discovered in the males of the Duck genus. The crest, or feathers on the back of the head of this bird, is also considerably longer than in the Goosander; a circumstance not observed in the female of any species. The tail of the Goosander is said to be composed of eighteen feathers; whereas this bird has twenty feathers in that part. From these circumstances we cannot hesitate in our opinion of these birds being distinct species. Dr. Latham observes that Dr. Heysham has proved, by dissection, that some of the larger Dun Divers were males, and that in Cumberland this bird is infinitely more common than the Goosander; at least ten or fifteen of the first to one of the last. We must, however, observe that, in many of the aquatic birds in particular, the young do not arrive to maturity in plumage till the third, or perhaps fourth year, before which the males most resemble the female in feathers. In order to clear up all doubt indisputably would be to prove, by dissection, there are female Goosanders, which does not seem to be at present satisfactorily ascertained. We have never had an opportunity of observing the tail of the Goosander; but if it is true that it has only eighteen feathers, it will certainly be an unerring mark of distinction, for we can speak with certainty as to the Dun Diver having twenty. This bird is said to be common in Germany; but most probably breeds in the lakes of the more northern parts of the world.

SUPPLEMENT.—Nothing has perplexed us more than the discrepancy of opinion concerning some of the Mergansers; nor can we, after so many years' indefatigable search for the truth, offer any thing satisfactory from personal observation; but we are induced to continue in our former opinion, that the Dun Diver and Goosander are really distinct, not having heard any thing adduced to alter that opinion. If indeed we are to rely on the Trans-

actions of public bodies, we may produce the 'Berlin Transactions' as an evidence of the fact. In the fourth vol. of that work, tab. 18, fig. 3, is a representation of the trachea of the Goosander; and in the third vol., tab. 7, fig. 5, is given the trachea of the Dun Diver. The difference between these in structure is so material that they cannot possibly belong to the same species. These not only differ in the bony labyrinth at the bottom of the trachea, but that which belongs to the Goosander has two enlargements about the middle; whereas only one enlargement belongs to the Dun Diver. This should seem to clear up all doubts upon the subject, especially as the birds in question cannot well have been confounded with any other species. It has been asserted by other naturalists that birds in the plumage of the Dun Diver have upon dissection possessed a labyrinth, a conformation peculiar to the masculine gender; but they have not been particular in noticing the distinction between it and that of the Goosander, if such existed. In fact such male Dun Divers have been generally considered as birds immature in plumage, and were young Goosanders, wanting only age to perfect them; and probably with that pre-existing opinion, proper attention to the enlargements in the middle of the trachea was neglected, and the labyrinth only attended to; and as the difference in that part might not be apparent but by comparison, these birds may have been frequently overlooked. With us, especially in the southern parts of the kingdom, these birds are so extremely rare that we never have had the good fortune to dissect a Goosander; and never more than two Dun Divers, both of which were females, and their tracheæ similar, being small and flattish, without an enlargement of any kind. From the authority before referred to, we cannot doubt but that the Goosander has two tracheal swellings, and that a bird at least similar to the Dun Diver has but one such enlargement, the evident distinction of the male sex. We have therefore to learn what are the females to these. Has any Goosander upon dissection proved a female, or been found destitute of the singular tracheal conformation? Or has any Dun Diver been observed to possess two tracheal enlargements? These are points in question, for though both sexes of the Dun Diver have been noticed, as we are told, no such occurrence has taken place with respect to the Goosander. Admitting therefore that both sexes of the Dun Diver are similar, and continue so at all ages, we have yet to discover the female of the Goosander; and

we cannot too strongly recommend to our northern scientific friends a strict attention to this subject. In the Eighth Vol. of the 'Transactions of the Linnean Society,' Mr. Simmonds has attempted to prove these birds to be of the same species; but much more is wanting to convince the critical Ornithologist and fix his wavering opinion. But we shall have occasion to say more on this subject under Goosander. It is, we admit, very possible that an error in our notes may have occurred; but we thought that every possible care had been taken in counting and noting the number of feathers in the tail of the only Dun Diver we ever had the means of examining fresh, previously to the publication of the former part of this work. But as Mr. Simmonds remarks that two specimens of both these birds, now in Edinburgh, have each eighteen feathers in the tail, and as we have since had a specimen of the Dun Diver with a similar number, we conceive we had been deceived. It should be remarked that in all the Dun Divers we have hitherto examined, the shafts of the feathers on the back are black: six of the secondary quills, and their greater coverts, nearly wholly white; and it appears that these are at first of a fine buff colour, for in one wing of a specimen now before us, two of these quills, which are only three-parts grown, are of that colour: some feathers on the sides of the lower neck, and body, are tipped with buff. The fact is that newly moulted birds have all the light parts buff, but that colour soon fades and becomes white: the throat and chin of this is ferruginous-white. Whether the Dun Diver feeds in preference on any particular species of fish, we have not been able to ascertain; but the bill is most admirably adapted to hold securely the most slippery of the finny tribe. The upper mandible is furnished with four series of teeth, or processes, inclining backwards, two rows on each side the whole length of the bill, except close to the tip, and here the upper mandible is much hooked, and falls over the point of the lower, and is armed with a strong nail, greatly contributing to the security of its prey. The outer series of teeth in the upper mandible on each side, consists of about thirty. In the lower mandible there is only one series on each side, consisting of about forty; these, when the bill is closed, lock in between the double series in the upper mandible. [The bird here described as the Dun Diver is both the female and young male of the Goosander, which see.]

Dung-Bird.—See Hoopoe.

Dung Hunter.—See Gull, Arctic.

Dunker, or Dun-Cur.—See Pochard.

Dunlin.—[Yarrell, iii. 86; Hewitson, cii. 364.] *Tringa alpina*, Lin. Syst. i. p. 249, 11; Gmel. Syst. ii. p. 676; Ind. Orn. ii. p. 736; Bewick, Br. Birds, ii. t. p. 117. *Cinclus torquatus*, Bris. v. p. 216, 11, t. 19, f. 2; Ib. 8vo, ii. p. 268. *Gallinago anglicana*, Bris. v. p. 309, 5; Ib. 8vo, ii. p. 288. Le Cincle, Buf. vii. p. 553. Le Brunette, Buf. vii. p. 493. Dunlin, Br. Zool. ii. No. 205; Ib. fol. p. 126, 1, E. 1, f. 2; Arct. Zool. ii. No. 391; Raii Syn. p. 109, A. 11; Will. p. 226; Ib. Angl. p. 305; Lath. Syn. v. p. 185, 33; Ib. Sup. p. 249; Walc. Syn. ii. t. 151; Lewin, Br. Birds, v. t. 176.—This species of Sandpiper weighs from nine to eleven drams; length of the largest eight inches. The bill full an inch in length, slender, a little bent downwards, and of a dusky colour; irides dusky. The upper part of the head, and whole plumage above, ferruginous-brown; the former and hind-neck streaked with dusky, the rest spotted with black; the cheeks, under side of the neck, and breast whitish, streaked with black; those on the neck are small, and more inclining to dusky; the wing-coverts greyish brown, edged with lighter; the quills black; the four first wholly so, the rest edged more or less with white on their exterior webs; the base of the interior webs of the same colour; the belly and vent white; the former marked with large black spots, the latter with a few dusky streaks; the tail consists of twelve feathers, the two middle ones longest and dusky, the others cinereous, all edged with white; legs dusky; toes almost divided to their origin. The female differs little or none from the other sex. The young birds have no spots on the belly or sides at first, and when they begin to appear are small; the upper parts are also lighter, dashed with cinereous; the middle of the feathers dusky. This species does not appear so plentiful as the Purre and many others; but we have seen it on our coasts in every month of the year, except from the latter end of June to the beginning of August; most frequent in the spring and autumn. We once killed several of these birds on the mountains in Scotland, near Inverness, in the month of August. May they not breed in the northern parts of this kingdom? Mr. Pennant says he has received the eggs from Denmark; and adds they lay four in number, of a dirty white, blotched with brown round the thicker end, and marked with a few small spots of the same colour on the smaller end. Not uncommon on the Devonshire and Cornwall coast; frequent also on the

coast of Wales. Is also found in Greenland, Iceland, and Scandinavia; and on the Siberian Alps, as well as at Hudson's Bay.

SUPPLEMENT.—We have had specimens of this bird weighing an ounce and a half. One shot on the eighth of August had nearly the whole under parts black from the neck. Another killed the third of October had the upper part of the back and scapulars chiefly cinereous, with dusky on the shafts, intermixed with a few black feathers slightly margined with rufous: the head and neck pale, streaked with brown, and nearly destitute of the usual rufous: the breast and belly having some black spots betrayed the species, but the spots were small and not confluent: the tail as usual. The former of these is evidently an old bird; the latter a young one, evinced by the mottled appearance; changing from the cinereous nestling feathers to the dark adult plumage. A specimen shot in July was extremely rufous on all the upper parts, especially on the head and neck. From the appearance of these birds at different seasons, it should seem that their first feathers, which are pale and mixed with cinereous, change, and are supplied before Christmas by those dark ones which constitute maturity; after which, as the summer advances, the rufous becomes conspicuous; but this last is not effected by change of feather, but the colour is turned by long exposure to the sun and weather, a circumstance not uncommon towards the latter end of summer, when even the quills of some dark birds lose their original black or brown, and become tawny. Mr. Simmonds says ('*Linnean Transactions*, vol. 8, p. 266) "that the nest is composed of dried tufts of *Juncus squarrosus*, and the eggs four, smoky white, irregularly marked with light and darker brown blotches, rather more distant and paler at the smaller end. Breeds in company with *Charadrius hiaticula* and *Tringa Vanellus*, in the islands of South Ronaldsha and Sanda, and at Loch Strathby, near Frazerburgh, Aberdeenshire.

APPENDIX.—When we look into the writings of the more ancient, as well as the latest modern ornithological works, we find that *Tringa alpina* and *Tringa cincla* are described as distinct species. It is, however, remarkable that, so common and so extremely plentiful as the Purre is known to be in the temperate parts of Europe, no naturalist should have described its nest and eggs. We might indeed have expected to find that part of its history amongst the writings of more northern physiologists, since it has been a generally received opinion that the abun-

dance which flock to our shores in the winter, repair more northward to obey the great dictates of nature. It will be recollected by those naturalists who explore the works of nature in her native retreats, that the Dunlin makes its appearance early in the spring, and remains with us, more or less, locally, till the autumn, or the beginning of winter, and then disappears. It will also be seen that the nest and eggs of this bird have been frequently noticed; a recent instance of which has been remarked in the preceding pages, and we have had ocular demonstration of its breeding on the coast of England. The circumstance of these two birds appearing and disappearing in constant alternation, added to their general form, their corresponding weight and measurement, the exact similitude of their bill and legs, and their cuneiform shape and colour of the tail, have long induced us to conjecture that they were actually the same species; and that in fact the black spots on the breast, and other variations in colour observed in the Dunlin, were not more extraordinary than those changes incidental to the breeding season, which are noticed in the black neck and breast of the Golden and the Grey Plovers. This suspicion was not a little strengthened by the enquiries of several of our scientific friends, who had found these birds approach so nearly in plumage that they required a clearer definition of the two species. In order, therefore, to obtain the best information, we procured as many of these birds as possible, about that period of the seasons when the changes of plumage are known to take place, the early part of both the spring and autumn; by so doing we have had the satisfaction to succeed in obtaining these supposed species in the intermediate changes of plumage, so as to leave no doubt that they are one and the same. It will be seen in the preceding pages that we described a variety of the Dunlin, shot early in October, the plumage of which was a mixture of the two birds, but we could not venture to annihilate one species so long established unimpeached, until further corresponding evidence had been obtained. Since that part was printed, other specimens partaking more of the Purre were killed in the early part of December; these had more or less black feathers, margined with rufous, especially on the body near the junction of the wing, and a few intermediate feathers in the scapulars that evidently bespoke the Dunlin, although there were no distinct spots on the belly. From what we have lately observed, the progress of change in plumage is similar to what has been noticed in all other birds which

have a double annual moulting. The young birds appear first in the plumage of the Purre, and the old birds throw off the Dunlin plumage at the close of the breeding season, and, like their young, continue the whole winter in that dress by which they have been distinguished by the name of Purre. Some do not appear to complete the autumnal change till the middle of December, and in the latter end of March, or the beginning of April, many commence the vernal change. Under

these circumstances we are induced to believe that no bird in the plumage by which the Dunlin has usually been recognized, will be met with in the three dead winter months; nor will the Purre, as usually described, be found from the beginning of May to the latter end of July.

Dunnock.—[See Accentor, Hedge.]

Duntur, or Duntur-Duck.—See Duck, Eider.

E.

Eagle.—A name given to the larger species of the Falcon genus, from which it differs in nothing but size.

Eagle, Black.—See Eagle, Ringtailed.

Eagle, Cinereous.—[Yarrell, i. 25; Hewitson, iv. 15.] Vultur Albicilla, *Lin. Syst.* i. p. 123, 8. Falco Albicilla, *Gmel. Syst.* i. p. 253; *Ind. Orn.* i. p. 9, 2; *Lath. Syn. Sup.* ii. p. 18; *Shaw, Gen. Zool.* vii. p. 79. Aquila Albicilla, seu Pygargus, *Bris.* i. p. 427, 5; *Ib.* 8vo, i. p. 123; *Raii Syn.* p. 7, 5; *Will.* p. 31. Le grand Pygargue, *Buf.* i. p. 99. White-tailed Eagle, *Will. Angl.* p. 61. Cinereous Eagle, *Br. Zool.* i. No. 45, t. 18; *Arct. Zool.* ii. p. 214, B.; *Lewin, Br. Birds.* i. t. 4; *Lath. Syn.* i. p. 33, 8; *Ib. Sup.* p. 11. Vultur Albicilla, *Walc. Syn.* i. t. 1.—This species is rather less than the Golden Eagle. The bill, cere, and irides of a pale yellow; a bare space between the bill and eye of a bluish colour; the head and neck of a pale ash-colour; the body and wing-coverts cinereous, clouded with brown; the quills dusky; tail dusky at the base, white at the end; the legs of a light yellow, feathered but little below the knee. The male is rather darkest in colour. The bill of the Cinereous Eagle is rather longer, and more straight towards the base, than usual in this tribe, which probably induced Linnæus to class it with the Vulture; but as no part of the head or neck is bare of feathers (the characteristic mark of that genus), we have followed the example of later authors, and continued it amongst the Eagles or Falcon genus. Inhabits Scotland and the Orkneys. An acquaintance had two of these birds, which were taken from the highest cliffs in the last-mentioned place; there were three in the nest. Dr. Latham says Dr. Heysham informed him that in a nest of one of these birds, near Keswick in Cumberland, was found a trout of about twelve pounds weight; that he obtained the bird alive, and had kept it above ten years when he communicated the account;

and that it was either six or seven years before the tail became white. Those from which our description was taken were about three years old. It is said to prey on land animals as well as fish and aquatic birds. Inhabits the southern parts of Russia, particularly about the Wolga; found also in Sweden, Denmark, Iceland, and Lapland. In Greenland it remains the whole year amongst the islands and rocks, where it preys on the aquatic birds, darting on them as soon as they rise on the surface of the water after diving; attempts sometimes to seize a Seal, which proves its own destruction, being drawn under water by that animal. Mr. Denne, of Littlebourne Court in Kent, favoured us with a live specimen he shot in March, 1797. From its inferior size and dark colour it is probably a male. The tail-feathers are still dusky at the base; the irides hazel.

SUPPLEMENT.—We refer to the second Supplement to the 'General Synopsis' with some doubt, for what Doctor Latham has considered as a variety of this species, inhabiting New Holland. The bill and legs black, general colour of the plumage deep brown, but the under parts are much paler, and the wings much darker than the rest: the rump and tail very pale ash-colour, nearly white. If this is one of the variations caused by climate, we may certainly as readily conceive that the Bald or White-headed Eagle is also a variety. The specimen mentioned in the former part of this work, which we had alive, died in the spring of the year 1806, having lived with us nearly seven years, and two years before that with Mr. Denne. The disease which occasioned his death was in the gall-bladder. During the time he was in our possession, no material change in plumage was apparent, except that the tail-feathers, which at first had the outer webs sprinkled with dusky, became more white, the outer feather only having a little of such mark: but the base of the tail is still dusky black for about one-third

of its length. As we suspected, this bird proved upon dissection to be a male, and was in good condition and beautiful plumage, and now occupies a place in our museum. His weight was seven pounds six ounces: length two feet eight inches and a half: breadth six feet ten and a half. The bill and cere yellow: irides pale yellow; the space between the bill and eye apparently bare, but on nice inspection is found to be covered with very short hairs; this is of a bluish grey colour: the head and neck pale cinereous-brown: the body is a mixture of brown and cinereous, the new feathers being dusky brown with a cinereous tinge; the old ones cinereous-brown with a rufous tinge: the upper and under tail-coverts, and thighs, are darker than any other parts except the base of the tail, and quill-feathers; the former is dusky black for about one-third of their length next to the body; the quills are dusky with a shade of cinereous above, the under part variable as the light falls upon it, or changeable from brown to cinereous lead-colour, and rufous-brown towards the tips: the legs as usual yellow. This bird did not appear to be particularly partial to fish, but devoured flesh with equal avidity. He usually plucked birds pretty clean of their feathers before he devoured them, and those unavoidably swallowed were, with a part of the bones, disgorged. He drank more frequently than usual with this tribe of birds. He was not a bold bird, but fearful of strangers, and in his violent struggles often broke his chain, and two or three times fled for a mile or more; but this being an exertion to which he was unaccustomed, was recaptured without much difficulty.

Eagle, Fishing.—See Osprey.

Eagle, Golden.—[Yarrell, i. 11; Hewitson, iii. 8.] *Falco Chrysaetos*, *Lin. Syst.* i. p. 125, 5; *Gmel. Syst.* i. p. 256; *Raii Syn.* p. 6, 1; *Will.* p. 27, t. 1; *Ind. Orn.* i. p. 12, 8; *Bris.* i. p. 431, 7; *Ib.* 8vo, p. 124; *Shaw, Zool. Lect.* i. t. 52; *Gen. Zool.* vii. p. 75, t. 17; *Bewick, Br. Birds*, i. t. p. 5. Le grand Aigle, *Buf.* i. p. 76. Golden Eagle, *Br. Zool.* i. No. 42, t. 16; *Ib.* fol. p. 61, t. A.; *Arct. Zool.* ii. p. 214, A.; *Albin.* ii. t. 1; *Lewin, Br. Birds*, i. t. 2; *Lath. Syn.* i. p. 31; *Ib. Sup.* p. 10; *Walc. Syn.* i. t. 3.—The general weight of this species is about twelve pounds; the length three feet and a half; breadth eight feet. The bill is of a bluish black; cere yellow; irides hazel. The whole bird is of a dark brown; the feathers about the back of the head and neck long and narrow, bordered with tawny; quill-feathers chocolate-brown;

tail deep brown, dashed with ash-colour, and white at the roots; legs yellow, short, strong, and covered with feathers to the feet, the great characteristic distinction between this and the Sea Eagle. The Golden Eagle is said to be not unfrequent in the mountainous parts of Ireland and Scotland; but we suspect it to be more rare than is generally imagined, and has undoubtedly been confounded with the Sea Eagle. It breeds in the most inaccessible rocks, and lays three or four white eggs. Smith, in his 'History of Kerry,' says a poor man in that county got a comfortable subsistence for his family, during a summer of famine, out of an Eagle's nest. Instances have been recorded of infants being carried to their nests. And in order to extirpate these birds there is a law in the Orkney Isles which entitles any person who kills an Eagle to a hen out of every house in the parish in which it is killed. These birds are remarkable for their longevity and abstinence from food. Mr. Pennant mentions an instance of one enduring hunger for twenty-one days.

SUPPLEMENT.—We have been told that this species breeds in Scotland and in Ireland, but we are inclined to believe it is much more rare in the British dominions than generally supposed; for we know that almost every large Eagle, especially of the species *Ossifragus* or Sea Eagle, is, by the captor and his neighbours, considered at once to be the "Eagle of the Sun," the only one particularized in ancient history, or that is recorded in sacred writings. Unless therefore such birds fall into the hands of the scientific naturalist, little is to be depended upon. We have had two or three specimens of *Ossifraga* sent to us for the *Chrysaetos*. Mr. Bewick says a Golden Eagle was shot near Warkworth which measured eleven feet and a quarter in the extent of wings. It has not been our good fortune to meet with one out of the many reputed Golden species that have been shot in England; nor have we ever seen this bird in any British collection, except in that which was once as much an honor to the country as its recent dispersion is a disgrace. When we reflect on the various defections of peculation to a vast amount by public characters; when public bodies can, by application to parliament, procure loans to any amount, and private individuals be rewarded from the public fund, how extraordinary does it appear that in neither of the houses of parliament an advocate, or a champion, should be found ready to stand forth and rescue science in so enlightened a country. It will scarcely be credited in after ages, when our children's children shall be told of the polish and refinement

of the present day, that the trifling sum of thirty, or perhaps twenty, thousand pounds would have added that vast assemblage of nature and art to the British Museum; yet it was suffered to be dispersed. Had the Leverian Museum been connected with that of British, these collectively would have formed a most magnificent national collection that might have been envied by surrounding potentates, but unrivalled even by that of the "Great Nation" (to which the fate of war has given the means of plundering from the public and private museums of nearly the whole of Europe); but alas! that unfortunate collection has been dissolved, "and like the baseless fabric of a vision, has not left a wreck behind." The scientific reader will pardon this digression, and sympathise with us on the fate of that once entertaining and highly instructive assemblage, both natural and artificial, collected from every part of the globe. At its dissolution the Austrian cabinet was enriched by means of a special scientific messenger expressly sent by its august sovereign, and some of the choicest and most valuable articles were probably, at the capture of Vienna, transferred to the Parisian museum.

APPENDIX.—We are able to announce, on the authority of an indefatigable ornithologist, that the Golden Eagle actually breeds in the islands belonging to North Britain. Mr. Bullock assures us that not only the Golden, but also the Cinereous and Ringtailed Eagles, breed in the Isle of Hoy, and that he took the nests of the two first, containing each two young Eaglets, in the year 1812.

[Eagle, Owl.—See Owl, Eagle.]

Eagle, Ringtail.—*Falco fulvus*, *Lin. Syst.* i. p. 125, 6; *Gmel. Syst.* i. p. 256; *Ind. Orn.* i. p. 10, 4; *Bewick, Br. Birds*, i. t. p. 7; *Shaw, Gen. Zool.* vii. p. 71. *Chrysaetos*, cauda annulo albo cincta, *Raii Syn.* p. 6, 2; *Will.* p. 28. *Aquila*, *Bris.* i. p. 419, 1; *Ib.* 8vo, 121. *L'Aigle commun*, *Buf.* i. p. 86. Black Eagle, *Br. Zool.* i. No. 87; *Arct. Zool.* ii. No. 87. Ringtail Eagle, *Br. Zool.* fol. p. 62; *Will. Angl.* p. 59; *Lewin, Br. Birds*, i. t. 3; *Lath. Syn.* i. p. 32; *Ib. Sup.* p. 10; *Walc. Syn.* i. t. 4; *Pult. Cat. Dorset.* p. 2. White-tailed Eagle, *Edw.* t. 1.—This species is nearly equal in size to the Golden Eagle. In the bill, cere, irides, and legs it resembles those of that bird. The plumage is rather darker; and the tail is white for two-thirds of its length; the end is black. Mr. Pennant informs us it is frequent in Scotland, where it is called the Black Eagle; and adds that it is very destructive to Deer, which it will seize

between the horns, and by incessantly beating it with its wings, soon makes a prey of the harassed animal; that it builds in cliffs of rocks near the deer forests, and makes great havoc not only amongst them, but also the white Hares and Ptarmigans. Mr. Willughby gives a curious account of the nest of this species found in the woodlands near the river Derwent in the Peak of Derbyshire. He says it was made of large sticks, lined with two layers of rushes, between which was one of heath; that in it was one young and an addle egg, and by them a Lamb, a Hare, and three Heath-poults. The young Eagle was black, having a white ring about the tail. From this mark in so young a bird it should appear to be a characteristic of the species in all ages; for though it varies in the breadth of that band, yet it never entirely loses it. This bird is as rarely found in South Britain as the Golden Eagle. Inhabits many parts of Europe and America.

SUPPLEMENT.—Mr. Pennant, in his 'Voyage to the Hebrides,' says that in the Isle of Rum the Ringtail Eagles have reduced the stags very much. The legs of this species, like the Golden, being covered with short feathers down to the toes, is one of its essential characters. The Ringtail Eagle does not appear to be so plentiful even in North Britain as the Sea Eagle, and probably is confined to the Highlands of Scotland, where it usually breeds in the most inaccessible parts of mountainous cliffs; sometimes on that stupendous mountain so well known to all the northern tourists, Ben-Lomond. Upon the summit of that mountain an Eagle's egg was found amongst the rocks, without any nest, supposed to belong to this species, and which must have been prematurely dropped. As we were sporting in the neighbourhood of Ben-Lomond, on the summit of the lesser mountains that form its base, a Grouse (*Tetrao Scoticus*) was wounded, and flew with difficulty eighty or an hundred paces. An Eagle, apparently of this species, perceiving the laborious flight of the Grouse, descended with rapid wing from the adjacent lofty cliffs, before our guns were reloaded, and, in defiance of the shouts made to deter him, carried off his prey. In another part of the Western Highlands of Scotland, we had an opportunity of witnessing the powers of the flight of this bird in pursuit of its quarry. An old Black-Cock (*Tetrao Tetrix*) was sprung, and was instantly pursued by the Eagle (who must have been on a neighbouring rock unperceived) across the glen, the breadth of which was at least two miles. The Eagle made several pounces in view, without success,

but as there was no wood, nor cover on the opposite mountain sufficient to conceal so large a bird as the Heath Grouse so closely pursued, he doubtless forfeited his life to the merciless tyrant of the rocks. The Rev. Mr. Fleming (who had an opportunity of observing these birds in Zetland) informs us they are general depredators, and in the breeding season rob the rock birds of their young, especially Gulls and Corvorants. [This is the young of the Golden Eagle.]

[Eagle, Roughfooted.—See Eagle, Spotted.]

Eagle, Sea.—*Falco ossifragus*, *Lin. Syst.* i. p. 124, 3; *Gmel. Syst.* i. p. 255; *Raii Syn.* p. 7, 3; *Will.* p. 29, t. 1; *Ind. Orn.* i. p. 12, 7; *Bewick, Br. Birds*, i. t. p. 11; *Shaw, Gen. Zool.* vii. p. 81, t. 18. *Aquila ossifraga*, *Bris.* i. p. 437, 9; *Ib.* 8vo. p. 125. *L'Orfraie*, *Buf.* i. p. 112, t. 3. Sea Eagle, or Osprey, *Br. Zool.* i. No. 44, t. 17; *Ib.* fol. t. 63; *Arct. Zool.* ii. No. 86, A.; *Will. Angl.* p. 59, t. 1; *Lewin, Br. Birds*, i. t. 1; *Lath. Syn.* i. p. 30; *Ib. Sup.* p. 9; *Walc. Syn.* i. t. 2; *Pult. Cat. Dorset.* p. 2; *Don. Br. Birds*, v. t. 105. — This species is full as large as the Golden Eagle. The bill is bluish black; cere, sides of the mouth, and orbits yellow; irides light hazel. The feathers on the head and upper part of the neck are long and narrow, dusky brown at their ends, tawny towards the base, and white at the roots; the whole body dark brown, intermixed with rust-colour; the tail and its coverts mottled with yellowish white, dark and faint ash-coloured brown; the quills are of a dark chocolate colour; the shafts white towards the base; the legs strong and yellow, feathered very little below the knee, and measuring two inches in circumference; the claws black; the inner one, which is largest, is two inches long, much hooked, and nearly one inch round at the base. The specimen from which this description is taken was killed by Sir Robert Littleton's gamekeeper in Shropshire, early in the spring of 1792, and presented to me by Lord Valentia, and is now in my museum. It was accompanied by a letter from Sir Robert, the purport of which was that his servant, being out shooting, saw two large birds feeding on the carcass of a sheep, which appeared recently killed; that having nothing but small snipe-shot with him he turned back, intending to go home for larger; that the Eagles then followed him, and frequently came so near that he concluded they meant either to attack him or his dogs. Suddenly losing sight of one, he judged it was very near him behind, and, being somewhat alarmed, turned round and shot at it in a hurry; after

which the bird flew some hundred yards, and dropped. On his approach it was vomiting blood; and he killed it after a struggle of half an hour. He adds that it was the largest of the two. The other Eagle continued in the neighbourhood for some time after, and roosted in the high trees of a wood belonging to Sir Robert Littleton. Another of this species was shot in Epping Forest a few weeks before. Others have been frequently killed in the New Forest; and we are informed scarce a year passes without one being seen in that part; two of which we have seen nailed up in the hall of the Lodge at Lyndhurst. John Maxwell, Esq., of Ardracran in Ireland, favoured us with two young birds of this species alive, taken the preceding year on a mountainous precipice, or craggy cliff, called Slieve Donald, impending the sea in the county of Down. That gentleman informed us, two men, covered with sackcloth and armed, were lowered by ropes to the area, which, with considerable difficulty, they robbed of two young, leaving only one addled egg behind. The old Eagles being so furious as to create serious alarm, neither the nest nor colour of the egg were noticed. Some fragments of flesh were in the nest. The Eaglets were covered with a glossy, dark, murky-coloured down (as it was termed). A basket was attached to the ropes that conveyed the men down; into this the young birds were put; but from the incessant violence and amazing strength of the parent birds, were with difficulty carried off. These birds were not twelve months old when we received them. On their first moulting they became much darker, particularly about the breast and thighs, the latter almost wholly of a dusky black; at two years old the base of the bill became yellow; in the third year there was not any material change. At this time one of them killed the other, and devoured it; probably neglected to be fed, for they before lived together in perfect harmony. The food of this bird is said to be principally fish; but it is probable every animal of inferior strength suffers from its rapacity. It is not uncommon in Scotland and Ireland, and breeds generally in the neighbourhood of large lakes, or on the sea-coast amongst the most stupendous cliffs. Between the upper and lower lakes of Killarney is a rock called the Eagle's Nest, originating from the circumstance of its breeding there annually. This bird is said to watch the Osprey catching fish, when it pursues that bird till he quits his prey, which it seizes most dexterously in the air. From the astonishing height these and some other birds fly, we are led to believe they are capable of living in a

much lighter air than other animals. From the top of some of the highest mountains in Scotland we have seen several soaring together at so great a distance as to appear scarce larger than a Swallow.

SUPPLEMENT. — The contest between birds of prey in the season of love is sometimes extremely desperate, and not unfrequently fatal. Two of this species contending in the air over the extensive lake, Loch-Lomond, in the Scottish Highlands, both at last became so firmly grappled to each other by their talons, that they were precipitated into the water. The uppermost regained the power of its wings, but the other was taken alive by a Highlander who witnessed the scene, and who waited till the wind had wafted him near the shore. This curious circumstance we received from an officer who bought the Eagle. Although this is an extremely bold bird, it will not venture to contend with a Dog or a Fox in its natural wild state. An Eagle and a Fox were observed to be regaling themselves on the carcase of a Goat that had fallen down a precipice in the Highlands of Scotland. The latter frequently obliged the other to desist, and retreat a little, but it was not sufficiently alarmed to prevent returning; and it occasionally threw itself into bold and picturesque attitudes of defence, spreading the wings and tail, and erecting every feather. Two living Eagles were sent to us from Ireland, and were on their arrival at Bristol detained by an officer of excise, upon a plea that there was a duty upon all singing-birds. Had this happened on the other side of the water it might have been termed an Irish story. The unfortunate birds would, however, have been starved at the Custom-house if application had not been made to the head of that department in the port of Bristol, offering to pay any demand for their release, if legally detained for their vocal abilities. By this officer it was most wisely determined, after some consideration, that Eagles could scarcely be considered as singing-birds. This is by far the most plentiful of the Aquiline race in the British dominions; not a year passes but many are shot in England. A specimen killed on the Mendip hills in Somersetshire, two years since, was very small, probably a male. Its talons were blunt, as if worn in confinement. This bird was very dark about the head and neck, but the greater coverts and scapulars were brown, with a rufous tinge, their tips dusky: the tail-feathers dirty white on the inner webs, much sprinkled with dusky spots, the shafts whitish, and the outer webs, like the quills, dusky black. The length was less than three feet, and

the breadth about six. [This is the young of the Cinereous Eagle.]

[Eagle, Spotted. — *Aquila nœvia*, Yarrell, i. 20; Hewitson, v. 18. *Falco nœvius*, Aigle criand, Temm. *Man. d'Ornith.* vol. i. p. 42, and vol. iii. p. 23. Roughfooted Eagle, Lath. *Syn.* vi. p. 37. — "The young bird in its first year has the bill of a dark bluish horn-colour, becoming lighter in colour towards the base; the cere yellow; irides hazel; the whole head, neck, back, wings, and tail dark chocolate-brown; the tips of all the small and large wing-coverts marked with a crescentic patch of pale wood-brown; the tertials, upper tail-coverts and tail-feathers the same; under surface of the body dark brown; the feathers of the thighs and legs varied with paler brown lines; the legs feathered down to the tarsal joint; the toes yellow, reticulated for a portion of their length, but ending with four large and broad scales; the claws nearly black. The young bird in its second year, as figured by Mr. Gould in his 'Birds of Europe,' is more uniform in its colour than the bird here represented, but has some of the smaller wing-coverts, the greater coverts, and the tertials tipped with light brown; the general colour dark reddish brown. An adult bird had the neck, back, wing-coverts, and tail reddish liver-brown; the head, both above and below, rather lighter in colour; the feathers of the upper part of the head and neck lanceolate; the primaries almost black; under surface of the body very little lighter in colour than the back; all the feathers white at the base; legs, toes, and claws as in the young birds. The whole length twenty-seven and a half inches, the wing from the anterior joint twenty-three and a half inches; the fourth and fifth quill-feathers nearly equal in length, but the fifth rather the longest in the wing. The wings when closed reach to the end of the tail." — Yarrell, i. 23. This small, but beautiful, Eagle occurs in the South of Europe, in the Islands of the Mediterranean, in North Africa, in Southern Russia, and in some parts of Asia, but its geographical range is not very exactly laid down by ornithologists, perhaps from the species not being always distinguished from the Golden Eagle, from which, however, it is perfectly distinct. Every authentic notice of its occurrence in the British Islands will be found in the 'Zoologist.' The first of these is from the pen of Mr. Robert Davis, of Clonmel, and is published in the volume for 1845, at page 1190:—"An Eagle new to these countries having been killed in this (the southern) quarter of our island, I thought a notice of its occurrence would be interesting to

the readers of the 'Zoologist.' The bird in question is an immature specimen of the Smaller Eagle (*Aquila naevia*, Linn.), and was shot in January, on the estate of the Earl of Shannon, near Youghal, in the County Cork, by one of the gamekeepers, who gave it to a friend of mine, Samuel Moss, of Youghal, by whom it was set up, and whose it now is. It is stated that another bird, similarly marked, but of a lighter shade of brown, was killed in the same place a few days previously, but unfortunately was not preserved; both had been observed for some weeks frequenting the neighbourhood in which they were killed, and were generally noticed sweeping over the low grounds there. This one was shot in a fallow field, in the act of feeding on a rabbit it had just killed. I should state that the bird is in that state of plumage in which it is called the Spotted Eagle, which was, I believe, till lately considered a distinct species, as in the case of our own Ringtailed Eagle." Mr. Thompson, after citing Mr. Davis's account, goes on to say:—"In a letter from Dr. Harvey, of Cork, dated October 30, 1845, it was remarked, with reference to the Irish specimen, 'Mr. Parker took a portrait of the little Eagle while I had it for a short time, and mentioned a singular coincidence. When on a visit to Mr. Butler, of Waterville, a few days before the bird came under his inspection, that gentleman had mentioned a small brown Eagle, in all respects like a Golden Eagle, except in being about half the size, as frequenting the mountains above Cahirciveen, in Kerry: he had seen it occasionally during the last seven or eight years. To the Rev. Mr. Bastable, a clergyman of the neighbourhood, it was likewise known.' I have little doubt, also, that a bird particularly described to myself, when visiting Horn Head, Donegal, in 1832, as having been shot there the previous year, was of this species."—*Natural History of Ireland*, vol. i. p. 13. I have no doubt that I saw several specimens of the same species on the 17th of July, 1839: the memorandum published in the 'Magazine of Natural History' is to this effect:—"I saw two Eagles soaring in circles far above the summit of Urrisbeg, and others sailing majestically on their way to and from the Twelve Pins."—*Notes on the Natural History of Ireland*, p. 12. I recollect being sorely disappointed with the size of these Eagles, but at that time I had not the most distant idea of our possessing a third native species. In the volume for 1846, at page 1246, the following commentary on Mr. Davis's note occurs:—"Your grand new Eagle is the Silver Eagle of this country, a very common bird. We have

two kinds of Eagles, the Golden and the Silver. In Cahirciveen you may see both kinds of Eagle in captivity; if you or any of your friends should be there, inquire at the hotel." The next notice is from the pen of Mr. Weaver, and occurs in the same volume and page:—"When in the neighbourhood of Killarney in May, 1840, I was told of an Eagle quite new to me, and being determined to obtain one, dead or alive, I posted off to Valentia Island, on the west coast. I soon found that the Eagle I was in quest of was perfectly well known, that it was called the Silver Eagle, and that a pair bred regularly on the rocks in Valentia Island. Having obtained a boat, I landed on the Island, and almost immediately on landing I saw a tame Eagle of this very species; he immediately threw himself into an attitude of resistance, and seemed inclined to dispute the passage. I found that this beautiful bird was not to be purchased for money; the gentleman to whom it belonged had had two taken from the nest; but a few days before I was there, one of them had swallowed the bait and hooks left by some fishermen while they were gone away to get some refreshment, and this killed him; unfortunately no attempt was made to preserve this specimen." Subsequently three specimens have occurred in England. The first of these is recorded by Mr. Rodd in the volume for 1861, at page 7311:—"A capture of this rare Eagle took place on the 4th of December, 1860, in the eastern part of Cornwall, at a large covert called Hawk's Wood, the property of Francis Rodd, Esq., of Trebartha Hall, adjoining the large moors between Hawk's Tor and Kilmar, and not very far distant from the well-known Cheesering. Hawk's Tor and Kilmar Tor rank amongst the highest hills in Cornwall, reaching an altitude of from 1000 to 1200 feet; the character of these hills, and the moors about them in every direction, is exactly similar to those on Dartmoor; in fact the range is a continuation of the great granite tract, extending, with some few interruptions, to the Land's End. The capture of this bird deserves a notice. It was observed first in a tree, and on the approach of the shooting party, instead of soaring, the bird shuffled down the tree and scrambled under some rocks; the condition of the bird was beyond the average of birds of prey, large masses of fat encircling the gizzard, which on dissection was entirely empty; one of the wing-bones was broken, but whether with shot or otherwise I cannot exactly determine; the body, wings, and other parts of the bird exhibited the most perfect form, but probably some injury at the time prevented the bird from

taking flight. The bird was sent to me in the flesh, and I had therefore a good opportunity of taking several particulars, which I will now proceed to give:—Weight 4 lbs. 1 oz. Extreme length 2 ft. 3 in.; from carpal joint to the end of the longest quill-feather (5th) 1 ft. 8 in.; extreme width 5 ft. 5 in.; length of tail 10 in. Cere bright yellow; eyes large, deep hazel; beak, at the base blue-horn, the centre and tip almost black; top of the head, throat, front, breast and back liver-brown; the feathers on the occiput, neck in front and behind, detached, ciliated and loose, with paler points. Quill-feathers abruptly narrowed by indentations of both webs towards their ends, which are black; inner webs towards their base in the widest part pale brown. Secondaries brown, broadly tipped with buff-yellow, forming a conspicuous bar. Greater and lesser wing-coverts ending in distinct oval-elliptic spots, gradually diminishing in size over and to the ridge of the shoulders, and appearing at the extreme margin like small drop-shaped streaks, but distinct and separate. Tail deep brown, tip much worn, but paler; upper tail-coverts broadly edged with dull yellow; the colour of the feathers next to the tail almost white. From the breast downwards to the vent a mixture of dirty yellow and brown, the centre of the feathers being yellow, with the edges all round brown; the feathers on the vent buff-yellow; thigh-feathers buff-yellow, the upper portion striped longitudinally with dark brown, terminating in uniform dull yellow. Tarsi feathered to the feet, which are bright yellow; claws dark brown; toes ending in four well-defined plated scales, similar in form to those of the Golden Eagle. Sex, male. In the first year's plumage. On dissection it appeared that an injury to the elbow of the wing prevented the bird's taking flight. Mr. Vingoe informs me that the flesh in this portion of the wing was like jelly, and there can be no doubt that the bird had met with a recent blow in that part; the high condition of the bird is evidence that it could not have been of long standing, but the remarkable collapsed appearance of the gizzard, without a particle of food, shows that the bird had taken no prey for a day or two." The volume for 1861 contains the following, at page 7380, from the pen of the Rev. M. A. Mathews:—"My friend Mr. Heaven, of Lundy, some three years since, shot a specimen of the Spotted Eagle in the Island; so Mr. Rodd's bird is not the first which has occurred in the West of England." Lastly, this second notice by Mr. Rodd occurs at page 7817 of the same volume:—"Another specimen of this rare Eagle has made its appearance

in Cornwall during the past week; it was shot in the parish of St. Mawgan, near St. Columb, and it was reported in the local paper as being the Golden Eagle. The bird was sent to Mr. Vingoe for preservation, and in this way it has come under my immediate observation. I have examined it minutely this morning, and it is quite as good a specimen, and pretty nearly in the same state of plumage as the one shot at Trebartha in December last. Both are in the state of plumage denoting them to be birds of the year, with the yellow spots and blotches on the quill and scapularies extending over a considerable portion of the feathers. In the specimen now under notice, the yellow over the back and scapularies is even more predominant than in my bird, and there is also a greater amount of yellow mixed with brown on the belly and under parts, approaching to almost a pure buff-yellow on the under tail-coverts and the thighs; the ciliated feathers on the neck have the extremities rather paler than in my bird. The bird was gorged with horse-flesh, and in very low condition. Length 2 ft. 3½ inches." The 'Zoologist' may be said to have commenced and completed the history of this grand addition to our British avi-fauna: it will henceforward take its rank as a native by the side of our other two British species.]

Eagle, Whitetailed.—See Eagle, Cinereous; and Eagle, Ringtail.

[Eared Grebe.—See Grebe, Eared.]

Easterling.—See Smew.

Ebb.—See Bunting, Common.

Egret.—[Yarrell, ii. 553.] *Ardea Garzetta*, *Lin. Syst.* i. p. 237, 13; *Gmel. Syst.* ii. p. 628; *Raii Syn.* p. 99, 5; *Will.* p. 206; *Ib. Angl.* p. 280; *Ind. Orn.* ii. p. 694, 64. *Egretta*, *Bris.* v. p. 431, 16; *Ib.* 8vo, ii. p. 322. *L'Aigrette*, *Buf.* vii. p. 372, t. 20. *Little Egret*, *Br. Zool. App.* t. 7; *Arct. Zool.* ii. No. 347; *Lath. Syn.* v. p. 90, 59; *Walc. Syn.* ii. t. 30; *Lewin, Br. Birds*, iv. t. 149; *Don. Br. Birds*, iv. t. 98.—This species of Heron weighs about one pound; length near a foot. The bill is black; irides yellow; the bare space about the eyes green. The feathers on the back of the head are long, forming a pendent crest; two of the feathers are nearly five inches long, and narrow; the whole plumage is of a pure white; the feathers on the breast and scapulars are of a soft and loose texture; legs greenish black; claws black. If we may judge from the bill of fare of the famous feast given by the Archbishop

Nevil, these birds were plentiful in this country formerly, for no less than one thousand were in that list. It is, however, now become a very rare bird in this kingdom; one instance only of its being killed in these realms is on record by modern authors, and that in Anglesea. In the first year this bird is said to be slate-coloured; the second year grey, spotted with white. It is not uncommon in many parts of Europe and Asia; is found also in Africa, and in America about New York and Long Island, some of the West India islands, and Cayenne. The feathers of this bird were formerly much esteemed as ornaments for the head-dress, especially those of the scapulars.

[Egret, Buffcoloured.—See Heron, Squacco.]

[Egret, Buffbacked.—See Heron, Little White.]

[Egret, Great.—See Heron, Great White.]

[Egret, Little.—See Egret.]

[Eider Duck.—See Duck, Eider.]

Elk.—See Swan, Whistling.

Emmet-Hunter.—See Wryneck.

Ern.—See Eagle, Cinereous. SUPPLEMENT.—This name does not appear to be confined to the Cinereous Eagle, as we are informed that the Golden, as well as the Black Eagle, and the Osprey, have this title applied to them in the Orknies.

[Erne.—See Eagle, Cinereous.]

F.

Falcon.—A genus of rapacious birds, the characters of which are: Bill strong, hooked; the base covered with a bare skin called the cere. Tongue bifid at the end. Nostrils small, oval, placed in the cere. Toes, middle toe connected to the outmost as far as the first joint. Claws large, much hooked. Female largest.

SUPPLEMENT.—This genus, like some others, has been nominally thrown into two divisions, the Aquiline or Eagles, and the Accipitrine or Hawks, differing however in nothing but size. Some of the former have been trained to falconry, but are too heavy to be carried on the fist, not so manageable as the larger Hawks, and not so well calculated for flying at feather. The Hawks and Falcons, as they are generally termed by the Falconer, are numerous; but as the gun has superseded the princely diversion of hawking, it is extremely difficult to trace from the epithets of falconers what species, ornithologically speaking, have been trained. We are assured our British ancestors made use of four species, the names of which we cannot apply at present: the Hebog or Hawk, the Gwalch or Falcon, the Hwyledig or long-winged, the Camming or crooked-bill. To these may be added some falconers' names of modern date, such as Tercel, Red Falcon, Gentle Hawk. These are spoken of in Thornton's 'Sporting Tour.' A cast of Hawks and a Tercel, sent to him from Lochaber, p. 74. Red Falcons and Red Tercels, p. 80. It should appear that the term Gentle is not a specific name, but a term given in the language of falconry to such as are "man-ny" or manageable. See Falcon, Peregrine.

Cuvier has divided this genus into ignoble and noble birds of prey, and these are again subdivided according to the length of their wings and legs, curvature and notches in the bill, and other circumstances of less importance. We do not perceive any advantage resulting from the numerous divisions formed by this naturalist. Amongst the ignoble are placed the Eagles, Fishing Eagles, Eglets, Eagle-hawks, Goshawks, and Sparrow-hawks, Buzzards, Busards, and Kites. These we are told are never employed in falconry, so that we must either conclude this writer has also separated the synonyms hawking and falconry, or he must be mistaken; for not only the Goshawk has been in high estimation with falconers, but that some species of Eagles have been trained to the flight with advantage. The Falcons, which Cuvier has properly termed the noble birds of prey, are tolerably well defined by the second feather in the wing being the longest; but all such have not the process or tooth on each side the upper mandible, as may be observed in the Rough-legged Falcon. And in the ignoble division, which is said to have no such dentation on the bill, the Sparrow Hawk is a proof to the contrary. There appears to be a strong division between the Buzzards, the Hawks, and the Falcons; and the Kites may be separated by their forked tail; but it is extremely difficult to determine the division of the Eagle from the Buzzard, as size alone constitutes the chief distinction. The Osprey has been called both Eagle and Buzzard: this belongs to Cuvier's division of Fishing Eagles, and possesses individually a

remarkable character, that of the outer talon being nearly as large as the inner; but this is probably a specific distinction, as no notice is taken of it in the divisional characters of that writer. We shall not enter further on this new arrangement at present, as we do not conceive it will enlighten our English readers.

Falcon, Ashcoloured.—[Montagu's Harrier, *Circus Montagui*, *Yarrell*, i. 114. Montagu's Harrier, *Circus cineraceus*, *Hewitson*, xvi. 49. Temminck singularly enough took on himself to alter the name of this carefully and elaborately described species to "Busard Montagu," still, however, retaining the technical name "*Falco* (misprinted *Ealco*) *cineraceus*." Both Yarrell and Hewitson have subsequently called it Montagu's Harrier, and Mr. Yarrell even goes so far as to alter the apt and elegant name of "*cineraceus*" into the very objectionable and inelegant one of "*Montagui*,"—a change which neither Mr. Hewitson nor, I believe, any other author has adopted.] *Falco cineraceus*. *Falco hyemalis*, *Gmel. Syst.* p. 274? *Ind. Orn.* i. p. 35, No. 78? Northern Falcon, *Lath. Syn.* i. p. 79? Winter Falcon, *Arct. Zool.* ii. p. 209? Ash-coloured Falcon, *Lin. Trans.* ix. p. 188.—Size rather inferior to the female Sparrow-hawk, but of a greater length and more slender make. The bill is small and black; cere and irides yellow. Head, neck, breast, and whole upper parts dark brownish grey, the tips of each feather darkest; the belly, sides, thighs, and under tail-coverts are white, with large ferruginous streaks down their middle; greater quills black; some of the greater coverts impending them, dusky black on the outer webs towards their middle, forming a small bar on the wings; the two middle feathers of the tail above like the back; the three next, on each side, incline more to light grey; the outer ones almost white; all more or less barred with ferruginous, except the exterior one; the under part of the tail is of a light colour, and the bars not so conspicuous; legs long, slender, yellow; claws short, black, and not greatly hooked for a predacious bird. This species was shot in Wiltshire in the winter, and we received it for the Hen Harrier, which indeed at first sight it might readily be mistaken for in the state of changing its plumage from the Ringtail; but the want of the wreath of short feathers round the head, always conspicuous in both sexes of that bird, at once distinguishes it; the size is also much inferior, though the tail is full as long, and the wings much longer. And, as an additional mark of distinction, the wings, when closed, reach beyond the

extremity of the tail, which in the Hen Harrier are far short of the tail. The wing is also more pointed, the third feather being much longer than any other; whereas in the Hen Harrier the point of the wing is more rounded by reason of the third and fourth feather being of equal length. From the state we received this bird in it was impossible to ascertain the sex. It was, however, in tolerable good plumage, and is now in good preservation. We cannot find this species described by any one except it is the Northern Falcon of Latham, 'Synopsis,' vol. i. No. 62, to which it bears some similitude, but the size of that bird is much superior. This, however, may be reconciled by supposing them to be of different sexes. Mr. Pennant has made his Winter Falcon of the 'Arctic Zoology' to be a variety of the Northern Falcon, occasioned by age or sex. The description, however, is materially different. Gmelin has quoted both the above authors for his *Falco hyemalis*; and Dr. Latham, in his 'Index Ornithologicus,' has adopted that name. It is spoken of as a native of North America, but does not seem to be much known. Visits New York in winter, and retires in the spring. The bird from which this description is taken differs in the marking of the tail from those of the before-quoted authors; but least so from that of the 'General Synopsis.' The bars are four in number, but these are mostly confined to the inner webs, and not observable on the two middle feathers or the exterior one, and are mere spots on the second outer feather.

SUPPLEMENT.—Much new light has been thrown upon the natural history of this bird since the publication of the former part of this work, which has been honoured with a place in the 'Transactions of the Linnean Society.' The subject however has grown upon us since; the nest has been taken, and the young ascertained, so that little remains to make the history of this species complete. We shall first extract a part of the account given in the Linnean 'Transactions,' as that work may not be in the hands of every ornithologist, and afterwards detail our subsequent observations. By the examination of a recent specimen of this bird, killed on the 10th of August, 1803, near Kingsbridge, in Devonshire, we are enabled to add somewhat to the description of it, and to correct a mistake in the former part of this work, where it is stated that the greater coverts have dusky black on the outer webs towards their middle, forming a small bar; whereas it will now be observed this visible mark, when the wings are closed, is on the secondary

quills, and not on the coverts. The specimen in question weighed nine ounces and three-quarters: length eighteen inches: breadth three feet eight inches and a half: the length from the elbow to the end of the third quill-feather (which is the longest) fifteen inches and a half: length of the tail, from the gland on the rump, nine inches and a half. Bill black, the base and cere greenish: irides and orbits bright yellow: crown of the head, cheeks, throat, under part of the neck, back, and scapulars cinereous-brown; the feathers of the last are cinereous at their base, with the tips brown: the smaller coverts are marked the same as the scapulars: the greater coverts are also cinereous-brown, the exposed part of each feather darkest, but not tipped like the others: the eight prime quills are dusky black, the last with a dash of cinereous; the first is very short, the third by far the longest: secondary quills cinereous-brown above, pale beneath, with three remarkable dusky bars, transversely placed, and nearly in parallel lines, each half an inch in breadth; in some of these feathers, when separated from the wing, the rudiment of a fourth bar is observable at the base; but of these three or four bars, only one is visible on the upper side of the wing, the others being hid by the coverts; this is about two inches from the tips of the feathers; on the under part of the wing two bars are very conspicuous; the others are paler and hidden by the smaller under coverts, the first row of which is white, with a large dusky bar across the middle; the rest are bright bay, more or less spotted, barred, or margined with white: the under parts of the body, including the under tail-coverts and thighs, white, with a broad streak of bright bay down the shaft of each feather: under scapulars with broad alternate bars of bay and white: the tail is a trifle cuneiform, the two middle feathers dusky brown, the rest dark ash-colour, palest on the two or three outer feathers, which have their inner webs approaching to white; all except the two middle feathers have five equidistant bars on the inner web, taking in the shaft; these bars on the two outer feathers are bay, the rest more or less dusky, with a ferruginous tinge on those at the base: legs orange-yellow, rather long and slender: claws small and black. The bird from which this description is taken is a male, proved to be so by the unerring rule of dissection. It has the feathers behind the ears short, but no ruff continued round the head so conspicuous as in the Hen Harrier. He was in good condition, and in his stomach was a Sky Lark, and yet his weight was not so much as that of the Hen Harrier by three or

four ounces; though his length and breadth are much superior, by reason of his longer wings and tail. It must also be remarked that he cannot be a young bird, as some of the quills are moulting; the first and second feathers of the secondary quills in each wing are not full grown, but are of the same colour as the rest, and possess the same bars. When this account was laid before the Linnean Society, we were unable to say any thing of the habitat, or to determine whether this bird was really indigenous or not; but we have been fortunate enough since to remove the greater part of the veil that hid in obscurity the history of this species. On the 23rd of May, in the year 1808, we observed one of these birds in South Devon, skimming over a patch of furze very near; and noticed that it repeatedly dropped into the same spot, after having pitched on the bare ground at some distance; but could not observe whether it was preparing a nest or not. At the same time we noticed a large brown Hawk floating over another piece of furze at a little distance. This had much the appearance of the Ringtail, but appeared longer in the wings, which gave a suspicion that these were actually the two sexes of the Ash-coloured Falcon; and which seems to be confirmed by subsequent events. Mr. Tucker (the author of '*Ornithologia Danmoniensis*'), while looking over our museum, had this bird pointed out to him, and was asked if he had ever seen it. To which he replied that he thought he had, but had probably mistaken it for a variety of the Hen Harrier. In a short time after Mr. Tucker sent us one of the secondary quill-feathers of this bird, which was then in his possession, and informed us that both sexes of this species were shot in that summer (1808) from the nest, by the gamekeeper of Mr. Templer, of Stover, in Devonshire, and that three young ones were also taken at the same time. All these had been nailed up against the garden wall, and were considered as the Hen Harrier, with his female the Ringtail, and their offspring; the male of which had been previously taken down by Mr. Tucker as a variety of the Hen Harrier, before we had pointed out to him the distinction. It would have been a most desirable object to have obtained the female, but unfortunately we were too late; it was totally destroyed. There was however no longer any doubt that the colour of that sex was brown, not very unlike the general appearance of the Ringtail, having been taken for such by Mr. Tucker upon a cursory view, when he took down the male. But it is singularly fortunate that in the same year Mr. Tucker should himself take a nest of this obscure

species with young, which he attempted to rear, under the idea that they were Hen Harriers. The nest was discovered in the month of July, on the ground, amongst furze, containing three young birds and an addled egg, which last was white. Two of the young Hawks continued alive till the summer of the following year, and were evidently, from their disproportionate size, of different sexes. About the beginning of August they began to moult, plainly discovering that they were not Hen Harriers as before suspected, but actually the birds in question. Unfortunately at this most interesting conjuncture the female made her escape before she had nearly completed her mature plumage, and the only part we could obtain of her was an outer feather of the tail that had been broken off, and was evidently of recent growth by not being completely expanded at the base: this feather has five bars of ferruginous, with alternate rufous-white on both webs; towards the end the dark bars incline to dusky. In the latter end of November the male was by some accident killed in the middle of his moulting, when assuming the feathers of maturity; and was in a mutilated state sent to us for examination; the description of which is as follows. The head, neck, part of the scapulars, and most of the lesser coverts of the wings, still possess the nestling brown feathers, which are similar to those of the immatured male Hen Harrier, or the adult Ringtail; but the ferruginous-brown is brighter, and more inclining to dull orange: all the smaller feathers upon the under part of the wings are bright ferruginous, differing most essentially in colour from that part of the Hen Harrier of either sex, or in any state of change, and which in the adult male of that species is invariably white. The under scapulars on one side are similar to those of the adult, elegantly barred ferruginous and white; but on the other side these feathers have not been changed, and are plain ferruginous: the under parts of the body and thighs are nearly matured, being white and possessing the bright ferruginous streaks down the shafts of the feathers: the quills and the greater coverts are mostly matured, but a few of the nestling feathers remain, which strongly and most interestingly mark the distinction, particularly two or three of the secondaries, which are destitute of the dusky bars, and are of an uniform chocolate-brown, darker than those on the young Hen Harrier: the tail is much mutilated, but the remains of the old feathers are in appearance barred much like those of the adult; the outer feathers with bright ferruginous and white, the others with ferruginous

bars at the base; but the third feather is new, and nearly full-grown, on which there are five dark and five pale bars alternate; the three lower dark bars mixed with ferruginous, the other two are dusky, and the light bars, which are white at the base, become cinereous towards the end, and the point, with the margin of the outer web, are also cinereous: the greater coverts of the tail are white, similar to those of the Ringtail, or young Hen Harrier, but tipped with cinereous. The premature loss of these young Hawks was rather unfortunate; however, little more could have been attained by them, since enough had been observed of the change of the female to show there was little or no alteration in the markings of the plumage; and it had been seen that both sexes were similar in their first feathers. But to put the matter beyond all doubt, another nest was found by Mr. Tucker in the following summer, very near the place where the young had been taken the preceding year; in which there were also three young birds and an addled egg. The nest was placed, like the last, amongst furze, upon a hill near Ashburton; from which two young ones were taken, and the female shot. The latter we had not an opportunity of examining, so that the exact weight and measurement were not ascertained; but with regard to plumage, we were informed that no difference existed between the female and the two young birds, which last were only known to be of different sexes by the superior size of the female, and by the tint of the irides, which in that sex are at first dusky, but in the male are of a pale colour. The colour therefore of these Hawks in their first plumage, like the Hen Harrier, exactly resembles the female till after the first moulting, and therefore cannot in any of its changes be mistaken for either sex of that bird, now the complete description of this species is obtained in both its primary and adult plumage. Upon the authority of Mr. Tucker we shall consider the plumage of the adult female to be exactly similar to that of the young, and shall therefore substitute a description taken from a young male on the 14th of November, with which bird, alive, Mr. Tucker favoured us, having been taken from the nest about five months. The bill dusky: cere yellow: irides so pale a yellow as to appear nearly white. The whole upper part of the head ferruginous, with small dusky spots; on the hind-head and nape a broken patch of white; immediately above and beneath the eye is a pale streak; the coverts of the ears, extending down to the lower mandibles, are dark chocolate-brown: the feathers on the whole

upper parts of the body, including the scapulars, are dark chocolate-brown: the quills the same; the first three or four pale ferruginous about the middle of the inner web; the secondary quills the darkest, and all more or less tipped with ferruginous, except on the upper part of the back; and those on the back of the neck are deeply margined with that colour: the lower part of the rump, and coverts of the tail, white, with a few streaks of bright ferruginous: the lesser coverts of the wings are deeply margined with ferruginous: the chin is dusky brown: the whole under parts, from chin to vent, including the thighs, under tail-coverts, and under coverts of the wings, bright ferruginous without spot, except the shafts being somewhat darker, appearing on close inspection like fine slender streaks: the tail-feathers have five alternate darker, and five paler bars, but the upper ones are nearly obsolete; these bars on the outer feathers are bright ferruginous and white, with one bar near the end darker; the second is similar, but has the ferruginous bars inclining to chocolate-brown, and the white ones run into pale ferruginous on the outer webs; the three next become gradually darker, with the pale bars less conspicuous, and more ferruginous than white; the two middle feathers have the bars marked only by a shade of difference in colour, and are scarcely defined. We have been particular in describing this bird in all its stages, in order that it may no longer be confounded with the Hen Harrier or Ringtail; and after what has been said, it is hardly necessary to remark that the bright ferruginous colour of the markings is always sufficient to discriminate this. In the adult male, these bright markings on the under parts of the body, and under the wings, and the black bars on the secondary quills (independent of the great difference in the tail), at once point out the distinction from the male Hen Harrier. In the female, the uniform ferruginous colour of all the under parts is sufficient to discriminate it from the female Hen Harrier, besides the colours being much brighter; and in the adolescent or changing state of plumage, the same difference exists in markings. That this bird has been long known, and confounded with the Hen Harrier, there can be no doubt, a proof of which is evident by the description of what Mr. Pennant supposed a variety of the Ringtail. In describing that bird, "The breast and belly (says Mr. Pennant) are of a yellowish brown, with a cast of red, and marked with oblong dusky spots, but they are subject to vary, for we have met with one specimen that had these parts entirely

plain." Here then is an excellent definition of the distinction of the females of the two species, or of the young of both sexes before the first moulting: and, except this remark of Mr. Pennant, we do not find any description, that sufficiently accords with either sex of our Ash-coloured Falcon, to refer to with confidence. We originally referred with doubt to the Winter Falcon of the 'Arctic Zoology;' but unless climate is admitted to make a strange difference in plumage, our doubts are more magnified since we became better acquainted with this species: by its description it differs as much from one sex of the Ash-coloured Falcon as from the other. From the Northern Falcon this also differs in some essential points, especially in the under tail-coverts, which in that are said to be plain white, whereas in ours the adult male (to which only that can be referred) has those feathers white streaked with ferruginous. Dr. Latham, who first described the Northern Falcon as a native of North America, says the under parts are ferruginous-brown with interrupted bars of white: "these bars (says the Doctor) are produced from each feather being of this ferruginous colour, with two or three spots of white on each side of the shaft." This is not similar to the markings of our bird, in which the feathers of that part, that is from the lower breast to the tail, are white, with a bright ferruginous streak down the middle of each. With such a material difference, we must still have very great doubts of their being the same species. Another bird given by Daudin, under the title of Faucon à crupion blanc, has been described in the second Supplement to the 'General Synopsis of Birds' as a variety of the Northern Falcon; but this in markings is farther removed from our species, by the neck and breast being more or less ferruginous mixed with white: the belly and thighs are also white, having two or three heart-shaped spots of ferruginous on each feather. This may be a variety of the Northern Falcon, but does not better accord with our bird than the former: upon the whole, therefore, we are inclined to believe our Ash-coloured Falcon has not hitherto been described as a distinct species, and that both sexes have been confounded with those of the Hen Harrier, unless *Falco spadiceus* of Mr. Foster, described in Phil. Trans. lxii. p. 383, belongs to it. The description states it to be very like the Moor Buzzard, only less, and wanting the light spot on the head. The female of our bird is in general appearance more like the Moor Buzzard than any other species of Falcon with which we are acquainted, especially in

having the under parts immaculate, but its colours are brighter, and the bird is not near so large. If, however, the spadiceus is the same as the Chocolate Falcon of the 'Arctic Zoology,' it cannot be our bird, as that has its legs covered with feathers. Whether the Ash-coloured Falcon remains with us the whole year has not been ascertained, but upon recurrence to notes we think not one has been seen by us later than October. [The closely-allied species, so familiarly known as the Hen Harrier, will be found under that name: it would be much more in accordance with modern usage to call this species, so admirably characterized here for the first time, a Harrier also.]

Falcon, Bluebacked.—See Falcon, Peregrine.

Falcon, Dovecoloured.—See Hen Harrier.

Falcon, Gentil.—*Falco gentilis*, *Lin. Syst.* p. 126; *Gmel. Syst.* p. 270; *Raii Syn.* p. 13, 5; *Will.* p. 46; *Ind. Orn.* p. 29, 66; *Bris. i.* p. 339; *Ib.* 8vo, p. 98. *Falco montanus*, *Raii Syn.* p. 13? *Will.* p. 45, t. 5? Gentil Falcon, *Br. Zool.* i. No. 50, t. 21, 22; *Arct. Zool.* ii. No. 98; *Albin.* ii. t. 6; *Will. Angl.* p. 79; *Lath. Syn.* i. p. 64; *Ib. Sup.* p. 17; *Lewin, Br. Birds*, i. t. 11; *Walc.* i. t. 11; *Pult. Cat. Dorset.* p. 2; *Shaw, Zool.* vii. p. 122. —This bird has been conceived by some to be the young of some other species. Buffon is of opinion that it is the Common Falcon in full feather; others have supposed it to be the young of the Goshawk immatured. It is a short-winged Hawk, like that of the Goshawk, the wings reaching only half the length of the tail. The size is that of the last-mentioned bird. Bill lead-colour; cere and irides yellow. Head light ferruginous, with oblong black spots; the whole under side yellowish white; the points of each feather marked with heart-shaped dusky spots; back brown; quills dusky, barred with black on the outer webs, and with white on the lower part of the inner webs; coverts of the wings and scapulars brown, edged with rust-colour; the tail is barred with black and cinereous alternately, the tip white. A variety, supposed to be young birds, is described to have transverse bars on the breast. Is said to make its nest in rocks, and to inhabit the north of Scotland.

SUPPLEMENT.—Doctor Latham, in his Second Supplement to the 'General Synopsis of Birds,' says, "The young of the Goshawk is very different from the adult, and it is not at all clear that the Falcon Gentil of the 'British Zoology,' No. 50, is

not the Goshawk in its first feathers." To this opinion we most heartily subscribe. Gentil or Gentle in Falconry does not appear to be a specific name of any particular Hawk, but is applied to such as are docile, and completely manned for the sports of the field. Colonel Thornton, whose knowledge on the subject no one will dispute, assures us that the term frequently used in his 'Sporting Tour to the Highlands of Scotland,' applies to the Peregrine Falcon: see that bird. Buffon considered the Gentil Falcon as the common Falcon in full plumage: Monsieur Daudin, on the contrary, maintains that it is perfectly distinct; but allows that falconers give this title also to the Common Falcon when completely trained, and in full plumage. Dr. Shaw says he has heard it maintained, on the faith of an eminent falconer, that the Falcon Gentil is in reality no other than a young or incomplete Goshawk. The two figures given by Mr. Pennant in the 'British Zoology' have short wings like the Goshawk, and not like the true Falcon; and as he asserts it to inhabit Scotland, where the Goshawk is known to breed, we really believe at any rate that Mr. Pennant's Falcon Gentil is in fact that bird. [I suppose this bird to be the Peregrine in a particular state of plumage.]

Falcon, Grey.—*Falco griseus*, *Gmel. Syst.* i. p. 275; *Ind. Orn.* i. p. 37, 86. Grey Falcon, *Br. Zool.* i. No. 49; *Ib.* fol. p. 65; *Lewin, Br. Birds*, i. t. 15; *Lath. Syn.* i. p. 82, 67. —Mr. Pennant first gave this bird to the public, from whose authority later ornithologists have continued it as a distinct species. It seems, however, the above author did not see the specimen he has recorded, but says it was shot near Halifax, 1762, and the following account transmitted to him by Mr. Bolton. This bird was about the size of a Raven; the bill was strong, short, much hooked, and of a bluish colour; the cere and edges of the eyelids yellow; the head was small, flattened at the top; the fore part of a deep brown; the hind part white; the sides of the head and throat were cream-coloured; the belly white, marked with oblong black spots; the hind part of the neck and the back were of a deep grey; the wings were very long, and when closed reached beyond the train; the first of the quill-feathers were black, with a white tip; the others were of a bluish grey, and their inner webs irregularly spotted with white; the tail was long and wedge-shaped; the two middle feathers, being the longest, were plain (the colour not mentioned), the rest spotted; the legs were long, naked, and yellow. We cannot help doubting whether

this bird may not be a mere accidental variety of some other species of Falcon; and we are the more inclined to be of that opinion as only one single instance of such a bird has been mentioned by any writer; and we know this class of birds is subject to much variety.

APPENDIX.—We are indebted to Mr. Foljambe for obtaining the opinion of an intelligent falconer in the service of Sir Thomas White, with respect to this and other obscure species of this tribe. This experienced German falconer says that the Grey Falcon is the Tercel, or male of the Jer Falcon in its first plumage. The Lanner he declares to be clearly a Peregrine. But the Spotted Falcon he asserts is a distinct species. He has taken that bird repeatedly in the Netherlands, but it is not used for falconry, being a bird of slow flight, allied to the Buzzards, which he explained to Mr. Foljambe, by pointing out the strong resemblance in the form of the wings, in the specimen belonging to that gentleman's collection, which we are assured is without doubt the Spotted Falcon of the 'British Zoology.' With respect to the Lanner, it does not appear that this falconer is acquainted with any distinct species by that name; the bird in Mr. Foljambe's collection which answers to the Lanner of Pennant, he is decidedly of opinion is a Peregrine. In fact the Lanarius of Aldrovandus and Belon appears to be lost, or at least not to have been ascertained as a distinct species, even in the time of Buffon, who says it is not in any of the cabinets in France, nor does any author figure it, Albin excepted. To this experienced person, with respect to the Falcon tribe, the question was put as to the identity of the species, commonly in use on the Continent, by naturalists called Falco communis. The reply was, that it is the same as the Peregrine. It will be seen in the preceding pages that we have expressed doubts upon this subject; but we really are at a loss to account for all those varieties to which the Common Falcon is said to be subject, unless effected by confinement, since the Peregrine appears in its state of liberty to be as little variable in plumage as any species of the tribe. [A synonymic list of the Falcons will be given in an Appendix, and therein these difficulties cleared up.]

Falcon, Gyr.—See Falcon, Jer.

Falcon, Haggard.—See Falcon, Peregrine.

Falcon, Jer.—[Yarrell, i. 36; Hewitson, vii. 22.] *Falco islandicus*, Ind. Orn. i. p. 32, 69; Shaw, Zool. vii. p. 120. *Falco*

candicans, Gmel. Syst. ii. p. 275. Gerfaulk, Buf. i. p. 241. *Gyrfalco*, Raii Syn. p. 13, 3. *Gerfalco*, Will. p. 44, t. 8; Bris. i. p. 370, t. 30, f. 2; Ib. 8vo, p. 108. *Gyrfalco*, Br. Zool. i. No. 47, t. 19; Arct. Zool. ii. p. 221, E.; Lewin, Br. Birds, i. t. 16. Iceland Falcon, Lath. Syn. i. p. 71, 50, A. B. White Jerfalcon, Lath. Syn. i. p. 83, 84; Ib. Sup. p. 21. *Gyrfalco*, Walc. Syn. i. t. 15.—This species is superior in size to the Goshawk. Bill bluish, tip black; cere blue ash-colour; irides dusky. The plumage is generally white, spotted with brown; legs bluish ash-colour. This bird is subject to variety, either from age, sex, or climate. In the northern countries it is found quite white. Others are said to be brown above, white beneath, spotted with brown; tail grey, with transverse brown lines. Mr. Pennant says the bill is yellow; the whole plumage white, marked with dusky lines, spots, or bars; the head, breast, and belly with narrow lines, thinly scattered and pointing down; the wings with large heart-shaped spots; the legs pale blue, and feathered a little below the knees. Said to inhabit the north of Scotland; has been shot near Aberdeen. The Jer Falcon was in high estimation in the time of falconry; is an extremely bold bird, and was used for the large species of game, Cranes and Herons.

SUPPLEMENT.—This species, still in use amongst the continental falconers, has also been in training in this country at no very distant date. The Icelanderkin mentioned in Thornton's 'Sporting Tour,' p. 37, is certainly of this species. This author observes that it is a species of Falcon taken only in Iceland, and informs us that one which was blown to sea, and taken in Davis's Straits, was sent to him. In the collection of Mr. Comyns is a bird which appears to be a variety of this species. It is white, with a few scattered spots of dusky black on the upper part of the body, and the head streaked the same; the wings and tail black, the latter with a band of white at the end, and a little white at the base; the quills slightly tipped with white: the secondary quills and under coverts elegantly barred with black and white. The wings are short for the proportion of the bird; for if the primary quills had been closed, they would certainly not have reached near the end of the tail.

Falcon, Peregrine.—[Yarrell, i. 56; Hewitson, viii. 24.] *Falco peregrinus*, Gmel. Syst. i. p. 272; Raii Syn. p. 13, 1; Will. p. 43, t. 8; Ind. Orn. i. p. 33, 72; Bris. i. p. 341; Ib. 8vo, p. 98; Shaw, Zool. vii. p. 128. *Falco nigro*, Bris. i. p. 263? Ib. 8vo, p. 94? Faucon pelerin, Buf. i. p.

249, t. 16. Faucon noir, *Buf.* i. p. 263? Peregrine Falcon, *Br. Zool.* i. No. 48, t. 8; *Ib.* fol. t. A.* 5; *Arct. Zool.* ii. No. 97; *Lewin, Br. Birds.* i. t. 12; *Lath. Syn.* i. p. 73; *Ib. Sup.* p. 18; *Walc.* i. t. 12. Tartarian Falcon, *Lath. Syn.* i. p. 73, A. Spotted-winged Falcon, *Lath. Syn.* i. p. 68? *Edw.* t. 3?; *Pult. Cat. Dorset.* p. 2; *Don. Br. Birds.* iii. t. 53. Provincial: Duckhawk; Haggard; Blue-backed Falcon.—This species is nearly as large as the Buzzard; weight between two and three pounds. Bill short, strong, blue at the base, black at the point; cere yellow, in some greenish; irides dusky. The whole upper parts of the plumage are of a cinereous-blue; the head darkest; the back, scapulars, and coverts of the wings obscurely barred; throat and upper breast yellowish white, the latter marked with a few streaks; the lower breast, belly, and vent white, crossed with pointed dusky streaks; quills dusky, with white spots on the inner webs; the tail barred, alternately cinereous-blue and black; legs short, strong, and yellow; toes long; claws black, strong, and much hooked. We took three young birds from a high cliff on the coast of Caermarthenshire; by the nest lay above a dozen Rooks, Crows, and Gulls. One of these was a male. The colour of them was, for the first year, dusky and ferruginous above; not the least of the cinereous-blue till after the first moulting, when they became as above described. The male was much inferior in size, but differed very little in plumage. We killed one of these birds in Wiltshire, which had the plumage of the last; and one that was sent us, which was killed on the Hampshire coast while in pursuit of a Gull, had the irides yellow: this was a male. Others have the legs greyish. The Peregrine Falcon is not uncommon upon most of our rocky coasts, usually frequenting such high cliffs as the Guillemot and Razorbill resort to for breeding, amongst whom it makes great havoc. It is a bold and powerful bird. Was much esteemed formerly by falconers.

SUPPLEMENT.—A male Peregrine, which had ravaged a farm-yard in the neighbourhood, and depredated largely amongst domestic poultry, was at last caught in a trap. His length was sixteen inches and a half; breadth about thirty-seven. The bill is bluish black, at the base yellowish; gape and cere yellow; irides dusky: a large space round the eye bare of feathers, pale yellow: the whole upper parts of the plumage dusky black, with a cinereous dash; the shafts of the feathers black, and the margins slightly edged with ferruginous-brown; the forehead pale; back and sides of the neck mixed with yellowish

white; behind the eye a black patch; from the corner of the mouth a broad black streak pointing downwards: chin ferruginous-white; the whole under parts the same, with a broad streak of dusky black down the shafts, less conspicuous on the throat and vent: under and upper tail-coverts barred with dusky and ferruginous-white, the former dashed with cinereous: quill-feathers dusky black, dashed with cinereous, the inner webs with transverse oblong spots of ferruginous-white: the under coverts of the wings alternately barred black and white: tail dusky black, dashed with cinereous, with eight pale ferruginous bars, least conspicuous on the outer webs of the exterior feathers; one of the bars constitutes the extremity. It is remarkable that the male bird here described, after having been kept for some time, died of a stoppage; a pellet of wool (which is usually disgorged), having passed the stomach, had got into the colon, and could not be evacuated. The bill and talons of this species are remarkably strong; the former is much hooked, and furnished with a tooth-like process on each side the upper mandible near the tip, and a corresponding notch in the under mandible, which enables it to cut and tear its prey the more easily. The wing is very pointed, the second feather being the longest, the first not much inferior. The tail is rather short, so that the wings, when closed, reach very near the end: legs short, strong, pale yellow: the toes long, furnished with a projecting callous beneath, at the second joint. It should however be remarked that the legs are sometimes of a bluish grey: such occurred to us in one out of three taken from the same nest. We have been thus particular in the description of this species, because the genus Falcon appears to run into so many varieties as to have caused great perplexity. If we are to give implicit credit to Monsieur Daudin concerning the Common Falcon (*Falco communis*), the varieties of that species are innumerable, and are as dissimilar in plumage as possible; so much that many of the supposed varieties have by other authors been considered as distinct. Thus we find the White-headed, the White, the Black, the Brown, the Reddish, the Italian, the Sacre, and the Spotted Falcons, are all considered as varieties of that one species: the last of these is the Spotted Falcon of the 'British Zoology.' Now as there is no difference in size between the Common Falcon and the Peregrine, nor does there appear to be any essential distinction in the conformation of the different parts; and from what may be collected from authors (who must have

frequently seen the former on the Continent, where it has been used for falconry, and, as its trivial name imports, must be common), there is not a material difference in the plumage from that of the Peregrine, in the first, or perhaps second year; we are not quite satisfied that these birds are not actually the same species, or so nearly allied as to be frequently confounded. In such an opinion we are not perhaps singular; and certainly the variety is not so strained as we have before noticed. The bill, cere, and legs are the same; the dark patch on the cheek is similar; the general brown, or dusky brown plumage, with rufous edges to the feathers, and the tail barred with alternate dark and light brown, comes so near to the young of the Peregrine, that we cannot help expressing doubts. As to the varieties enumerated, most of them must be merely accidental, and if these two birds are not the same, then who will determine to which species these varieties belong? In the more northern parts of Europe, the Falcon tribe, as well as some others, are subject to vary towards white, more or less, but this is not perceived in our temperate climate; nor have we in any instance seen any material variation in the plumage of the Peregrine in this country, so as to cause the smallest hesitation in declaring the species. The Peregrine Falcon, from its nature, is limited to certain districts, for it inhabits only the mountainous parts, or where it can settle in security upon the shelving rocks of some stupendous cliff. With us therefore it is chiefly confined to the bold and rocky parts of our coast, where it breeds, not only in security, but in the midst of plenty. From its habits, therefore, it appears to be less common than it really is; for in fact it is nearly as plentiful a species as any in England, one or two of the commonest sorts excepted; there is not any part of our coast, from north to south, where the cliffs rise to the height of three or four hundred feet, but they are found scattered in the breeding season; and from which they seldom retire, except for occasional migratory purposes, or when the young are driven to seek fresh quarters. This species, therefore, is well known to the Ornithologists of this country, and makes a part in every collection of British birds, and yet the *Falco communis*, which is said to be not less rare in France and Germany, does not appear to have ever been identified in Great Britain. Doctor Shaw, in his 'General Zoology,' vol. vii. p. 129, has given the Barbary Falcon as a variety of the Peregrine; and in the following page the Lanner stands also as another va-

riety. We refer to that work for the opinion of the author, with whom we are inclined to join, that those birds are in fact only varieties of the Peregrine; at least the bird described in the 'British Zoology' under the title of Lanner; and whether there may be any such bird specifically distinct is to be doubted. It must, however, be admitted that the knowledge of many of these birds is in great obscurity, and no recent light has been thrown upon the subject. Mr. Pennant remarks that the rock of Llandidno, in Caernarvonshire, was celebrated for producing a generous breed in the days of falconry. In more recent days, the stupendous rock on which the castle of Dunbarton, in Scotland, stands, has been famous for a good breed of the Peregrine Falcon; from whence Lord Eglington obtained his Hawks for falconry. This nobleman (whose excessive partiality for the sports of the field, and tenacity of his game, was the cause of his premature dissolution) was, we believe, then Governor of Dunbarton Castle; in consequence, the Peregrine Falcon was suffered to breed annually on the rock. We happened to be in the neighbourhood of Dunbarton one summer, when the young were unmolested, and had an opportunity of examining the larder of these general depredators, which might have supplied a luxurious table, though not perhaps equal to that of the Bishop's of Gevaudan, from the eyry of the Ring-tailed Eagle, transcribed into the 'General Zoology,' from the life of De Thou. From one point of the summit of the rock, the Falcon's nest was visible, placed on a projecting ledge, and near the young were several Heath Poults, Red Grouse, and other birds. It is natural to conceive that every falconer was partial to his own breed, and that caprice alone constituted individual excellence: but we are assured by Colonel Thornton that he never could obtain a Tercel (a male) that would kill Ducks, but from Hambleton, in Yorkshire, although he had procured many from other places. From the same source we have also been favoured with the following observations. The female Peregrine Falcon, in the terms of falconry, is always called Falcon, whereas the male is denominated Tercel. The former is a match for Heron and Geese, and will fly at lesser game equally well; and where perseverance is requisite she excels the Tercel; but when flown at Snipes is apt to carry them off, and when fed on them difficult to catch; with care, however, the Colonel assures us, he has found them faultless. The female, when a yearling, is termed a Red Falcon, and the male a Red Tercel; and when thoroughly

docile, are called *Gentil* or *Gentle Hawks*. The rapidity with which a Falcon flies in pursuit of its quarry is inconceivably great. "The flight of a strong Falcon (says Doctor Shaw) is wonderfully swift. It is recorded that a Falcon belonging to a Duke of Cleve flew out of Westphalia into Prussia in one day; and in the county of Norfolk a Hawk has made a flight at a Woodcock near thirty miles in an hour." But what are these to be compared to the actual velocity and continuance of the flight of a Falcon that is recorded to have belonged to Henry IV. King of France, which escaped from Fontainebleau, and in twenty-four hours after was found in Malta a space computed to be not less than 1350 miles; a velocity equal to fifty-seven miles an hour, supposing the Hawk to have been on wing the whole time. But as such birds never fly by night, and allowing the day to be at the longest, or to be eighteen hours light, this would make seventy-five miles an hour. It is probable, however, that he neither had so many hours of light in the twenty-four to perform the journey, nor that he was retaken the moment of his arrival, so that we may fairly conclude much less time was occupied in performing that distant flight. Those who have attended to the flight of birds know that a sparrow will fly at the rate of more than thirty miles in an hour. It is indeed extremely difficult to ascertain the actual distance a Falcon may fly in a given space of time when in pursuit of its quarry. But Colonel Thornton, speaking of the rapidity of the flight of a Falcon in pursuit of a Snipe, estimates the space of nine miles in eleven minutes, independent of the numerous turns; and the force with which they strike, in the utmost of their velocity, is so great that the Colonel has known a Hawk belonging to him cut a Snipe in two parts. The rapidity with which a Hawk, and many other birds, occasionally fly, is probably not less than at the rate of a hundred and fifty miles an hour, when either pursued or pursuing, and their powers fully exerted; and certainly a hundred miles is not beyond a fair computation for migratory continuance, not only of the Hawk, but of the Woodcock, Snipe, and other similar birds. The Eider Duck's usual flight has been ascertained to be at the rate of ninety miles an hour, as before stated in the history of that bird. Amongst quadrupeds, the Horse is perhaps as fleet as any, and yet the velocity falls very short of that of a bird; the famous racer Hambletonian covered a space of four miles in eight minutes, which is but thirty miles in an hour, if it could be continued. Eclipse is

said to have gone at the rate of a mile in a minute for a very short distance. The velocity of the motion of fishes is not perhaps equal to that of quadrupeds, but can be continued. The Whale has been calculated by Cope to swim at the rate of thirty-three feet in a second, which is about twenty-two miles an hour; and if continued he might circumnavigate the globe at the equator in about forty-six days, including nights: whereas a bird, at the rate of a hundred miles an hour, would effect the same distance in ten days and ten hours. How admirably then is the feathered tribe calculated to migrate and remigrate to and from distant climates. The courage of the Peregrine Falcon is equal to its powers, as we have observed upon many occasions, and which the following circumstance will fully evince. A yearling female bird in our possession, which had never enjoyed its native habits of destruction (having been taken before she could fly, and had never been much used to slaughter, except with an occasional small bird), was suffered to be a whole day without food, at the expiration of which an old male Heron was introduced into the room where the Falcon was at liberty, the point of the Heron's bill having been previously sawed off. As soon as the Heron was in motion, the Falcon, who was also deprived of the means of flight, took post on a stool which was at one end of the room; and as the Heron, regardless of his enemy, traversed the apartment, the Falcon motionless kept her eyes fixed on her destined prey, till, after several turns round the room, she judged the Heron was sufficiently near to effect her purpose, when she sprang at the head, intending to seize that part with her talons. In this however she failed, the stool not having given her sufficient elevation to reach the high-erected head of the Heron. This failure might probably have cost the Falcon her life, had the bill of her antagonist been perfect; for she received such a blow on the body that must otherwise have inflicted a severe if not a mortal wound, from so pointed an instrument urged with such power. Baffled in this attempt, and having received a severe blow, it was conjectured no further attack would be made until the calls of hunger became more urgent. The Falcon, however, had soon regained her station, and it was not long before we perceived the Heron, regardless of his foe, pass very near, when the Falcon, in a second attempt to seize her prey as before, was equally foiled, and again received a severe check from the bill of the Heron. Finding her efforts had failed for want of the advantage Nature had

assigned her, instinct directed the Falcon to a box that stood on the opposite side of the room, which was somewhat higher. Here she again seemed to meditate another attack, by watching every motion of the Heron, who continued his rounds with a view to make his escape; and it was not long before an opportunity offered for Falco to make an assault from her more elevated station. Here she had found an humble substitute for those powers with which Nature had so amply furnished her, but of which she had been deprived, and at last succeeded by springing from her perch, and seizing the unfortunate Heron by the head and upper part of the neck with her talons, which instantly brought him to the ground. Now the unequal contest was soon determined; for in vain did the superior weight and strength of the Heron drag and flounder with his enemy across the floor; in vain did he flap his unwieldy pinions to shake off the tyrant of the air; nor could even his gigantic legs force her from the bloody grasp; her work was short and certain; no efforts could compel her now to quit her deadly gripe; the powerful and only dreaded arms of her antagonist were secured, and thus disarmed he became a sure and easy prey. Scarcely was the gigantic bird prostrate on the ground than death ensued; for in this noble race, destined for blood and slaughter, torture makes no part of its nature, but, like what we are told of the generous Lion, exulting in death, but disdaining cruelty. In less than half a minute did the Falcon tear out the gullet and windpipe of the Heron, and regaled on the head and neck. The Falcon which had killed the Heron was afterwards killed by a younger bird of her own species in a similar manner. She was confined in the same apartment with three others that were taken from the same nest, and not above six months' old, two females and one male; one of the females broke her chain, and by that means having considerable advantage over the older bird, which was chained, soon killed her. One of these young Falcons was, after two years, suffered to have her liberty, and for a long time took possession of the tower of the church, and would descend to the person who usually supplied her daily food; but at last she probably acquired her native powers, and shifted for herself. How characteristic of genuine courage would the nature of the generous breed of Hawks appear, were we not assured that sentiment bears no part in their actions, but that instinct, that powerful principle of unerring action in secondary beings, supplies the place of reason, and has

wisely been given by Nature's hand to direct all in that course which shall not only conduce to their own existence and comforts, but also to answer the original designs and more extended views of the Creator. Thus, the more ignoble birds of prey, who are either not endowed with courage or strength, rarely attack any animal stronger than themselves, but are content to make a prey of those divested of power to resist. These, conscious of the weakness of their quarry, disrobe them while yet alive, and frequently begin their meal on the extremities of the tortured victim, viewing as it were with pleasure the panting, bleeding sacrifice to their unquenchable thirst for blood. Not so with the noble and more powerful race; these, from their bold and intrepid nature, cannot risk an advantage they have taken, by dexterity, of an animal vastly superior in bodily strength, and therefore the vital parts of such are the object of their first attack, in order to secure their prey as expeditiously as possible by death, and thereby prevent the chance either of losing it, or of receiving an injury by long and reiterated struggles under the agonies of torture. If the cowardly Buzzard is given a living bird that he ventures to seize, he plucks off its feathers, and begins his repast indiscriminately at any part he may chance to draw blood; whereas we have observed this is not the case with the generous breed of the same tribe. The intrepid Peregrine knew the extent of her power when she was opposed to such superior strength as that of the Heron; she was conscious of her inability to hold her antagonist by grasping his body, especially while his destructive weapon was at liberty, which might have reversed the issue of the contest. The head therefore, or the upper part of the neck nearest to the head, were the only places that could secure to her a prompt and decisive victory, over an animal that so much exceeded her in size and strength, without endangering her own person. Was a living bird of inferior size given to the Peregrine, she would not hesitate to seize it by the body with her talons; but the operations of nature are invariable; the same immutable instinct appears; the head is the first crushed, and perhaps eaten before the body is touched. It is not the nature of a Falcon to attack on the ground, or to get in contact with a large bird; it is on wing her powers are to be estimated; and here it is astonishing to perceive the force with which she pounces her prey. How this is performed, without receiving any injury by the contact with such velocity, is not easily ascertained; in what manner the quarry

receives its *coup de grace* without repercussion, is equally mysterious. Is it by striking the talon into the vertebræ, as the Spanish Bull is killed, or is it by a contusion on the head?

[Falcon, Redfooted.—Yarrell, i. 56; Hewitson, ix. 28. *Falco rufipes*, Orangelegged Hobby, Selby, *Br. Ornith.* vol. i. p. 45. Red-legged Falcon, *Jenyns, Brit. Vert.* p. 83. Redfooted Falcon, *Gould, Birds of Europe*, Pt. 1. Redlegged Falcon, *Eyton, Rare British Birds*. Faucon a Pieds rouges, *Temminck, Man. d'Ornith.* vol. i. p. 33.—“After their first change, the plumage of the males is much more uniform than that of the females. In the adult male, the base of the beak is yellowish white, the other part dark horn-colour; the cere and eyelids reddish orange, the irides dark brown; the head, neck, back, upper surface of the wings and tail, the throat, breast, and belly of a uniform dark lead-colour; the thighs, vent, and under tail-coverts deep ferruginous; the legs and toes reddish flesh-colour; the claws yellowish white, with dusky tips. The whole length of the bird eleven inches. The plumage of the young males before their first change is similar to that of young females, which will hereafter be described. At their first change they become of a uniform pearl-grey; the thighs and flanks ferruginous; beak, cere, eyes, legs, toes, and claws as in the old male. The adult female has the beak, cere, irides, legs, &c., as in the male; the head and back of the neck reddish brown; the eye surrounded with dusky feathers almost black; the whole of the back, wing-coverts, and tail-feathers blackish grey, barred transversely with bluish black; upper surface of the wing-primaries uniform dusky black. The chin and throat nearly white; the breast and all the under surface of the body pale rufous, with dark reddish brown longitudinal streaks; the thighs and their long feathers plain rufous; under wing-coverts rufous, with transverse bars of dark brown; under surface of the wing-primaries blackish grey, with numerous transverse bars of bluish grey: under surface of the tail-feathers bluish grey, with nine or ten transverse bars of bluish black, the bars increasing a little in breadth as they approach the tip. Young females have the top of the head reddish brown with dusky streaks; the eyes encircled with black, with a small black pointed moustache descending from the anterior part of the eye; ear-coverts white: upper surface of the body dark brown, the feathers ending with reddish brown; wing-primaries dusky black, the inner edges and tips buffy white; the tail-feathers dark brown, with

numerous transverse bars of reddish brown; throat white; sides of the neck, the breast, and all the under surface of the body pale reddish white, with brown longitudinal streaks and patches on the breast; the thighs and their long feathers uniform pale ferruginous; beak, cere, irides, &c., as in the adult female.”—Yarrell, i. p. 58. The Redfooted Falcon is a native of Russia Poland and Austria, the whole of the South of Europe, the Mediterranean, and India. Its occurrences in Britain are few and far between. See ‘Zoo-logist’ for 1844, p. 654; for 1849, p. 2595; for 1857, pp. 5351 and 5354: and also Mr. Yarrell’s records. It can only be regarded as a straggler, its visits being merely accidental.]

Falcon, Roughlegged.—[See Buzzard, Roughlegged.]

Falcon, Spotted.—*Falco versicolor*, *Gmel. Syst.* i. p. 272; *Ind. Orn.* i. p. 33, 73. Spotted Falcon, *Br. Zool.* i. No. 55, t. 26; *Lewin, Br. Birds*, i. t. 13; *Lath. Syn.* i. p. 74; *Walc. Syn.* i. t. 13.—This species is about the size of a Buzzard. Bill black; cere yellow; irides pale yellow. The crown of the head, and hind part of the neck, white, spotted with light reddish brown; back and scapulars the same, edged with white; quill feathers dusky, barred with ash-colour; under side of the neck, breast, belly, thighs, and rump white; on the two first are a few rust-coloured spots; the middle feathers of the tail barred with white and deep brown; the others with light and darker brown; the legs are strong. Two of these birds were shot at Longnor in Shropshire, and first described by Mr. Pennant.

SUPPLEMENT.—Doctor Shaw, on the authority of Monsieur Daudin, has given this bird (originally described by Mr. Pennant) as one of the many varieties to which the Common Falcon (*Falco communis*) is subject; but from its superior size and predominance of white plumage, we rather suspect it to be a variety of the Jer Falcon. [I do not know to what species this description can be referred.]

Falcon, Stone.—APPENDIX.—*Falco Lithofalco*, *Gmel. Syst.* p. 278; *Ind. Orn.* i. p. 47; *Bris.* i. p. 349; *Id.* 8vo, p. 101. *Lithofalco* and *Dendofalco*, *Raii Syn.* p. 14, 8. Le Rochier, *Buf.* i. p. 286; *Planch. Enl.* 447. Stone or Tree Falcon, *Will. Orn.* p. 80; *Lath. Syn.* i. p. 93.—The scientific reader is here presented with a bird which has long maintained itself as a distinct species, and we believe it is the only instance of its being recorded as a British subject. Whe-

ther it is a good species or not, is a matter of some consideration, and perhaps, with the little knowledge we are able to collect, it may be long before it is finally ascertained. All we can do for the present is to bear record as to the existence of a British species of Falcon, which is clearly that of the authors to which we have referred, and to offer our humble conjectures thereon. The bird in question has so exactly the plumage, and is so nearly the size and general appearance of the male Merlin (*Falco æsalon*), that was it not for the colour of the irides, and a previous knowledge of the opinion of abler naturalists, we should not have hesitated to have pronounced it to be one of the varieties of that species. For the means of introducing this into the Fauna of British birds, we have to repeat our obligations to Mr. Foljambe, whose accurate description of the bird it will be proper to transcribe, in order to enable the practical ornithologist to assist in throwing more light upon the subject. The bird in question was shot at Osberton, in Nottinghamshire, in the month of December, 1810, and proved a male. There would be no necessity of describing the bird after what we have said of its exact resemblance to the male Merlin, but as several varieties, or supposed varieties, of that bird have been described by different authors, we speak of its likeness generally to the Merlin in that plumage which has most usually occurred to us. The length of the bird in question is about twelve inches: bill lead-colour: cere and irides yellow. The feathers on the crown and back of the head brownish cinereous, with black shafts: throat cream-colour, with very narrow brown streaks: forehead cream-colour, extending in a very narrow line over the eyes: cheeks, back of the neck, and breast rufous with longitudinal spots of brown: thighs pale rufous, with a few very narrow brown lines pointing downwards: the back, scapulars, and wing-coverts bluish cinereous, with black shafts to the feathers: the prime quills have their inner webs marked with six large white spots, the base edged with white; the outer web of the first feather is scalloped with white; the second and third feathers the longest: the wings when closed reach within an inch of the end of the tail: the tail is bluish cinereous, with four black bars, that at the end an inch in breadth, the others narrower; the tip white; the under side of the tail white, barred as above: the legs and toes yellow and slender. Mr. Foljambe is in possession of another of this species which he suspects to be the female, but as it came to him in a dried

state this important object could not be ascertained. It is a trifle larger than the other, and the throat is plain: the outer web of the first quill is white, and the tail has only one black bar about half an inch in breadth at the end, with the tip white. In every other respect it resembles the last described. It now becomes necessary to offer some observation upon this bird, in order to induce other naturalists to pay particular attention to some characters the Merlin invariably possesses (should any bird similar in appearance occur whose irides are yellow), and that has not been noticed in the Stone Falcon just described. In our description of the Merlin it will be seen that we remarked a singular formation of the two first quill-feathers; the under wing-coverts, and under scapulars, are rufous, with round white spots on each web: the notch in the bill should also be attended to. If these characters should be found similar in both these birds, there would remain no distinction but in the irides; and when experience has taught us that that is a character liable to some variation, it cannot be wholly depended upon. We have seen the Moor Buzzard and the Peregrine Falcon with the irides yellow, though of very rare occurrence, but the observation is sufficient to raise suspicion that the Merlin may also, occasionally, vary in that particular, and then the two birds must be united in one species. No conclusion can be drawn from the bird above mentioned, supposed to be the female of the Stone Falcon, for even the colour of its irides is not known, and the difference in plumage so trifling from the other that scarcely two Hawks of any species will be found so nearly alike that differ in sex. It must also be recollected that most authors have considered the Merlin as subject to considerable variation in plumage, especially with respect to the number of bars in the tail, and the sexes are easily ascertained by the plumage. In fact, some of the varieties of the Merlin have, by some writers, been described as distinct species, while others have brought them together, possibly with as little certainty. It should, however, be considered that in all stages of either sex, the Merlin should have the dark streak down the shaft of the feathers on the upper parts of the body and wing-coverts. We shall now dismiss this subject, with expressing very considerable doubts whether the *Lithofalco* and the *æsalon* be actually distinct species, and shall be ready to acknowledge our obligations to any naturalist who will favour us with sufficient proof to the contrary. Since the above was written, an eminent falconer in the service of Sir Thomas White

declares that, having trained the Merlin repeatedly, he found that both sexes by age and full maturity became what has been called the Stone Falcon. ["In North Wales the young of the Merlin are called Stone Falcons; but among ornithologists the Stone Falcon is considered to be an adult bird."]—*Yarrell*, i. 62.]

Falcon, White.—See Falcon, Jer.

Falk.—See Razorbill.

[**Fallow Chat.**—See Wheatear.]

Fallow-Smich.—See Wheatear.

Fasceddar.—See Gull, Arctic.

Feaser.—See Gull, Arctic.

Feltifer.—See Fieldfare.

Fieldfare.—[*Yarrell*, i. 208; *Hewitson*, xxiv. 84.] *Turdus pilaris*, *Lin. Syst.* i. p. 291, 2; *Gmel. Syst.* ii. p. 807; *Raii Syn.* p. 64, A. 3; *Will.* p. 138, t. 37; *Ind. Orn.* i. p. 330, 11; *Bris.* ii. p. 214, 5; *Ib.* 8vo, i. p. 217. *La Litorne, ou Tourdelle, Buf.* iii. p. 301. *Fieldefare, or Feldefare, Br. Zool.* i. No. 106; *Ib.* fol. 90, t. P. 2, f. 1; *Arct. Zool.* ii. p. 340, A.; *Will. Angl.* p. 188, t. 37; *Albin.* i. t. 36; *Hayes, Br. Birds*, t. 31; *Lewin, Br. Birds*, ii. t. 60; *Lath. Syn.* iii. p. 24, 11; *Pult. Cat. Dorset.* p. 10; *Walc. Syn.* ii. t. 200. Provincial: Pigeon Fieldfare.—This species of Thrush is in size between that of the Missel and the Throstle; length ten inches; weight four ounces. The bill is yellowish, black at the point; irides hazel. The head and hind part of the neck cinereous, the first spotted with black; the back and lesser coverts of the wings chesnut-brown; rump ash-colour; quill-feathers dusky brown, with paler edges; the fore part of the neck, breast, and sides yellowish, streaked with dusky; throat white; belly and vent the same; tail dusky black; the middle feathers dashed with cinereous; legs black. The female has less of the rufous tinge on the breast; in other respects like the other sex. This is a migrative species, visits us together with the Redwing in large flocks in October, and frequently remains till the beginning of April. With us its principal food is the fruit of the hawthorn and other berries, worms and insects. In very severe weather they migrate further south; but a sudden fall of snow sometimes deprives them of the power of flying across the seas to a warmer climate; in which case thousands are starved. In the winter of 1798 a very heavy snow fell to the northern and eastern parts of this country,

when prodigious flocks appeared in the west of England; but as that part was soon after covered with snow, which lasted on the ground for a considerable time, they became too weak to shift their quarters to a more southern climate, and thousands were picked up starved to death in Devonshire. Stares and Redwings suffered the same fate. If severe weather comes on more gradually, and food becomes scarce, few are seen with us after Christmas; but on their return northward to breed appear again in small flocks. This bird with us roosts on the ground, and rarely perches for that purpose. *Linnaeus* says it builds in high trees in Sweden, and frequents the places where junipers grow. It is also found, during the warmer months, in Russia, Siberia, and Norway, where they undoubtedly breed.

[**Field Lark.**—A vague and inapplicable term; in *Bewick*, accompanied by the technical name *Alauda campestris*, *Br. Birds*, i. 221, it implies the Rock Pipit, *Anthus petrosus*; in *Fleming's Brit. An.* p. 79, accompanied by the technical name *Alauda arvensis*, it implies the Sky Lark; and in *Montagu*, accompanied by the technical name of *Alauda minor*, I suppose it means the Tree Pipit, *Anthus arboreus*. See Lark, Sky.]

Fig-eater.—A bird so called by *Willughby*, who says it is found in Yorkshire, where it is called Bean Bird. *Mr. Pennant* makes it the Pettychaps; but that cannot be if it makes its nest under beams in old buildings, as it is said to do. We have suspected it to be no other than the Spotted Flycatcher, who frequently builds in such situations. But we are left in great doubts about this bird. Certainly it is not the true Fig-eater found on the Continent.

Finch.—A genus of birds, the characters of which are: Bill perfectly conic, slender towards the point, and sharp. Tongue truncated. Toes, three forward, one backward.

Finch-Beech.—See Finch, Chaf.

Finch, Bramble.—See Brambling.

Finch, Bul.—[*Yarrell*, i. 601; *Hewitson*, liv. 211.] *Loxia pyrrhula*, *Lin. Syst.* i. p. 300, 4; *Gmel. Syst.* ii. p. 846; *Raii Syn.* p. 86, A.; *Will.* p. 130, t. 43; *Ind. Orn.* i. p. 387, 56; *Bris.* iii. p. 308, 1; *Ib.* 8vo, i. p. 395. *Bouvreuril, Buf.* iv. p. 372, t. 17. *Bulfinch, Br. Zool.* i. No. 116; *Ib.* fol. 106, t. U. f. 3, 4; *Arct. Zool.* ii. p. 353, A.; *Albin.* i. t. 59, 60; *Ib. Song Birds*, t. 15;

Will. Angl. p. 247, t. 17; *Hayes, Br. Birds*, t. 37; *Lewin, Br. Birds*, ii. t. 70; *Lath. Syn.* ii. p. 143, 51; *Ib. Sup.* p. 152; *Walc.* t. 209; *Pult. Cat. Dorset.* p. 111. Provincial: Red-hoop; Tony-hoop; Alp; Nope.—This species of Grosbeak is so well known as to make it unnecessary to be very particular in description. The bill is black, short, and thick; irides dusky. The crown of the head is black; upper part of the neck and back fine cinereous-grey; cheeks, breast, and belly bright crimson; vent white; coverts of the wings crossed with a white line just above the quill-feathers, which last are dusky; rump white; tail black. The female is very unlike the male in plumage, except in the crown of the head, which is black; the whole bird besides is of a dirty brown; rump white. The Bulfinch is not gregarious; seldom more than a brood is seen together; is most commonly seen in pairs. It is not migratory, but frequents our woods and thickets all the year. In the spring it affects gardens and orchards, where it is very destructive among the buds of fruit-trees. It makes a nest the latter end of April or beginning of May, preferring the thickest places for that purpose, most frequently in a black or white thorn-bush, either in woods or hedges. The nest is composed of small dry twigs, lined with fibrous roots. The eggs are four or five in number, of a bluish white, speckled, and streaked with purple; rather larger than those of a Linnet. The young birds at first resemble the female, except that they have no black on the head. This, as well as the crimson on the breast of the male, does not appear till two months after they leave the nest. In confinement this bird not unusually turns wholly black; supposed to be effected by being fed too much on hempseed. Its native notes are few, but remarkably soft, and delivered so low as to escape a common observer; the call-notes are simple, but more audible. When caged it becomes very docile, and may be taught a variety of tunes; for which reason, as well as for its beauty, it is frequently deprived of liberty.

Finch, Bul, Greatest.—See Grosbeak, Pine.

Finch, Chaf.—[*Yarrell*, i. 532; *Hewitson*, xlix. 192.] *Fringilla cœlebs*, *Lin. Syst.* i. p. 318, 3; *Gmel. Syst.* ii. p. 901; *Raii Syn.* p. 88, 16, A.; *Will.* p. 186, t. 45, f. 4; *Ind. Orn.* i. p. 437, No. 12; *Bris.* iii. p. 148, 36; *Ib.* 8vo, i. p. 437. Le Pençon, *Buf.* iv. p. 109, f. 4. Chaffinch, *Br. Zool.* i. No. 125; *Ib.* fol. 108, t. 5, f. 2, 3; *Arct. Zool.* ii. p. 381, F.; *Will. Angl.* p. 253, 45; *Albin*, i. t. 63; *Ib. Song Birds*, t. p. 25; *Lewin, Br.*

Birds, ii. t. 79; *Lath. Syn.* iii. p. 257, 10; *Ib. Sup.* p. 165; *Walc.* ii. t. 217; *Pult. Cat. Dorset.* p. 12. Provincial: Beechfinch; Horsefinch; Pink; Twink.—This bird is rather less than the Sparrow. The bill is bluish; irides hazel; the forehead black; crown of the head, back part, and sides of the neck bluish ash-colour; the cheeks, under side of the neck, and breast dull pink; back chesnut-brown; rump greenish; belly white, tinged with pink; the bastard wing and coverts of the primary quills are black; those of the secondary tipped with white; the smaller coverts black and greyish, on which is a spot of white; the quill-feathers dusky, slightly edged with greenish yellow on the outer webs, marked with white on both webs at the base; tail dusky; the exterior feather is obliquely marked with white, taking in the whole of the outer web, the next is tipped with white; legs dusky. The female is of a dull green above; the breast and belly of a brown or dirty white; the wings have the same markings as the male, but less brilliant. This bird makes a most elegant nest of green moss, curiously studded with lichen interwoven with wool, and lined with feathers and hair. It builds against the side of a tree, particularly in ivy, or in some forked branch of a bush; but particularly in apple-trees overgrown with moss and lichen, and, like many other birds, adapts the materials of its nest to the surrounding colour; an instinct of no small importance. The eggs are four or five in number, larger than those of the Goldfinch, of a dirty white, tinged with purple, marked with streaks and spots of dark purple. Its notes are few, and scarce deserve the name of song. Both sexes have a monotonous call-note, which seems to express the word "twink;" from whence it is provincially called by that name. In the summer these birds live chiefly upon insects, with which they feed their young; in the winter they become gregarious, and feed on seeds and grain. They remain with us the whole year, and flock with other hard-billed birds in the colder months; but the sexes do not separate, as they are known to do in Holland and other countries. Mr. White makes mention of flocks of females being seen in Hampshire; these probably came from some more northern county.

Finch, Cherry.—See Grosbeak, Haw.

Finch, Cold.—See Flycatcher, Pied.

Finch, Copper.—See Finch, Chaf.

Finch, Fallow.—See Wheatear.

Finch, Great Pied Mountain.—See Bunting, Tawny.

Finch, Green.—See Grosbeak, Green.

Finch, Gold.—[Yarrell, i. 565; Hewitson, l. 196.] *Fringilla Carduelis*, *Lin. Syst.* i. p. 318, 7; *Gmel. Syst.* ii. p. 903; *Raii Syn.* p. 89, A. 1; *Will.* p. 189, t. 46; *Ind. Orn.* i. p. 449, 58; *Bris.* iii. p. 53, 1; *Ib.* 8vo, i. p. 320. Le Chardonneret, *Buf.* iv. p. 187, t. 10. Goldfinch, or Thistlefinch, *Br. Zool.* ii. No. 124; *Ib.* fol. 108, t. v. f. 1; *Arct. Zool.* ii. p. 283, H.; *Will. Angl.* p. 246, t. 46; *Albin.* i. t. 64; *Ib. Song Birds*, t. p. 18; *Hayes, Br. Birds*, t. 34; *Lewin, Br. Birds*, t. 81; *Lath. Syn.* iii. p. 281; *Walc. Syn.* ii. t. 219; *Pult. Cat. Dorset.* p. 12; *Don. Br. Birds.* v. t. 103.—This beautiful bird is rather less than the Chaffinch. The bill is white, with a black point; irides dusky. The forehead and chin rich scarlet; top of the head black; cheeks white, bounded with black; hind part of the head white; breast pale tawny-brown; the coverts of the wings black; quill-feathers dusky black, barred across with bright yellow; tips white; belly white; the tail-feathers black; most of them marked with a white spot near their ends; legs whitish. The female differs very little in plumage from the male; in general the smaller coverts of the wings are not so black. Young birds are brown about the head for some time after they leave the nest, and are by some called Grey Pates. The Goldfinch is subject to variety in confinement; sometimes wholly black; others black and white, or quite white. A variety is sometimes taken by the birdcatchers with white spots under the throat: such is termed a Cheverel. It makes a very elegant nest, formed externally of bents, moss, and liverwort, wove together with wool; lined sometimes with wool, or hair covered with thistle down, or willow cotton. The eggs are four or five in number, of a bluish white, with a few small spots, chiefly at the larger end. It sometimes builds in hedges, but most commonly in trees, especially those which are evergreen. The native song of this bird is not inelegant, but which is seldom pure in confinement. It readily breeds with the Canary-bird; the production are mules, and generally termed Canary-goldfinch. Their principal food is seed of various kinds, particularly the thistle and teasel; is fond of plantain, chickweed, and hempseed.

Finch, Haw.—See Grosbeak, Haw.

Finch, Horse.—See Finch, Chaf.

Finch, Lesser Mountain.—See Bunting, Mountain.

[Finch, Linnet.—See Linnet, Brown.]

Finch, Marygold.—See Wren, Golden-crested.

Finch, Mountain.—See Brambling.

[Finch, Redheaded.—See Linnet, Brown.]

[Finch, Serin.—*Fringilla serinus*, *Linneus, Gmel. Syst.* i. p. 908, sp. 17; *Lath. Ind.* i. p. 454, sp. 69; *Meyer, Tasschenb. Deut.* i. p. 146. Serin Finch, *Lath. Syn.* iii. p. 296; *Temminck*, i. p. 356, and iii. p. 259. Temminck gives the following references to figures:—“*Atlas du Manuel*, pl. lithog. Le serin sous le faux nom de Venturon, *Viell. Galerie des Oiseaux*, i. p. 75, pl. 62, and *Faun. Franc.* p. 76, pl. 38, fig. 1. *Fringilla cini*, *Roux, Ornith. Provenc.* i. p. 146, pl. 94, male and female; *Naum. Neue Ausg.* pl. 123.—“Forehead, round the eyes, and a band above the eyes which extends almost to the back of the head, greenish yellow clouded with grey; from the gape to the sides of the neck there is an olive stripe; upper parts olive-brown, clouded with cinereous and spotted with blackish; rump and breast jonquil-yellow, the latter shaded with cinereous; there are some dark longitudinal markings on the breast and flanks; on the wings are two transverse bands, one green-yellow, the other brown-yellow; tail slightly forked; belly yellowish white, with longitudinal blackish markings; length 4 inches 4-5 lines. The female in autumn has the colours much brighter, the upper parts clouded with cinereous, the under parts of a dingy yellow, with a great number of longitudinal spots. In the spring both sexes have the yellow much purer. In the young of the year the yellow tints on different parts of the plumage are much less pure, especially on the head; in its nestling plumage grey and greenish red are the predominant colours, dashed with longitudinal brown markings. Care must be taken not to confound this species with the Siskin, from which it differs in the form of the beak; nor with the Citril Finch of Latham (*Fringilla citrinella* of Linneus), from which it differs in the distribution of its colours: the learned Bechstein, in the first edition of his work and also in his ‘Pocket Manual,’ has confounded the Serin with the Citril Finch, an error corrected in his second edition. Cuvier, in the ‘Règne Animal,’ places the Serin with the Linnets, but it cannot be comprised in that family, differing essentially in its strong and convex beak. The Serin inhabits the countries of the South of Europe, but is less abundant in central France and central Germany, in the south

of both which countries it is very common, frequenting the vineyards and orchards, fruit trees, oaks and beeches: common in Switzerland, but less so in Holland, where it appears only as a bird of passage. It feeds on small seeds, as those of groundsel, plantain, chickweed, &c. It builds in fruit trees, beeches and oaks, and lays four or five white eggs, adorned at the larger end with a circle of brown and reddish spots and dots." — *Temminck*, i. 356, &c. This pretty little Finch has escaped the notice of our publishing ornithologists; it is nevertheless an occasional visitor of Britain. The first record of its occurrence in England is in the 'Zoologist' for 1860, p. 7105, from the pen of Mr. Bond: that gentleman says:—"On a recent visit to Brighton I was shown a specimen of this bird caught in a clap-net near there on the 20th of June, 1859. It is in the possession of Mr. H. Pratt, of 35, Duke Street, Brighton, who had the bird very shortly after its capture. It was described as being quite alone and very wild. I believe it is a female. I have since seen another, a fine male, captured near London, in the autumn of the same year, shortly after the severe storm in October."]

Finch, Storm.—See Petrel, Stormy.

Finch, Thistle.—See Finch, Gold.

Finch, Tree.—See Sparrow, Tree.]

[Firecrested *Regulus*. — See Wren, Fire-crested.]

Flusher.—See [Shrike], Redback.

Flycatcher. — A genus of birds, the characters of which are: Bill beset with bristles, and flattened at the base; upper mandible notched at the end. Toes divided at their origin.

Flycatcher, Pied.—[*Yarrell*, i. 187; *Hewitson*, xxi. 75.] *Muscicapa atricapilla*, *Lin. Syst.* i. p. 326, 9; *Gmel. Syst.* ii. p. 935; *Ind. Orn.* ii. p. 467, 1; *Bewick, Br. Birds*, i. t. p. 201. *Cenante nostra quarta*, *Raii Syn.* p. 77, A. 5; *Will.* p. 170. *Rubetra anglicana*, *Bris.* iii. p. 436, 27; *Ib.* 8vo, i. p. 271. *Traquet d'Angleterre*, *Buf.* v. p. 222. Cold Finch, *Will. Angl.* p. 236; *Edw. t.* 30. Pied Flycatcher, *Br. Zool.* No. 135; *Ib.* fol. 103, t. S. f. 1 (mas); *Arct. Zool.* ii. p. 391, B.; *Ib. Sup.* p. 64; *Lewin, Br. Birds*, iii. t. 88; *Lath. Syn.* iii. p. 324, 2; *Walc.* ii. t. 225; *Don. Br. Birds*, i. t. 22.—This species is about the size of a Linnet. The bill is black; irides hazel. Forehead white; crown of the head, cheeks, taking in the eyes, and whole upper parts black;

the lesser wing-coverts and the greater coverts of the primaries are dusky; the six first quill-feathers wholly dusky, the rest white at the base, increasing till the three last feathers are wholly white, except a spot of black near the point of the exterior web; the under parts of the bird, from chin to tail, are white; the tail is dusky black; the two exterior feathers white on their outer webs, and near the shaft on the inner webs, except at the point; the legs are black. The female has no white on the forehead; the whole upper parts are dusky brown; the under parts dirty white; in the wings the white is less conspicuous than in the male. This bird is subject to some variety: some are said to be mixed with grey on the upper parts, or spotted with white on the rump or upper tail-coverts; others have white on the three exterior feathers of the tail; some have only the outer feather marked with white. Young birds at first resemble the female, and in their change of plumage the males have all the intermediate shades from brown to black. This has probably given rise to an opinion that the male changes his plumage in the winter, and becomes like the female. It is said to be indigenous to England. It is, however, very local, and by no means plentiful; but is spoken of as an inhabitant of Yorkshire, Lancashire, and Derbyshire. We do not find the nest has been discovered in this country. Dr. Latham says it builds in some hole of a tree, not very near the ground; and adds that the nest is only a few fibres, mixed with moss, covering the bottom of the hole; and that the eggs are six in number. With us it seems to affect wild and uncultivated tracts of furze, where there are no trees. In such situations, therefore, it is probable it builds on the ground amongst the high grass and furze, like the Whinchat and Stonechat, as it has all the actions and manners of those birds.

SUPPLEMENT. — This bird rarely if ever makes its appearance in the southern parts of the island, from which it may be inferred that it is a northern species, and we might rather expect it to be indigenous than only a summer visitant. Mr. Bolton, in his 'Harmonia Ruralis,' says the Colefinch has been known to build its nest in an almond tree when in full blossom. The eggs represented in this work are five in number, of a blue colour. This is indeed early in the season, for the almond is frequently in blossom the latter end of March, before any leaves could conceal the nest. Other authors assure us the nest is formed in the hole of a tree, so that it is extremely difficult to reconcile these accounts, for it has been justly considered that the habit

of nidification is a strong specific character more rarely subject to variation than the bird itself. Mr. Bewick speaks of a pair of these birds having been shot at Benton in Northumberland, but is silent with respect to the season; one of these wanted the white spot on the forehead; in other respects they were similar; the upper parts in both were black obscurely mixed with brown. This author adds the following remark, but unfortunately does not quote his authority:—"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." If the author had ocular demonstration of this remark it is unfortunate that the circumstance should be omitted, for we know by long experience how little is to be depended on the observations of the unscientific. Mr. Bolton, who was a Yorkshire gentleman, says that it visits the West Riding of Yorkshire, and departs with its young in September ('*Harmonia Ruralis*,' p. 40). This account certainly implies that Mr. Bolton found the bird in his neighbourhood sufficiently plentiful to make such observations on its autumnal migrations, but we cannot conceive that it would retire northward in the colder months: and if it does not change its habits with the season, and continues less noticed, it certainly proceeds a very little way southward. We believe there is no instance on record of its being killed in the southern counties of Kent or Sussex, the evident route of the bird if it migrated to and from the continent of Europe, like the spotted species. With regard to the "very great number of young" found in the hole of a tree, as related by Mr. Bewick, we cannot help expressing a doubt that he has been deceived, as this circumstance alone, so contrary to the characters of its congeners, is sufficient to create doubts in the mind of the scientific ornithologist, unless we had been told the author spoke from personal knowledge. Sepp and Kramer both assert that the *Muscicapa atricapilla* builds its nest in the hole of a tree; Linnæus admits it in his first edition of the '*Fauna Suecica*,' but appears to have rejected it in the second. Mr. Oedman, however, avers it to be a Swedish bird, and says it lays five eggs in the hollow of a tree. Whether it winters so far north we are not informed, but we are told it braves the winter in Norway. "The Pied Flycatcher," says Dr. Reeves in his '*Essay on Torpidity*,' p. 93, "lives on soft seeds and insects in this country; but it feeds very different in

Norway, especially during winter, when it repairs to the habitations of men, and subsists on flesh dried in the smoke." If then this bird breeds so far north as Sweden, and continues the whole year in Norway, there can be little doubt but that it is truly indigenous to England, since it is known to breed there. It is, however, a local species, never has been plentiful, and seems at present to become rare, so that we have not hitherto been able to ascertain whether it has ever been identified with us in winter, though we have scarcely a doubt that it remains in England the whole year. It is one of the very few amongst the smaller tribe of birds whose nest we have not taken with our own hands, but this is in a great measure compensated by the kind assistance of a scientific friend and naturalist, the Rev. Mr. Dalton, of Copgrove, in the West Riding of Yorkshire, who is well acquainted with the bird, and has frequently seen it about his house in the summer, but does not recollect ever to have noticed it in the winter. This gentleman favoured us with a pair of these birds shot in his neighbourhood, in which there is no material distinction between the sexes, except that the female is rather less bright in the black parts of the plumage. At our request Mr. Dalton has recently furnished us with the nest and eggs taken the beginning of May in the present year (1811), in the same county; remarking at the same time that this bird had not made its appearance about his house this season, and that it was become very scarce. The nest was taken from a hole in a tree; it is composed of dry leaves intermixed with broad pieces of the interior bark of some tree, and a little hay, with a few long hairs, and three or four feathers form the lining. The materials are so coarse, and destitute of wool or other substance that is capable of connecting the parts, that it scarcely holds together, evidently bespeaking that it had been taken from the situation described. The eggs are five in number, of a very pale blue, about the size and colour of those of the Redstart, but rather paler. The nest is very different from that of the Redstart, which is more compact, and formed of moss, plentifully lined with hair and feathers; whereas in the Flycatcher's nest now before us there is not a single sprig of moss. The scientific Ornithologist will be gratified by these additions which Mr. Dalton has enabled us to give to the history of this local species; and we may hope through the same channel to obtain a more competent knowledge of its manners and general history. It now remains to discover whether any change of plumage in the autumn takes

place, that may hitherto have occasioned the want of identifying this bird in the winter. Observations on the colour of the plumage of the young, just before or after they leave the nest, might throw light on the subject. But we cannot help suspecting that its rarity and extreme locality have been the occasion of the desiderata in its natural history, and that our scientific friend will hereafter find that the bird in question is in fact indigenous to Yorkshire, continuing there the whole year; but perhaps is induced, by local circumstances, to change its situation after the breeding season. The place in which our nest was found, as well as the number of eggs, perfectly accord with the accounts of those foreign authors before mentioned; but not with the accounts given by either Mr. Bolton or Mr. Bewick. From the very early period of the year that the supposed Flycatcher's nest was noticed by the former amongst the branches of an almond-tree, we have very little doubt but that it was actually belonging to the Hedge Warbler, the earliest breeder, and the only one that lays blue eggs in such a situation. It is possible such an opinion was induced by the appearance of the Pied Flycatcher on, or in the neighbourhood of, the tree. What the bird could be, the nest of which is described to belong to the Flycatcher, in the hole of a tree, containing a "very great number of young," is impossible to determine, but we cannot think it belonged to this species, since five eggs appear to be the utmost number the Pied Flycatcher has been clearly ascertained to lay, which also corresponds with the nature of its congeners.

[Flycatcher, Redbreasted. — *Muscicapa parva*, *Bechst. Naturg. Deut.* v. 3, p. 442; *Temminck, Manuel d'Ornithologie*, vol. i. p. 159; *Gould, Birds of Europe*, plate xii. — "The adult male has all the upper parts of an uniform shade of cinereous-red, which assumes a slightly blue tint above the ears; the wing-feathers are cinereous-brown; the four middle feathers of the tail, and the tips of the side feathers of the tail, are blackish; these last are pure white at their base; throat, fore part of the neck, and breast bright red; flanks reddish; the remainder of the under parts white; bristles at the base of the beak very long; beak and legs brown. Length 4 inches 5 lines. The adult female has the red of the breast and neck much duller, and all the other colours less distinct. At present I am only well acquainted with the young of this species. They are of a very bright red on the breast and flanks; the throat white, slightly tinged with red; all the upper parts ash-coloured;

the wing-feathers margined and tipped with red; the side feathers of the tail white, tipped with cinereous-brown: in this state it is the *Muscicapa parva* of Bechstein, *Naturg. Deut.* v. iii. p. 442; *Kleiner fliegenfanger*, Meyer, Tasschenb. *Deut.* v. i. p. 215. *Note.*—This species, for which I am indebted to my friends in Germany, is there migratory, but very difficult to procure. I have not heard that the species has been seen elsewhere; probably it only passes through France in its migrations. I am unable to say whether it has a double moult, but I suppose so. It inhabits the vast forests of Germany only during the very short breeding season: it is common in the eastern parts of Germany towards the south: it feeds on small insects. It builds on the united branches of two neighbouring trees, or in a fork of the branches."—*Temminck*, i. 158. "The moult of this species is single, but the colours of the plumage, especially of the under parts, change periodically, from the same causes as those of *Muscicapa grisola* and *M. albicollis*. *Muscicapa parva* and *rufogularis* of Brehm, *Vog. Deut.* p. 227. *Atlas du Manuel*, pl. lithog., the male in spring. Naum, *Naturg. Neue Ausg.* pl. 65, fig. 3, the young bird of the year. Inhabits the neighbourhood of Vienna, but it is not common: it is more abundant in Hungary. It has just the appearance of the Redbreast, which it resembles in the tints of its plumage; it also possesses the warbling song of that bird."—*Temminck*, iii. 85. We are indebted to Mr. Gould for making known to us the addition of this interesting little bird to the avi-fauna of Britain; all that is known respecting it is recorded by Mr. E. H. Rodd in the 'Zoologist'; the first notice is in the volume for 1863, at p. 8444:—"The following communication, which I received from Mr. Gould, enables me to add the above interesting and (to Western Europe) rare species to our Cornish list of birds:—"Strange to say, on the very day I visited Falmouth one of the rarest of European birds was shot for the first time in Great Britain, and, it being killed in Cornwall, I thought you would like to know something about it. The bird in question is the *Muscicapa parva*, and you will find figures of it in Part 14 of my 'Birds of Europe,' which you have in the Penzance Museum. The plates will at once give you an idea of this pretty species (a robin amongst the flycatchers). I certainly never expected this singular bird to have been added to our Fauna. This occasional lateral migration of birds is very singular: the proper home of the species is Western India or the eastern parts of Europe. The specimen was sent in the flesh to Dr. Gray, of the

British Museum, and in this state I had it in my hands, so that there is no mistake about it. The bird was in good condition, thanks to your genial climate. The bird was shot on the 24th of January, by Mr. Copeland, of Carwythenack House, in the parish of Constantine, near Falmouth, and is a female. Unfortunately the specimen was placed in some insecure place, and the head was eaten by mice or rats, so that the body alone was sent to the Museum. If you write to Mr. Copeland, ask him to look out for the male, which will have a red breast.' I wrote at once to Mr. Copeland, whose attention to Natural History, and whose especial interest in observing the ornithological rarities in our county, I felt sure would ensure an accurate account of the capture of this little wanderer; and I received from him the following interesting remarks on the habits of the bird:—'Your favour has duly reached me. The little Flycatcher alluded to we observed some days before it was shot. Its habits were interesting, taking a great deal the character of our summer visitor. We first observed it on a dead holly tree; this tree and the ground around the house were its favourite resort. It was particularly active, skimming the grass to within about a foot, then perching itself, darted occasionally with a toss, resting either on a shrub or the wire fencing. There is another in the neighbourhood, for which a vigilant watch will be kept. I saw it a few days back in a plantation which is four hundred yards from my house. Should I be fortunate to capture it, you shall have due notice. I believe that with due attention many interesting visitors may be found.' I am unable to offer you any particulars of this valuable fact, except second-hand; but no doubt, upon the two authorities I have quoted, you will feel a pleasure in giving the visit of this new British bird a place in the 'Zoologist.' The second and only other notice is at p. 8841 of the same volume:—'Amongst the various arrivals of different birds, in their migratorial movement at this season of the year at Scilly, Flycatchers were observed on Friday last, three of which were captured, one of them from its smaller size being taken for a Chiffchaff. The four outer semi-white tail-feathers arrested the attention of my nephew and Mr. A. Pechell, who were the captors, and they were sent over here for my inspection. The little bird, from the description my nephew gave before I saw it, led me to believe it would prove a second specimen of the *Muscicapa parva*. He writes:—'Pechell has sent three little birds to be preserved, and we want your opinion about them. Two, we think, are young Pied Flycatchers; the third seems

to be something like a Chiffchaff, but the tail is not right, and the white feathers seem odd. I think they are all young. The actions of the bird with the white tail were those of a Flycatcher.' On examining this third and small bird, it proved to be the Redbreasted Flycatcher. The sides of the breast are tinged with buff-brown, which colour is perceptible across the breast. The chin and middle parts of the breast and belly white, not quite pure. The four outer tail-feathers with their basal halves irregularly white, leaving the tips to the extent of two-thirds of an inch brown. I venture an opinion that this is an immature male bird." There can be little doubt, now that attention has been called to this little bird, and its similarity to the Robin, both in song and plumage, pointed out, that we shall have numerous other records of its occurrence in the British Isles.]

[Flycatcher, Redeyed. — *Muscicapa olivacea*, Wilson, *American Ornithology*, plate xii. figure ii. *Vireo olivaceus*, Bonaparte and Jameson's Edition of Wilson, A. M. vol. ii. p. 77. *Vireosylva olivacea*, Bonaparte, and Edwin Brown in *Nat. Hist. of Tutbury*. — "This species is five inches and a half long, and seven inches in extent; crown ash, slightly tinged with olive, bordered on each side with a line of black, below which is a line of white passing from the nostril over and a little beyond the eye; the bill is longer than usual with birds of its tribe, the upper mandible overhanging the lower considerably, and notched, dusky above and light blue below; all the rest of the plumage above is of a yellow-olive, relieved on the tail and at the tips of the wings with brown; chin, throat, breast, and belly pure white; inside of the wings and vent-feathers greenish yellow; the tail is very slightly forked; legs and feet light blue; iris of the eye red. The female is marked nearly in the same manner, and is distinguishable only by the greater obscurity of the colours. This is a numerous species, though confined chiefly to the woods and forests, and, like all the rest of its tribe that visit Pennsylvania, is a bird of passage. It arrives here late in April; has a loud, lively, and energetic song, which it continues as it hunts among the thick foliage, sometimes for an hour with little intermission. In the months of May, June, and to the middle of July, it is the most distinguishable of all the warblers of the forest; and even in August, long after the rest have almost all become mute, the notes of the Red-eyed Flycatcher are frequently heard with unabated spirit. These notes are in short, emphatical bars, of two, three, or four

syllables. In Jamaica, where this bird winters, and is probably also resident, it is called, as Sloane informs us, Whip-tom-kelly, from an imagined resemblance of its notes to these words. And, indeed, on attentively listening for some time to this bird in his full ardour of song, it requires but little of imagination to fancy that you hear it pronounce these words, 'Tom-kelly, whip-tom-kelly!' very distinctly. It inhabits from Georgia to the River St. Lawrence, leaving Pennsylvania about the middle of September. This bird builds in the month of May a small, neat, pensile nest, generally suspended between two twigs of a young dogwood or other small sapling. It is hung by the two upper edges, seldom at a greater height than four or five feet from the ground. It is formed of pieces of hornets' nests, some flax, fragments of withered leaves, slips of vine-bark, bits of paper, all glued together with the saliva of the bird, and the silk of caterpillars, so as to be very compact; the inside is lined with thin slips of grape-vine-bark, fibrous grass, and sometimes hair. These nests are so durable that I have often known them to resist the action of the weather for a year; and in one instance I have found the nest of the yellow bird built in the cavity of one of those of the preceding year. The mice very often take possession of them after they are abandoned by the owners. The eggs are four, sometimes five, pure white, except near the great end, where they are marked with a few small dots of dark brown or reddish. They generally raise two broods in the season." — *Wilson, Am. Ornith., Jameson's Edition*, p. 77. The only instance of the occurrence of this North-American bird in Britain is recorded at page 385 of the 'Natural History of Tisbury,' by Sir Oswald Mosley, Bart., and Edwin Brown; and again in the 'Zoologist' for 1864, p. 8965. The passage is subjoined:—"A male specimen of the Red-eyed Flycatcher (*Muscicapa olivacea* of Linneus and Wilson) was trapped by a birdcatcher, together with its female companion, at Chellaston, near Derby, in May, 1859. The specimen of the male is in my possession; the female was unfortunately not preserved."—*Edwin Brown.*]

Flycatcher, Spotted.—[*Yarrell*, i. 182; *Hewitson*, xxi. 74.] *Muscicapa Grisola*, *Lin. Syst.* i. p. 328, 20; *Gmel. Syst.* ii. p. 949; *Raii Syn.* p. 81, 7; *Will.* p. 153, 171, 7; *Ib. Angl.* p. 211; *Bris.* ii. p. 357, i. t. 35, f. 3; *Ib. Svo.* i. p. 257; *Ind. Orn.* ii. p. 467, 1. *Stoporola Aldr?* *Raii Syn.* p. 77, A. 1; *Will.* p. 159; *Ib. Angl.* p. 217. *Le Gobemouche*, *Buf.* iv. p. 517, t. 25, f. 2. *Cobweb*, *Mort. North.* p. 426. **Spotted**

Flycatcher, *Br. Zool.* No. 134; *Ib.* fol. 99, t. P. 2, f. 4; *Lewin, Br. Birds*, iii. t. 87; *Lath. Syn.* iii. p. 323, 1; *Walc.* ii. t. 224; *Pult. Cat. Dorset.* p. 11. Provincial: Rafter; Bee-bird; Cherry-sucker; Chanchider.—This species is about the size of a Titlark; length not quite six inches. The bill is dusky, and broad at the base; inside of the mouth yellow; irides hazel. The whole upper parts of the bird are brown; the head obscurely spotted with dusky; breast and belly dull white; the shafts of the feathers on the breast dusky; sides under the wings tinged with dull orange; legs short and black. This bird comes to us late in the spring, and departs in September. It frequents orchards and groves, will often make its nest on the limb of some fruit-tree nailed against the wall, or in a hole; sometimes in outbuildings, upon the end of a rafter or beam, and at other times against the body of a large tree upon the stump of a decayed branch. The nest is formed of bents, moss, and such like materials, interwoven with spiders' webs, and lined with feathers. It lays four or five eggs, not much unlike those of the Redbreast, but rather less, and the rust-coloured spots more distinct, and not so much confined to the larger end. Its food seems to be entirely winged insects; though we are told it is particularly fond of cherries. Perhaps they may frequent that and other fruit-trees for the sake of flies, which are attracted by the fruit. As soon as the young birds leave the nest they are led by the old ones to some neighbouring wood or grove where insects abound, and where they may be seen darting in every direction in pursuit of flies, and frequently returning to the same stand. Its note is a simple weak chirp, not frequently used till after the young are fled, so that the bird is not easily discovered, though it is by no means uncommon, and seems to be more generally diffused in England than the Redstart, and many other of the summer migrants. We have observed it in several parts of Cornwall, where the last mentioned bird is rarely if ever seen; and it is more common than that bird in the west of Devonshire.

[**Foolish Guillemot.**—See Guillemot.]

[**Forktailed Petrel.**—See Petrel, Forktailed.]

[**Freckled Heron.**—See Heron, Freckled.]

French-Pie.—See Shrike, Cinereous.

Fulmar, or Fulmer.—[*Yarrell*, iii. 638; *Hewitson*, cxliv. 512.] *Procellaria glacialis*,

Lin. Syst. i. p. 213, 3; *Gmel. Syst.* ii. p. 562; *Ind. Orn.* ii. p. 823, 9; *Bewick, Br. Birds.* ii. t. p. 243. *Procellaria cinerea*, *Bris.* vi. p. 143, 2, t. 12, f. 2; *Ib.* 8vo, ii. p. 399. Fulmar, ou Petrel-puffin gris-blanc, *Buf.* ix. p. 325, t. 22. *Wagellus Cornubiensium Mallemucke, Raii Syn.* p. 130, A. 13. Haffert, seu *Equus marinus*, *Will.* p. 306; *Ib. Angl.* p. 395. Fulmar Petrel, *Br. Zool.* ii. No. 257; *Ib.* fol. 145, t. M. 2; *Arct. Zool.* ii. No. 461; *Lath. Syn.* vi. p. 403, 9; *Lewin, Br. Birds.* vi. t. 217; *Walc. Syn.* ii. t. 89. Provincial: Mallemock, Malmock, or Mallduck. — This species of Petrel is about the size of the Common Gull. The bill is yellow, very strong, and much hooked at the end; the nostrils are placed in a convex sheath. The head, neck, tail, and whole under side of the body white; the back and coverts of the wings ash-colour; quill-feathers dusky; the legs yellowish; back toe wanting, instead of which is a sort of spur. The Fulmar is not frequently seen on our southern coasts; we never remember but one instance, and that was in South Wales. It is not uncommon in some of the islands off the north of Scotland. At St. Kilda it breeds, and supplies the inhabitants with a vast quantity of oil, which is used for culinary as well as medical purposes. Its food is entirely fish, particularly that of the most oily nature, by which means it is always charged with oil, and has the power of ejecting it with force from its bill, a mode of defence peculiar to the Petrel genus. Is said to lay one large white egg the latter end of May.

SUPPLEMENT.—A very complete skeleton of this bird has been presented to us by Colonel Templar, and with it the following genuine "Newfoundland poetry," which was given to him by a master of a trader to that country, accompanied with the narrative:—"This bird (which seems to be known only by the title of 'John Down' by the fishermen) attends the fishing vessels on the banks of Newfoundland, and feeds on the liver and offal of the cod-fish that is thrown overboard. It is taken by means of a hook baited with a piece of

liver, and being stretched at length to a stick, it is sunk under water, and in half an hour (as the informant declared) is completely skeletonized by what the sailors call sea-lice." Some of these insects were procured for us in Newfoundland, and did not turn out to be what is usually denominated sea-louse (*Oniscus*), but Cancer Locusta, the same in every respect as that found on our coast, and figured in the 'Linnean Transactions,' vol. ix. tab. 4, fig. 1. The following poetical soliloquy has been transcribed without the smallest alteration except in orthography, which was necessary to its being generally understood:—

"Here hangs I, John Down, for ever,
That often crossed the bank for liver;
Now, to my sorrow and great surprise,
Here I hang an anatomize.
Come all you birds now of my flock,
Don't be too anxious for to eat,
For if in that liver a hook shall be,
You'll share the fate then here like me."

It is remarkable that in this skeleton the skin of the legs, and webs of the feet, remain as perfect as in a fresh specimen; from which it may be inferred that these anatomists, be what they may, are extremely expeditious in their work, but it can scarcely be credited that it could be so completely effected in so short a time as half an hour. No human art could so completely divest a bird of every particle of flesh, and leave all the finer bones, cartilages and ligaments in so perfect a condition; nothing but the conjoint efforts of numerous insects, with their minute nippers, could so admirably prepare such a subject. We are assured that this species of Petrel abounds in the Northern Seas, where they follow the track of the wounded whale, and when he is exhausted they instantly alight on this huge monster of the deep, and with their strong hooked bills penetrate the skin, and gorge themselves with the blubber.

Furze-Chat.—See Whinchat.

G.

Gadwall.—[*Yarrell*, iii. 254; *Hewitson*, cxiii. 402]. *Anas strepera*, *Lin. Syst.* i. p. 200, 20; *Gmel. Syst.* ii. p. 520; *Ind. Orn.* ii. p. 859, 69; *Bris.* vi. p. 339, 8, t. 33, f. 1; *Ib.* 8vo, ii. p. 452; *Lath. Syn. Sup.* ii. p. 353; *Lin. Trans.* iv. p. 111, t. 13, f. 7, 8 (trachea); *Bewick, Br. Birds.* ii. p. 350. *Anas platyrhynchos*, *Raii Syn.* p. 145, A. 2; *Will.* p. 287. *Chipeau*, *Buf.* ix. p. 187,

t. 12. Gadwall, or Grey, *Br. Zool.* ii. No. 288; *Ib.* fol. 157, t. Q. 3; *Arct. Zool.* ii. p. 575, I.; *Will. Angl.* p. 374, t. 72; *Lewin, Br. Birds.* vii. t. 258; *Lath. Syn.* vi. p. 515, 16; *Walc. Syn.* ii. t. 68; *Pult. Cat. Dorset.* p. 21. Provincial: Rodge.—This species of Duck is about the size of a Widgeon; length nineteen inches. The bill is two inches long, flat and black.

Head, and most part of the neck, reddish brown, spotted with black; sides of the head, throat, and fore part of the neck, rufous-white, spotted with brown; the lower part of the neck, upper part of the back, breast, and scapulars elegantly marked with black and white curved lines; lower part of the back dusky brown; rump, upper and under tail-coverts black; belly dirty white; sides and thighs marked with light brown lines; the coverts on the ridge of the wing are pale reddish brown; beneath that of a purplish red; the lowest order of a deep black; greater quills dusky; on the lesser quills is a white patch; the tail ash-coloured, edged with white; legs orange. The female has the same markings in the wings, but not near so bright in colour; the breast reddish brown, spotted with black; the feathers on the neck, back, and rump edged with pale reddish brown; the curved lines on the neck and breast of the male are wanting in this sex. This bird visits us in winter, but does not appear to be a plentiful species. Supposed to breed in Sweden, and probably in Russia and Siberia, being found in those parts. It is said to be a great diver; feeds chiefly by night, concealing itself amongst the reeds and rushes during the day. It makes a noise not unlike that of the Mallard, but louder.

SUPPLEMENT.—This species of Duck appears to be extremely rare in England, so much so that in no instance have we been able to procure a fresh specimen in the great number of years we have attended to the subject of Ornithology. The trachea (which, as it becomes better known, forms a strong specific character in this tribe of aquatic birds) has been described and figured by Dr. Latham, in an admirable paper on the subject, printed in the 'Transactions of the Linnæan Society;' and is again described in the second volume of the Supplement to the 'General Synopsis of Birds.' This we shall take the liberty of transcribing:—"The windpipe of the male has a bony bladder and arch somewhat like that of the Pintail Duck, but the globular part not quite so large: we may observe, too, that it adheres to the side of the arch, quite to the bottom, whereas in the Pintail it is attached to the side of the arch by a small portion only."

[Gadwall Duck.—See Gadwall.]

Gair-Fowl.—See Auk, Great.

Gallinule.—A genus of birds, the characters of which are: Bill thick at the base, sloping towards the point, and somewhat compressed sideways. Forehead more or less bare. Body compressed. Wings short

and concave. Tail short. Toes divided to their origin.

[Gallinule, Baillon's. — Yarrell, iii. 121; Hewitson, cvi. 377. Baillon's Crake, *Crex Baillonii*, Selby, *Brit. Ornith.* ii. 182. Poule d'eau Baillon, Temminck, *Manuel d'Ornithologie*, ii. 692. Yarrell and Hewitson adopt, as above cited, Selby's name.—"In the adult male the beak is green, the base red; irides red; top of the head, and back of the neck, clove-brown; centre of the back, and the scapulars, black, with numerous spots and streaks of pure white; wing-coverts and tertials clove-brown, spotted and streaked with pure white; primaries dark brown; the outer web of the first quill-feather edged with white; upper tail-coverts and tail-feathers clove-brown; throat, cheek, sides, and front of the neck, breast and belly, uniform lead-grey; vent and under tail-coverts the same, but tipped with white; legs and toes flesh-colour. The female has both mandibles green at the point, pale reddish brown at the base; irides crimson-red; neither the black colour on the centre of the back, or on the scapulars, or the white spots upon the black, are so pure in colour as the same parts in the males; nor are the white spots so numerous; the chin white; legs, toes, and claws, in the preserved specimen, pale brown; all the other parts as in the adult male. The whole length is six inches and a half. From the carpal joint to the end of the wing four inches; the first and the sixth quill-feathers equal in length, and shorter than the fourth or the fifth; the second and third feathers equal in length, and the longest in the wing: the length of the tarsus one inch and one-eighth; the length of the middle toe and claw one inch and five-eighths."—Yarrell, iii. 123. An extremely rare bird in Britain, but occurring more frequently in the South of Europe, and abundantly in Northern Africa. Mr. Yarrell has recorded the occurrence of six examples in England. The following records occur in the 'Zoologist:'—In the volume for 1847, at p. 1877, a specimen near Youghal, in Ireland, on the authority of Dr. Harvey: the paragraph is copied from the 'Annals and Magazine of Natural History.' In the volume for 1850, at p. 2923, Mr. C. A. Delmar states that on the 19th of September of that year a specimen was obtained near Deal. In the volume for 1851, at p. 3035, we find that the same gentleman obtained a second specimen in the same locality. In the volume for 1858, at p. 6210, that indefatigable observer, Mr. Rodd, mentions the occurrence of a specimen near Penzance during the summer of that year. In the volume for 1859, at p. 6329, Mr. Sealy tells

us that during 1858 there were several instances of their occurrence in Cambridge-shire, and adds the still more extraordinary fact of its nesting in that county. This bird is Baillon's Crake, of Yarrell and Hewitson, as cited above.]

Gallinule, Common.—[Yarrell, iii. 129; Hewitson, cvii. 378.] *Fulica chloropus*, *Lin. Syst.* i. p. 258, 4; *Gmel. Syst.* ii. p. 698. *Gallinula chloropus*, *Ind. Orn.* ii. p. 770, 13. *Gallinula chloropus major*, *Raii Syn.* p. 113, A. 1; *Ib.* p. 190, 15; *Will.* p. 223, t. 58; *Bris.* vi. p. 3, 1, t. 1; *Ib.* 8vo, ii. p. 358. *Poule d'eau*, *Buf.* viii. p. 171, t. 15. Common Water-Hen, or More-Hen, *Albin*, ii. t. 71,—iii. t. 91; *Will. Angl.* p. 312, t. 58. Common Gallinule, *Br. Zool.* ii. No. 217, t. 77; *Ib.* fol. 131, t. L. 1; *Arct. Zool.* ii. No. 411; *Sup.* p. 69; *Hayes, Br. Birds*, t. 30; *Lath. Syn.* v. p. 258, 12; *Lewin, Br. Birds*, v. t. 191; *Pult. Cat. Dorset.* p. 16; *Walc. Syn.* ii. t. 169; *Don. Br. Birds*, v. t. 110. Provincial: Moorhen; Marsh-hen; Cuddy; Moor-coot.—This bird weighs from fourteen to sixteen ounces; length fourteen inches. The bill is red towards the base, greenish at the point; irides reddish hazel. The crown of the head and whole upper parts are of a deep olive-brown; the under parts cinereous; ridge of the wing and under tail-coverts white; in some there are two or three white feathers at the base of the thigh; legs and toes dusky green; above the knee is a garter of red. The female is less than the male, and wants the red on the bill. This mark, however, is most conspicuous in the spring. This is a very common species, found in most sedgy and slow rivers, or streams of water, and frequently in ponds abounding with weeds, where it can lay concealed. Its food is principally insects, seeds, and vegetable productions of various sorts, for which it frequently quits the water. It runs fast, and is equally expert in swimming and diving, although the feet do not seem calculated for the latter. It is continually flirting up the tail as it runs or swims, at which time the white underneath is very conspicuous. The nest is made of flags or rushes, which is placed near the surface of the water on some branch of a tree or bush; sometimes on the stump of an old willow. The eggs are nine or ten in number, but most commonly five or six, of a light yellowish brown, marked with rust-coloured spots. The young are hatched in about three weeks, and instantly take the water: they are covered with a black down. When disturbed will frequently perch. It flies badly, with its legs hanging down. In the act of diving the wings are used as fins, like most others of the

aquatic tribe. The breed of this bird is very much destroyed by summer floods in our rivers; by reason of their nests being placed so near the water the eggs are continually swept away. The young are frequently destroyed by fish of prey; and we have taken an old bird out of the stomach of a pike. Is found in many parts of the European continent; as also in America, and in the West Indies.

Gallinule Crake.—[Yarrell, iii. 107; Hewitson, cv. 378]. *Rallus Crex*, *Lin. Syst.* i. p. 261, 1; *Gmel. Syst.* ii. p. 711. *Gallinula Crex*, *Ind. Orn.* ii. p. 766, 1. *Ortygometra*, *Raii Syn.* p. 58, A. 8; *Will.* p. 122, t. 29; *Bris.* v. p. 159, 3; *Ib.* 8vo, ii. p. 253. *Porphyrion rufescens*, *Bris.* v. p. 533, 5; *Ib.* 8vo, ii. p. 353; *Will.* p. 236. *Rale de Genet*, ou *Roi des Cailles*, *Buf.* viii. p. 146, t. 12. Land-Hen, Daker-Hen, or Rail, *Will. Angl.* p. 170, t. 29; *Ib.* p. 316; *Albin*, i. t. 32. Crake Gallinule, *Br. Zool.* ii. No. 216, t. 75; *Ib.* fol. 131; *Arct. Zool.* ii. No. 412; *Lath. Syn.* v. p. 250, 1; *Walc. Syn.* ii. t. 170; *Lewin, Br. Birds*, v. t. 190; *Pult. Cat. Dorset.* p. 15; *Don. Br. Birds*, v. t. 116. [Corncrake of Yarrell and Hewitson, as cited above.] Provincial: Land-Rail; Corn-Crake, Crek, or Cracker; Bean-Crake; Corn-Drake.—The weight of this species is seven or eight ounces; length nine inches and a half. The bill is of a light brown colour; irides hazel. The whole upper parts of the bird are of a rufous-brown; the top of the head, back, and scapulars marked with dusky black; the coverts of the wings and tail are of a fine bay; under parts pale yellowish brown, approaching to white on the belly; the sides barred with dark and light rufous-brown; the sides of the head, over the eyes, inclining to ash-colour; legs cinereous-brown. This bird has been supposed by some to be the Water Rail in its summer plumage; but this is too obvious an error to dwell on; their characters and mode of life are entirely different. It never takes the water, but resides in high grass or corn, where it breeds, making a nest of a few dry plants, and lays twelve or fourteen eggs, some say as many as twenty. These are not much less than those of a Partridge, but of a longer shape; of a dull white, marked with rust-coloured spots. It is a migrative species, appearing with us about the latter end of April, and departing in October. On its first appearance, and till the female begins to sit, the male is frequently heard to make a singular noise, much resembling that of a comb when the finger is drawn along the teeth; and which has been used as a decoy. It is much sought after for the delicacy of its flesh, but is a difficult bird to spring,

depending on its legs for safety more than its wings. In the autumn, when the corn and grass are cut, it takes to the thickets and brakes, and is with difficulty roused to take flight. It flies slow, and with its legs hanging down. It is most plentiful in the northern parts of the kingdom, and in Ireland. On their first coming they are very lean, but before their departure become excessively fat. It is found in the Hebrides and Orkneys; inhabits Germany, France, and Italy, and as far north as Norway. Their food is chiefly worms, snails and insects, in defect of which seeds and various vegetables.

Gallinule, Little.—*Gallinula minuta*.—**SUPPLEMENT.**—We are indebted to Mr. Tucker (the author of a periodical work on birds, before mentioned) for this very interesting little bird, which appears not only to be new as British, but to be a non-descript species. The weight was two ounces; length seven inches and three-quarters. The bill is five-eighths of an inch long, of a bright green colour: the upper part of the head dusky brown: the cheeks pale brown: over each eye cinereous: the chin and throat white, shaded into a cream-colour on the upper part of the neck before: the lower part of the neck, breast, sides, and greater part of the body beneath, plain fawn-colour: the lower belly, thighs, and vent olive-brown, spotted with white, and slightly barred with paler brown: the back, and sides of the neck, pale olivaceous-brown: back and scapulars black, deeply margined with the same colour as the last, the inner margins very pale, similar to the under part of the neck: the rump plain olive-brown: the tail of a similar colour: the legs bright green, bare for three-eighths of an inch above the knee, and an inch and a half long from the knee to the toes: the middle toe, including the claw, is of the same length: the claws horn-colour: the hind toe, including the claw, five-eighths of an inch long. The tail is much mutilated, but the remaining feathers are as described, and extend a trifle beyond the point of the wings. We might have been induced to have considered this bird as an accidental *lusus* variety of the spotted Waterhen, had it not been for its very inferior size and other peculiarities. By weight it is about half the size of the spotted species, and is inferior in length about an inch and a quarter. It has more the shape of the Land Rail, being long in proportion to its bulk, and much compressed: the legs and toes are full as long as those of the spotted species: the bill is also of equal length, and rather more slender: the head is smaller, and the neck

much more slender; the form of the forehead is essentially different, the feathers sloping from the front to the gape very considerably, which is not the case with the other species: the hind toe is also rather longer than that of an old male spotted Waterhen with which it was compared: the tertials of the wings are remarkably short, an unusual circumstance for a bird of this genus, for in the Land Rail and Spotted Gallinule the tertials almost obscure the whole of the primary quills when the wing is closed. There does not appear to be any defect or mutilation in the wings, and both sides are similar, the tertials equally extending to only the point of the seventh feather of the primary quills, leaving the points of the first six conspicuous. The Common Gallinule, indeed, has not the whole of the primary quills concealed by the tertials, as the ends of four or five may be seen beyond them when the wings are closed. We have been thus particular, lest a hasty conclusion might be drawn that this bird is either the young or a *lusus* variety of the Spotted Gallinule; whereas, by the comparative particulars here related, such an opinion cannot exist. We have obtained specimens of the Spotted Gallinule early in September, and some were evidently the young of that season, and the chief distinction between them and the old birds consisted in being rather less spotted, and the colours not so generally bright, besides being rather smaller; and in these, as in all other young birds, the bill and toes were in proportion. This bird, although not above half the weight, and considerably inferior in length, has the bill and toes fully as long and more slender, and the back toe rather longer. We have never seen the Spotted Gallinule in its infancy, nor, perhaps, so soon as it could fly; but the shape and proportion of the limbs would be similar to the adult, in which this bird essentially differs. No author, to our knowledge, has described the Spotted Gallinule in its early plumage to be different from that of the adult; and we know that in neither the Common nor Crake Gallinules, nor in the Water Rail (a bird of similar habits), does any material difference exist between the young and the old birds. In fact, the plumage and general appearance are so extremely dissimilar to those of the Spotted Gallinule, that if this bird had been exotic, a comparison would never have been thought necessary; but as the species of the genus are not numerous, and only three of those known to inhabit this country, the subject required scrupulous investigation, especially as no such bird appears to have been described

by any ornithological writer. The Little Gallinule was shot near Ashburton, in Devonshire, in the year 1809. [Ornithologists regard the Little and Olivaceous Gallinules as identical; perhaps they are the sexes: both are comprised under the name Little Crake by Yarrell, vol. iii. p. 16.]

Gallinule, Olivaceous.—*Gallinula Foljambei*. [Yarrell, iii. 16.] APPENDIX.—We have to record, with pleasure, a new species of Waterhen, which was fortunately rescued from the spit, and consequently from oblivion, by the hand of Science. Mr. Foljambe discovered it in a poulterer's shop, early in the month of May, 1812, together with some other valuable birds, which had recently been received from the fens in Norfolk. The bird now occupies a place in the excellent museum of that gentleman, who has kindly permitted us to take an engraving of it from an admirable drawing executed by Mr. Sydenham Edwards, with which we were favoured, accompanied with an accurate description, originally taken from the bird when it was recently killed. The weight was not noted; but the length is seven inches and a half; breadth ten inches and a half. The bill is nearly three-quarters of an inch long, of a greenish yellow colour, the base red: irides and orbits bright red, inclining to orange: cheeks and forehead dusky cinereous; sides of the neck and throat pale cinereous: breast, belly, and thighs plain dark cinereous or slate-colour, like the Water Rail, without spots or markings of any kind: the back of the head deep olive-brown: hind neck lighter, being of a yellowish olive: the feathers of the back have a mixture of olive-brown and dusky black, the margins being mostly of the former colour, with paler edges: scapulars dusky black, with broad olive margins: coverts of the wings olive-brown: quills dusky, the outer webs edged with olive: rump and upper coverts of the tail very dark olive-brown, with a mixture of dusky black: the feathers of the tail are of a deep dusky brown, the shafts paler and the lateral ones margined with olive-yellow: vent and under coverts of the tail dusky cinereous, some of the feathers deeply margined with sullied white: sides behind the thighs olive, slightly margined as the last: the legs, toes, and knees olive. The tail when examined by Mr. Foljambe had only ten feathers; but this must be considered as accidental, as we believe all the species of this genus have invariably twelve feathers in that part when perfect. It is rather rounded at the end, the exterior feathers being half an inch shorter than the middle ones. When this bird was first examined it was suspected to be

the Soree Gallinule (*Gallinula Carolina* of 'Index Ornithologicus'), but except in size it has no other characters of that bird, for all authors record that species as having a bare space on the forehead, a circumstance not unusual in several of the genus, exemplified in the Common Gallinule. The face round the bill, the chin, and part of the neck before, is in the Soree black; Mr. Pennant says the greater part of the front of the neck is deep black: the belly and sides dirty white, the latter barred downwards with black. Highly laudable as it must appear to avoid as far as possible a useless multiplication of species, yet we must not conclude the subject is exhausted, and that new objects are not to be found even within our own limited sphere. With such a very material difference between the present species and the Soree, we should have no hesitation in pronouncing them distinct, even had they inhabited the same country, because whatever might have been suspected of the change in plumage, the bare forehead is a permanent character. In the present case we might, if requisite, urge another powerful reason against these birds being brought together, namely, that the Soree is truly transatlantic, and we may venture to affirm that no such short-winged bird ever found its way from the New to the Old World. The Continent of America has its peculiar inhabitants, few of which have ever been found in Europe. Some of the aquatic species of birds belong equally perhaps to the north of both the American and European Continent, as the distance between these two quarters of the globe is there not very distant, or at least is in a manner connected by an extended chain of islands that may favour an interchange; but we must consider that whatever migrations take place from the higher latitudes of either country on the approach of the rigorous season, they are performed over land, or coastwise southerly, each in their respective country. Strange as it may appear that a bird so ill calculated for migration should be for the first time discovered in a country so populous and so cultivated, and where the science of Natural History is more generally diffused in the present era than in any part of the world; yet it is probable that the Foljambean Gallinule may hereafter be found to breed in the fens of the eastern parts of Great Britain. It is more than probable the bird in question would be mistaken for the Water Rail by the generality of sportsmen who might meet with it, and consequently may have frequently been consigned to oblivion, for want of the eye of the naturalist, and the rescuing hand of Science. The habits of the smaller

species of Gallinules are their principal security; they are not only equally capable of diving and concealing their bodies under water, with only the bill above the surface to secure respiration, but run with celerity and conceal themselves amongst the rushes and flags of swampy places, and are with great difficulty roused even with the assistance of dogs, depending more on concealment in thick cover, than upon their wings, to avoid danger. From these circumstances it is that the Spotted Gallinule is rarely obtained, and that have probably hitherto prevented our knowledge of the present species, as well as the Little Gallinule, described in another part of this work. It is remarkable too that this hitherto concealed and solitary species should not come to light singly, for about the same time that Mr. Foljambe obtained this specimen, Mr. Plasted, of Chelsea, procured another that was shot on the banks of the Thames at that place, and which is now in his collection. This circumstance would at once obviate any suspicion of its being a *lusus* variety of the Spotted species, if such could by any one have been suspected; and it is remarkable that these two specimens are exactly alike.

Gallinule, Spotted.—[Yarrell, iii. 112; Hewitson, cvi. 375.] *Rallus Porzana*, *Lin. Syst.* i. p. 262, 3; *Gmel. Syst.* ii. p. 712; *Ind. Orn.* ii. p. 772, 19. *Rallus aquaticus minor*, sive *Maruetta*, *Bris.* v. p. 155, 2, t. 13, f. 1; *Ib.* 8vo, ii. p. 252. *Gallinula ochra Gesneri*, *Raii Syn.* p. 115, 7; *Will.* p. 236; *Ib. Angl.* p. 316. *Petit Rale d'eau*, ou le *Marouette*, *Buf.* viii. p. 157. Spotted Gallinule, *Br. Zool.* ii. No. 215; *Ib.* fol. 130, t. L.* 1; *Arct. Zool. Sup.* p. 69; *Lath. Syn.* v. p. 264, 18; *Walc. Syn.* ii. t. 172; *Lewin, Br. Birds*, v. t. 192; *Don. Br. Birds*, v. t. 122. Water-Crake, *Bewick, Br. Birds*, 11, t. p. 10. Provincial: Spotted Water-Hen; Skitty; Spotted Rail, or Lesser Spotted Water Rail.—The weight of this elegant species is about four ounces; length nine inches. The bill is yellowish green; the base red-orange; irides reddish hazel. The crown of the head, back, and rump olive-brown, streaked with dusky; the two last spotted with white; the sides of the head and neck dashed with cinereous, and minutely spotted with white; the breast and wing-coverts olive-brown, spotted with white; the larger coverts barred and streaked with white; belly and vent dirty yellowish white; the sides, above the thighs, barred with white; legs pale green. This is rather a scarce bird with us, and is certainly a migrative species. We have met with it as early as the 1st of April, and as late as the middle of October, about which

time it probably retires south to pass the winter. We have received it from Sussex, Hampshire, and Caermarthenshire. It does not appear to be found far inland, but chiefly resorts to the marshes and borders of small streams well clothed with reeds and rushes, amongst which it is concealed, and difficult to be roused. It has all the manners and habits of the Common Gallinule, or Water-Hen; is said to make a nest composed of rushes, placed amongst reeds on the surface of the water, and to lay seven or eight white eggs. The young take the water as soon as hatched, and are said to be quite black. It is found in France and Italy in the spring, and is there supposed to be migratory. Is found also in the South of Russia and western parts of Siberia. In England it has not been observed farther north than Cumberland.

SUPPLEMENT.—We have obtained this species as early as the 14th of March, and as late in the year as the 23rd of October, in Devonshire, but never in the winter months. The last mentioned was only slightly wounded in the wing; the part was amputated, and the bird lived for nearly a month; its death could not be accounted for, as it was fat, and the wound perfectly healed. It fed freely on worms the day it was captured, and was observed to partake largely of bread and milk, the food of some Ruffs, with whom it was confined in a spacious place.

Gambet.—*Tringa gambetta*, *Lin. Syst.* i. p. 248, 3; *Gmel. Syst.* ii. p. 671; *Ind. Orn.* ii. p. 728, 9. *Gambetta*, *Raii Syn.* p. 107, 2; *Will.* p. 222; *Ib. Angl.* p. 300. *Totanus ruber*, *Bris.* v. p. 192, 4; *Ib.* 8vo, ii. p. 262. Red-legged Horseman, *Albin*, ii. t. 68. Gambet Sandpiper, *Br. Zool.* ii. No. 198, t. 70; *Arct. Zool.* ii. No. 394; *Lath. Syn.* v. p. 167, 9; *Lewin, Br. Birds*, v. t. 168.—This species of Sandpiper, we are informed by Mr. Pennant, has been shot on the coast of Lincolnshire. He describes it to be the size of the Greenshank; the head, back, and breast cinereous-brown, spotted with dull yellow; the coverts of the wings and scapulars cinereous, edged with yellow; the primaries dusky, bordered with yellow; legs yellow. Dr. Latham adds that the bill is of a reddish colour, with a black tip; the irides yellowish green. This bird seems to have been rarely met with in England. Said to be known in France, but is esteemed there a rare bird. Is spoken of as inhabiting Scandinavia and Iceland.

SUPPLEMENT.—In keeping Ruffs in confinement for many years, and attending to their change of plumage, we have no doubt that several of the Sandpiper class, which

have been described as distinct species, are, in fact, no other than the Ruff, destitute of the long feathers which adorn its head and neck for about three months in the spring of the year. Amongst the number we have ascertained the Greenwich and the Yellow-Legged Sandpipers; and we have had some specimens so nearly corresponding with the Aberdeen Sandpiper and the Gambet, that scarcely a doubt exists in our mind but that the whole of these, and some others, are amongst the endless variety of *Tringa pugnax*, not two of which are to be found exactly alike, and many as dissimilar as any two distinct species of the same genus.

[Gambo Goose.—See Goose, Spurwinged.]

Gan.—See Gannet.

Gannet.—[Yarrell, iii. 493; Hewitson, cxxx. 474.] *Pelicanus bassanus*, *Lin. Syst.* i. p. 217, 5; *Gmel. Syst.* ii. p. 577; *Ind. Orn.* ii. p. 891, 26; *Trans. Wernerian Society*, vol. i. *Anser bassanus*, *Raii Syn.* p. 122, A. 2; *Will.* p. 247, t. 63. *Sula Hoieri*, *Raii Syn.* p. 123, 5; *Will.* p. 249. *Sula bassana*, *Bris.* vi. p. 503, 5, t. 44; *Ib.* 8vo, ii. t. 492. Fou de Bassan, *Buf.* viii. p. 376. Soland Goose, *Will. Angl.* p. 328, t. 63; *Albin*, i. t. 86. Gannet, *Br. Zool.* ii. No. 293, t. 103; *Ib.* fol. 160, t. L.; *Arct. Zool.* ii. No. 510; *Lath. Syn.* vi. p. 608, 25; *Lewin, Br. Birds*, vii. t. 265; *Walc. Syn.* i. t. 94; *Pult. Cat. Dorset.* p. 22.—This species of Pelican weighs about seven pounds; length full three feet; breadth above six. The bill is about six inches long, nearly strait, except towards the point, where it declines a little; the edges of the mandibles are sharp, and a little jagged irregularly; the colour dirty yellowish white; near the base of the upper mandible is a sharp process and suture, which enables the bird to move it a little in the act of swallowing large fish; along the sides are two longitudinal grooves running the whole length, but no nostrils. The irides are pale yellow; round the eyes the skin is bare, and of a blue colour; the chin is destitute of feathers, and of a dusky colour, capable of great distention, forming a kind of pouch. The whole plumage is white, except the crown of the head, which is buff colour, and the bastard wing and greater quill-feathers, which are black; the tail-feathers are twelve, strong and pointed. A variety is mentioned by Mr. Pennant to have been killed in Caernarvonshire. (See *Sula*). The young birds, during the first year, and perhaps longer, are dusky, speckled with white. It lays one egg, nearly the size of that of the Goose; the nest is composed chiefly of

sea-weeds, and generally placed upon the most inaccessible parts of the highest rocks. The Gannet is found plentiful on some of the northern coasts, particularly the Orknies and the Bass Island in the Firth of Edinburgh; but we believe breeds no where further south. In the autumn it leaves those places, and pursues the herrings and pilchards round our coast, returning to their usual haunts in spring. During their winter migration they are frequently found off the coast of Cornwall, and are seen in every part of the British and Irish Channel, but generally keep far out at sea. It takes its prey by darting down upon it with great velocity from a considerable height. The pouch with which it is furnished is of peculiar service to carry food to its young.

SUPPLEMENT.—We have procured several of this species alive, but have been unable to keep them in health for any length of time. The bill, when alive, is of an elegant bluish gray colour: the legs are singularly marked, being of a dusky colour, with the front bluish yellow, which divides at the feet, and forms a line of the same colour along the ridge of the three forward toes: the irides very pale yellow: the nictitating membrane is unusually strong, and nearly as transparent as glass. This bird is said to go as far south as the Tagus, to feed on *Sardinæ*; and according to Acerbi's 'List of Lapland Plants' it is also found as far north in that country as the Gulph of Bothnia. By an old Scottish law, the proprietor of the Bass Island has a right to visit the neighbouring isles, and drive away the Gannets, in order that they may return to his domain, being considered as his sole property; and from which it is said he derives a considerable profit, by taking the young and sending them to market. We have, indeed, heard that they are by no means a bad relish, and are sometimes eaten to give a whet to the appetite. The egg is white, and very like that of the Corvorant, but rather larger: those sent to us by a Scottish friend are by no means so large as the egg of a Goose, but weigh about three ounces and a quarter each. The Gannet is essentially different from the Corvorant and Shag in almost every particular, although they have been placed in the same genus, probably for no other reason than that they have one common character, the four toes united by a web; but so has the Tropic-bird, Phaeton; and the Darter, *Plotus*. The Gannet is incapable of diving, or at least it does not appear that any exertion or alarm can force it to immerse. Upon the water it swims as buoyant as a Gull. When Gannets have been offered fish, they took it, but would never go into

a pond after it, and, from every appearance of their actions on the water (to which they never went but by compulsion), they could not procure the fish out of the reach of the extent of their neck. The Gannet is frequently observed in the English Channel during the winter, and continues as late as the month of April; Mr. Pennant was therefore misinformed when he stated that they were seen no longer on the coast of Cornwall than November, when the pilchards retire. What their particular object is for remaining so long in the Channel, we have been unable to ascertain, but we have had them brought to us by fishermen in the months of February, March, and April; from whom we learn that they are only occasionally seen, and from their actions appeared busied in fishing; but what the shoal of fish was that they were apparently following, could not be discovered. In the month of February, 1808, and in March, the preceding year, many were taken alive; and more might have been captured, for, as the fishermen observe, they rise at certain times from the water with difficulty, at which time they are easily run down by a boat. When surprised, they defend themselves obstinately and powerfully, striking with their bills, and pinching very severely. It should seem, from the accounts we have been able to collect from these unintelligible sort of beings, the fishermen, that the Gannets cannot rise from the water, but against the wind, and that when that advantage is taken of them they are easily captured. This defect however is certainly not constant, but only occasional, as we perceive in the Corvorant, Divers, Grebes, and many piscivorous birds at particular times, when they are both gorged with prey, and their feathers have become wet with the exertion of procuring it. These however most frequently baffle their pursuers by immersion and long continuance under water. The Gannet, on the contrary, has no such resource; when his stomach is replete with fish, and his plumage saturated with water occasioned by the concussion on its surface, by his rapid descent upon his prey, his only alternative is his oars upon the bosom of the deep, for he cannot dive by reason of his body being so much specifically lighter than that element. A Gannet brought to us alive on the 20th of March, in the year 1807, took no kind of food for seven days; it was then crammed with both fish and flesh, and soon after began to devour all white fish greedily, but did not choose to pick up even a plaice when the back was uppermost. It was remarked that when the bill was held so as to close the mandibles for a considerable time, respiration

became laborious, there being no nostrils. When the bird was placed on the water of a pond, nothing could induce him to attempt to dive; and from the manner of his putting the bill, and sometimes the whole head, under water, as if searching for fish, it appears that their prey is frequently taken in that manner. It is probable more fish are caught in their congregated migrations, when the shoals are near the surface, than by their descent upon wing; for the herrings, pilchards, mackarel, and other gregarious fishes cannot at that time avoid their enemy, who is floating in the midst of profusion. In the act of respiration there appears to be always some air propelled between the skin and the body of this bird, as a visible expansion and contraction is observed about the breast, and this singular conformation makes the bird so buoyant that it floats high on the water, and not sunk beneath its surface, as observed in the Corvorant and Shag. The legs are not placed so far behind as in such of the feathered tribe who procure their subsistence by immersion: the Gannet, consequently, has the centre of gravity placed more forward; and, when standing, the body is nearly horizontal like a Goose, and not erect like a Corvorant. Having, by the dissection of a specimen of the Gannet for preservation, noticed the slight and partial adhesion of the skin to the flesh of the whole under parts of the body, we availed ourselves of the opportunity of paying more attention to the structure of this bird, and by experiments endeavoured to discover to what extent, and upon what principle, the inflation of the body was performed. The appearance of so singular a conformation brought to recollection what Buffon relates of the Pelican, who remarks that from the lungs the air passes through axillary pipes, into a thick vesicular cellular membrane that covers the muscles, and envelopes the whole body. The structure, however, of the Gannet, although probably intended for similar purposes, is very different from that of the Pelican, according to the relation of that naturalist. The bill of the Gannet differs from that of most birds, for it is not only destitute of nostrils, but on each side the upper mandible towards the base is a dentation that divides the margin, and thus admits of considerable motion. It has been customary to describe the Gannet as possessing a large pouch like the Pelican under the chin, capable of containing five or six herrings; but this is erroneous. The oesophagus is extremely capacious, and the skin from the chin downwards extending along the neck, is equally capable of dilation, so that five or six

fishes, equal in size to that of a herring, might be contained in the gullet and stomach; for there appears to be very little difference between them; or in other words, the stomach is a continuation of the œsophagus, with little or no stricture or division. It is well known that many birds regurgitate with much ease and facility, and that instinct points out to them the necessity of preparing the food intended for the nourishment of their young, in the receptacle usually termed the craw: in this manner the Gannet can readily disgorge the contents of its stomach (for it has no craw) to satisfy its young. By comparative anatomy it has been clearly demonstrated that birds in general are provided with air-vessels in different parts of the body, and that many of their bones are not destitute of this contrivance, admirably fitted for increasing their levity, and consequent buoyancy, as well as progressive motion through that element in which they are intended principally to move; and that, too, with a velocity that far surpasses all other parts of animated nature. Mr. John Hunter (in the 'Transactions of the Royal Society') proves that the air-cells, in the parts already mentioned, have a free communication with the lungs, by means of openings on their surface, through which the air passes readily into them: and it clearly appears there is no diaphragm that confines the air to the regions or cavity of the breast, but that the whole of the abdomen is equally inflated by inspiration through the lungs. Thus far have the scientific researches of that anatomist contributed to our knowledge on this subject, but we may presume much remains to be done. No one appears to have noticed the phenomena attendant on the construction of the Gannet, or to what further extent this circulation of aerial fluid is carried in some particular species of birds; a circumstance which demands our highest admiration, when we contemplate the advantages which such a structure may be of in conducing to the comforts and perhaps to the very existence of such animals. Several Gannets having been subjected to artificial inflation, we shall state the result, and relate the manner in which the experiments were pursued. A pipe was first introduced into the trachea, and when air was propelled through it, the whole internal cavity of the body was inflated, but no air passed into the external cells between the skin and the body. An incision was then made in the lower part of the abdomen into the body, very near the vent; air was forced through a pipe introduced at that part (the pipe in the trachea having been previously stopped), and a similar

inflation ensued, without affecting the exterior cells. The pipe was now removed from the trachea, and upon the air being propelled with force through the pipe near the vent, it readily found its way through the larynx, producing a noise similar to the sound emitted by the living bird. A small opening was then made in the skin on the left side, about midway between the wing and the thigh, and a pipe introduced, having first stopped those directly communicating with the internal parts. It was now obvious that when air was forced through this orifice, the skin on that side, as far as the middle line of the body, was greatly inflated, extending into the lower part of the neck, along the larger joints of the wing, down the thigh, and also into the cavity of the body; but the right side was not in the least affected. The pipe at the trachea being now removed, the air produced a similar effect upon the larynx as before mentioned, but not so loud. Still suspecting that there was a communication between the sides, by means of some valvular apparatus, the right side was subjected to the same experiment; the result, however, negatived our expectation, the effect produced being similar in every respect. From a repetition of these experiments upon several subjects, it became evident that there was a communication between the lungs and the cellular membrane that covers the greater part of the body, as well as with the whole cavity of the body, but that, by reason of some valvular contrivance, the skin could not be artificially inflated through the lungs, although air would readily pass in a contrary direction. It is also clear that there is no direct communication between the sides. In order to examine this extraordinary structure, we made a longitudinal incision the whole length of the body, a little on one side of the keel, or what is commonly termed the breast-bone; by this means the membrane that connects the skin to the body, and cuts off the communication between the sides, was easily examined; but nothing was observed indicating that a communication could be effected, even at the will of the animal. On each side, nearly equidistant between this pectoral membrane and the back, is situated another longitudinal one, very similar to the last, but perforated; between this and the pectoral are about nine irregular transverse membranous septa, that hold the skin firmly to the body, having a free communication with each other. The skin is also furnished with a transparent cellular membrane, the cells being regularly perforated close to the base of each feather. At the upper part of the breast is a large bag,

which extends some way up the neck; this is attached to the skin by the septa of innumerable small cells, but no opening into this cellular bag could be discovered; the introduction, however, of a small pipe through an artificial aperture, clearly demonstrated a passage to the lungs, as the whole internal cavity of the body was inflated, and the air issued from the trachea. Upon opening this bag the passage of communication with the internal parts appeared to be under the clavicles, as a thin perforated membrane was perceived at the bottom, leading to the thorax, not directly into the lungs, but near the part where the trachea divaricates, and afterwards communicating with the lungs. It could not, however, be discovered where the air could find a passage from the great magazine into the cellular bag, and yet there is every reason to conclude that at this part some valvular passage exists. Pursuing our researches, we observed at the bottom of each lobe of the lungs a considerable opening for the passage of air into the cavity of the body. But what arrested our particular attention was a wonderful provision of Nature for the protection of the vital parts, by guarding the viscera with a strong integument, that preserves them in a proper degree of moisture, and contributes to the due secretions for lubricating those parts, so essential to the functions of their delicate nature, which might otherwise be too quickly carried off, by the constant circulation of fresh air that nearly surrounds them; for this integument is held only by ligaments to the back and front, leaving all other parts free for inspired air. The liver and intestines are firmly attached to the surrounding integument: the heart is enveloped by a similar covering, which is only partially connected to the common one. In the trachea nothing very remarkable occurs, except two small glands about the size of a pea at the lower extremity. The tongue is so extremely diminutive as scarcely to be entitled to that denomination. The clavicles, or what is commonly called the merry-thought, which are usually affixed to the point of the keel of the breast-bone by a ligament, are in the Gannet so nearly united as to appear part of it. From what has been already observed, it will not be unreasonable to conclude that the Gannet is endowed with such singular properties for very different purposes than those of long and continual immersion, of which we have before stated it appears to be incapable. But such a power of inflation must contribute greatly to lessen the concussion in its rapid descent upon water, in order to seize its prey. Besides, as the enlargement of the

surface, without materially adding to the specific gravity, must greatly contribute to its buoyancy both in air and water, it is well adapted for residing in the midst of the most tempestuous sea, floating on its surface in perfect security, and following those shoals of fishes on which depend its whole existence. Thus, when all other birds are compelled to seek shelter in bays and creeks, the Gannet is enabled to brave the severest weather in all seasons, without attempting to near the shore. This contrivance may also be of the most important service to an animal which is constantly exposed, even in the most inclement season, and cannot quit its station without starving. Nothing could possibly conduce more to its security against intense cold, or be better adapted to preserve the necessary temperature of animal heat, than the intermediate air dispersed between the skin and the body, since that element is found to be a non-conductor of caloric. Upon this principle, what animal can be more securely protected against cold, or retain its vital heat so effectually as the Gannet, or such birds as are almost surrounded with a body of confined air, divided by cells, and intersected by membranes between the skin and the body, and that skin so amply covered with a light, porous substance, filled also with air, and impervious to water. The Gannet is capable of containing about three full inspirations of the human lungs, divided into nearly three equal portions, the cellular parts under the skin on each side holding nearly as much as the cavity of the body. Now, as a full or extraordinary inspiration of the human lungs has been considered to occupy a space of about sixty cubic inches (Phil. Trans. vol. 69, p. 349), so the Gannet is capable of containing not less than 180 cubic inches of air at one time, subject to the will of the bird under certain impressions. Another singular property belonging to this bird is, that the cellular membrane beneath the skin is the habitation of an apterous insect; and is, perhaps, the only known instance of a true insect having been found to perpetually reside and propagate within the body of another living animal. For an account of this insect we refer to the 'Memoirs of the Wernerian Society.' [The Gannet, like all other birds, has nostrils, although this distinguished and most accurate ornithologist has overlooked them, and denies their existence: they are very narrow, situated at the base of the beak and concealed.]

Gannet, Cornish.—See Gull, Skua.

[Gardenian Heron.—See Heron, Garde-

nian, now better known as the Night Heron.]

[Garden Warbler.—See Pettychaps, Greater. The former is the name in general use.]

Garganey.—[*Yarrell*, iii. 278; *Hewitson*, cxiv. 409.] *Anas Querquedula*, *Lin. Syst.* i. p. 203, 32; *Gmel. Syst.* ii. p. 531; *Raii Syn.* p. 148, 8; *Will.* p. 291, t. 74; *Ind. Orn.* ii. p. 872, 99; *Bris.* vi. p. 427, 31, t. 39, f. 1, 2; *Ib.* 8vo, ii. p. 473; *Bewick, Br. Birds*, ii. p. 374; *Lath. Syn. Sup.* ii. p. 360; *Lin. Trans.* iv. p. 108, t. 13, f. 2, 3 (trachea). Phascas forte Gesnero D. Johnson, *Raii Syn.* p. 147, A. 4 (fem.); *Will.* p. 289. *Sarcelle*, *Buf.* ix. p. 260. *Garganey*, *Br. Zool.* ii. No. 289, t. 101; *Ib.* fol. 158, t. Q. 9; *Arct. Zool.* ii. p. 576, O.; *Will. Angl.* p. 377, 7, t. 74; *Lath. Syn.* vi. p. 550, 87; *Lewin, Br. Birds*, t. 259; *Pult. Cat. Dorset.* p. 21; *Walc. Syn.* i. t. 75; *Don. Br. Birds*, i. t. 21. Provincial: Pied Widgeon; Summer Teal; Cricket Teal.—This species of Duck is in size between the Widgeon and Teal; length about seventeen inches. The bill is dark lead-colour; irides light hazel. The upper part of the head dusky brown, streaked with dusky; over the eye is a broad white line, passing down the side of the neck; the cheeks and upper part of the neck purplish, marked with minute lines of white pointing downwards; the breast marked with semicircular lines of brown and black; chin black; belly dirty white, streaked with dusky towards the vent; the sides crossed with numerous small black undulated lines; coverts of the wings cinereous-gray, the larger ones tipped with white; scapulars long and narrow, the upper ones striped with black, white, and ash-colour, the rest cinereous-gray; the speculum on the secondary quill-feathers is green; the tail is dusky; legs lead-colour. The female is brown above, streaked with dusky; the white streak behind the eye is very faint, and the green on the wing wanting. This last distinguishes it from the female Teal, which in other respects it resembles. Whether this bird ever breeds with us is not ascertained; we have received it from the decoys in Somersetshire in the month of April by the name of Summer Teal, and were informed it made its appearance on those pools always about that time. It is found with us in winter, as also in France at that season. Has been observed in Sweden, Russia, and Siberia, and even as far as Kamtschatka, where it is said to be plentiful, and most probably breeds.

SUPPLEMENT.—We have found the male Garganey to weigh about fourteen or fifteen ounces; the length about sixteen inches: the tail possesses fourteen fea-

thers; the green feathers also that form the speculum in the wing are tipped with white. This species has a tracheal labyrinth, a figure of which has been given to the public by Dr. Latham in the work referred to. The labyrinth is entirely bony, like that of the Common Mallard, of an oval shape, three or four times as large as that of the Teal, and essentially different; it is, as Dr. Latham observes, placed perpendicular to the trachea, not on the side as in that bird; on one side is a slight indentation for the admission of two muscles; on the opposite side, or that situated next to the breast, it is flattened, and from the upper part of it the branchi, or divarication of the wind-pipe, originate.

[*Garrot*, Buffelheaded.—See Duck, Buffel-headed.]

[*Garrot*, Goldeneyed.—See Golden-eye.]

[*Garrot*, Barrow's.—See Golden-eye, Barrow's.]

[*Gibraltar Quail*.—See Hemipode, Andalusian.]

Gid.—See Snipe, Jack.

Gillihowter.—See Owl, White.

Gladdy, or *Golden Gladdy*.—See Bunting, Yellow.

Glead.—See Kite.

Goatsucker.—A genus of birds, the characters of which are: Bill short, hooked at the end; the base of the upper mandible beset with a row of stiff bristles; mouth wide. Tongue small, entire. Toes connected by a membrane as far as the first joint. Legs short; middle claw serrated. Tail consists of ten feathers.

Goatsucker, European.—[*Yarrell*, ii. 280; *Hewitson*, lxvi. 270.] *Caprimulgus Europæus*, *Lin. Syst.* i. p. 346, 1; *Gmel. Syst.* ii. p. 1027; *Raii Syn.* p. 26, A. 1; *Will.* p. 70, t. 14; *Ind. Orn.* ii. p. 584, 5; *Bris.* ii. p. 470, i. t. 44; *Ib.* 8vo, i. p. 289. *L'Engoulevent*, *Buf.* vi. p. 512. Nocturnal Goatsucker, *Br. Zool.* ii. No. 173, t. 59; *Ib.* fol. 97, t. R. 1. European Goatsucker, *Arct. Zool.* ii. p. 437, A.; *Will. Angl.* p. 107; *Albin*, i. t. 10; *Borlas. Cornw.* t. 24, f. 13; *White, Selb.* p. 62, 94; *Lath. Syn.* iv. p. 593, 5; *Ib. Sup.* p. 194; *Lewin, Br. Birds*, iii. t. 127; *Pult. Cat. Dorset.* p. 13; *Walc. Syn.* ii. t. 255; *Don. Br. Birds*, iii. t. 67. By *Borlase* called Night-Crow. [Night-jar of *Yarrell* and *Hewitson*, as cited above.] Provincial: Night-hawk; Dorr-

GOATSUCKER.

hawk; Churn-owl; Goat-owl; Wheel-bird; Night-jarr.—This species weighs between two and three ounces; length full ten inches. The bill is dusky and weak; mouth excessive wide; eyes very large; irides dusky. The plumage is beautifully diversified with black, brown, ferruginous, and white, sprinkled and dashed with cinereous; the under parts are ferruginous-brown, with numerous undulated transverse lines; the legs are very short, scaly, and feathered below the knee; the claw of the middle toe serrated on the inner edge. The male has a large oval spot of white on the inner web of the three first quill-feathers, and at the end of the two outmost tail-feathers. The female wants the white spots on the wings and tail; in other respects is like the male. With us this bird is only a summer visitant, appearing about the middle of May, and departing again the latter end of September or beginning of October. It is the only species found in Europe out of nineteen or twenty enumerated by different authors. It makes no nest, but lays two eggs on the bare ground amongst fern, heath or long grass, sometimes in woods or furze; but at all times contiguous to woods, where it chiefly conceals itself by day. The eggs are larger than those of a Blackbird, of an oblong-oval, whitish, elegantly marbled with light brown and ash-colour. It generally sits on the ground, but if disturbed frequently perches on the limb of a tree, most commonly lengthwise, not across, as is usual with most birds. In the dusk of the evening it begins its flight in pursuit of the larger insects, particularly the *Scarabæus Melolontha* and *Solstitialis*, which rise from their earthy abode about that time. Is also fond of the large-bodied moths; but few winged insects escape its wide-extended mouth. It makes a singular noise, like the sound of a large spinning-wheel, and which it is observed to utter perched, with the head lowermost; besides which it emits a sharp squeak, repeated as it flies. The Goatsucker is most plentiful in the wild tracts of uncultivated land, interspersed with rocks and wood. We have seen in Scotland eight or ten on wing together in the dusk of the evening, skimming over the surface of the ground in all directions, like the Swallow, in pursuit of insects.

SUPPLEMENT.—This bird we shot as late as the 8th of November in the year 1805, in Devonshire. It is remarkable that in that year all the migrative species were unusually late; the Swallows and Martins did not finally leave the South of Devon till after the 19th of the same month.

GODWIT.

Godwin. } See
[Godwit, Bartailed.] } Godwit, Common.

[Godwit, Blacktailed.—See Godwit, Red.]

Godwit, Cambridge.—*Scolopax Cantabrigiensis*, *Gmel. Syst.* i. p. 668; *Ind. Orn.* ii. p. 721, 23. Cambridge Godwit, *Br. Zool.* ii. No. 185; *Lath. Syn.* v. p. 146, 16; *Lewin, Br. Birds*, iv. p. 36.—We are informed this species of Snipe was shot near Cambridge. Mr. Pennant, to whom we are obliged for the description of this bird, says it is larger than the Common Redshank. The head, upper part of the neck, and the back are of a cinereous-brown; the lesser coverts of the wings brown, edged with dull white, and barred with black; the primaries dusky, whitish on their inner sides; secondaries barred with dusky and white; under side of the neck and breast of a dirty white; belly and vent white; tail barred with cinereous and black; legs of an orange-red.

APPENDIX.—This long-sought-for bird we have suspected would turn out to be an immatured Redshank, as the description originally given by Mr. Pennant does not differ much from the first plumage of that species. This opinion appears to be strengthened by what is related in a late edition of Pennant's 'British Zoology,' where it appears that Mr. Boys had sent a bird to Dr. Latham, in the month of March, for the Cambridge Godwit, which proved to be a young Redshank in the plumage of that season. "From this circumstance," says the Editor, "and that the original description of the Cambridge Godwit was taken from a stuffed specimen, we presume it might, with propriety, be erased from the list of distinct British species." [This is doubtless the case.]

Godwit, Cinereous.—*Scolopax canescens*, *Gmel. Syst.* ii. p. 668; *Ind. Orn.* ii. p. 721, 22. Cinereous Godwit, *Br. Zool.* ii. No. 180, t. 66; *Lath. Syn.* v. p. 145, 15.—This is another species of Snipe for which the public are indebted to Mr. Pennant, who says the bill was two inches and a half long. The head, neck, and back variegated with ash-colour and white; the tail slightly barred with cinereous; the throat and breast white, the last marked with a few ash-coloured spots; the legs long, slender, and ash-coloured. This was about the size of the Greenshanks; approaches it nearly in colour; but the bill was so much thicker as to form a specific distinction. It was killed near Spalding.

SUPPLEMENT.—One of these birds, in the late unfortunate Leverian Museum, was marked Grey Godwit. It appeared to be rather smaller than the Common God-

wit, the bill and legs rather shorter and more slender; the tail barred dusky and white nearly to the base: the rump white with a few spots: the back and scapulars pale brown, with grey borders. Are not this and the one described by Mr. Pennant to be so like the Greenshank (except in the size of the bill), actually varieties of that bird, or young birds in their first or immature plumage? [Probably the young of the next species.]

Godwit, Common.—[Yarrell, ii. 688; Hewitson, xciv. 343.] *Scolopax ogocephala*, *Lin. Syst.* i. p. 246, 16; *Gmel. Syst.* ii. p. 667; *Ind. Orn.* ii. p. 719, 16; *Bewick, Br. Birds*, ii. t. p. 78. *Ogocephalus Bellonii*, *Raii Syn.* p. 105, A. 4; *Will.* p. 215; *Ib. Angl.* p. 294. *Limosa rufa* major, *Bris.* v. p. 284, 6; *Ib.* 8vo, ii. p. 282. *Le grande Barge rousse*, *Buf.* vii. p. 505. *Godwit*, *Lath. Syn.* v. p. 145, 14, A.; *Albin*, ii. t. 70; *Br. Zool.* fol. t. B. B.; *Walc. Syn.* ii. t. 141. *Scolopax leucophæa*, *Ind. Orn.* ii. p. 719, 17? *Limosa grisea* major, *Bris.* v. p. 272, 3, t. 24, f. 2; *Ib.* 8vo, ii. p. 279. *Common Godwit*, *Br. Zool.* ii. No. 179; *Ib.* fol. 120, t. B.; *Arct. Zool.* ii. No. 373; *Lath. Syn.* v. p. 144, 15; *Ib. Sup.* p. 245. *Grey Godwit*, *Lewin, Br. Birds*, iv. t. 161; *Don. Br. Birds*, iv. t. 75. [Godwit, Bartailed, of Yarrell and Hewitson, as cited above.] *Provincial*: Yarwhelp, or Yarwip; Sea Woodcock; Godwin or Godwyn.—This species of Snipe is subject to very considerable variety, both in size and plumage; and we conceive authors have erred in making more than one species out of these varieties, which is only a difference occasioned by age or sex. Dr. Latham had, in his 'Synopsis,' given a variety which afterward, in his 'Index Ornithologicus,' he gave as a distinct species, under the title of *Leucophæa*; but we do not find any sufficient character to make it distinct from the *Ogocephala* of Linnæus. In the many we have examined, the markings seem to run so much into one another that we cannot find a permanent distinction. The weight of this bird is from seven to twelve ounces; length fifteen or sixteen inches. Bill from three inches and a quarter to upwards of four inches, a very little reflected, of a pale brown, dusky at the point; irides hazel. The head, neck, and upper parts are of a light rusty brown, in some inclining to ash-colour; the middle of each feather dusky; breast cinereous-brown; belly and under tail-coverts white; in some the throat and rump are white; from the bill to the eye a whitish stroke; the prime quill-feathers are black; the shaft of the first white; tail white, barred more or less with dusky brown; legs long

and dusky, sometimes bluish grey. In some the upper and under tail-coverts are barred or spotted with brown or dusky; and other trifling varieties. One now before us has the greater coverts of the wings so deeply margined with light grey-brown as to appear almost all whitish at a little distance; and the sides of the body have a few long streaks of brown. Old male birds are said to have some black lines on the chin, breast, and throat. These birds continue with us the whole year; in the spring resort to the fens, where they breed; and are taken in nets with the Ruffs, by means of a stale or stuffed bird. In the winter it is found on our shores, particularly at the mouths of large rivers and inlets, where the mud and sand become bare at low water, where it feeds on insects. It is met with in various parts of the continent of Europe and Asia, as well as in America.

SUPPLEMENT.—We believe this species is no longer to be found in England during the breeding season. In a late tour through Lincolnshire no trace could be found of the Godwit's breeding in the fens of that country. By the accounts of the oldest and most expert bird-catchers and fen-shooters, it should appear that, whatever may have been the case formerly, no such bird has been known to breed in those parts within the recollection of the present generation. It is true these birds are sometimes taken in the nets placed for catching Ruffs, and that chiefly in the autumn, on their return from the more extensive swamps of the North of Europe, remote from the habitation of man. Godwits were formerly fattened by the same means, and with the Ruffs; but we are assured by Mr. Towns, the noted Ruff-fatter at Spalding, that he had not procured any for these twenty years.

Godwit, Lesser.—See Snipe, *Jadrega*.

Godwit, Red.—[Yarrell, ii. 681; Hewitson, xciii. 342.] *Scolopax Lapponica*, *Lin. Syst.* i. p. 246, 15; *Gmel. Syst.* ii. p. 667; *Ind. Orn.* ii. p. 718, 15. *Limosa rufa*, *Bris.* v. p. 281, 5, t. 25, f. 1; *Ib.* 8vo, ii. p. 281. *La Barge rousse*, *Buf.* vii. p. 504. *Red Godwit*, *Br. Zool.* ii. No. 181, t. 67; *Ib.* fol. tab. add.; *Arct. Zool.* ii. No. 372; *Edw.* t. 138; *Lath. Syn.* v. p. 142, 13; *Lewin, Br. Birds*, iv. t. 160; *Pult. Cat. Dorset.* p. 14; *Walc. Syn.* ii. t. 140. *Small Curlew*, or *Red-breasted Godwit*, *Lin. Trans.* i. p. 128. *Godwit*, var. A., *Lath. Syn. Sup.* ii. p. 309. *Scolopax Belgica*, *Gmel. Syst.* p. 663. [Godwit, Blacktailed, of Yarrell and Hewitson, as cited above.]—This species of Snipe is generally rather larger than the Common Godwit; weight

twelve ounces; length eighteen inches. The bill is full three inches and a half long, a trifle reflected, slender, dusky towards the point; the base yellowish flesh-colour; irides hazel. The head, neck, breast, back, and scapulars ferruginous; the top of the head is streaked with dusky; the back and scapulars marked with large spots or bars; from the bill to the eye a light-coloured streak; the belly and under tail-coverts white; the sides under the wings barred with dusky; the smaller coverts of the wings on the ridge dusky, the next inclining to ferruginous; the larger ones cinereous-brown, light at the tips; greater quill-feathers black, shafts white; the outer webs slightly edged with white half way down; inner webs white at the base; the secondary quills dusky from their points half way; base white; those next the body ferruginous, like the scapulars, barred with black; the rump and upper tail-coverts white; the middle feathers of the tail dusky black, the rest white half way from the base, ends black; legs near four inches long, and black; the thighs bare of feathers full an inch above the knee. In some the breast is streaked with black, others mottled rufous and white; and the upper tail-coverts barred with rufous and brown. The specimen from which the above description is taken was sent to us by some unknown friend; it was killed early in the autumn. It is a rare species in England, and not frequently met with; and we believe never in summer. One we saw in Cornwall had the breast and neck of a bright ferruginous. It is said to be plentiful in some parts of America; is found in numbers in the fens about Hudson's Bay, where they breed and retire southward.

SUPPLEMENT.—The variety of the Godwit described by Dr. Latham, in his last Supplement, is, we conceive, a variety of the Red, not the Common, species; the ferruginous colour of the head, neck, and breast, as well as the borders of the feathers of the back; the length of the legs, as well as their dark colour, all bespeak it. Indeed the description given differs very little from a specimen of the Red Godwit now before us, especially in the tail having all the feathers, except the two middle ones, white at the base. This seems to be an invariable mark of distinction between the two species in all their varieties. Two or three originally in the Leverian Museum, and in private collections, whatever were their variations in other respects, possessed this specific character, as well as the superior length of the legs. The Linnæan trivial name bespeaks it to be a Lapland bird, and we find it enumerated

in Acerbi's list of the birds of that country.

APPENDIX.—Finding by the communication of our friends that this bird is not clearly identified by the general description which is given of it, we shall endeavour to point out those characteristic marks in the plumage, which, in all the specimens that have come under examination, have been invariable. Two very fine specimens of different sexes, belonging to the collection of Mr. Foljambe, killed the latter end of September, 1812; another mutilated bird, shot about the same time in Devonshire, and one which has been long in our collection, are now before us. In these four birds there is scarcely a variation in plumage, but the difference in size, length of leg, and length of bill is very considerable. Mr. Foljambe's male specimen measures seventeen inches: length of the bill three inches five-eighths: length of the leg three inches and a half. The weight was not ascertained, but from comparison it must have weighed near twelve ounces. The specimen shot in Devonshire weighed only six ounces: length fourteen inches: that of the bill two inches three-eighths: the leg two inches and a half. The other two specimens are of different intermediate sizes, with the bill and legs in proportion. Thus we perceive that although these birds are extremely similar in plumage, they are very dissimilar in size. What particularly characterizes this species is the rufous colour of the neck and upper part of the breast, the back, the scapulars, and tertials being barred or spotted with black and rufous, or ferruginous in some specimens, on the latter part: the cheeks and throat are usually paler, the latter nearly white, and the white from the upper mandible runs over the eye: the under part of the body from the breast is cinereous-white: the rump and lower part of the back, concealed by the scapulars, are black; and the greater part of the upper tail-coverts are white, but the lower series impending the tail are tipped with black; the tail-feathers are white at the base and black at the end, slightly tipped whitish, the outer feather having most white, that colour commencing within half an inch of the tip, and, running diagonally across, carries that mark in the same direction through all the feathers, so that the middle ones have only their base white, which is concealed by the black tips of their coverts; thus the tail, when closed, appears all black, except the exterior margin of the outer feather and the pale tips. We do not know of any species, foreign or domestic, that can be mistaken for the Red Godwit, except any variety of the Jadreka

Snipe we are not acquainted with has been confounded with it. It will, however, be seen that one character of that bird is the plain spotless plumage of the upper parts. Variety A. of the Red Godwit, described in the 'General Synopsis' from a bird in the late Leverian Museum, appears to be more nearly allied to the Jadreka Snipe. The black feathers with rufous margins on the back; the black and rufous, or ferruginous alternate bars on the scapulars and tertials; are alone sufficient marks of discrimination in the Red Godwit. It will be seen that the largest specimen here mentioned is equal in length to our Jadreka Snipe, and there is considerable affinity between the length of the bill and the shape of the claws. We have in the preceding pages stated that, from the appearance in plumage, these two birds should seem to be distinct species, but knowing that spotted or barred feathers are so frequently the indication of youth, or the change of plumage at one season of the year, suspicions of their being actually the same species cannot be wholly erased from the mind, though as yet no bird in an intermediate plumage has appeared. It is probable this is the autumnal plumage, since we find a variety, described with the neck, breast, and sides of a bright ferruginous, the two last barred with cinereous and brown; and we are assured by Mr. Foljambe that he has three specimens which have the neck and upper breast of a bright rufous, the lower breast and sides barred with rufous and brown. The tail-feathers of all these correspond. These varieties are probably more owing to season than to age, though we may consider the pale rufous neck and breast without markings as indicative of youth, since the brighter ferruginous specimens are more or less barred. It is also probable that the ferruginous parts have the colour heightened towards the spring, and that more of the markings appear. Varieties have been described to have the tail either plain dark brown, with pale edges and tips, or barred with a dark colour upon a rufous ground; but we suspect these variations do not belong to the Red Godwit.

Godwit, Redlegged.—See Snipe, Spotted.

[Golden Eagle.—See Eagle, Golden.]

Golden-eye [or Goldeneyed Duck.—*Yarrell*, iii. 371; *Hewitson*, cxix. 435.] *Anas Clangula*, *Lin. Syst.* i. p. 201, 23; *Gmel. Syst.* ii. p. 523; *Raii Syn.* p. 142, A. 8; *Will.* p. 282, 13, t. 73; *Ind. Orn.* ii. p. 867, 87; *Bris.* vi. p. 416, 27, t. 37, f. 2; *Ib.* 8vo, ii. p. 470; *Lath. Syn. Sup.* ii. p. 355; *Lin. Trans.* iv. p. 118, t. 15, f. 12 (trachea);

Bewick, Br. Birds, ii. p. 367. *Morillon, Id.* ii. p. 371. *Le Garrot, Buf.* ix. p. 222. *Golden-eye, Br. Zool.* ii. No. 276; *Ib.* fol. 154, t. Addend. *Arct. Zool.* ii. No. 486; *Albin*, i. t. 96; *Will. Angl.* p. 368, t. 73; *Lath. Syn.* vi. p. 535, 76; *Lewin, Br. Birds*, vii. t. 255; *Walc. Syn.* i. t. 69. Brown-headed Duck, *Lewin, Br. Birds*, vii. t. 256. *Morillon*, or Grey-headed Duck, *Br. Zool.* ii. No. 277? *Arct. Zool.* ii. p. 573, F.? *Lath. Syn.* vi. p. 537, 77? *Will. Angl.* p. 367. *Anas Glaucion*, *Ind. Orn.* ii. p. 868, 88. Provincial: Pied Widgeon.—*Willughby* and *Ray* seem to have given the young, or female, of this species under the title of Smaller Red-headed Duck. *Lewin* considers his Brown-headed Duck as a distinct species, and states the bill to be essentially different. Nothing has tended so much to the discovery and ascertaining the species of Ducks as the singular conformation in the trachea, or windpipe, of the males of some of this tribe of birds. That of the Golden-eye is so very different from most others that it is an unerring mark of distinction. We have examined many with the rusty brown head, as described by authors for a different species, some of which were males, and had the enlargement of the trachea. A matured male Golden-eye weighs near two pounds; length between eighteen and nineteen inches. Bill black; irides fine bright yellow. Head and upper half of the neck black, glossed with green and violet, changeable as viewed in different lights; at the corner of the mouth is a large white spot; the lower part of the neck, the breast, and all beneath are white; the back, rump, and upper tail-coverts black; scapulars black and white; the coverts of the wings are black, with a white patch on the lesser, and another on the larger coverts; quill-feathers black, except seven of the secondaries, which are mostly white; tail black; legs orange. The female is considerably less. The bill is yellowish towards the point; the head in this, as well as in the male, is full of feathers, which makes it appear large, but instead of being black it is, as well as the upper part of the neck, of a rusty brown; round the middle of the neck is a greyish ring; the lower part of the neck and breast mottled dusky and cinereous; back dusky, dashed with cinereous; the coverts of the wings and quills like the male, but the black parts of a dusky colour; the fore part of the legs and toes yellowish, the hind part and webs black. The young male birds are like the female in plumage, but are larger. We have taken no small pains in dissecting a great many of this species which appeared to be females, but proved males; and all such possessed the

swelling in the trachea, and the labyrinth of the Golden-eye. It is probable the male of this species is many years arriving at full maturity, for it is rarely found with the full black head, and the white spot at the corner of the mouth. The sexes are readily discovered in their first feathers by passing the finger and thumb down the windpipe; the enlargement of the trachea is easily felt. This bird, in its immature state, is probably the Glaucion, or Morillon, of various authors. It visits us in winter in small flocks, and feeds chiefly in rivers contiguous to the sea; sometimes killed in fresh waters more remote; is a quick diver, and not easily shot, except on wing. Is seldom caught in the decoys; but we have frequently bought them in Bristol market, where they are indiscriminately sold for Widgeon. It retires northward to breed; is found at that season in Norway and Sweden; is known also in America.

SUPPLEMENT.—Notwithstanding the discordancy of opinion which still exists concerning the distinction between this bird and the supposed Morillon, we have obtained no information that has in the least shaken our former opinion; but, on the contrary, circumstances have rather tended to confirm it. This bird is common in the estuary of Kingsbridge, and on Slapton Ley (a large piece of fresh water), where they are frequently seen in small flocks; and from whence we have, by the kind assistance of friends, obtained many for examination, in particular from Mr. Holdsworth. From these flocks have been shot those supposed to be the Morillon, and other varieties, if the change of plumage from the young to the adult can be so called. It should be observed that in all the males, in the feathers of that fictitious bird, the very remarkable trachea of the Golden-eye appeared; and in every little variation of plumage of the females, the same truss shape of the bird, the form of the bill and legs were similar; and what is more essential, the shape and number of feathers of the tail (which is sixteen) were invariable. The Morillon described by Mr. Bewick is indeed very far advanced towards the adult plumage of the male Golden-eye, for in that not only the head appeared to be advancing to black about the cheeks, but the white round the neck was much enlarged; the scapulars and coverts of the wings were black and white, and in other respects appear to have been fast advancing towards maturity. It should seem the Golden-eye is some years attaining its complete adult plumage, for those with the full black head, and the white spot in the cheek, rarely occur, although the young males, so well known by their

extraordinary trachea, are common. We have seen a specimen, with the white spot, that had the feathers on the head dusky. The windpipe of the Golden-eye (says Dr. Latham in his excellent essay on the trachea of birds, given in the 'Transactions of the Linnean Society') "is of a curious and wonderful structure, for the labyrinth is not only of a different and much more complicated form than any other, but a singular enlargement takes place about the middle of the trachea itself." The ventricose part consists of the same cartilaginous rings as the rest of the windpipe, and in fact is only a great enlargement of the same structure, being at least four times the diameter of any other part, or three inches or more in circumference, and about three inches in length. This part is so formed by the inequality of its cartilaginous annulations and intermediate membranes, that it is not only capable of contracting to little more than an inch in length, but likewise of compression, the under part being in the contracted state considerably flattened. The labyrinthic part at the bottom of the trachea is of so extraordinary a form, and so complicated a structure, that no description could give an adequate idea of it; suffice it to say that it is very large, with a bony arch on one side, nearly transverse to the trachea; but for the perfect comprehension of it we refer to the figure in the 'Linnean Transactions.' "It is manifest (says Dr. Latham) that the structure of the trachea in this bird being so very unlike that of any other, will ever prevent its being confounded with a different species; and on that account I can with confidence assert that the *Anas Glaucion* of Linnæus, or Morillon, commonly so called, has no existence taking it as a species, for it is merely the Golden-eye incomplete in plumage. But this is not the only one known by the name of Morillon, for a specimen put into my hands for that bird has proved to be the young of the Tufted Duck, and others that of the Scaup. Whatever share the structure of this singular kind of trachea may have in promoting the loudness of the voice, I will not here insist on; but it is notorious that the cry is heard further off than many others of the genus."

[Golden-eye, Barrow's. — *Clangula Barrowii*, Richardson, *Faun. Boreal-Amer.* p. 456, No. 216, Pl. 70, the adult male. *Anas Barrowii*, Temminck, *Manuel d'Ornith.* iv. 551. Barrow's Duck, Gould, *Birds of Europe*, Part 16, male.—Beak extremely short, much thicker at the base than towards the tip; tarsi and toes orange; little white on the wing, and the speculum bearing

a black band; the feathers on the forehead form a semicircular line at the base of the beak. Female smaller than the male. "At the base of the beak is a large white mark in the form of a crescent, with a point directed towards the *sinciput*; head and upper part of the neck of a bright purple colour, with green reflections about the sides; forehead and chin black-brown; back, wings, and edges of the feathers on the flanks, velvety black; lower part of the neck, shoulders, tips of the outer scapulars, last row of lesser wing-coverts, tips of the larger wing-coverts, six feathers of the secondaries, and all the under parts pure white; a black band traverses the white on the wing; tail, together with its inferior lateral coverts, brown. Beak black; iris yellow-white; feet and toes orange, the webs black: total length 19 to 20 inches."—*Temminck*, the description of an adult male at the age of three years. "The female is a fourth less than the male, and has the head and the upper part of the neck umber-brown, without the white marks; mantle and back black, but all the feathers bordered with cinereous; a pure white ring encircles the middle of the neck; flanks, sides of the breast, and a broad belt on the front of the neck dark cinereous, bordered with white; intermediate wing-coverts spotted with black and white; larger wing-coverts tipped with a black band; secondaries as in the male. Mandibles orange at the tip, black at the base; iris yellow-white. Legs as in the male."—*Richardson, Fauna Bor.-Amer.* p. 456. This bird inhabits the arctic regions of both continents; it is abundant in Iceland on the shores of Lake Maytavan, and was found by Richardson in the district of the Rocky Mountains. The adult males migrate from Iceland before the females, but the young of the year leave that island long after the adults. It constructs its nest under brushwood on the shores of the lakes, and lays ten, twelve or fourteen eggs, of a bright green colour, about the size of those of the Scaup Duck. In the 'Zoologist' for 1864, at p. 9038, is recorded the occurrence of one of these Ducks in the Mersey, by Mr. Graham, of York.]

Goldspink.—See Finch, Gold.

Goosander. — [*Yarrell*, iii. 398; *Hewitson*, cxix. 439.] *Mergus Merganser*, *Lin. Syst.* i. p. 208, 2; *Gmel. Syst.* ii. p. 544; *Raii Syn.* p. 134, A. 1; *Will.* p. 253, t. 64; *Ind. Orn.* ii. p. 828, 1; *Bris.* vi. p. 231, t. 32; *Ib.* 8vo, ii. p. 423; *Lath. Syn. Sup.* ii. p. 336. *Le Harle*, *Buf.* viii. p. 267, t. 23. Goosander, or Merganser, *Br. Zool.* ii. No. 260, t. 92, f. 1; *Ib.* fol.

147; *Aret. Zool.* ii. No. 465; *Ib. Sup.* p. 73; *Will. Angl.* p. 335, t. 64; *Lath. Syn.* vi. p. 418, 1; *Lewin, Br. Birds*, vi. t. 231; *Pult. Cat. Dorset.* p. 19; *Walc. Syn.* i. t. 79; *Don. Br. Birds*, iii. t. 49. Greater Goosander, *Lin. Trans.* iv. p. 122; *Bewick, Br. Birds*, ii. t. p. 254. Provincial: Jacksaw. — This is the largest species of Merganser; weight about four pounds; length two feet four inches. The bill three inches long, narrow, serrated, or toothed on the edges of both mandibles; the tip of the upper hooked; colour red; irides the same. The head and upper part of the neck glossy greenish black; the feathers on the crown and back of the head are long and loose; the rest of the neck, breast, and under parts white; the sides, above the thighs, undulated with dusky lines; the upper part of the back black; lower part of the back, rump, and tail-coverts brownish ash-colour; the lesser wing-coverts white; the rest ash-colour, with some white; the greater quill-feathers are black, with ash-colour on the interior webs of some of the inner ones; the secondaries white, margined with greenish black on the outer webs; the scapulars nearest the body black, the others white; the tail consists of eighteen ash-coloured feathers, with dusky shafts; legs orange. In some specimens the breast is of a rosy buff-colour. Mr. Pennant has given the Dun Diver as the female of this species; but in the description of that bird we have given our reasons for continuing it as a distinct species. The Goosander sometimes visits our rivers and lakes in severe winters, but retires to the more northern latitudes to breed. Is said to be found in the Hebrides in summer, and to continue in the Orkneys the whole year. It is not uncommon on the continent of Europe and Asia, but most plentiful towards the north; breeds in Greenland and Iceland; is also found in some parts of America. Its food is fish, for which it dives with great celerity, and holds its slippery prey with great security by means of its toothed bill, so admirably adapted to the purpose.

SUPPLEMENT.—We have, under the article Dun Diver, given our reasons why we are still inclined to consider these birds distinct species. In the eighth vol. of the 'Linnean Transactions,' Mr. Simmonds remarks that there is so much similarity in the structure of the *Mergus Merganser* and *M. castor*, even in the intestines as well as in the trachea, vertebræ of the neck, and number of tail-feathers (which in both are eighteen), to warrant a conclusion that they are the same, differing only in age or sex. But this information does not advance us one step towards clearing up this long-contested point. It

has long been known that males in the plumage of *Mergus castor*, or Dun Diver, have been proved by dissection; and we have before been told that they possessed a tracheal labyrinth similar to that of *Mergus Merganser*, or Goosander; but we should have been glad to have been informed whether in the trachea itself there had been one or two enlargements; for otherwise we gain no additional knowledge. We have before remarked that later observations have proved that at least some birds, in the habit of the Dun Diver, have but one tracheal enlargement, besides the labyrinth; whereas the Goosander has two, both of which are figured in the 'Berlin Transactions.' To this may be added the remarks of an excellent Ornithologist of the day, and a critical observer, Willughby, who, speaking of the Goosander, says, "It hath a huge bony labyrinth on the windpipe, above the divarications; and the windpipe hath, besides, two swellings out, one above another, each resembling a powder-puff." These appear to be incontestible facts of the trachea of the Goosander possessing two enlargements. Now, as no naturalist has yet described such an appearance in any *Merganser* of different plumage, we are yet in the dark as to the immature male of this species, as well as the female. It may be reasonable to conclude that, if strict attention is paid to these birds, some with two tracheal enlargements may be found attendant on the plumage of the Dun Diver, and others with only one, with perhaps very little variation in feather; the former the immatured male of *Mergus Merganser*, the latter the male *castor*; and the females of both these may be so similar as to continue their obscurity in a country where they so seldom appear. This species appears to be common on the Tornea, in Finland, during the breeding season; and their eggs are much coveted by the natives, who place decayed trees that are hollow near the banks of the river, which these birds enter, and there deposit their eggs to the number of twenty: these the Finlanders take out from time to time, but always leave two or three at least, in order to continue the breed. (Acerbi). If this tourist had been a critical Ornithologist, with such an opportunity to ascertain the complete natural history of this bird, we should not now have been left bewildered by strange, imperfect, and contradictory accounts, from which we have to reason, and perhaps at last conclude with false deductions. [See Dun Diver, p. 73.]

Goosander, Redbreasted. — See *Merganser*, Redbreasted.

Goose. — Several of the larger species of the Duck genus, commonly so called. The Common Goose is given under the title of Goose, Grey-lag.

Goose, Bald. — See Goose, White-fronted.

Goose, Bean. — [Yarrell, iii. 153; Hewitson, cviii. 385.] *Anas segetum*, Gmel. Syst. ii. p. 512; Ind. Orn. ii. p. 843, 28. Bean Goose, Br. Zool. ii. No. 267, t. 94, f. 2; Arct. Zool. ii. No. 472; Lath. Syn. vi. p. 464, 23; Lewin, Br. Birds, vii. t. 239; Pult. Cat. Dorset. p. 20; Walc. Syn. i. t. 65. Provincial: Small Grey Goose. — This species is less than the Common Goose; weight from five pounds to upwards of seven; length from two feet and a half to three feet. The bill is small, compressed near the end, of a whitish flesh-colour; the tip, or what is termed the nail, is black (the great characteristic mark of distinction); irides hazel. The head and neck cinereous-brown; the whole under part, as far as the legs, the same, but lighter, darkest on the thighs; the forehead speckled with white, behind which the feathers are dusky brown; the back is ash-colour; the lower part of the belly, upper and under tail-coverts white; scapulars brown ash-colour, edged with white; the greater quill-feathers are black; exterior webs grey; secondaries cinereous-grey, margined with black on the outer webs; coverts grey, the larger ones tipped with white; legs dull orange. There appears to be some little variation in the plumage of these birds; in some the bill is of a dull brownish red; the upper part of the back, scapulars, and wing-coverts brown, dashed with cinereous, and tipped with white; greater quills plain dusky black; secondaries grey, tipped and margined with white. These birds come to us early in the winter, sometimes in large flocks, and are as often seen in the uplands as in the fens, resorting to fields of green wheat, which at that season they seem to prefer to any other food. In the spring they retire northward to breed; many are said to inhabit Lewis, one of the Hebrides, all the summer, and breed there. It is frequently killed and sold at market for the Common Wild Goose; and indeed is more frequent, but has long been confounded for that bird. The specimen from which our description is taken was killed in Wales; but we have seen it as far west as Devonshire.

SUPPLEMENT. — A male and female, wounded and taken alive, were sent to us by Mr. Holdsworth; the male was afterwards killed by a barleycorn getting into the larynx, and lodging just within the rima glottidis. The female is still alive,

and become docile. This species, like the Bernacle, has a callous knob upon the elbow of the wing. The trachea increases in size about the middle, and the branchial tubes are short and tumid. The bill is orange except the nail, tip of the under mandible, and round the base, reaching on the upper mandible, as far as the nostrils, where it terminates in a tridentate figure; these parts are black; the edges of both mandibles are serrated; in the upper there is a row of smaller denticulations within the larger, between which those of the lower mandible lock; an admirable contrivance for cutting vegetable food. The irides are rufous-brown.

APPENDIX.—From recent observations, we are quite sure that this species and the White-fronted Goose are occasionally confounded. It has been generally considered that the colour of the tip of the bill, usually called the nail, is the criterion of distinction; in the Bean Goose it is always black, in contradistinction to that of the White-fronted Goose, which is said to be always white. This, however, is not strictly correct, since we have a specimen of a female of the latter with a black nail to the bill, and this is not a character peculiar to that sex, since we have lately examined another which had that part white. In two species whose plumage is frequently extremely similar, when the White-fronted Goose is destitute of the black patches beneath, it requires particular attention to other characters to discriminate them. This species is considerably larger, its bill is longer, more compressed towards the end, and broader; its breadth too at the point is the same as in the middle; whereas in the White-fronted Goose the bill narrows a little towards the point. In both sexes of this (of all we have examined) the bill is black at the base and the tip, the intermediate space more or less orange, as before described in this Supplement, from a male which weighed about seven pounds, and measured in length two feet nine inches. The female of this species has the bill marked similar to the other sex, and appears to differ in nothing, except being rather less; but considerably larger than the female White-fronted Goose. A female in our menagerie has made no alteration in her plumage in moulting. She devours grass, and particularly aquatic plants, with avidity, but is content with grain.

Goose, Bernacle.—[Yarrell, iii. 166; Hewitson, cix. 388.] *Anas erythropus*, *Lin. Syst.* i. p. 197, 11; *Gmel. Syst.* ii. p. 512; *Ind. Orn.* ii. p. 843, 31; *Bewick, Br. Birds*, ii. t. p. 307. *Bernicla*, *Raii Syn.* p. 137, A. 5; *Will.* p. 274; *Bris.* vi. p. 300,

14; *Ib.* 8vo, ii. p. 411. *La Bernache*, *Buf.* ix. p. 93, t. 5. Canada Goose, *Albin*, i. t. 92. Bernacle, or Clakis, *Br. Zool.* ii. No. 269; *Ib.* fol. 150; *Arct. Zool.* ii. No. 479; *Will. Angl.* p. 359; *Hayes, Br. Birds*, t. 24; *Lath. Syn.* vi. p. 466, 26; *Lewin, Br. Birds*, vii. t. 242; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 62. Provincial: Claik Goose; Routheroock.—The weight of this species is between four and five pounds; the length about two feet. The bill is black and short. The forehead, chin, and cheeks are white; from the bill to the eye a black line; the rest of the head, neck, and upper part of the back black; the breast and under parts white; thighs mottled dusky and white; black about the knee; the back, scapulars, and coverts of the wings barred with black, white, and grey; upper tail-coverts white; rump black; tail the same; legs dusky black. These birds frequent the north-west coasts of England in winter in large flocks, and are plentiful in some parts of Ireland; but are rarely met with in the southern parts of this country, except in very severe weather. Is said to retire north as early as February to breed, and are then found in Russia, Lapland, Norway, and Iceland. Has been met with at Hudson's Bay. In the darker ages strange accounts were given of the history of this bird, which was supposed to be produced from the shell called by Linnaeus *Lepas anatifera*, which are frequently found in vast abundance adhering by a pedicle to logs of wood that have laid long in the sea; from which it was given the name of Tree Goose. Strange as this may appear in this enlightened age, it was credited and handed down by various authors. Gerard, who was one of these credulous persons, has given a curious account of it, as may be seen in his *Herbal*.

SUPPLEMENT.—The confusion between this species and the Brent, the *Bernicla* of Linnaeus, renders it difficult to get at the habitat of the one, without confounding it with the other. This species has generally been said to be abundant on the coast of Ireland in the winter season; we are, however, informed by Sir William Elford (whose attention to the subject of Ornithology gives effect to his observations) that it is certainly a mistake; the Brent being commonly called by the same name has probably occasioned the assertion, for that bird is taken in the bay of Belfast, and other northern parts of that island, in great abundance, but he never could discover the *erythropus* amongst them. A specimen sent us by Mr. Anstice, from Bridgewater, in the month of February, 1809, is at this time alive and in high health. It appears a remarkable docile

bird, was immediately reconciled to confinement with other aquatic birds, and partook of their food the instant it was liberated from the basket in which it was sent, and had then been taken (by means of a shot-wound) only a week or ten days. A large flock of these birds were observed on Slapton Ley in the winter of 1801. A specific character belonging to this species which we have not noticed on record, is a callous protuberance or blunt spur upon the elbow, or front joint of the wing.

Goose, Bernacle, Smaller.	} See Goose, Brent.
Goose, Black.	
Goose, Brand.	

Goose, Brent.—[Yarrell, iii. 169; Hewitson, cix. 389.] *Anas Bernicla*, *Lin. Syst.* i. p. 198, 13; *Gmel. Syst.* ii. p. 513; *Ind. Orn.* ii. p. 844, 32. *Brenta*, *Raii Syn.* p. 130, 8; *Will.* p. 275, t. 69; *Bris.* vi. p. 304, 16, t. 31; *Ib.* 8vo, ii. p. 442. *Le Cravant*, *Buf.* ix. p. 87. *Brent*, or *Brand Goose*, *Br. Zool.* ii. No. 270; *Ib.* fol. 151; *Ib. Ad-dend.* t. Q.; *Arct. Zool.* ii. No. 478; *Ib. Sup.* p. 75; *Albin*, i. t. 93; *Will. Angl.* p. 360; *Hayes, Br. Birds*, t. 25; *Lath. Syn.* vi. p. 467, 27; *Lewin, Br. Birds*, vii. t. 243; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 63. *Black Goose*, *Rural Sports*, ii. t. p. 465; *Bewick, Br. Birds*, ii. t. p. 311. *Provincial: Rat*, or *Road Goose*; *Clatter-goose*; *Horia* or *Horie Goose*; *Quink-goose*; *Rood-goose*.—This species is considerably less than the Bernacle. The specimen before us weighed two pounds twelve ounces; length twenty-nine inches. Bill short and black; irides dusky. The head, neck, and upper part of the breast black; on each side the small part of the neck is a patch of white, mixed with black; the back, scapulars, and wing-coverts are of a brownish slate-colour, dashed with cinereous; quills black; the under parts of the body slate-colour; the sides a little barred with white; behind the thighs, the vent, and under tail-coverts white; the rump is black; upper tail-coverts white; tail black; legs black. The female is rather less; the plumage not so dark, and the feathers of the body above and beneath margined with grey, greatly so on the wing-coverts; the lower part of the rump, as well as the tail-coverts, are white. Young birds are said to want the white mark on the neck. These birds appear on our coasts in winter, particularly in the west of England, but are most plentiful in Ireland, where they are taken in nets placed across the rivers, and are esteemed good eating; are in greatest abundance in those rivers that empty themselves into the northern part of the Irish Channel. Sometimes appear in vast flocks on the

coasts of Picardy, even to a pest, destroying all the corn near the sea. In the year 1740 these birds, we are told, appeared in such prodigious numbers on that coast that the inhabitants knocked them down with clubs. It is said to be easily tamed. They breed far north, and return southward in autumn. In Shetland are called *Horra Geese*. Are common at Hudson's Bay, and probably breed there. We are informed some of these birds breed in Ireland: however that may be, the greater part retire more northward for that purpose.

SUPPLEMENT.—This appears to be a much more plentiful species than the Bernacle, and sometimes migrates from the north in such congregated myriads as to starve each other. The late Mr. Boys, of Sandwich, informed us that in the year 1739—40, when these birds were so abundant on the Continent (especially on the coast of Picardy, where the inhabitants were raised *en masse* in order to destroy them), they were so plentiful on the coast of Kent, that they were in so starving a condition as to suffer themselves to be knocked down with stones and sticks; and were carried in carts to the neighbouring towns, where a purchaser was allowed to pick and choose for sixpence a-piece. We learn from the same respectable source, that in the year 1803 they were innumerable about Sandwich; and were so miserably poor and debilitated as not to be able to rise after alighting, and many were taken by hand. "It is remarkable," says Mr. Boys, "not a Bernacle, Grey-lag Goose, nor Bean Goose have been seen with this superabundance of Brent Geese, and yet the weather has been sufficiently severe to compel the Hooping Swan so far south." It is a curious circumstance that such occasional excesses in migration of some particular species should occur so locally. Thus when the Brent was so plentiful on the eastern coast of the kingdom, not a single instance occurred in the west to our knowledge; yet in the year 1800, about Christmas, they were common contiguous to the coast of South Devon.

Goose, Canada.—See Goose, Bernacle. But this is not the true Canada Goose. That bird has not been found in this country in a wild state, though it is frequently domesticated with us, and will breed with the common species. [The Canada Goose, or Cravat Goose (*Anser Canadensis*), figured in Yarrell, iii. 185, and the egg by Hewitson, cx. 391, is so generally established in our ornamental waters, and breeds so freely, that escapes are very numerous and of very common occurrence; but there seems to be no reason for regarding it as a British bird.]

[Goose, Channell.—See Gannet.]

Goose, Claik.—See Bernacle.

Goose, Cole.—See Corvorant.

[Goose, Cravat.—See Goose, Canada.]

[Goose, Egyptian.—Yarrell, iii. 177. *Anser aegyptiacus*, Bewick, ii. 315; *Temminck, Manuel d'Ornithologie*, vol. iv. p. 523.—“The beak in the centre is pale brown; the nail, the margins, and the base dark brown; the irides wax-yellow; round the eye a patch of chestnut-brown; cheeks and sides of the neck pale rufous-white; forehead, crown of the head, back of the neck, the back, scapulars and tertials rich reddish brown; the carpal portion of the wing, the smaller and the larger wing-coverts white; the smaller coverts tipped with black; the wing-primaries almost black, tinged with green; the secondaries tinged with reddish bay, and edged with chestnut; the lower part of the back, the rump, and tail nearly black: front of the neck, the breast, and upper part of the belly pale rufous-brown, a patch on the breast chestnut-brown; lower part of the belly and the vent pale brown; the legs and feet pink. The whole length of an adult male is about 26 inches. The distribution of colours is the same in females as in males, but the tints are less bright and pure. The wing is furnished with a short blunt spur at the wrist.”—Yarrell, iii. 179. This beautiful bird is very frequently domesticated on our ornamental waters in Britain, and occurs not unfrequently at liberty, many instances being recorded in the ‘Zoologist,’ and not a few in Mr. Yarrell’s ‘British Birds.’ Much difference of opinion prevails as to the propriety of admitting it into the British list, but there are many other species whose claim is equally questionable, and yet which retain a place in all our works on British Ornithology.]

Goose, Ember.—See Diver, Imber.

Goose, Fen.—See Goose, Grey-lag.

[Goose, Gambo.—See Goose, Spurwinged.]

Goose, Grey-lag. — [Yarrell, iii. 145; *Hewitson*, cviii. 382.] *Anas Anser* (ferus), *Lin. Syst.* i. p. 197, 9; *Gmel. Syst.* ii. p. 510; *Raii Syn.* p. 136, A. 4.—138, A. 3; *Will.* p. 274, 2, t. 69; *Ind. Orn.* ii. p. 841, 26; *Bewick, Br. Birds*, ii. t. p. 292. *Anser sylvestris*, *Bris.* vi. p. 265, 2; *Ib.* 8vo, ii. p. 432; *Oie sauvage*, *Buf.* ix. p. 30, t. 2; *Wild Goose*, *Will. Angl.* p. 358; *Albin*, i. t. 90. Grey-lag Goose, *Br. Zool.* ii. No.

266; *Ib.* fol. 150; *Arct. Zool.* ii. No. 473; *Lath. Syn.* vi. p. 459, 31; *Lewin, Br. Birds*, vii. t. 238; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 61. Provincial: Fen Goose.—This is the origin of our common domestic Goose. It weighs eight or nine pounds; length about thirty-three inches. The bill is large and elevated, of a flesh-colour; the nail white; irides greyish. The head and neck ash-colour, mixed with light rust-colour; back dusky grey; the breast and belly whitish, clouded with ash-colour; scapulars grey, edged with white; the wing-coverts are composed of different shades of cinereous, margins of the feathers lightest, the lesser coverts darkest; quill-feathers more or less black at their ends; the upper and under tail-coverts pure white; the tail-feathers are dusky, tipped with white, the outer ones almost entirely white; legs flesh-coloured; claws black. These birds are said to reside in the Lincolnshire fens the whole year, where they breed, and the young frequently taken and become tame. It lays eight or nine eggs of a dirty white. The greater part of the large flocks seen with us in the winter doubtless retire northward to breed. Is frequently killed upon the downs in the south of England, feeding on green wheat. We remember one being shot in the wing by a farmer in the neighbourhood of the Wiltshire downs, was kept alive many years, but would never associate with the tame ones. This and most of the other species are indiscriminately called Wild Geese.

SUPPLEMENT.—In the ‘Environs of London,’ by Mr. Lyson, an anecdote is given of the partiality of a Canada Goose for a yard-dog; the Goose could only be separated by force from her canine friend, and, after his death, fell a sacrifice by endeavouring to possess that seat in the kennel where she had so long been fostered with the kindest friendship by his predecessor. A similar attachment we recollect of the China Goose, the male of which had been killed by a young pointer. Ponto (for that was the dog’s name) was most severely punished for this misdemeanour, and had the dead bird tied to his neck. The solitary Goose became extremely distressed for the loss of her partner and only companion, and, probably having been attracted to the dog’s kennel by the sight of her dead mate, she seemed determined to persecute Ponto by her constant attendance and continual vociferations; and after a little time a strict amity and friendship subsisted between these incongruous animals; they fed out of the same trough, lived under the same roof, and in the same straw bed kept each other warm; and when the dog was taken to the field

the inharmonious lamentations of the Goose for the absence of her friend were incessant. M. Cuvier has published a brief description of a bird produced between a Swan and a Goose, which in fact amounts to its being a perfect Goose, in everything but size, like its mother, which it greatly exceeds. The Common Goose, from which our domestic breed is descended, must have been domesticated many centuries; and it is rather surprising that many other species of the larger birds, especially of the aquatic kind, have not been brought under the dominion of man. The Common or Grey-legged Goose was formerly indigenous to this country, and bred in the then vast, extensive, and impenetrable swamps and fens contiguous to the eastern coasts of the kingdom. The labour of man, by draining and cultivating these fens and morasses, has entirely depopulated these places of their native inhabitants; but he has wisely selected the Goose from the number of the feathered tribe that once roamed at large over these extended flats, and by domestication, and conversion into private property, has made it prove to him a source of real wealth. These swamps, which in more barbarous times yielded a scanty subsistence to the natives, by the promiscuous capture of such birds, are now teeming with them in a domesticated and highly improved state. Those who have never witnessed the abundance that are fed in some of the fens in Lincolnshire, can form no idea of this real golden treasure, nor of the beauty of the innumerable flocks that enliven those dreary tracts, as yet too moist to afford wholesome pasture for sheep. In few countries does the value of Geese appear to be fully appreciated, for, with proper management, few animals are of greater worth. If we consider that these birds not only afford us a wholesome but a delicate food; their smaller feathers and down contribute so largely to our nightly repose; their quills, so common in use for transmitting our thoughts to the present and future ages, we may truly estimate their intrinsic value as little inferior to the sheep; for the wool of the Goose is equally valuable, and the flesh as eagerly sought for: upon the whole therefore a Goose is a highly profitable animal, little inferior to that of a sheep, in certain situations; and thousands are annually bred where that animal could not exist. If the produce of the feathers, plucked three times a year, and the quills twice, and that upon an average each Goose produces six or seven young for the market annually, are considered, how much short they are of the profit yielded by an ewe in the same time, we shall leave to the calcu-

lation of the agriculturist. In most parts of the kingdom the Goose is an appendage to the farm-yard, and being a hardy bird, and subject to few distempers, she requires no care, is neither fed with hay nor corn, and consequently her value is clear profit. In the west of England, where Geese are plentiful, but are not associated into large flocks, they are neither cultivated nor managed with advantage; for though, in some parts of Devonshire, the poorest persons would deem themselves poor indeed that could not sleep upon a feather-bed, yet it is not the custom in that county to extend a profit upon these birds by shearing or plucking their feathers, although of double the value of the wool of the common sheep of that county.

Goose, Horra, or Horie. — See Goose, Brent.

Goose, Laughing. — See Goose, White-fronted.

[Goose, Pinkfooted. — *Yarrell*, iii. 158; *Hewitson*, cviii. 386. *Anser Brachyrhynchus*, *Temminck*, *Manuel d'Ornith.* vol. iv. p. 520. — "The bill is but one inch and five-eighths in length, considerably shorter than the head, narrow and much contracted towards the tip; the nail and the space from the nostrils to the base black, the intermediate space pink; the irides dark brown; head and neck dark ash-brown, the colour becoming lighter towards the lower part of the neck; back, wing-coverts, and tertials brownish grey, edged and tipped with dull white; the primary quill-feathers lead-grey, with white shafts; the secondaries still darker, almost bluish black; rump greyish ash-colour; upper tail-coverts white; tail-feathers grey, edged and tipped with white; neck in front, breast and belly pale ash-brown, with lighter coloured edges; sides, flanks, and thighs grey, broadly tipped with pale brown; vent, under tail-coverts, and under surface of the tail-feathers white; legs, toes, and membranes pink, tinged with vermilion; the claw black; the hind toe short; the membranes of the feet thick and fleshy. The whole length of an adult male twenty-eight inches. From the carpal joint to the end of the second quill-feather, which is rather the longest of the wing, seventeen inches and a half; the carpal joint of the wing furnished with the usual hard knob; the wings when closed reach an inch or more beyond the end of the tail." — *Yarrell*, iii. 145. Apparently a species of frequent occurrence in Europe and the British Isles, but not distinguished from the common Wild Goose until 1833. It is said to breed in great numbers in the small islands of

the Sound of Harris, as well as those of the interior of North Uist.]

Goose, Quink.—See Goose, Brent.

Goose, Rat, or Road.—See Goose, Brent.

Goose, Redbreasted.—[*Yarrell*, iii. 174.] *Anas ruficollis*, *Gmel. Syst.* ii. p. 511; *Ind. Orn.* ii. p. 841, 23. Red-breasted Goose, *Arct. Zool.* ii. p. 571, C.; *Lath. Syn.* vi. p. 455, 17; *Lewin, Br. Birds*, vii. t. 241. — This species is less than the Common Goose; weight about three pounds; length twenty-one inches. Bill brown; nail black; irides yellow-brown. The fore part of the head and crown black, passing backwards in a narrow stripe to the back; forehead and cheeks sprinkled with white; between the bill and eye an oval white spot, above which is a black line; chin and throat black; behind the eye is white, passing down the neck on each side; the middle of this white is rufous; the rest of the neck deep rufous; on the breast is a band of black, and another of white; belly white; sides striped with black; back and wings black; greater wing-coverts tipped with grey; upper and under tail-coverts white; legs black. This is a rare species in England; two or three instances only on record. One, Dr. Latham informs us, was shot near London in the severe frost of 1766; and another was taken alive in Yorkshire about the same time, soon became tame, and was kept amongst other Ducks in a pond. This beautiful species is said to breed in the northern parts of Russia.

Goose, Rain.—See Diver, Red-throated.

Goose, Rood.—See Goose, Brent.

Goose, Routherhooch.—See Goose, Bernacle.

[Goose, Ruddy.—See Sheldrake, Ruddy.]

Goose, Small, Grey.—See Goose, Bean.

Goose, Soland. }
[Goose, Solent.] } See Gannet.

[Goose, Spurwinged. — *Bewick's British Birds*, ii. 313; *Yarrell*, iii. 181. — "The bill is reddish yellow, with a jointed protuberance on the base of the upper mandible. The upper part of the head and neck are dingy brown; the auriculars and sides of the throat are white, spotted with brown; the lower part of the neck, sides of the breast, and all the upper plumage appear black, but this colour is lost, particularly in the scapulars and tertials,

which are most resplendently bronzed and glossed with brilliant green, and most of the outer webs of the other feathers partake of the same hue; on the bend of the wing, or wrist, is placed a strong white horny spur, about five-eighths of an inch in length, turning upwards, and rather inwards; the whole of the edges of the wing from the alula spuria to the elbow and shoulder are white, all the under parts the same. This beautiful bird is nearly of the bulk of the Wild Goose, but its legs and toes are somewhat longer, and of a red or orange-yellow."—*Yarrell*, iii. 182. *Bewick* records that a specimen of this African Goose was killed near St. Germain's, in Cornwall, in June, 1821; and *Yarrell* mentions the occurrence of a second specimen near Banff. It has no claim whatever to a place in the list of British birds.]

Goose, Whitefronted.—[*Yarrell*, iii. 162; *Hewitson*, cix. 387.] *Anas albifrons*, *Gmel. Syst.* ii. p. 509; *Ind. Orn.* ii. p. 842, 27. *Anas erythropus*, *Faun. Suec.* No. 116 (fem.) *Anser septentrionalis sylvestris*, *Bris.* vi. p. 269, 3; *Ib.* 8vo, ii. p. 433. *L'Oie rieuse*, *Buf.* ix. p. 81. Laughing Goose, *Edw.* t. 153. White-fronted Goose, *Br. Zool.* ii. No. 268, t. 94, 1; *Ib.* fol. 150; *Arct. Zool.* ii. No. 476; *Lath. Syn.* vi. p. 463, 22; *Lewin, Br. Birds*, vii. t. 240; *Pult. Cat. Dorset.* p. 20; *Walc. Syn.* i. t. 64; *Don. Br. Birds*, v. t. 102. — This is rather less than the Common Goose; is said to weigh sometimes as much as seven pounds. The bird now before us is of the general size, and was only four pounds four ounces. (It should, however, be remembered that great allowance is to be made in the weight of birds, as it depends on their condition, and whether the stomach is full or empty). The length twenty-nine inches. The bill is flesh-coloured, with an orange spot on the top at the base between the nostrils; the nail white; irides dusky. The feathers round the base of the bill are white, running some way on the forehead, bounded by dusky brown; the head, neck, and upper parts dark brown; the upper part of the back, scapulars, and wing-coverts margined with grey; breast, belly, and sides blotched irregularly with large black and white patches; vent, upper and under tail-coverts white; quills dusky; the primaries cinereous on the outer webs; tail dusky black, more or less margined with white; the outer ones almost wholly white; legs and feet orange. We have met with this species in general more plentiful than the Bean Goose. It visits the fenny parts of this country in small flocks in winter; is killed on the coast, as well as on our rivers, in severe weather; and not uncommonly brought to

market and sold for the common Wild Goose. It retires northward to breed about the month of March. Inhabits the north of Europe and Asia in summer; is frequent in Siberia and part of Russia; common at Hudson's Bay.

APPENDIX. — It is probable the young of this species do not attain the black markings on the under parts of the body till the ensuing breeding season, and the females appear to be entirely destitute of it. This last circumstance was noticed by Mr. Pennant, who well discriminated the species from the Bean Goose by the bill: he, however, however, omitted to remark that the white front in the female is a very narrow band at the base of the upper mandible, not unlike what is observed in the Bean Goose; from which circumstance, as well as its having no spots beneath, and occasionally having the nail of the bill black, these two birds are sometimes confounded. See Goose, Bean.

Goose, Wild.—See Goose, Grey-lag.

Gorcock.—See Grouse, Red.

Gourder.—See Petrel, Stormy.

Gowk.—See Cuckow.

[Goshawk.—See Hawk, Gos.]

[Grasshopper Warbler. — See Warbler, Grasshopper.]

Grebe.—A genus of birds, the characters of which are: Bill strong, slender, sharp-pointed. Nostrils linear. Lore, or skin between the bill and eyes, bare. Tongue slightly cloven. Tail none. Legs placed far behind, much compressed. Toes furnished on each side with a broad, plain membrane; the middle toe united to the inner as far as the first joint, and to the outer as far as the middle of the second.

Grebe, Black-chin. — *Colymbus hebridicus*, *Gmel. Syst.* ii. p. 594. *Podiceps hebridicus*, *Ind. Orn.* ii. p. 785, 11; *Br. Miscel.* p. 19, t. 70. Black-chin Grebe, *Br. Zool.* No. 227, t. 79; *Arct. Zool.* ii. No. 227; *Lath. Syn.* v. p. 292, 12; *Lewin, Br. Birds*, v. t. 201; *Walc. Syn.* i. t. 107. — This species is rather larger than the Little Grebe. The chin is black; fore part of the neck ferruginous; hind part mixed with dusky; belly cinereous and silvery white intermixed. Inhabits Tirée, one of the Hebrides.

SUPPLEMENT. — This bird, the description of which originated with Mr. Pennant, was considered rather larger than the Little Grebe, and a distinct species,

and was described from a specimen noticed in the Hebrides. In the 'British Miscellany' there is a representation of the male and female of this supposed species, accompanied with the nest and eggs, which were taken in a pond on Chelsea Common, in June, 1805. These appear to accord with the description given of the Black-chin Grebe; and we have another now before us which must be considered as similar; but we cannot avoid expressing an opinion that these, as well as that originally noticed by Mr. Pennant, are no other than unusually dark varieties of the Little Grebe. It should be recollected that the *Podiceps minor* is subject to a considerable variation in colour as well as size; and that in some the ferruginous, in others the dusky, predominates; and that the gradations can be traced to the very dark specimens that have been considered as distinct. Ours is rather a small specimen, being (as we believe) a female: the length is six inches and a half. The bill is black, with the point very pale: irides reddish: the upper part of the head, and the hind part of the neck, as well as the chin, are dusky black with an olivaceous tinge: the cheeks, fore part and sides of the neck chesnut: the whole bird, besides, dusky, mixed with ash-colour on the under parts; the rump mixed with ferruginous; the first nine quill-feathers pale brown tinged with rufous; the secondaries white on the inner webs; legs and feet dusky black with a greenish tinge. This bird was shot the latter end of August, in a pond close to the river Avon in Devonshire, and presented to us by our ornithological friend the Rev. Mr. Vaughan. Our specimen is considerably darker beneath than those figured by Mr. Sowerby are represented to be, and not spotted; and the chin is more inclining to black. Mr. Pennant's bird was thought to be larger than the Little Grebe; Mr. Sowerby's is said to be smaller, and ours is a medium. These very dark varieties are not common, but we suspect many would be found verging towards it in the summer months, when the older birds are in their fullest plumage. [This is the Little Grebe or Dabchick. See Grebe, Little.]

Grebe, Crested.—[*Yarrell*, iii. 403; *Hewitson*, cxx. 441.] *Colymbus cristatus*, *Lin. Syst.* i. p. 222, 7; *Gmel. Syst.* ii. p. 589. *Podiceps cristatus*, *Ind. Orn.* ii. p. 780, 1. *Colymbus major-cristatus*, et *cornutus*, *Raii Syn.* p. 124, A. 2; *Will.* p. 257, t. 61. *Colymbus cornutus*, *Bris.* vi. p. 45, 4, t. 5, f. 1; *Ib.* 8vo, ii. p. 370. *Le Grebe cornu-Buf.* viii. p. 235, t. 19. Greater Crested and Horned Ducker, *Will. Angl.* p. 340, 5, t. 61, f. 1; *Albin*, i. t. 81; *Plot's Hist.*

Staff. p. 229, t. 22. Crested Grebe, *Br. Zool.* ii. No. 223; *Ib.* fol. 132, t. K.; *Arct. Zool.* ii. p. 498, A.; *Lath. Syn.* v. p. 281, 1; *Lewin, Br. Birds*, v. t. 106; *Walc. Syn.* i. t. 102; *Don. Br. Birds*, iii. t. 68. *Colymbus cinereus-major*, *Raii Syn.* p. 124, A. 1; *Will.* p. 357; *Albin*, ii. t. 75. *Colymbus cristatus*, *Bris.* vi. p. 38, 2, t. 4; *Ib.* 8vo, ii. p. 368. Le Grebe huppé, *Bris.* viii. p. 233. Grey or Ash-coloured Loon, *Will. Angl.* p. 340, 4, t. 61, f. 4. *Colymbus urinator*, *Lin. Syst.* i. p. 223, 9; *Gmel. Syst.* ii. p. 593. *Colymbus*, *Bris.* vi. p. 34, i. t. 3, f. 1; *Ib.* 8vo, ii. p. 368. *Colymbus major* Aldrov, *Raii Syn.* p. 125, 6; *Will.* p. 256, t. 51. Le Grebe, *Buf.* viii. p. 227. Greater Loon, or Arsefoot, *Will. Angl.* p. 339, t. 51; *Edw.* t. 360, f. 2. Tippet Grebe, *Br. Zool.* ii. No. 222, t. 78; *Ib.* fol. 133; *Lath. Syn.* v. p. 283, 2. Provincial: Cargoose; Gaunt.—The variety of species authors appear to have made from this bird has obliged us to be more than usually diffuse in the synonyms; all of which we consider to be mere variety occasioned by age, sex, and season. A full-grown male Crested Grebe weighs between two and three pounds; length about two feet. The bill is two inches and three-quarters long, dusky brown along the ridge of the upper mandible and at the point; the rest reddish flesh-colour; irides and lore crimson. The head is much enlarged by a crest of a dusky colour, standing up on each side; the cheeks and throat are surrounded by long feathers of a ferruginous colour; from the bill to the eye is a black line, above which is a white one; the chin is white; the hind part of the neck, and the upper part of the body and wings, dusky brown; the under part of the neck, breast, and all beneath beautiful glossy white; the primary quill-feathers dusky, some of the inner ones tipped with white, the rest are nearly all white, which, when the wing is closed, makes an oblique bar of that colour across it; legs dusky on the outside; some wholly dusky green. In a male bird now before us the long feathers on the sides of the head and throat are mostly dusky, with a mixture of ferruginous; the sides under the wings, and the thighs, dusky brown; two or three of the outer scapulars, and the ridge of the wing, white; the lore is dusky green. This bird is probably of the second year, and not arrived at maturity. The female now before us did not weigh two pounds; the length twenty inches to the end of the rump-feathers; bill nearly the same, but lighter flesh-coloured; irides rufous-brown; the feathers about the head scarcely elongated; the upper part of the head, back of the neck, and whole upper parts dusky, dashed with ash-colour; on the crown of

the head the feathers are a little lengthened; the lore is brown, beneath which a streak of small brown feathers reach from the mouth to the eye; the cheeks are white, with a few black spots near the sides of the throat; the under parts are wholly of a fine satin-white from chin to vent; the shoulders, and smallest coverts of the wings, white; the eleven first quill-feathers are dusky, the four last of them tipped with white; the rest are white, but a few of them have a dusky streak down the shaft; the legs are dusky without, inside pale flesh-colour; inner edge yellow; feet dusky beneath, pale flesh-colour above; edges of the fins yellow; nails bluish. These and other varieties frequently occur; and it is probable that even in maturity two are scarcely alike in plumage, and that the full feathers of the head are not perfected till the third year. It must also be observed that this as well as many other birds vary in the colour of those parts destitute of feathers, such as the bill, lore, and legs; these change with the season, and are brightest in the spring. There can be no doubt that the Tippet Grebe is the female or young of this species. Dr. Latham seems to have been inclined to this opinion in his 'Synopsis;' and in his 'Index Ornithologicus' has judiciously brought them together. That author informs us that a large flock of the Crested Grebes appeared on the shores of the river Thames, many of which came under his inspection; amongst which he found the greatest variety about the head, from being perfectly without a crest, to the most complete one with all the intermediate stages. This bird is indigenous to England; breeds in the meres of Shropshire and Cheshire, and in the fens of Lincolnshire. The nest is large, composed of a variety of aquatic plants; it is not attached to anything, but floats amongst the reeds and flags, penetrated by the water. The female lays four white eggs, about the size of that of a Pigeon. Their principal food is fish, in pursuit of which they dive admirably. On the least appearance of danger they plunge under water, depending very little on their wings for safety. Is very rarely seen on land, and at this season seldom fly farther than from one side of the pool to the other. Mr. Pennant says it will carry its young upon its back, or under its wing, when they are tired, and feeds them with small eels. In the winter these birds visit our coasts and large rivers, especially in hard weather, when the standing waters are frozen.

Grebe, Dusky. — *Colymbus obscurus*, *Gmel. Syst.* ii. p. 592. *Colymbus minor*, *Bris.* vi. p. 56, 7; *Ib.* 8vo, ii. p. 373.

Podiceps obscurus, *Ind. Orn.* ii. p. 782, 4. Le petit Grebe, *Buf.* viii. p. 232. Black and White Dobchick, *Edw.* t. 96, f. 1. Dusky Grebe, *Br. Zool.* ii. No. 225, t. 78, 1; *Ib.* fol. 133, t. K. 1; *Arct. Zool.* ii. No. 420; *Lath. Syn.* v. p. 286, 5; *Lewin, Br. Birds*, v. t. 198; *Walc. Syn.* i. t. 106; *Don. Br. Birds*, ii. t. 44.—This species is rather larger than the Little Grebe; length eleven inches. Bill rather more than an inch long, and black; edges of the mandible in some red, others flesh-coloured; irides and lore red; sometimes the latter is flesh-colour or brown. The upper part of the head, neck, and body dusky; in some the cheeks are ferruginous, and forehead white; the under parts, from chin to vent, white; the breast and belly very glossy; in some the white on the throat almost encompasses the neck; the ridge of the wing is white; primary quills dusky; secondaries tipped with white; thighs mixed with dusky. In some the under parts of the neck and sides of the body are dusky grey, or ash-coloured; others spotted dusky between the legs; legs dusky green on the outside, flesh-coloured within; toes flesh-coloured; fins dusky. Inhabits the fens of Lincolnshire, where it breeds. Makes a nest in the same manner as the Crested Grebe; the eggs are also white. Is found in the winter in our inlets on the coast, particularly in Devonshire, where it is by no means uncommon. [This is identical with the Slavonian Grebe. See Grebe, Slavonian.]

Grebe, Eared.—[*Yarrell*, iii. 420; *Hewitson*, cxxi. 445.] *Colymbus auritus*, *Lin. Syst.* i. p. 222, 8; *Gmel. Syst.* ii. p. 590. *Podiceps auritus*, *Ind. Orn.* ii. p. 781, 3. *Colymbus auritus*, *Bris.* vi. p. 54, 6; *Ib.* 8vo, ii. p. 372. Le petit Grebe huppé, *Buf.* viii. p. 235. Eared Dobchick, *Edw.* t. 96, f. 2. Eared Grebe, *Br. Zool.* ii. No. 224, t. 79; *Ib.* fol. 133; *Arct. Zool.* ii. p. 499, B.; *Lath. Syn.* v. p. 285, 4; *Walc. Syn.* i. t. 104; *Lewin, Br. Birds*, v. t. 107; *Don. Br. Birds*, ii. t. 29. *Colymbus cristatus minor*, *Bris.* vi. p. 42, 3, t. 3, f. 2; *Ib.* 8vo, ii. p. 369.—This species is larger than the Dusky Grebe; length about one foot. Bill about an inch long, dusky, a little turned up at the point, reddish at the base; irides and lore crimson. The head is well clothed with feathers of a dusky black; the neck and upper parts of the body dusky; behind the eyes, on each side, is a tuft of feathers falling backwards of a ferruginous colour; the breast and under parts silvery white; the feathers on the sides ferruginous; legs black. This, like most of the genus, is subject to some variety. In some the head and tufts behind the eyes are brown; sides of the head white; neck white on the fore part, marked with ferru-

ginous spots; sides of the body marked the same; the back of the neck and upper parts of the body brown; some of the secondary quill-feathers and wing-coverts next the body are white. The female, in general, is not so full of feathers on the head. Inhabits the fens of Lincolnshire, where it breeds; lays four or five white eggs on a floating nest. Feeds on fish and water plants. Is sometimes found in winter in the inlets and rivers on the coast. Found in the north of Europe, in Iceland and Siberia.

SUPPLEMENT.—In the former part of this work it will be observed (under the head of Grebe, Slavonian) [see page 133] some doubts were expressed concerning the distinction of these birds as species; we have since had an opportunity of examining and comparing a fresh specimen of the auritus with our cornutus, which has enabled us to decide most clearly that they are perfectly distinct. So remarkably scarce do both these species appear to be, that amongst our numerous friends only one instance of each have come to us in a fresh state. To Colonel George, of Penryn in Cornwall, we are indebted for a very fine male specimen of the auritus, shot on the 15th of March, 1811, so that we may fairly conclude, as it was so near the breeding season, that its plumage is fully matured; we shall therefore give a description of this bird, and then point out the material distinction between the two species. The weight was one pound: the length thirteen inches and a half. The bill is black, an inch in length to the feathers on the forehead, a little reflected; the upper mandible is nearly straight at the point, the lower mandible decreases at about a quarter of an inch from the end, and from thence forms a conic point, which makes the bill appear to reflect more than it actually does: the lore is black: irides bright scarlet: head and neck black: chin spotted with white: the sides of the head furnished with long slender yellow feathers commencing behind the upper part of the eye, and extending downwards for more than an inch; these flow backwards; the lower series are shaded to a deep orange; the black feathers on the forehead and crown are long, and terminate abruptly as if cut with a pair of scissors, forming an obtusely conic crest: the back, scapulars, and coverts of the wings dusky black: the first six quills are dusky black; the three next black only on the outer web, the inner web white; the thirteen succeeding are wholly white: the lower part of the neck before is mottled black and white: the sides of the breast and sides of the body are similarly marked, the latter interspersed with ferruginous: legs and feet

dusky, of a bluish ash cast, pale on the inside of the former. Upon comparing this with our cornutus (which is also a male) the distinction of the species is at once made evident. The bay feathers which adorn the sides of the head, in the cornutus, originate from the base of the bill, pass over the eye, and are not at first longer than usual, but increase in length gradually from behind the eye, and, instead of flowing backwards, ascend, and stand above the head like ears; these also spread gradually as they recede backwards. The auritus, on the contrary, has these feathers in a very different situation, for they originate from a broad base behind the eye, extending partly towards the neck, and are long from the commencement; they are in fact a tuft of long yellow feathers that cover the black ones on the sides of the head; whereas in the cornutus there are no black feathers beneath, and the feathers on the cheeks and nape are much longer, giving the head a much more tumid appearance. Besides this essential difference in the aurited feathers of the two species, the general plumage is different, as may be observed by comparing the description. But whatever variety of plumage these two species may assume that gives them a nearer approach to each other, and might leave existing doubts in the minds of some Ornithologists, the shape of the bill alone will determine the species, and must set at rest all discrepancy of opinion. The bill of the cornutus does not reflect, but both mandibles are equally sloped, forming the point regularly conic; whereas the auritus has the upper mandible straight at the apex, and the under one sloped to form the bill into a point.

Grebe, Great-crested.—See Grebe, Crested.

Grebe, Horned.—See Grebe, Slavonian.

Grebe, Little.—[Yarrell, iii. 423; Hewitson, cxxi. 446.] *Colymbus cristatus*, Lin. Syst. i. p. 223, γ. *Colymbus minor*, Gmel. Syst. ii. p. 591. *Colymbus fluviatilis*, Bris. vi. p. 59, 9; *Ib.* 8vo, ii. p. 374. *Podiceps minor*, Ind. Orn. ii. p. 784, 9; *Raii Syn.* p. 125, A. 3; *Will.* p. 258, t. 61. *Yacapitzahoac*, *Raii Syn.* p. 177. Le Grebe de la rivier ou le Castagneux, *Buf.* viii. p. 244, t. 20. Little Grebe, *Br. Zool.* ii. No. 226; *Ib.* fol. 134, t. F.; *Will. Angl.* p. 340, t. 61; *Lath. Syn.* v. p. 289, 10; *Lewin, Br. Birds*, v. t. 200. *Didapper*, *Walc. Syn.* i. t. 105; *Don. Br. Birds*, iii. t. 56. Provincial: Dipper; Dobchick, or Dabchick; Small Doucker; Loon; Arsefoot. — The weight of this species is between six and seven ounces; length ten inches. Bill scarce an

inch long, brown; irides reddish hazel. The whole upper parts are of a rusty brown; pale on the rump; cheeks light ferruginous; the fore part of the neck grey; in some the cheeks are of the same colour; breast and belly glossy white, mottled with ash-colour and light ferruginous; in some the ferruginous is wanting, especially in the females; but both sexes are subject to vary in plumage according to age; legs dark dull green. This is the least and most plentiful species; is common in most lakes, slow rivers, small streams, and even fish-ponds. It seldom takes wing, but dives on the least alarm, and will remain under water amongst the reeds or other aquatic plants with only its bill above for respiration. Its nest is formed, like the rest of the Grebes, of a prodigious quantity of flags or other water-plants, but is generally fastened to the reeds or flags, in order to prevent its being carried away by the current. The eggs are five or six in number, of a dirty white; the shape oblong, less than those of a Pigeon. These are generally covered with weeds, so that when the bird quits her nest suddenly they are not exposed to view. Notwithstanding this precaution they are frequently destroyed by the water-rat. Mr. Pennant supposes that the quantity of vegetables collected to form the nest ferments and gives warmth to the eggs; but we never could discover the least warmth in the nest. In large rivers these birds are frequently devoured by pike and trout while they are diving in pursuit of small fish. We once took from the stomach of the last a water-rat weighing fifteen ounces; the trout weighed only four pounds. In the spring the males are very active in pursuit of the other sex, and then frequently fly along the surface of the water to a small distance: at this season it also emits a shrill chattering noise. After the breeding season it is frequently seen in some of our inlets of the sea, where it is said to feed on shrimps. This bird is not uncommon in most parts of the old continent, and some parts of America, particularly at Hudson's Bay.

SUPPLEMENT. — This species appears to be subject to considerable variation in colour, from a light brown to a dusky black on the upper parts, and from a silvery white to dusky beneath; the cheeks also in some are only tinged with ferruginous, in others that colour extends over the sides of the head and neck, more or less bright; and all the intermediate stages are to be found; and in a further advanced stage, where the chin becomes darker or dusky, brings it to the Black-chin Grebe of the 'British Zoology.' See Grebe, Black-chin.

Grebe, Rednecked. — [Yarrell, iii. 410; Hewitson, cxx. 443.] *Colymbus rubricollis*, *Gmel. Syst.* ii. p. 529. *Colymbus subcristatus*, *Gmel. Syst.* ii. p. 590. *Podiceps rubricollis*, *Ind. Orn.* ii. 783, 6; *Bewick, Br. Birds*, t. p. 152. Le Grebe à joues grises, *Jougrise, Buf.* viii. p. 241. Red-necked Grebe, *Arct. Zool.* ii. p. 499, C.; *Ib. Sup.* p. 69; *Lath. Syn.* v. p. 288, 7; *Ib. Sup.* p. 260, t. 118; *Lewin, Br. Birds*, v. t. 199; *Walc. Syn.* i. t. 103; *Don. Br. Birds*, i. t. 6. — Length eighteen inches; bill nearly two inches long; sides of the base of both mandibles, for three-quarters of an inch, of a fine orange-yellow, the rest black; lore brown or blackish; irides fine orange-red; the crown, and sides of the head above the eyes, nearly black, and the feathers a little elongated; the hind part of the neck, the back, and wings dark brown; six of the middle secondaries white, a little mottled with dusky at the tips; the two or three next outward ones more or less white near the tips and inner webs; the chin, sides under the eyes, and fore part of the neck for above an inch pale ash-colour; the rest of the neck ferruginous-chestnut, mottled with dusky; from thence to the vent white, like satin, mottled on the sides with dusky irregular spots; legs black. The description of this rare species we have borrowed from Dr. Latham's Supplement to his 'Synopsis,' who says two of these birds were taken alive in East Kent, in April, 1786. He also mentions two other specimens, one killed at Teignmouth in January, the other at Sandwich in October. The first of these had the colours of the head and neck much blended, and the ferruginous of the neck only just breaking forth. The other weighed nineteen ounces and a half; length twenty-one inches and a half; the bill yellow at the base, dusky olive towards the tip; lore dusky; irides pale brown; head quite smooth; the ferruginous colour of the neck much blended with dusky; the white on the under parts greatly mottled with the same; legs without dusky, within greenish yellow. Another variety is mentioned to have a band of white across the lower part of the neck. This bird is supposed to inhabit Denmark or Norway.

SUPPLEMENT. — Early in the year 1809 five of these birds were seen together on Slapton Ley; four of them were killed, two of which were eaten, or attempted to be devoured by the natives, but finding them extremely rank they threw away the third; and the fourth fortunately came to our hands, through the means of another ornithological friend, the Rev. Mr. Holdsworth. This gentleman, who has paid particular attention to the habits of such birds as have fallen under his notice, assures us

he had frequently observed these birds on wing, and, from their singular manner of flight, considered them as birds he had never before seen; but it was some time before he could procure a specimen; and his utmost exertions could not save either of the others from destruction, but only fragments that showed their actual existence. The bird in question, although a male, had not the least appearance of the rufous neck, and was of course either a young bird or in its winter plumage, and in that season may be destitute of such mark. Those who may have considered this species as belonging to the Crested Grebe cannot possibly have compared them. Our specimen was shot on the 3rd of February. It weighed twenty-three ounces: the length seventeen inches. The bill is an inch and a half long to the feathers on the forehead, of a dusky colour, with the base and under part of the lower mandible, and a streak from the nostrils to the corner of the mouth of the upper mandible, bright yellow: irides hazel: lore dusky. The top of the head, back of the neck, and back dusky, the feathers on the last slightly margined with cinereous: the chin, throat, and cheeks white, the last dingy white, extending on each side towards the back of the head: the under part of the neck brown, with a slight tinge of rufous; but the lower part of the neck, upper breast, and the sides of the body white, obscurely spotted with dusky; the rest of the body beneath is white: the scapulars, rump, prime quills, and coverts of the wings all black, except a patch of pure white on the shoulder, or junction of the wing with the body, and the ridge of the wing: thirteen of the secondary quills are white, the two first and two last with more or less black on their outer webs, the others pure white; the tertials are black: legs and feet pale greenish yellow, the former, as well as the webs, dusky on the outside. Upon dissection the stomach was found to be distended with feathers and small seeds. Being struck with so singular an appearance, we carefully washed and dried the contents of the stomach, and by that means discovered that the feathers had been collected from its own body. For what purpose could such a quantity have been swallowed, since few of the piscivorous birds disgorge the refuse like the Falcon tribe? Such a quantity can scarcely be supposed to have been taken into the stomach in the act of cleaning and dressing its plumage, unless they had been long collecting and were impassable; many indeed were completely comminuted, and fit to pass into the intestines. This singularity has been observed also in the Crested Grebe. There

was nothing remarkable in the trachea, except that the branchi, or divarications, were hard and bony, particularly on the inside, where there were scarcely any membranous divisions, and consequently little or no flexibility. We shall again repeat that, notwithstanding Mr. Pennant and some others may have doubted whether this was not a variety of the Crested Grebe, we can, from a comparison of the birds, declare they are perfectly distinct. This is smaller, much shorter, and a more truss-shaped bird, in size between the Dusky and the Crested species; the neck is much shorter, and the bill is materially different. In fact there is full as much difference between these as between the Dusky and the Little Grebe, independent of the plumage, which in all its variations is essentially distinct.

Grebe, Slavonian. — [Yarrell, iii. 414; Hewitson, cxxi. 444.] *Podiceps cornutus*, Ind. Orn. ii. p. 783, 5, β . *Colymbus*, sive *Podiceps minor*, Raii Syn. p. 190, 14. *Colymbus cornutus minor*, Bris. vi. p. 50, 5; Ib. 8vo, ii. p. 371. Le petit Grebe cornu, Buf. viii. p. 237. Horned Grebe, Lath. Syn. v. p. 288, 6, var. A. — This bird is larger than the dusky Grebe; length thirteen inches and a half to the end of the rump-feathers; breadth twenty-two inches. The bill is near an inch long, dusky, lighter at the base of the under mandible, and inclining to pink, the very tip light horn-colour; lore crimson; irides the same, but round the pupil a circle of white, and the exterior edge of the iris is shaded to nearly white. The head is greatly enlarged by the feathers; those on the top are black, tinged with dark green; the cheeks and throat the same; the feathers very long, forming a sort of ruff; from the base of the upper mandible originates a broad bar of dull orange-yellow that passes through the eye to the hind-head, growing gradually broader; these form a tuft on each side, and are somewhat erectable, appearing like ears; the forehead dusky ferruginous; the back of the neck and upper part of the back dark brown, dashed with ferruginous; the back, scapulars, and rump dusky, faintly edged with cinereous; the wing-coverts and twelve first quill-feathers brown; the thirteenth white on the inner web; the eleven next all white, except the last, which is brown on the outer web; the chin is black, a little mottled with white; the under part of the neck and upper breast running far behind and down under the wings, bright ferruginous-chestnut; the rest of the under parts glossy satin-white; the back part of the thighs ferruginous-brown; legs dusky on the outside, pale on the inside; toes pale down

their middle, dusky at the edges. This bird, which was rescued from the hands of a fisherman as he was just going to pick it, was killed near Truro in Cornwall, on the 4th of May, 1796, and presented to me by a friend. It was a male bird, and is now in my museum. It had no labyrinth, nor anything uncommon in the trachea. We are very much inclined to believe, with Dr. Latham, that it is a variety of the Horned Grebe, *Synopsis*, v. p. 287, 6, t. 91; the Eared or Horned Dobeck, *Edw. t.* 145; the *Colymbus cornutus*, *Lin. Syst. i.* p. 591. Dr. Latham says it is found in Slavonia. Mr. Pennant says, in his *Arct. Zool. ii.* No. 417, that the Horned Grebe is found at Hudson's Bay in June, and breeds in fresh water; appears at New York in the spring, where it is called the Water Witch, from its vast quickness in diving. We cannot, however, help expressing our doubts concerning these birds. If we consider that the Grebes are all subject to great variety in plumage, occasioned by age, and if we compare the various descriptions given by authors of the Horned or Slavonian Grebe, we shall not find any very essential difference from the Eared Grebe, at least not more than there is in individual subjects of that species. The size is nearly the same; the most material distinction is in the colour of the neck and breast. We must, however, leave this matter to those who have more frequent opportunities of examining the Eared Grebe in those parts where it is known to breed.

SUPPLEMENT. — This is now ascertained to be perfectly distinct from the aurited species. See Grebe, Eared.

Grebe, Tippet. — See Grebe, Crested.

[Green Grosbeak. — See Grosbeak, Green.]

[Green Sandpiper. — See Sandpiper, Green.]

[Greenfinch. — See Grosbeak, Green.]

[Greenheaded Bunting. — See Bunting, Ortolan.]

Greenlegged Horseman. — See Greenshank.

Greenshank. — [Yarrell, ii. 665; Hewitson, xci. 336.] *Scolopax glottis*, *Lin. Syst. i.* p. 245, 10; *Gmel. Syst. ii.* p. 664; *Ind. Orn. ii.* p. 720, 21. *Limosa grisea*, *Bris. v.* p. 267, 2, t. 23, f. 1; *Ib. 8vo, ii.* p. 278. La barge variée, *Buf. vii.* p. 503? *Pluvialis major*, *Raii Syn.* p. 106, A. 8, — p. 190, 6; *Will. p.* 220, t. 55; *Ib. Angl. p.* 298. Green-legged Horseman, *Albin, ii.* t. 69. Greenshank, *Br. Zool. ii.* No. 183; *Ib. fol.*

121, t. C. 1; *Arct. Zool.* ii. No. 379; *Lath. Syn.* v. p. 147, 18; *Ib. Sup.* p. 245; *Lewin, Br. Birds*, iv. t. 163; *Walc. Syn.* ii. t. 142. Provincial: Greater Plover. — The length of this species of Snipe is fourteen inches; weight about six ounces. Bill about two inches and a half long, dusky, slender; irides hazel. The head, back and sides of the neck, and back cinereous, streaked with dusky; from the upper mandible to the eye a white streak; the under parts, from chin to tail, white, but the white part is narrow down to the fore part of the neck; lower part of the back and rump white; greater wing-coverts, scapulars, and three or four of the quill-feathers next the body brown, glossed with green; the edges of each feather scalloped with dusky and ash-colour, some of them barred on both webs; smaller coverts dusky; quills dusky, the inner webs of some spotted with white; tail white, crossed with dusky bars; legs very long and slender, of a dusky green colour; the outer toe united to the middle one as far as the first joint. In some the coverts of the wings, scapulars, and upper part of the back are ash-colour. Such are probably adults, for we have observed the spots and bars frequently found on a variety of Snipes and Sandpipers, as well as others, in the autumn, are rarely met with in the spring. Some variation is also observed in the length of the bill and legs; and the bare part of the thigh is in some nearly two inches above the knee, in others not above an inch. These birds are sometimes seen in small flocks on our coasts in winter; as also in the marshes and fens contiguous to the sea. Some few are supposed to remain with us all the summer, and to breed in our fens, from whence we received an egg said to belong to this bird. It is rather less than that of the Lapwing, and not very unlike in shape and colour, being of an olive-brown, covered with dusky spots all over, but smaller than those of the Lapwing. The greater part, however, retire northward to breed, and are found in Sweden, Russia, and Siberia. Has been also observed in America in the province of New York.

APPENDIX. — A very elegant variety of this species having been submitted to our examination by Mr. Bullock, which differs materially from what has hitherto been described, requires notice. The upper parts of the bird are marked as usual, but darker, and the spots larger on the top of the head, back, and scapulars; the newly-moulted feathers on the two last (known by their comparative brightness) are black, with the margins deeply and angularly scalloped with white; these markings are also particularly elegant on the tertials: the tail-coverts only are white; the rump

having a mixture of dusky black and grey in bars: the tail is barred as usual with zigzag lines: the throat is white: fore part of the neck and breast streaked and spotted with black, the spots increasing in size on the latter: the middle of the belly white, but the feathers on the sides are barred with black: some of the under tail-coverts are plain white, others are barred with black: the legs appear to have been yellowish, or perhaps pale green, which in drying turns to dull yellow. The size of the bird, and the length of the bill and legs, as usual. This is an interesting specimen in a state of moult, showing the newly-acquired feathers on the back, scapulars, and coverts of the wings to have all the spots much larger and better defined than on the old intermediate feathers, which are dark cinereous, or dusky, with grey spots. It was not noticed at what season this bird was killed, but we should suspect in the spring, a little before the usual time of departure, and that it had just begun to throw out its summer plumage.

[Green Woodpecker. — See Woodpecker, Green.]

Grey, or Gray. — See Gadwall.

Grey Cootfooted Tringa. — See Phalarope, Grey.

[Greyheaded Wagtail. — See Wagtail, Grey-headed.]

[Grey Phalarope. — See Phalarope, Grey.]

[Grey-lag. — See Goose, Grey-lag.]

Grey-Pate. — The young of the Goldfinch, so called by the birdcatchers before the crimson on the head appears. See Finch, Gold.

[Grey Plover. — See Plover, Grey.]

[Grey Shrike. — See Shrike, Great Grey.]

Grey-Skit. — See Rail, Water.

[Grey Snipe. — See Snipe, Brown.]

[Grey Wagtail. — See Wagtail, Grey.]

[Griffon Vulture. — See Vulture, Griffon.]

Grosbeak. — A genus of birds, the characters of which are: Bill strong, both mandibles convex and thick. Nostrils small, round. Tongue truncated. Toes, three before, one behind.

[Grosbeak, Common. — See Grosbeak, Haw.]

Grosbeak, Green.—[Yarrell, i. 552; Hewitson, lii. 204.] *Loxia Chloris*, *Lin. Syst.* i. p. 304, 27; *Gmel. Syst.* ii. p. 854; *Raii Syn.* p. 85, A. 4; *Will.* p. 129, t. 44; *Ind. Orn.* i. p. 382, 39; *Bris.* iii. p. 190, 54; *Ib.* 8vo, i. p. 359. Le Verdier, *Buf.* iv. p. 172, t. 15. Greenfinch, or Green Grosbeak, *Br. Zool.* No. 117; *Ib.* fol. 107; *Arct. Zool.* ii. p. 253, B.; *Will. Angl.* p. 246, t. 44; *Albin*, i. t. 58; *Lath. Syn.* iii. p. 134, 36; *Ib. Sup.* p. 152; *Lewin, Br. Birds*, ii. t. 69; *Pult. Cat. Dorset.* p. 11; *Walc. Syn.* ii. t. 108.

[Greenfinch of Yarrell, as cited above.] Provincial: Green Linnet. — This species of Grosbeak is rather larger than the House Sparrow; weight near eight drams; length six inches and a half. The bill is thick and whitish; irides dark hazel. The head and back yellowish green; the edges of the feathers greyish, inclining to ash-colour about the sides of the head and neck; the rump and breast more yellow; the greater quills are yellow on the outer webs; those next the body greyish; the tail is somewhat forked; the middle feathers dusky; the four outer feathers on each side are yellow on their exterior webs; legs flesh-colour. The plumage of the female is much less vivid, inclining to brown. This is a very common bird in most parts of England in summer; becomes gregarious in winter, flocking with Chaffinches and Yellowhammers; but in severe weather entirely quits some districts. It is rather a late breeder. The nest is composed of small dry twigs, bents, and moss interwoven with wool, and lined with hair and feathers; is commonly placed amongst ivy surrounding a tree, or in some thick bush. The eggs are four or five in number, white, speckled with rusty red at the larger end, much like those of the Linnet, but larger; their weight thirty-seven grains. Its food is principally seed and grain. The native song of this bird is trifling, but in confinement it becomes very tame and docile, and will catch the notes of other birds.

Grosbeak, Haw.—[Yarrell, i. 558; Hewitson, lii. 205.] *Loxia Coccothraustes*, *Lin. Syst.* i. p. 299; *Gmel. Syst.* ii. p. 844; *Raii Syn.* p. 85, A. 1; *Will.* p. 178, t. 44; *Ind. Orn.* i. p. 371, 4; *Bris.* iii. p. 219, 1; *Ib.* 8vo, i. p. 370. Le Grosbec, *Buf.* iii. p. 444, t. 27, f. 1. Grosbeak, or Hawfinch, *Br. Zool.* No. 113; *Ib.* fol. 105, t. U. f. 1; *Arct. Zool.* ii. p. 354, C.; *Will. Angl.* p. 244, t. 44; *Albin*, i. t. 56; *Edw.* t. 188; *Lewin, Br. Birds*, ii. t. 67; *Lath. Syn.* iii. p. 109, 4; *Ib. Sup.* p. 148; *Pult. Cat. Dorset.* p. 11; *Walc. Syn.*

ii. t. 206; *Don. Br. Birds*, ii. t. 43. [Hawfinch of Yarrell and Hewitson, as cited above.] Provincial: Cherry Finch.—The length of this species is six inches; weight about two ounces. The bill is three-quarters of an inch long, half an inch thick at the base, and remarkably strong, of a pinkish hue when alive, but soon fades to a light brown horn-colour; irides gray. The crown of the head and cheeks are bay; between the bill and eye, and round the nostrils, is black; the chin and throat the same; hind part of the neck ash-coloured; the back and scapulars chesnut-brown; rump and upper tail-coverts light brown, inclining to ash-colour; the breast light brown, tinged with blossom-colour, whitish toward the vent; the greater quills are dusky black; the points, from the fourth, including the secondary quills, as far as the fifteenth or sixteenth, are glossy bluish black, truncated at their ends, and four or five of them bent in form of a battle-axe; on the middle of their inner webs a white spot; three or four of the lesser quills close to the body are the colour of the back; the smallest coverts dusky; beneath a few are white, making a small bar of that colour on the wing; the greatest coverts of the secondary quills are cinereous-grey on their outer webs; the tail is black; the inner webs half white from the points, except the two middle feathers; the coverts of the tail are very long, and reach nearly to the end; the legs are pale brown. We are informed the female wants the black spot on the chin. It is probable, however, such may be a variety, as we have examined a great many of both sexes, all of which had more or less black on that part; but the females in general have less of the bay-colour on the head. However, this is not to be depended on, as they vary considerably in that part from age. Dr. Latham says this species is subject to great variety of plumage; that the top of the head in some is whitish, surrounded with rufous, in others wholly black; that the band in the wings in some is almost white, in others grey, and again wholly wanting; and that specimens have been seen wholly black. These birds usually visit England in the autumn, and continue with us till the month of April. It appears in small flocks, seldom more than four or five, but are in no parts common. We once saw as many as a dozen together, feeding on the hawthorn berries in Badmington Park in Gloucestershire. The facility with which they break the hard stones of that fruit to get at the kernel is astonishing. It is done apparently with as much ease as other small birds break hempseed. No instance has been recorded of its breeding with us; but Dr. Latham assures us he

had one sent to him in the summer months. What the song of this bird may be in the season of love, authors are silent about; but we have heard it sing pleasantly, in low plaintive notes, even in winter, when the weather has been unusually warm. It is more plentiful in France; appears about Burgundy in April, where it breeds. The nest is composed of dried fibres intermixed with liverwort, and lined with finer materials. The eggs are of a bluish green, spotted with olive-brown, with a few irregular black markings. Is also common in Italy, Germany, Sweden, and part of Russia.

Grosbeak, Pine.—[Yarrell, i. 608; Hewitson, liii.* 210*.] *Loxia Enucleator*, Lin. Syst. i. p. 299, 3; Gmel. Syst. ii. p. 845; Ind. Orn. i. p. 372, 5. *Coccothraustes canadensis*, Bris. iii. p. 250, 15, t. 12, f. 3; Ib. 8vo, i. p. 378. Le Dur-bec, ou Grosbec de Canada, Buf. iii. p. 457. Greatest Bulfinch, Edw. t. 123, 124, M. and F. Pine Grosbeak, Br. Zool. i. No. 114, t. 49, f. 2; Arct. Zool. ii. No. 209; Ib. Sup. p. 64; Lath. Syn. iii. p. 111, 5; Ib. Sup. p. 148; Lewin, Br. Birds, ii. t. 68; Walc. Syn. t. 207; Don. Br. Birds, i. t. 17.—This is larger than the last species; weight rather more than two ounces; length above seven inches. Bill thick at the base and hooked at the point, colour dusky; irides hazel. The head, neck, breast, and rump crimson; the back and lesser coverts of the wings black, edged with reddish; the greater wing-coverts tipped with white, forming two bars on the wing; quill-feathers dusky, edged on their external webs with dirty white; lower part of the belly and vent ash-colour; the tail is a little forked, dusky, margined whitish; legs brown. The female is brown, tinged with green; in some yellowish. This bird is met with in this kingdom only in the most northern parts, inhabiting the pine forests of Scotland, feeding on the seeds of that tree. It is supposed they breed in those parts, as Mr. Pennant saw them flying about the pines in the forest of Invercauld, in Aberdeenshire, on the 5th of August. Dr. Latham observes they are found in North America and Hudson's Bay; that they make their nest in trees at a small height from the ground, composed of sticks, lined with feathers, laying four white eggs. Is found also in the pine forests of Siberia, Lapland, and the northern part of Russia.

Grosbeak, Whitewinged.—SUPPLEMENT.—*Loxia falcirostra*, Ind. Orn. i. p. 371. Whitewinged Crossbill, Lath. Syn. iii. p. 108.—In the extract of the minute-book inserted in the 7th vol. of the 'Linnean Transactions,' mention is made that a female of this

species was shot within two miles of Belfast in Ireland, in the month of June, 1802, communicated by Mr. Templeton, of Orange Grove, near Belfast. We cannot help expressing a doubt whether the bird in question was any other than an accidental variety of the Common Crossbill, *Loxia recurvirostra*, with some accidental white on the wings, a circumstance attendant on most species of birds. And we are the more inclined to suspect this was the case, since there is no other distinction between the two species than the two white lines across the wings of the American bird; and were considered by Mr. Pennant as the same. If, however, it actually was the *Loxia falcirostra*, we can have no doubt that it must have made its escape from a cage, as that species is wholly confined to America, from whence we do not believe any birds migrate into the southern parts of Europe. Similar captures have frequently been made in England, to our knowledge. We recollect a rich South American ship was stranded at Laugharn, on the coast of Caermarthenshire, and a great many caged birds of that country obtained their liberty; many of these were afterwards shot at a considerable distance from the fatal spot; the game-keeper belonging to Mr. Vaughan, of Golden Grove in the same county, killed several of these birds. A Painted Bunting, *Emberiza ciris*, was taken alive on Portland Island in the year 1802, having doubtless made its escape from on board some ship going up Channel, or that came to anchor off Weymouth. This bird we saw alive in the possession of Mrs. Steward, of that place. The Golden breasted Trumpeter (*Psophia crepitans*), and the American Quail, or Maryland Partridge, have both been taken in England; of the latter a male was shot near Mansfield, by Mr. Harrison, and was afterwards sent to Lord Stanley, from whom we received the information. Although foreign to our subject (as no one can suppose a Brazilian bird can be introduced into the British catalogue!), yet as the Trumpeter was taken at large, we shall state the circumstances as related to us by letter from Lord Stanley. His Lordship says:—"The Trumpeter was found in the neighbourhood of my father's, in Surrey, in the habit of attending a farmer's yard, whither it had come of itself and associated with his poultry. When first observed by us it was on occasion of Lord Derby's hounds running through the yard, when it joined, and the servants told me kept up with the hounds for near three miles. I think they said it did so more than once. When I first saw it, it was picking up some scraps of meat (of which it seemed very fond) in our back yard, whither I found it had

followed some of the farmer's children, and, liking its new situation, remained there. It was very small, and evidently a young bird, and not very handsome, but as a curiosity Lord Derby made inquiries about it, and, finding that it could not be traced to its right owner, a small present to the possessor put us in possession of it." His Lordship also informed us that it died on its journey into Lancashire. This interesting account in the biography of the Trumpeter should not be lost, and therefore we trust this little digression, in order to bear record of it, will be excused. The American Quail has been turned out in some parts of the British Empire, with a view to establish the breed, but we believe without effect. The late General Gabbitt liberated many on his estates in Ireland, but in two years the breed was lost. These and various other instances might be mentioned; but such not bearing a shadow of self-migration must not be introduced into the catalogue of British birds. If such accidental fugitives were introduced into the Fauna of this country, we might soon expect to find our catalogue swelled with quadrupeds and amphibia, as well as American and equatorial birds. The tortoise, *Testudo græca*, has already found its way into the catalogue of the indigena of British Zoology, and we may expect that the rattle-snake and alligator may also make their escape from their prisons, and ramble like the Grecian tortoise, which, having been taken in the cultivated parts of Devon, has been considered as a native. [It will be seen, on referring to Crossbill, American Whitewinged and European Whitewinged, pp. 37 and 38, that the occurrence of these birds in Britain is not so rare a circumstance as is implied from the foregoing observations.]

Grouse. A genus of birds, the characters of which are: Bill convex, short, strong. Skin above the eyes naked, scarlet. Nostrils hid in the feathers. Tongue pointed. Legs feathered.

Grouse, Black.—[*Yarrell*, ii. 351; *Hewitson*, lxix. 278.] *Tetrao Tetrix*, *Lin. Syst.* i. p. 274, 2; *Gmel. Syst.* ii. p. 784; *Ind. Orn.* ii. p. 635, 3; *Bewick, Br. Birds*, i. t. p. 310; *Rural Sports*, ii. t. p. 413. *Urogallus minor*, *Raii Syn.* p. 53, A. 2; *Will.* p. 124, t. 31; *Bris.* p. 186, 2; *Ib.* 8vo, i. p. 52. Le Coq de bruyeres a queue fourchue, *Bris.* ii. p. 210, t. 6. Black Cock, Black Game or Grouse, Heath Cock, *Br. Zool.* i. No. 93, t. 42; *Ib.* fol. 85, t. M. 1, 2; *Arct. Zool.* ii. p. 314, C.; *Will. Angl.* p. 173, t. 31; *Albin*, i. t. 22; *Lath. Syn.* iv. p. 733, 3; *Ib. Sup.* p. 213; *Lewin, Br. Birds*, iv. t. 133; *Pult. Cat. Dorset.* p. 7; *Walc. Syn.* ii.

t. 181; *Don. Br. Birds*, iv. t. 97. Provincial: Heath Fowl, or Heath Poult.—[The male of] this species sometimes weighs as much as four pounds; length about twenty-three inches. Bill dusky; irides hazel. The head, neck, and whole body are of a glossy blue-black, particularly about the neck, breast, and rump; over the eye the bare scarlet skin is granulated; the coverts of the wings dusky brown; the four first quill-feathers black; the next white at the bottom; the lower half and tips of the secondaries white; under wing-coverts white; the thighs are dark brown, sometimes marked with a few white spots; the tail consists of sixteen black feathers; the exterior ones bend outwards, and are much longer than those in the middle, which makes the tail very forked; the under tail-coverts pure white; legs covered with hair-like feathers of a dark brown, speckled with grey; toes pectinated. The female weighs about two pounds; the plumage is very different from that of the male. The general colour is ferruginous, barred and mottled with black above; the under parts paler, with dusky and brown bars; the tail-feathers are straight and even at the end, variegated with ferruginous and black. The Black Grouse is at present chiefly confined to the more northern parts of this kingdom, population and culture having driven them from the south, except in a few of the more wild, uncultivated parts; in the New Forest in Hampshire, Dartmoor and Sedgemoor in Devonshire, and the heathy hills in Somersetshire, contiguous to the latter. It is also found in Staffordshire, and in North Wales, and again in the north of England; but nowhere so plentiful as in some parts of the Highlands of Scotland. The males are polygamous, and fight desperately for the females. In the month of April the male places himself on an eminence as soon as it is light in the morning, crows and claps his wings, to which the females resort. After the courting season the males associate peaceably together in small packs; are fond of woody, heathy, and mountainous situations; but will occasionally visit the corn-fields in the autumn, retiring almost wholly to woods in the winter, and perch on trees. The female lays six or seven dirty white eggs, blotched with rust-colour, about the size of those of a Pheasant. These are deposited amongst the highest heath, without much appearance of a nest. The young follow the female for some time. The males are scarcely distinguishable from the other sex till they are above half-grown, when the black feathers begin to appear first about the sides and breast. Their food is chiefly the tops of heath and birch, except when the

mountain berries are ripe, at which time they devour bilberries and cranberries most voraciously.

SUPPLEMENT.—Mr. Pennant, in his Supplement to the 'Arctic Zoology,' says the Black Cock has been known in Sweden to breed with the common domestic Hen, which produced a barren spurious generation. About Avemoor in the Highlands of Scotland, the Black Cock is called Kelochdoe ('Thornton's Tour,' p. 159). This bird does not appear to bear domestication well, nor to breed in confinement; many attempts have been made by the present Lord Carnarvon (on whose property in the west of England it still ranges at large), but with no success: and others that were in the menagerie belonging to the late Lord Carnarvon were as sterile. The females, though short-lived in confinement, appeared to bear it better than the other sex. These birds, which formerly were abundant over the mountainous, heathy, and woodland parts of Devonshire and Somersetshire, are greatly reduced, and would long ago have been extirpated, was it not for a few of the most extensive properties being highly preserved. But notwithstanding every precaution, they do not increase, even where the hand of protection is held out to them. The encroachment of cultivation upon their heathy range must limit their numbers, and in time this noble species will be totally lost in the southern parts of the island, in spite of the attempts of individuals to prevent it. On Dartmoor and its neighbourhood this bird is now become extremely scarce. In Sedgemoor and the neighbouring hills, especially those belonging to Lord Carnarvon and Sir Thomas Acland, they are in the most abundance. In the autumn of the year 1808, his Lordship thought there were about twelve or fourteen packs or broods upon his extensive moors at Pixton, and at least that number of old cocks. The chain of heathy hills that still protect these birds extends eastwards from the forest of Exmoor in Devon, into Somersetshire, but these are interspersed with cultivated ground, to which they sometimes ramble and are destroyed; so that were it not for the very extensive and almost impenetrable woods that clothe the valleys and sides of the hills, these noble birds could not long exist. The same tract of extensive woods and waste that affords protection to the Black Grouse and Pheasant, also gives shelter to the only few remaining of that royal animal, the Stag, which are now to be found in a perfect state of nature on the south side of the Tweed; and of these it is computed there are now about thirty killable, or of four years' old, independent of hinds,

within the district before specified. Before we quit the Black Grouse, we must remark that it still exists in Hampshire and in Staffordshire. The Rev. Mr. Dickinson, of Blimhill, in the last-mentioned county, assured us that a pair visited his parish in the year 1802, and fed almost entirely on acorns; and that in Cannock Chase, in that county, these birds are frequently observed to feed upon hawthorn berries. We must here notice that our astonishment was not a little excited to observe, in a very respectable publication, the following remark:—"It is the general opinion of sportsmen that the Grouse species have no tongue, but (adds the author) this could only have arisen from their being viewed when expiring, or after death; for upon inspecting the gizzard, the tongue will be found to have retreated there with all its ligaments." We need scarcely remark that an assertion so unnatural and so unphilosophical, as that a bird should be able, in the last act of deglutition, to force its tongue out by the roots and swallow it, is not more founded in fact than that they have no tongue. The naturalist, however, will find no difficulty to discover the tongue, in all the species belonging to this genus, in its proper place, whether dead or alive.

Grouse, Great.—See Grouse, Wood.

Grouse, Hybridus.—[Yarrell, ii. 346.] *Tetrao hybridus*, *Faun. Suec.* No. 201. *Tetrao Tetrix*, *Ind. Orn.* ii. p. 636, 3, ♂; *Gmel. Syst.* i. p. 784, 2 γ. *Urogallus minor punctatus*, *Bris.* i. p. 191, A.; *Ib.* 8vo, i. p. 53. Spurious Grouse, *Br. Zool.* i. p. 268; *Arct. Zool.* ii. p. 314, B.; *Ib. Sup.* p. 62; *Lath. Syn.* iv. p. 734; *Ib. Sup.* p. 214.—This bird has been described by Linnæus and others as a distinct species, or a mixed breed between the Black and Wood Grouse. It is said to differ from the Black Grouse in having reddish spots on the neck, breast, wings, and thighs; and in being of a superior size. Is said to have been formerly met with in Scotland. Dr. Latham has considered it as a mere variety of the Black Grouse. In his 'Synopsis Supplement' he has recited the accounts given by Dr. Sparrman, who says it is of the size of the female Great or Wood Grouse, and supposed to be produced from that breed and the male Black Grouse; that it varies greatly in colour, scarcely two being found exactly corresponding; and that it is a remarkably stupid bird. Its notes resemble most that of the Wood Grouse, but louder, harsher, and every way more disagreeable. This gentleman likewise remarks that the birds hitherto met with, whether associating with the male birds or females, are ever

of the male sex; and that it is not uncommon in the woods of Sweden and Finland. Mr. Pennant, in his Supplement to the 'Arctic Zoology,' says the Spurious Grouse, or Racklehanen of the Swedes, is a breed between the cock of the Black Grouse and a female of the Great Grouse: its note partakes of both species. It is restless, constantly moving from tree to tree; is therefore hated by sportsmen, as it gives other birds notice of their approach. This variety is well figured by Dr. Sparrman, in his 'Museum Carlsonianum,' tab. xv. P. Notwithstanding the above accounts, we cannot help entertaining some doubt of its being a mixed breed; a circumstance so unnatural in a state of nature, and of which we find no other instance. If this species is met with so common in Sweden, how is it that none but males are found? The Wood Grouse, as well as the Black Grouse, are found plentiful in Norway, and numbers are brought into this country every year; and yet we cannot learn that any such bird as the Hybridus is found there. And yet Dr. Latham says he was informed by Dr. Tunstall that he was told by some old Scotch gentleman that both the Wood, as well as the Spurious Grouse, were extant in Scotland within their memory. We must, however, consider this matter as in a state of obscurity, and that nothing has been advanced on the subject to induce us to believe the bird in question is any other than a mere variety of the male Black Grouse. Some authors have, indeed, described the female to be of a grey colour, spotted with black. A singular bird is mentioned in the 'Naturalist's Calendar,' supposed to be a mixed breed between the Common Fowl and Pheasant, shot in the woods. But then, in this case, the male or female was a domesticated bird, and most probably the former. For further particulars, see the article Pheasant.

Grouse, Red.—[Yarrell, ii. 364; Hewitson, lxx. 279.] *Tetrao Lagopus*, Gmel. Syst. ii. p. 750, 4, γ. *Tetrao Scoticus*, Ind. Orn. ii. p. 641, 15; Bewick, Br. Birds, t. p. 313; Rural Sports, ii. t. p. 416. *Bonasa Scotica*, Bris. i. p. 199, 5, t. 22, f. 1; Ib. 8vo, i. p. 55; Buf. ii. p. 252. *Attagen*, Bris. i. p. 209, 9; Ib. 8vo, i. p. 58; Buf. ii. p. 252. Red Game, Moorcock, Gorcock, *Raii Syn.* p. 54, A. 3; Will. Angl. p. 177; Albin, i. t. 23, 24. Red Grouse, Br. Zool. i. No. 94, t. 43; Ib. fol. 85, t. M. 3; Lath. Syn. iv. p. 746, 13; Ib. Sup. p. 216; Lewin, Br. Birds, t. 135; Walc. Syn. ii. t. 183.—This species weighs about twenty ounces; length sixteen inches. Bill black; irides hazel; above the eye is a scarlet fringed membrane bare of feathers. The nostrils are

covered with black and ferruginous feathers; the head and neck pale tawny, spotted black; breast and belly dull purplish brown, crossed with numerous narrow dusky lines; quills dusky; the tail consists of sixteen feathers; the four middle ones are barred with tawny-red, the rest black; legs covered with soft whitish feathers down to the claws, which are of a light horn-colour, broad and concave underneath. The female weighs about sixteen ounces; the colour not so dark as in the male. This bird is only to be met with in the extensive uncultivated wastes covered with heath, particularly the most mountainous situations; are driven from the south by cultivation. The mountains of Wales are now the most southern parts these birds are found in; are not uncommon in Yorkshire, and from thence northward upon the moor-lands; but nowhere so plentiful as in the Highlands of Scotland, where the moors are unbounded. It is also found on the western islands, and in the mountains and bogs of Ireland; but it is remarkable that these birds should seem to be confined to these kingdoms. Linnæus did not seem to be acquainted with it, and Gmelin has given it as a variety of the Ptarmigan. Buffon speaks of a white variety which he names *L'altagas blanc*, and says it is found about the mountains of Switzerland, and those of Vicenza. But there is little doubt this is the Ptarmigan. The Red Grouse never resort to woods, but confine themselves wholly to the open moors, feeding on the mountain and bog berries, and, in defect of these, on the tops of the heath. It lays from eight to fourteen eggs, much like those of the Black Grouse, but smaller. The young keep with the parent birds till towards winter, and are called a pack or brood; in November they flock together in greater numbers, sometimes thirty or forty, where they are plentiful, at which time they are extremely shy, and difficult to be shot. We never remember but one instance of its being found at a distance from the moors. This was a female, taken alive near Wedhampton in Wiltshire, in the winter of the year 1794, and communicated by the late Edward Poore, Esq., who showed us a part of the bird. By what unaccountable accident it should have been driven to so great a distance from its native moors is difficult to be assigned, as the nearest place they are known to inhabit is the South of Wales; a distance, in a straight line, not less than sixty miles.

SUPPLEMENT.—In severe winters moor-game comes lower down the mountains in Scotland, and flock together in prodigious numbers: in 1782 and 1783 three or four

thousand assembled ('Thornton's Tour,' p. 205). The same author (p. 131), in his sporting marches, encamped at the source of the Dalmon, at the foot of an immense hill, called Croke Franc. "The game on these moors (says our author) is innumerable. In a mile long, and not half a one broad, I saw at least one thousand brace of birds" (meaning Red Grouse, or moor-game). Such days of plenty will scarcely ever be seen again; since the communication between the two countries has been facilitated by good roads, ready conveyance, and excellent accommodation, parties have been continually formed in England to make sporting tours in the Highlands of Scotland, and slaughter is the word. At Mr. Grierson's, of Rathfarnham, County of Dublin, in 1802, a brace of Grouse which had been confined for three years hatched a brood of young. ('Rural Sports.') Is said to have bred in the menagerie of the Duchess Dowager of Portland. (Id.) As a further and more recent proof that this bird will breed in confinement, Lord Stanley assures us that a pair of Grouse which had been confined two years, by a person who paid little attention to them, had produced many eggs. This circumstance made his Lordship desirous to obtain the birds, in which he succeeded, and that last year (1811) the female laid ten eggs, which she incubated, and brought out eight young. These infant birds, from some unknown cause, probably a defect of natural food at that tender age, did not live many days. The old birds feed on grain and oatmeal, like others of the gallinaceous tribe. They are still remarkably shy, and are as little disturbed as possible, in order to induce them to breed again. If ants' eggs, grasshoppers and other insects cannot be procured in sufficient abundance, alum-curd or hard-boiled egg, as animal food, is perhaps as good a substitute for insects as can be administered, and we recommend it to all persons who wish to rear any young birds of a similar nature. But if grasshoppers can be obtained, they are eagerly devoured, and for the first month the best food that can be given. A mottled brown-and-white variety, very much resembling the summer plumage of the Ptarmigan, was shot in Lancashire, in the month of August. (Lord Stanley). This bird is more of a true ancient Britain than any other of which we can boast, and as such it ought to be protected and reared; for, strange as it may seem, it does not appear to have found its way to any other part of the world, but is exclusively of British origin, and continues wholly attached to the British Empire. Inhabiting the most dreary and inhospitable parts of the three united kingdoms, contented with

the native produce of such uncultivated regions, it never by choice approaches the habitation of man, to riot in the fruits of his labour. It has not even extended into the Shetland island, but has reached the Orkneys, its utmost extent northwards. Linnæus considered the Red Grouse as a variety only of Tetrao Lagopus or Ptarmigan; and as late as the publication of the thirteenth edition of the 'Systema Naturæ,' by Gmelin, it has so been continued. Some of the French naturalists gave it the trivial name of Scotica, probably from first having heard of it as a native of that part. [It has always been considered extraordinary that a bird so abundant as the Red Grouse should be confined to the British Islands, and attempts have repeatedly been made to show that it is a mere local variety of some continental species, for instance the Willow Grouse of Norway, or the Ptarmigan common to the arctic regions of both continents, and found occasionally in Scotland. The subject has been discussed at considerable length in the 'Zoologist,' but as no definite conclusion has been attained it is not desirable to transfer the arguments to these pages.]

Grouse, Spurious.—See Grouse, Hybridus.

[Grouse, White.—See Ptarmigan.]

Grouse, Wood.—[Yarrell, ii. 333; Hewitson, lxi. 277.] Tetrao urogallus, Lin. Syst. i. p. 273, 1; Gmel. Syst. i. p. 746; Raii Syn. p. 53, A. 1; Will. p. 123, t. 30; Ind. Orn. ii. p. 634, 1; Bewick, Br. Birds, i. [t. p. 307; Rural Sports, ii. t. p. 411. Urogallus major, Bris. i. p. 182; Ib. 8vo, i. p. 51. Coq de Bruyere, ou Tetras, Buf. ii. p. 191, t. 5. Capricallus, Sib. Scot. xvi. t. 14, 18. Cock of the Wood or Mountain, Raii Syn. p. 53, A. 1; Will. Angl. p. 172, t. 30; Albin, ii. t. 29, 30. Wood, or Great Grouse, Br. Zool. i. No. 92, t. 40, 41; Ib. fol. M. M.; Arct. Zool. ii. p. 312, A.; Ib. Sup. p. 62; Lath. Syn. iv. p. 729, 1; Lewin, Br. Birds, iv. t. 132; Walc. Syn. ii. t. 180; Don. Br. Birds, iv. t. 89. In Scotland commonly known by the name of Caper-calze, or Caperkally. — This noble species is not much inferior in size to a Turkey; weight sometimes twelve or thirteen pounds, but more frequently seven or eight; length two feet eight or nine inches. The bill is above two inches long, very strong, the upper mandible much convex and hooked, the point hanging over the under mandible very considerably when closed, as in birds of prey, and projecting over the sides, not meeting at the edges, as in most birds, by which means it can cut its food like a pair of scissors; the colour yellowish; irides

hazel. The nostrils are covered with dusky feathers; over the eye is a bare red skin, under the eye a small spot of white feathers; the head is dusky, a little dashed with ash-colour; the feathers on the chin and throat are dusky black, and long; the neck dark ash-coloured, finely sprinkled with dusky; the breast is of a fine dark glossy green; the rest of the under parts black, with spots of white, most about the thighs and vent; the wing-coverts and scapulars chesnut-brown, finely speckled with dusky, at the junction of the wing to the body is a little white; greater quills dusky; secondaries like the coverts, slightly tipped with white; the lower part of the back, rump, and upper tail-coverts ash-colour, marked with innumerable small undulated lines and specks of black; the two outer rows of feathers covering the tail are greatly longer than those in the middle, and gradually lengthening, the under ones reaching nearly to the end of the tail; these are seven or eight in number, laying immediately over each other; their ends are white, making as many white bars on each side; the tail is considerably rounded, consisting of eighteen black feathers, marked with a few spots of white on the sides; the legs are covered with brown hair-like feathers; the edges of the toes strongly pectinated; claws dusky and blunt. The female differs exceedingly both in size and colour; weight about four pounds. Bill dusky; head, neck, and back are barred with tawny-red and black; the throat tawny-red; breast pale tawny, with some white spots on the upper part; the belly barred with pale tawny and black, the feathers tipped with white; scapulars tipped the same; quill-feathers dusky, mottled on the exterior webs with light brown; the tail is of a dark-rust-colour, barred with black, and tipped with white. This sex is described by some authors to have but sixteen feathers in the tail. This variation must have been occasioned by the loss of some not noticed, for we have never seen an instance where the sexes differ in this particular. It is a strong character, that seems to divide birds of apparent similitude, as in the Corvorant and Shag, and many of the Duck tribe, the females of which so frequently resemble each other. The male of this species is polygamous, and lives separate from the females, except in the amorous season. Their manner and habits are very like those of the Black Grouse, except that this seems to be confined wholly to forests of pine, on the tender shoots of which it feeds. It was formerly met with in Scotland and Ireland, but is now extinct. The female is said to lay from eight to sixteen eggs, of a

white colour, spotted with yellow, larger than those of our domestic Fowl. Dr. Latham says he is well informed the nest of one found in Scotland was placed on a Scotch pine; if so, it differs from all the genus, who are known to lay their eggs on the bare ground. It is not uncommon in the pine forests of Norway, from whence we have received it. Is also found plentiful in Russia and Siberia, in Italy, and several parts of the Alps.

SUPPLEMENT.—The Wood Grouse is found in Sweden, where it inhabits the fir woods, and is said to be so extremely shy as to be only approached while it is singing, at which time the male has a convulsive motion in his head and eyes, which prevents him from seeing or hearing anything. This song continues for a minute each time, and enables the sportsman to approach by degrees, taking care to hide himself behind a tree during the interval of the song, until he gets sufficiently close to fire. This bird we believe is now extinct in the British dominions; but we have received both sexes from Norway, perfectly fresh and fit for the table, where they are in general much more estimated by the epicure than if they were preserved in their feathers, considering the best stuffing to be that of stuffing themselves. The female has been said to possess only sixteen feathers in the tail, whereas the male has eighteen. We are enabled to assert that both the sexes have the latter number. Two females lately examined weighed the same within six ounces; the largest was three pounds eleven ounces; the length twenty-seven inches. In the crops of these birds were a species of berry similar to the cranberry, called, in Norway, *Tytteboer*: these, with the tops of the plant, and the common heath, filled the crops. The gizzard, which is extremely strong and muscular, contained a vast quantity of crystal-like pebbles intermixed with the macerated food. The male of this species is in Norway known by the name of *Aarhanen*; the female is called *Tiur*.

[Grouse, Sand.—*Syrnhaptes*.—A genus of birds, of which the characters are: Beak short, rather slender; first primary of each wing, and two middle feathers of the tail, terminating in a long, slender, naked shaft: legs densely covered to the nails with short feathers; hind toe wanting, the remaining toes somewhat dilated, united throughout their length, and forming a flat scabrous sole: nails broad and flat, scarcely bent.]

[Grouse, Sand, Pallas'.—*Ibis*, ii. 4. *Syrnhaptes paradoxus*, Illiger. *Tetrao paradoxus*, Pallas, *Itin.* ii. *App.* p. 111, tab. F.;

Zoograph. Rosso-Asiat. ii. p. 74. — MALE : Beak (stuffed bird) dark horn-colour. Fore-head, and space between the beak and eye and over each eye, orange-yellow, continued backward down the sides of the neck in a richer tint, and divided by a streak of stone colour from the bright patch of reddish orange pervading the chin, and throat in front. Breast rich stone-colour, inclining to pink, bordered with four darker pencilled lines, from the point of each wing, when closed, across the chest, the dark lines crossing each feather near the tip, but edged with stone-colour. Breast below these lines, and flanks, much more pink, with a dark broad abdominal band, showing some pinkish feathers, crossing the stomach in front of and between the legs. Vent and under tail-coverts white. Feet and legs buffy white, feathered to the claws. Ground colour of back and wings rich buff, each feather banded with black and tipped with buff. Scapulars more unevenly marked. Point of wings with a few dark blotches, but the wing-coverts rich buff, tinged with a slight shading like a fine water-marking. Across the secondaries a rich chesnut bar. Primaries greyish blue; shafts black; first primary shaft elongated. Tail-feathers barred like the back, except two centre ones, blue in tint and elongated. (Autumn plumage). *FEMALE :* Upper part of head black. Wings and all upper parts streaked, spotted and barred with blackish brown on a buffy ground, giving a mottled look, like a Kestrel. Over the head, extending to back of each eye, a streak of lemon-yellow, similar to the gular patch, which terminates in a dark ring, not observable in the male at any time; the lemon very bright. Breast, all the wing stone-colour, not so pink as in male. Broad band across the abdomen like the male, but more reddish in some. Feet and legs same as in male. Tail-feathers slightly elongated. Vent white. Primaries greyish. Secondary bar reddish chesnut. (Female, July). This bird is a native of Asia, more especially of the Chinese Empire. Mr. Swinhoe informs us it is very abundant, during winter, on the plains between Pekin and Tientsin, flocks of hundreds constantly passing over with a swift flight, not unlike that of the Golden Plover, for which bird they were at first mistaken. "The market at Tientsin," says Mr. Swinhoe, "was completely glutted with them, and you could purchase them for a mere nothing. The natives call them Sha-chee, or Sand-fowl, and told me they were mostly caught with clap-nets. After a fall of snow the capture was the greatest, for where the net was laid the ground was cleared and strewed with small green beans. The

cleared patch was almost sure to catch the eye of the passing flocks, who would descend and crowd into the snare. It only remained then for the fowler, hidden at a distance, to jerk the strings, and in his hawl he would not unfrequently take the whole flock." Mr. Swinhoe was told that these birds are found abundantly in the great plains of Tartary beyond the Great Wall, where they breed in the sand. The same accomplished ornithologist says they possess rather a melodious chuckle, the only note he has heard them utter. The advent in Britain of this species is the most remarkable ornithological fact that has occurred for very many years. The bird was previously unknown to the European Avifauna; for although the name was twice introduced into our list, it was also twice struck out, under the conviction that the bird intended was a species of *Pterocles* long known to ornithologists as an inhabitant of the South of Europe. The first record of this bird's occurrence in Britain will be found in the 'Zoologist' for 1859, at p. 6728, where Mr. Moore, of Liverpool, records that a single specimen was killed near Tremadoc, in Wales, on the 9th of July of that year; two others were seen, but escaped. About the same day a specimen was killed on the opposite side of the Island, at Walpole St. Peter's, in Norfolk; this was an adult male in perfect plumage (see Zool. 6764). On the 23rd of the same month one of these birds was killed on the Continent, at Hobro, in Jutland, and another seen a few miles from the same locality, as recorded by Mr. Newton (Zool. 6780). An interval of three years passed over before the bird was again observed, and then it made an invasion in force. Great pains have been taken by naturalists in every part of the kingdom to transfer to the 'Zoologist' a record of every instance in which the bird was obtained or seen; but many of these records remain incomplete, owing to the carelessness and indifference of writers, who are not themselves naturalists, in wording their communications, and in failing to give that precise information which the naturalist regards as of primary importance. In the first place, it may be observed that three out of every four communications sent to the public papers had neither the names nor addresses of the writers; an equal number had no dates of the occurrences; and again, almost the only clew afforded to the sex of the visitors is from the bird-stuffers evidently mistaking males for females, and recording them accordingly: those few instances in which the specimens were pronounced females, on account of the presence of two large and equally developed eggs, were certainly

adult males, exhibiting indications usual at the breeding season; a few others, which fortunately fell into the hands of naturalists, were as certainly females, clusters of minute undeveloped eggs being detected in their ovaries. Mr. Henry Stevenson, of Norwich, a most accomplished ornithologist, has taken the greatest pains to elicit the truth from a mass of conflicting and confused evidence on this subject, and has published the result in two invaluable papers in the 'Zoologist,' pp. 8826 and 8849, but his researches have extended only to the counties of Norfolk and Suffolk, and therefore scarcely form a sufficient basis for a general record. In these admirable papers Mr. Stevenson fixes the number killed in Norfolk at fifty-five, and in Suffolk at thirteen; of these, thirty-five were females, which shows that the sexes were about equal in number. It will be seen from Mr. Swinhoe's remarks, already quoted, that in its native country this is a migratory species; and we find that the direction of flight, as the breeding season approaches, was westward from China towards Chinese Tartary. It may also be gathered, from various observations made on the Continent of Europe during the summer of 1863, that its progress continued in the same direction; and further inferred, from the various detached remarks of observers in England, that this great migratory movement was still continued in the same direction, and therefore was not in accordance with the simple law which governs the great vernal and autumnal movement, the direction of which is from south to north in the spring, from north to south in the autumn. A vast majority of migratory birds are insect-feeders, and when the supply of insect food fails, as it invariably does at the approach of winter, they remove to southern climes where winter has no existence; but here was a migratory movement of a very decided character, in which the ordinary migratory impulse seems to have been entirely absent. The arrival on British land seems to have commenced about the third week in May, and to have continued uninterrupted until the third week in June, when it ceased entirely, for we cannot but conclude that the examples of this bird subsequently found had arrived during the month included between these dates; during this period at least two hundred and fifty, and probably three hundred, were destroyed. This view of the direction taken during this abnormal migration is certainly supported by the evidence of Mr. Gatke, who, writing from Heligoland, says (Zool. 8724), "This very beautiful and interesting stranger was first observed and shot here on the 21st of May, the weather being

very fine with a moderate easterly breeze. Each successive day up to the earlier part of June, it was seen here in flocks varying from about three, five or fifteen, to fifty, and in one or two instances even to a hundred. Out of these nearly thirty have been shot; the earlier birds being, with two exceptions, all very fine male specimens; the later nearly all female birds; every one of them in the most perfect plumage. After a lapse of a fortnight, viz., on the 22nd of June, six sand grouse again made their appearance: out of these five were shot, all female birds, whose plumage no longer had the fresh and tidy appearance of the earlier instances; so that all through this abnormal and mysterious excursion of the species they still adhered to the rules of birds on a regular spring migration; that is, the males forming the van, the finest old specimens coming first, after which the females make their appearance, and the rear being invariably made up by weak, badly developed or injured individuals of a shabby appearance. I was so fortunate as to obtain two living specimens of this sand grouse, a male and a female, both of which for a while went on very well; but yesterday, to my great regret, I discovered that the female had died. The abdomen of this bird had the appearance as if containing a developed egg, which on examination, however, proved to be a solid accumulation of a gritty calcareous substance, of the size of a large walnut. It would be very interesting if these birds were to breed on the English moors. Although I have little doubt that, if at convenient localities they are left undisturbed, such will be the result, it also is my opinion that in the autumn the offspring, together with the parent birds, will depart for their original fatherland, never to return. But a future different result would perhaps be obtained if such young birds were to be procured before fully fledged, kept well during the winter, and set at liberty the following spring near such localities as their parents had chosen for their nidification. If during this season any young sand grouse are reared in England or on the Continent, I am sure one or other of them will turn up on Heligoland." It thus seems quite certain that the arrival of these birds in Heligoland was as nearly as possible simultaneous with their arrival in England, a circumstance by no means remarkable when we recollect that ornithologists have calculated the rate at which birds can fly at the rate of forty, fifty and even sixty miles an hour, and therefore that only a few hours of continuous flight would be necessary to accomplish the distance between the continent of Europe and any part of the

British Islands. No hypothesis can be more plausible than that the very birds which rested on the ocean islet of Heligoland made their appearance, on the days immediately following, on the coast of Essex, Norfolk, Suffolk and Lincolnshire. It is not, however, to be overlooked that the bird arrived almost simultaneously at very distant and very opposite parts of the kingdom; thus, commencing at Heligoland, on the 21st of May, we find them on the 22nd of May on Walney Island, off the west coast of Lancashire (Zool. 8687); on the 23rd, in Norfolk (Zool. 8718); on the 26th, at Aldershot (Zool. 8683); on the 27th, at Forest Gate, in Essex (Zool. 8684); on the 28th, at Thorpe, in Suffolk (Zool. 8685); on the 29th, in Essex (Zool. 8684). Touching the food of the sand grouse while in England, we have evidence that no imperfection of observation can mystify, and no future observations can possibly confute: this evidence is derived from a careful examination of the contents of the stomach by botanists in all respects competent to pronounce an opinion: the seeds have also been sown, and the result has in every case verified the previous conclusion. Nothing but seeds and very minute stones has been discovered. The seeds belong to seven natural orders of plants; amongst the Cruciferae, *Capsella bursa-pastoris*, *Brassica napus*, *Sinapis arvensis*, and *Raphanus Raphanistrum*; amongst the Caryophyllaceae, *Sagina apetala* and *S. procumbens*, *Stellaria holosteam* and *S. media*; amongst the Leguminosae, *Ulex europaeus*, *Genista anglica* and *G. tinctoria*, *Cytisus scoparius*, *Ononis spinosus*, *Medicago minima*, *Trifolium repens*, *T. pratense* and *T. suffocatum*, and *Lotus corniculatus*; amongst the Plantaginaceae, *Plantago major* and *P. coronopus*; amongst the Chenopodiaceae, *Chenopodium olidum*, *C. Bonus-Henricus* and *C. album*, and several others doubtfully ascertained; amongst the Polygonaceae, *Polygonum aviculare*, *P. fagopyrum*, *P. convolvulus* and *P. persicaria*, *Rumex palustris*, *R. acetosa* and *R. acetosella*; amongst the Gramineae, *Poa annua*. It will be observed that all these seeds are of small size, and consequently the numerical supply required to fill the stomach is very large indeed.]

[Guernsey Partridge. — See Partridge, Guernsey.]

Guillem.—See Guillemot, Foolish.

Guillemot. — A genus of birds, the characters of which are: Bill slender, pointed; the mandible slightly bending towards the

end; base covered with short feathers. Nostrils lodged in a hollow near the base. Tongue slender, almost the length of the bill. Legs furnished with three toes, all placed forward, and webbed.

Guillemot, Black. — [Yarrell, iii. 465; Hewitson, cxxvi. 462.] *Colymbus Grylle*, *Lin. Syst.* i. p. 220, 1; *Gmel. Syst.* ii. p. 584. *Uria Grylle*, *Ind. Orn.* ii. p. 797, 2; *Bewick, Br. Birds*, ii. t. p. 179. *Uria minor nigra*, *Columba groenlandica*, *Bris.* vi. p. 76, 3; *Ib.* 8vo, ii. p. 379; *Raii Syn.* p. 121, 6; *Will.* p. 245. Le petit Guillemot, *Buf.* ix. p. 354. Greenland Dove, or Sea Turtle, *Albin*, ii. t. 80; *Will. Angl.* p. 326, t. 78. Black Guillemot, *Br. Zool.* ii. No. 236; *Ib.* fol. 138, t. H. 4; *Arct. Zool.* ii. No. 437; *Lath. Syn.* vi. p. 332, 3; *Lewin, Br. Birds*, vi. t. 221; *Walc. Syn.* i. t. 95; *Pult. Cat. Dorset.* p. 17. Provincial: Scaber.—This species weighs fourteen ounces; length near fourteen inches. The bill is black, strait, slender; inside of the mouth yellow-red. The whole plumage is black, except some of the wing-coverts and secondary quills, which are tipped with white; legs red. Some are said to be found wholly black; others spotted black and white; and that the plumage is changed to white in winter. These birds are not frequent on the southern coasts, but are not uncommon in the north, on the Farn islands, and in Scotland in the Hebrides. We have seen it rarely on the coast of Wales near Tenbeigh, where a few breed annually; but nowhere else that we could find from thence to St. David's. It lays one egg of a dirty white, blotched with pale rust-colour, which is deposited under ground, or in some hole in the rocks. Frequent in Greenland, Hudson's Bay, and other northern parts.

SUPPLEMENT.—This bird, in the Orkney and Zetland islands, is called Puffinet, Taiste, Toyst, Tysty, or Tyste. It remains there the whole year, becoming speckled with white in winter, and is then considered as the young only, left behind, and that the old migrate. It continues the whole year in the bay of Dublin, and is there common. (*Lath. Syn. Sup.* ii. p. 265). Mr. Henry Boys observed both old and young, in the month of August, at Fowlesheugh near Stonehaven, in Scotland. The female measured fifteen inches and a half in length; in this there was no white except on the wings; but in the young birds the under parts were white streaked with black, as was the white in the wings: legs dusky brown: the tail consists of twelve feathers. The Black Guillemot is amongst the few feathered inhabitants of the North Cape of Lapland. (*Acerbi*).

[Guillemot, Bridled or Ringed. — *Yarrell*, iii. 461. *Uria lacrymans*, *Temminck*, *Man. d'Ornith.* ii. p. 577. — "An adult bird in its breeding plumage, obtained at Grimsey Island, has the beak black, rather more slender in form than that of the Common Guillemot obtained at the same locality; the irides dark; all round the eye a narrow ring of pure white, and a line of the same colour, about an inch and a half long, passing from the eye backwards and downwards on the neck; head, chin, throat, upper part of neck all round, lower portion of neck behind, back, wings, and tail dull greyish black; tips of secondaries, and all under surface of the body, white; legs, toes, and membranes brownish black. The whole length is about eighteen inches; the wing, from the joint to the end, eight inches." — *Yarrell*, iii. 464. Examples of this bird have occurred on several parts of our coast, but doubts are entertained whether it be distinct as a species from the Common Guillemot (*Uria troile*): on this point opinions are equally balanced.]

[Guillemot, Brunnich's, or Thickbilled. — *Yarrell*, iii. 458; *Hewitson*, cxxx. 460. *Uria Brunnichii*, *Fleming*, *Brit. An.* p. 134. — "The beak is black; the posterior half of the marginal portion of the upper mandible nearly white, extending from the corner of the mouth to the point where the feathers project on the bill; the irides dark; head, throat, neck behind, back, wings, and tail sooty black; secondaries tipped with white; belly and all beneath pure white, running up to a point on the front of the neck; in the Common Guillemot the white colour ends here in the form of a rounded arch; legs, toes and their membranes brownish black. The whole length is eighteen inches. From the wrist to the end of the longest quill-feather eight inches and a quarter. The sexes are alike in plumage." — *Yarrell*, iii. 460. This species, which is a native of Greenland, has occurred in Ireland, the Orkneys, and the Shetland Islands. Mr. *Yarrell* says "It may be presumed to breed on the coast of Kerry."]

[Guillemot, Common. — See Guillemot, Foolish.]

Guillemot, Foolish. — [*Yarrell*, iii. 453; *Hewitson*, cxxiv. 455.] *Colymbus Troile*, *Lin. Syst.* i. p. 220, 2; *Gmel. Syst.* ii. p. 585. *Uria Bris.* vi. p. 70, 1, t. 6, f. 1; *Ib.* 8vo, ii. p. 377. *Uria Troile*, *Ind. Orn.* ii. p. 796, 1; *Bewick*, *Br. Birds*, ii. t. p. 175. *Lomwia Hoieri*, *Raii Syn.* p. 120, A. 4; *Will.* p. 244, t. 65. Le Guillemot, *Buf.* ix. p. 350, t. 25. Foolish Guillemot, *Br. Zool.* ii. No. 234; *Ib.* fol. 138, t. H. 3; *Arct. Zool.* ii. No. 436; *Will. Angl.* p. 324;

Albin, i. t. 84; *Edw.* t. 359, f. 1; *Lath. Syn.* vi. p. 329, 1; *Ib. Sup.* p. 265; *Lewin*, *Br. Birds*, vi. t. 220; *Pult. Cat. Dorset.* p. 17; *Walc. Syn.* i. t. 96; *Don. Br. Birds*, ii. t. 28. Provincial: Sea-hen; Scout; Kiddaw; Murre; Lavy; Willock; Tinkershire; Marrot; Strany; Lungy; Skuttock. — This species weighs about twenty-four ounces; length seventeen inches. The bill is black, three inches long, strait, sharp-pointed; inside of the mouth yellow; irides dusky. The base of the bill is covered with soft feathers, which, with the head, neck, back, wings, and tail, are of a deep mouse-coloured brown; the tips of the lesser quill-feathers white; the whole under side of the body pure white; on the sides under the wings a few dusky lines; from the eye to the hind-head is a singular line occasioned by a division of the feathers; legs dusky. These birds are found in great abundance in various parts of our high rocky coasts from north to south, and in some places perfectly swarm. It is not uncommon to see hundreds sitting upon their eggs on the ledge of a rock, in a line nearly touching each other. The female lays but one egg, of a greenish colour, blotched and marbled with dusky, so variable that scarce two are seen alike. They seldom quit their eggs unless disturbed, but are fed with sprats and other small fish by the male. In places where they are seldom disturbed it is with difficulty they are put to flight, and may sometimes be taken with the hand; others flutter into the water, appearing not to have much use of their wings. They begin to settle on their breeding-places early in May, and wholly leave the southern parts of the kingdom the latter end of August. The Razorbill is frequently found in the same situation, but seldom breed on the same cliff, at least not close to or intermixed with the groups of Guillemites. Both these birds are indiscriminately called Willocks and Murres in some parts. The young seldom leave the rocks till they can fly, and are of the same colour with the parent birds.

SUPPLEMENT. — In the latter end of January, 1805, as cold and severe a winter as for many years had been experienced in the West of England, several of these birds were shot in the estuary of Kingsbridge, some of which we examined; and one that was dissected proved a female, and weighed about thirty ounces. These had the exact plumage of those which frequent our rocks in summer, and in every respect so exactly corresponded with the summer dress of the Foolish Guillemot, that it should seem to prove, beyond all doubt, that the Lesser Guillemot is perfectly distinct, and that the Foolish

Guillemot at no season is differently marked. The colour even at this time is not black, as in the Lesser species, but of the usual dark brown. This is the only instance that has occurred to us of this bird having been taken on our coast in the winter, but it is a circumstance fraught with information. After having related what is so much in favour of the distinction of the species, it behoves us to record faithfully all those circumstances that may militate against such an opinion. Of such the following stands foremost:—In June, 1805, we examined a young Guillemot that was full-grown, excepting the wings and tail; its weight was thirty-one ounces: length sixteen inches and a half. The plumage on the lower part of the back and rump brown mixed with grey, some of the lesser coverts of the wings the same: the feathers of the tail margined and tipped rufous-white: the upper part of the neck before, and the throat, as far as the dark colour usually extends, are mottled black and white; these markings pass round the sides of the head behind the eyes, and meet behind the nape in an obscure narrow band; the feathers on these parts being white tipped with black, not distinctly marked, some black and others white. The rest is like the Foolish Guillemot, but darker about the head and hind neck. The inside of the mouth yellowish flesh-colour: length of the bill to the nostrils one inch and a half, to the gape two and three-quarters. The extraordinary weight of this bird (admitting it to be the young of the Foolish species, and of which there can be no doubt, as no other is known to breed on the coast where it was taken) can only be accounted for by supposing that it was highly fed, while the old birds at this season are more exhausted; but we have had old birds of superior weight sometimes. Several of these, exactly similar in markings, were shot at the same time at the mouth of Salcomb Bay, on the coast of South Devon. It now appears that this species, like the Razorbill, is at first, in its nestling feathers, like the parent birds, destitute of any white about the head and neck, but that after they take to the water, and before they can fly, a partial moulting takes place, and the throat and fore part of the neck become spotted with white feathers tipped with dusky, and which in a slight degree extends round behind the upper part of the neck. Now it must be remarked by every naturalist that these newly-acquired white feathers, tipped with dusky, must be again cast, and be replaced by entirely white ones, in order to render this bird similar in plumage to the Lesser Guillemot; a circumstance, if not

impossible, highly improbable. Besides, if these two species were at any time by accident to be found alike in plumage, no one who has had the opportunity we at this moment have of placing all the species before us, the two Guillemots and two Auks which have caused such discrepancy of opinion, together with their young at different ages, would hesitate a moment in deciding the matter. The size and weight of the spotted young Guillemot is essentially greater than the Lesser Guillemot is ever found to be; the neck is longer, and, as an especial mark of distinction, the bill of this young bird is full one-third longer, and is furnished with an indenture in both mandibles near the tip. This is an obvious mark of distinction, not, we believe, before noticed in the Foolish Guillemot, and of which the Lesser Guillemot is wholly destitute in the under mandible, though on the upper, nearer to the point, there is a very slight inclination to an indenture. The circumstance of variation of colour in particular parts of the plumage in some of these species, especially the change to that of white, is well exemplified in the Black Guillemot, which has been found to vary so much that the older naturalists had formed of them several species; but no Ornithologist of the present day can doubt the identity of the same bird in all its various plumage, by size and other immutable characters. We consider it extremely fortunate to have obtained the Foolish Guillemot in the midst of winter (a rare occurrence), and at the same time the Lesser Guillemot to compare with the young of the former, having the speckled neck. The size and weight, so different; the length and structure of the bill, so dissimilar in the two species, and so exactly alike in the old and young birds of the former, set all controversy at rest upon this subject. These birds are as perfectly distinct from each other as the Lesser is from the Black Guillemot; and we may be assured that the Black-billed Auk is as distinct from the Razorbill as it is from the Little Auk; the invariable difference in size, as well as other circumstances related under their proper heads, do not leave even a shadow of doubt. The eggs of this species of Guillemot and those of the Razorbill, when boiled hard, are in some parts much esteemed.

Guillemot, Lesser. — *Colymbus minor*, *Gmel. Syst. i. p. 585*. *Uria minor*, *Bewick, Br. Birds, ii. t. p. 177*. *Uria Troile*, *Ind. Orn. ii. p. 797*, 1, β . Lesser Guillemot, *Br. Zool. ii. No. 235*, t. 83; *Ib. fol. 138*; *Arct. Zool. Sup. p. 69*; *Lath. Syn. vi. p. 332*, 2; *Walc. Syn. t. 97*. Provincial: Winter Guillemot; Morrot. — This bird is less than the preceding

species; its weight is eighteen or nineteen ounces; length about sixteen inches. Bill and irides the same as the last. The upper part of the head, hind part of the neck, back, wings, and tail are black; from the eye a dusky streak pointing backwards; the tips of the secondary quill-feathers are slightly marked with white; the cheeks, throat, and all beneath white; along the sides and on the thighs a few dusky streaks; legs black. These are found sparingly on the southern coasts in winter only, but more frequently in the north. Many doubts have been entertained with regard to this bird. Dr. Latham, in his 'Synopsis,' was inclined to believe it no other than the Foolish Guillemot, and in his 'Index Ornithologicus' has put them together. There are some circumstances, however, that forbid us from coinciding with that excellent Ornithologist. It is to be observed that, besides the difference in size and plumage, this bird is rarely met with in the south till the month of November; whereas the other species always leave us before September, and do not appear again till the ensuing spring; and that the young are at the time they depart exactly like the old ones. In the same state of doubt and uncertainty have the Razorbill and the Black-billed Auk been held, under the heads of which we shall have occasion to say more on the subject. Mr. Pennant observes, these and the Black-billed Auks haunt the Firth of Forth during winter, in large flocks, where they are called Morrots; and that they retire before spring. Where such opportunity offers it is much to be wished some naturalist would pay attention to the doubts in question.

SUPPLEMENT.—Having enlarged so much upon the identity of this bird as a distinct species in treating of the Foolish Guillemot, it only remains for us to remark that this species, together with the Black-billed Auk (*Alca pica*), are found in vast abundance, in winter, in the bays on the coast of Scotland, extending even to the Orkney and Zetland Islands, but particularly in the Frith of Forth; and at the same time being so sparingly scattered over the southern parts of the kingdom, evinces that they are properly natives of the more northern regions, and retire only from the icy seas, to such parts as may afford them subsistence. Thus they are contented with a boreal station, even in the colder months, and never seek a southern region, but mostly continue on our northern shores, where they are never impeded by ice from diving after their favourite prey, the sprat, which is there found in abundance throughout the winter. The Foolish Guillemot and the Razorbill, on the

contrary, are indigenous to this country, breed on most of our higher cliffs that form a barrier to the ocean, and, after performing the great dictates of nature, invariably leave our shores, and retreat to some more southern climate; nor is one to be found amongst the Lesser Guillemots and Black-billed Auks, in the winter season, so far north as Scotland, an accidental maimed bird excepted; and only one or two instances have occurred in which the Foolish Guillemot was found on the most southern part of the Island (Devonshire) at that season. Thus has Nature assigned to these birds their limited stations, by forming them of different temperaments: the more tender species, that winter in the southern parts of Europe and on the coasts of Africa, return with the spring to our temperate climate, and as it were push on the hardier species to their northern destination. Thus the Lesser Guillemot and Black-billed Auk in part supply the place of the Foolish Guillemot and Razorbill during the winter, and the reverse is the consequence of our nearer approach to the sun. We shall now sum up the account of these hitherto ambiguous species, for the consideration of those who may continue to be of an opinion that the Lesser Guillemot and Black-billed Auk are only the young of the Foolish Guillemot and Razorbill. In the first place, it is contrary to every principle of reasoning upon natural causes, to suppose that when the two last retire, in the autumn, from the southern parts of England, they should go to the north of Scotland, and be converted by a change of plumage into the two former. The supposition that any bird should migrate northward to pass the winter is in direct violation of the actual cause of the propensity to migrate. Every species of animal that shifts its quarters with the seasons, breeds in the higher and passes the winter in the lower latitudes. Those who may have formed an opinion that the two first are the young of the others should be asked to produce an instance of so unnatural a case as that of all the young of any species remaining behind to winter in a northern country, while the old birds seek a more southern climate. Besides, those who favour such an opinion must go further, for they must also believe that, when the old birds leave England, in the autumn, to winter along the shores of the southern parts of the Continent, the young birds take a contrary direction, and accumulate in the North of Scotland as far as Zetland, in which parts they are infinitely more abundant than anywhere further south. More need not be said to convince any reasoning mind of the unphilosophical

principle of such an opinion. Whatever variation, therefore, may have appeared in the change of plumage of some, for which we cannot so readily account, we may be assured our safest guide is the habits, and that alone must convince us of the difference of the species in question, were all other distinctions wanting. Myriads of Foolish Guillemots and Razorbills resort to the lofty promontories of the southern as well as the northern shores of Great Britain: and when these retire, not a Lesser Guillemot or a Black-billed Auk is to be seen in their place for a month or six weeks, and then a few stragglers only, for they are never common in the South of England. As it has been clearly ascertained that the Little Auk changes its black head and neck after the breeding season, and re-assumes it again in the spring, there is much reason for supposing that the Black-billed Auk and Lesser Guillemot do the same, as they are equally birds of the same northern regions. It may also be fairly inferred that neither the Razorbill nor the Foolish Guillemot vary their plumage at any season, since none of the latter, which are occasionally shot in the winter on the south coast of Devon, differ in the least from their summer plumage. A singular variety of this species was taken alive in the month of March. Its length sixteen inches. The upper parts of the plumage, where this species is usually black, are in this bird of a pale cinereous-brown; the margins of the feathers palest; quills the same, with pale tips; the secondaries, as usual, tipped with white; the under parts, cheeks, and throat, as usual, white; legs dull orange-brown. This bird devoured flesh, as well as fish, cut into slender pieces, and doubtless would have lived on fresh water, had not some defect existed that caused its capture, and which probably occasioned its death, after ten days' confinement in the menagerie. It had in this short time become docile, and came to the side of the pond to be fed; this gave us an opportunity of observing its motions when diving for its food; and it was evident that all its evolutions under water were performed by its wings alone, the legs being thrown back. It is literally flying in water, for the wings have exactly the same action, except that they are not quite so much extended nor so rapidly moved, as when flying in air. By thus converting its short wings into fins its progressive motion is rapid, and the body is turned quickly by the exertion of one wing more or less than the other, for neither the tail nor the legs gave it the least bias. It is only on the surface of the water that the legs are used as oars.

[The Lesser Guillemot of Gmelin is certainly the Common Guillemot.]

[Guillemot, Ringed.—See Guillemot, Bridled.]

Guillemot, Spotted.—*Uria Grylle*, *Ind. Orn.* ii. p. 797, 2, var. Black Guillemot, *Lath. Syn.* vi. p. 333. var. Spotted Guillemot, *Br. Zool.* ii. t. 83, f. 2. Spotted Greenland Dove, *Edw.* t. 50.—There is no doubt but this bird is a mere variety of the Black Guillemot, more or less spotted. [Certainly the Black Guillemot.]

Gulden Head.—See Puffin.

Gull.—A genus of birds, the characters of which are: Bill strong, strait, but bending down at the point; on the lower mandible an angular prominence. Nostrils oblong, narrow, placed in the middle of the bill. Tongue a little cloven. Body light, very full of feathers; wings long. Legs small, naked above the knees. Feet small; toes before webbed; back toe small.

Gull, Arctic.—[*Yarrell*, iii. 630; *Hewitson*, cxliii. 509.] *Larus Parasiticus*, *Lin. Syst.* i. p. 226, 10; *Gmel. Syst.* ii. p. 601; *Ind. Orn.* ii. p. 819, 15; *Bewick, Br. Birds*, ii. p. 239; *Lin. Trans.* viii. p. 267. *Stercorarius longicaudus*, *Bris.* vi. p. 155, 3,—p. 150, 1; *Ib.* 8vo. ii. p. 402,—p. 401. *L'Abbe à longue queue*, *Buf.* viii. p. 445. *Strunt-jager*, *Raii Syn.* p. 127, 2. Arctic Birds, *Edw.* t. 148, 149, M. & F. Arctic Gull, *Br. Zool.* ii. No. 245, t. 87, M. & F.; *Arct. Zool.* ii. No. 459; *Lath. Syn.* vi. p. 389, 16, t. 99; *Lewin, Br. Birds*, vi. t. 207; *Walc. Syn.* i. t. 116. [Richardson's Skua of Yarrell, and Richardson's Arctic Gull of Hewitson, as cited above.] Provincial: Feaser; Dung-hunter; Scull; Badock; Faceddar; Scoutinallan; Dirlen-allan or Allen.—The length of this species is about twenty-one inches. The bill is an inch and a half long, pretty much hooked, and of a dusky colour; nostrils placed in a kind of cere. The top of the head is black; on the sides, forehead, neck, and under parts of the body white; across the breast a pale dusky bar; the upper parts of the body, wings, and tail black; the base of the quills white on the inner webs; the two middle feathers of the tail are four inches longer than the rest; legs black, scaly. This, like all the genus, is liable to vary in plumage according to age. In some the white parts are mixed with brown, and the black parts dusky brown; the middle feathers of the tail also very little longer than the rest. The female is said by some to be entirely brown, palest

beneath; others assert this sex to be like the male, which is most probable, and that the brown variety is only young birds in their first feathers. This bird is not uncommon in the Hebrides and in the Orkneys, where they breed amongst the heath, appearing in May, and retire in August. Has been met with as far south as Yorkshire. It is said to make a nest of grass and moss in some marshy place, and lay two eggs, the size of those of a Hen, ash-coloured, spotted with black. This and other species of Gulls pursue the lesser ones, not for the sake of their dung, as some have asserted, but to make them disgorge, which they catch with great dexterity before it reaches the water. It is to be remarked all this tribe are voracious, and, if pursued by a Hawk or other bird that creates alarm, it readily disgorges, in order to lighten itself and escape by flight. It is no uncommon thing to see them bring up a large quantity of half-digested food when slightly wounded by shot: tamed Gulls will do the same if driven by a dog. Gulls float lightly on the surface of the water, by reason of the quantity of feathers in proportion to their weight, and seem incapable of diving. If wounded ever so slightly and fall in the water, they never attempt to dive like other aquatic birds. The Arctic Gull is found in Norway, Sweden, Denmark, and Russia, and as far as Kamtschatka; is common in Greenland.

SUPPLEMENT.—The Arctic Gull is a very rare species in the southern parts of Great Britain, and only accidentally occurs. Mr. Pennant, in his 'Voyage to the Hebrides,' speaks of its breeding amongst the heath, and, when disturbed, flying leisurely about like the Lapwing. It is found on the island of Rum, and Mr. Simmonds ('Linnean Transactions') says "Plentiful in the isles of Glass and Scalpa. Nest composed of dry grass, found upon the slope of a marshy hill. Eggs very light brown, marked irregularly with dark brown blotches. No external mark of distinction between the sexes." The little variety to which this species is subject, perhaps renders it difficult to ascertain the distinction of sex by the plumage: indeed in the whole of this tribe there is no material difference in sexual plumage. A specimen of the Arctic Gull now under inspection differs somewhat from that which was described in the former part of this work. It has the sides of the head, neck, and throat buff-colour: the breast white, shaded into a grey, and becoming dark slate-colour on the belly and parts beneath: the upper parts of the body are also dark slate: the wings and tail black: the legs are yellowish: the knees, and the feet as high as the back toe, black. The sex could not be

determined, but the two middle feathers of the tail are of their full length.

Gull, Blackheaded. — [Yarrell, iii. 569; Hewitson, cxxxvi. 491.] *Larus ridibundus*, *Lin. Syst.* i. p. 225, 9; *Gmel. Syst.* ii. p. 601; *Ind. Orn.* ii. p. 811, 2; *Lin. Trans.* vii. p. 284; *Bewick, Br. Birds*, ii. t. p. 222. Brown Gull, *Lath. Syn. Sup.* ii. p. 331, No. 1. *Larus cinereus*, *Raii Syn.* p. 128, A. 5; *Will.* p. 264. *Gavia ridibundus phœnicopos*, *Bris.* vi. p. 197, 14; *Ib.* 8vo, ii. p. 413. *La Mouette rieuse*, *Buf.* viii. p. 433. Brown-headed Gull, *Albin*, ii. t. 86. Black-headed Gull, *Br. Zool.* ii. No. 252; *Ib.* fol. 143, t. L. 5; *Arct. Zool.* ii. No. 455; *Lath. Syn.* vi. p. 380, 9; *Ib. Sup.* p. 268; *Lewin, Br. Birds*, vi. t. 212; *Walc. Syn.* i. t. 115; *Plott. Hist. Staff.* p. 231, 7. Provincial: Puit, or Pewit Gull; Black-cap; Sea-Crow; Mire-Crow; Crocker; Pickmire; Black-head, or Hooded Crow. — This species is fifteen inches in length; weight nine or ten ounces. Bill slender; deep red; orbits the same; irides hazel. The head and throat black; on each eyelid a small white spot; back and wings ash-colour; the prime quills white, more or less margined and tipped with black, the first and second slightly so on the outer web, the three next wholly white on that part; from the sixth the exterior webs are ash-coloured; the neck, whole under parts, and tail are white; legs and feet red; claws black. These birds appear to be subject to great variety from age, or at least in their change in the first year, and in those changes have been described as different species. The Red-legged Gull of authors is only this bird before it is arrived to maturity; and there seems no doubt but the old birds lose the black on the head in the winter, and do not assume it again till the breeding season; but there is generally a little black about the ears; the bill and legs also lose their bright colour. We have seen hundreds of these birds together in the winter, but have never seen one with a black head at that season. They appear in great abundance in the autumn on the coast of Caermarthen and Glamorganshire, particularly about the mouths of rivers. At that time the head is white, in some mottled with brown, with a dusky spot behind the ear; the back and wing-coverts in young birds are mottled with brown and white; the tail crossed with a dusky bar at the end; the bill and legs scarcely tinged with red. Towards spring the back begins to assume the ash-colour; then the wing-coverts, and the bill and legs, obtain their proper colour; the black behind the ears spreads and meets behind, and on lifting up the feathers of the crown about the month of

March the stubs of the black feathers are to be observed. At this time also some few black feathers appear on the throat; but the perfect black head is not assumed during their stay in those parts. In Devonshire we have seen them complete in feather later in the spring, but have observed the same appearance in winter. The Black-headed Gull is said to breed in Lincolnshire on the fens, and in other parts of England upon the borders of rivers. Dr. Plott assures us, in his 'History of Staffordshire,' that in his time these birds annually visited a pool in Staffordshire, in the parish of Norbury, which pool was called Pewit Pool, on account of these birds breeding on the islands. He also assures us that they would not breed on any other land than that of the proprietor of the before-mentioned place; and that, on the death of the owner, they deserted the pool for three years, but only retired to another estate belonging to the next heir. In these more enlightened times more substantial reasons might be assigned for their leaving their usual breeding-place. The Doctor further states that they appeared about the latter end of March or beginning of April, and retired again before winter. The young birds were accounted good eating, and were taken by driving them into nets before they could fly; that fifty dozen were taken at a driving; and that five shillings per dozen was the usual price. The young were kept alive and fattened on offal. It is also added that three drivings were generally made in a season; and that anciently as many were taken, as the profit amounted to fifty or sixty pounds. No author mentions their being seen in winter, having at that time been made a distinct species under various denominations, particularly that of Red-legged Gull. See that bird, under which the synonyms will be found. It makes a nest on the ground with rushes, dead grass, and such like materials, and lays three eggs of an olivaceous-brown, marked with rusty brown blotches. Found in Russia and Siberia. Inhabits North America.

SUPPLEMENT.—We have now and then observed this species in the beginning of July upon the coast of Devon, with the full dark-coloured plumage on the head, but never in the winter. These birds, we are assured by Mr. Dickinson, continue to breed in great numbers about the same parts in Shropshire mentioned by Plott. Mr. Bewick says that they breed at Palinsbourne, in Northumberland, where they are accounted of great use in clearing the surrounding lands of noxious insects, worms, and slugs. In some of the fens in Lincolnshire they are plentiful in the

breeding season, inhabiting the most swampy parts along with Snipes, Red-shanks, and Ruffs, whose nests are intermixed amongst the high tufts of bog-grass. The Gulls trample down the grass upon the tops of the tumps, and thus form a place on which they deposit their eggs, and set isolated, each on its own little island, about a foot or more above the surface of the water or swamp. Thus raised from the surface, they are seen at a considerable distance, and can equally observe the approach of an enemy, and consequently are difficult to be shot. Amongst the great number we have seen in Lincolnshire in the breeding season, not one was observed without the complete dark-coloured head, and only one or two instances in which there were a few brown feathers on the coverts of the wings, probably belonging to a late brood of the former year. The eggs weigh from nine to ten drams and a half. As there has been so much confusion and difference of opinion with respect to this bird in its several gradations of change before its arrival at maturity, it may not be improper in this place to enter more minutely into this subject; and for this purpose we cannot perhaps more effectually remove obscurity than by transcribing a paper on the subject which we had the pleasure to lay before the Linnean Society, and which has been honoured with a place in their 'Transactions':—"From the very great confusion which seems to have arisen in some species of the Gull tribe, occasioned by a very considerable variation in plumage at different ages and seasons, we trust it will not be unacceptable to this Society, and to the critical Ornithologist, if, from long and strict attention to several of this genus, which for many years have almost daily been presented to our view, we should endeavour to clear away a little more of that mist which has for so long a period veiled in obscurity those birds which are usually known by the names of Black-headed Gull (*Larus ridibundus*), Red-legged Gull (*Larus cinerarius*), Brown-headed Gull (*Larus erythropus*), Brown Tern (*Sterna obscura*), all of the Gmelinian system; and the Brown Gull of the Second Supplement to Latham's 'General Synopsis.' The endeavour to elucidate any of the more obscure objects of creation is a claim which Science has upon the naturalist; in our attempt, therefore, to throw light upon a subject which has caused so many various opinions, we beg leave to say that, from long acquaintance with the objects in question, we have no scruple in asserting that the three first and the last are, without doubt, one and the same species, and that the other has

been confounded with it. To those who are not well acquainted with the subject it may appear arrogant and presumptuous to call in question the opinions of so many respectable authors; but we trust we shall, from an intimate acquaintance with the bird in question, in all its various changes from the young to the adult, be able to prove, and lay before the Society, sufficient grounds of reason for an opinion so greatly at variance with that of so many more able Ornithologists. In the 'Ornithological Dictionary' we thought sufficient had been said, under the articles 'Gull, Black-headed' and 'Red-legged,' to have cleared away the greater part of such obscurity; but we since find, in the work of our estimable friend, and one of the greatest Ornithologists of the age, which made its appearance about the same time as the former (from which circumstance, unfortunately, no advantage could be reaped from that valuable source), that the Brown Gull, with reference to the Brown Tern of some authors, is there given as a distinct species. It does not, however, appear that this author saw the bird in question, but that the description was sent to him by a very able naturalist, our late worthy and much-to-be-lamented friend, Mr. Boys; and a very accurate description it is. That the bird should have been considered by him as that which has been so long in obscurity under the title of Brown Tern, as handed down to us by Ray and Willughby, is not surprising; and that Dr. Latham should fall into such an opinion is not more extraordinary; on the contrary, it was very natural; and possibly this may be the identical bird, though we rather think the Brown Tern is the young of the Common Tern (*Sterna Hirundo*). But be this as it may, it becomes requisite to show that the bird which now stands as a distinct species in the Second Supplement to the 'General Synopsis,' under the title of Brown Gull, is no other than the Black-headed Gull in its adolescent state; and it becomes the more necessary to clear up this point, as it is stamped with such high ornithological authority, which might lay a foundation for more confusion in this very intricate class. To point out the errors of our friends, for whom we have the highest regard, would indeed be a task ill suited to our pen, were we not, from long habits of intimate friendship with both these gentlemen, well aware of the purity of their writings, and that nothing would afford them more pleasure than the furtherance of Science, by clearing up the doubts existing by well-grounded facts. In the former works of our friend Dr. Latham, he had been induced to fall into the opinion

of other authors, and made some of the varieties of the Black-headed Gull distinct species. In his 'Index Ornithologicus,' however, he has very judiciously brought the *Larus cinerarius* and *erythropus* of Gmelin, together with the *ridibundus*, as mere varieties; but suffers the *Sterna obscura* to remain a distinct species, although he expresses a doubt whether it may not be a young of some one of the Tern or Gull genus. Thus the Doctor has cleared away much of the obscurity; and it only remained to restore the Brown Gull to its proper place as the young of the Black-headed species, and scarcely differing in plumage from the state in which it is described as the Brown-headed. Whether the Brown Tern of the older naturalists is a Tern or a Gull is perhaps a doubt; for as the young of the former do not remain with us long after they are capable of flying, we cannot ascertain their several changes in plumage; though we ought, perhaps, to give them credit, and admit it was a Tern, but not a distinct species. So with respect to the Brown Gull: whether it is or is not the Brown Tern of older authors is of no importance, as at any rate it is an immatured bird, and alike ought to be expunged from the works on Ornithology as a distinct species. Since the perusal of Doctor Latham's last valuable work, we sent him the bird in question, having every mark of that described by him as the Brown Gull; and we believe the Doctor is thoroughly satisfied with our observations upon it. It is indeed remarkable that a bird bearing such strong marks as the Black-headed Gull, in all the changes from the nestling to the adult plumage, should have ever been multiplied into so many species, as it is in its various stages readily ascertained by the superior whiteness of many of the prime quill-feathers, especially on the outer webs, and the greater coverts immediately impending them, which is very conspicuous when the wings are extended, and an obvious distinguishing mark from all others even when flying. In order to elucidate the subject more clearly, we shall here subjoin a description of the several remarkable changes incident to the Black-headed Gull, which a long and intimate acquaintance, from daily observation, has warranted us to assert, and from which it will appear evident that one of those mutations presents the identical bird in question, the Brown Gull of the Second Supplement to the 'General Synopsis.' In making any part of the history of this intricate class of birds more clear, by endeavouring to bring them into the limits of truly definable distinction, we do not arrogate superior knowledge on the subject,

except so far as favourable situations and strict attention to a favourite pursuit have conspired to develope undeniable facts. Without detailing the various synonyms of authors for this bird in its several changes of plumage, we shall only have recourse to a few quotations, particularly to the 'Ornithological Dictionary,' where references may be found under its various denominations, and to the 'General Synopsis,' as well as to Gmelin's 'Systema Naturæ,' for the more copious. In order to render the subject more clear, we shall begin with a short description of the Black-headed Gull in its first or nestling feathers, or as it first appears on our shores, after having quitted its place of nidification; and trace it through the various changes, till it arrives at full maturity, which we are inclined to believe, in this and some other of the smaller species of the genus *Larus*, is effected in one year, but which in the larger species takes three or four years to accomplish. In the first plumage the feathers are more or less mottled with brown and white, which, in a short time after leaving the nest, are displaced by those which are wholly white underneath; the head becomes white, with an obscure spot behind the ear; but the back, scapulars, and coverts of the wings continue mottled some time longer. In this state, therefore, it comes nearest to the description of Ray's Brown Tern, which had the whole under side white, the upper brown: the wings partly brown and partly ash-colour: but then he expressly says the head is black, a circumstance which never occurs in this bird while it has any brown feathers remaining on its back, and therefore cannot be referred to. The second material change brings it to the Lathamian Brown Gull of the Second Supplement to the 'General Synopsis,' to which we refer for a comparative description, and which so exactly accords with the following, taken from a recent specimen killed on the 14th of February, on purpose to send to Dr. Latham, that there can be no doubt of their being the same:—Length thirteen inches and a half; breadth thirty-seven: weight eight ounces and three-quarters. The bill one inch and a quarter in length to the feathers on the forehead; the base red-orange, the tip dusky black: irides dusky: a black spot at the anterior corner of the eye; another behind the ear: crown of the head mottled dusky and white; forehead and all the under parts white: back, scapulars, greater coverts of the secondary quills, and some of the upper series of the smaller ones near the shoulder, grey: several rows of the middle series of the coverts brown, edged with dull white: the two first prime

quills are white, margined on both webs with black; in the third the white increases on the outer margin, and the black at the tip; and at the fifth feather the white part becomes pale grey, and the dark part increases on the inner web and becomes more dusky: secondary quills dusky near their ends, margined with grey: tertials brown: the feathers of the spurious wing are dusky, slightly tipped with white; the ridge of the wing below that, and the three or four larger coverts adjoining, are wholly white; the rest of the greater coverts impeding the prime quills, more or less brown: the outer feather of the tail quite white; the next with two dusky brown spots at the tip; the rest white, tipped with the same for rather more than half an inch, the ends slightly edged with dirty white: legs and feet dull orange-red. The next change brings it to the Brown-headed Gull, *Lath. Syn.* vi. p. 383; *Larus erythropus*, *Gmel. Syst.* ii. p. 597; *Larus ridibundus*, *Ind. Orn.* ii. p. 812; and in the 'Ornithological Dictionary' will be found, under Gull, Brown-headed, to refer to Gull, Black-headed. In this there is no material difference from the last, except that the legs have attained their perfect colour (red), and the head assumes more of the dusky or brown feathers than usual; while the middle coverts of the wings retain the mottled brown, and the tail the dusky bar at the end. This, though we consider it as an irregular change, may be admitted as an unusual variation in the gradations commonly observed; for scarcely an instance is to be found but where the brown scapulars, and middle series of the wing-coverts, are changed for those of grey, and the tail becomes wholly white before the head is much covered with dusky feathers, or the legs become more than reddish. The fourth change is that which has been generally known by the title of the Red-legged Gull, *Lath. Syn.* vi. p. 381; *Larus cinerarius*, *Gmel. Syst.* ii. p. 597; *Larus ridibundus*, *Ind. Orn.* ii. p. 812, var. B.; and in the 'Ornithological Dictionary' is described as Gull, Red-legged, with reference to Gull, Black-headed. In this change, which brings it so near to maturity, we find a very material difference; for not only the scapulars and coverts of the wings are become grey, but the bar at the end of the tail is lost, and that part assumes a pure white; the legs and bill also become of a fine purplish red; these last, however, grow darker as the spring advances, and the black increases on the head, a circumstance peculiar to the breeding season, when that colour spreads over the whole head, taking in the throat; and in this, the most perfect or adult state, it is the Black-headed

Gull (*Larus ridibundus*). It should, however, be observed that this most perfect state of plumage disappears in the autumnal moulting, and the bird re-appears in that which characterised it as the Red-legged Gull; and these mutations take place every summer and winter; in the former all have the black head, in the latter season none. Having now traced the Black-headed Gull through its various stages of plumage, after long experience and investigation, we trust that the numerous synonyms will in future be concentrated in one species, *Larus ridibundus*.

APPENDIX.—We really did not suspect, after what had been so fully explained in vol. vii. of the 'Transactions of the Linnean Society,' concerning the identity of the Black-headed, Red-legged, and Brown-headed Gulls as one species, that we should have occasion to bring the subject again before the public. But as we find in a late edition of Pennant's 'British Zoology' that the editor has made the Red-legged Gull of Latham's 'Synopsis' a variety of the Black-headed Gull of the same author, and has continued the Red-legged Gull of the 'Arctic Zoology' as a distinct species under that title, with a reference to the Brown-headed Gull of Latham, the confusion will become greater than at the time when we undertook to demonstrate that all these birds were actually one species. The reason which seems to have induced the editor of the work to which we allude, to continue the Brown-headed Gull of Latham's 'Synopsis' as a distinct species, may be collected from the following paragraph:—"Mr. Montagu considers this as the young of the Black-headed Gull, but Dr. Latham, in some observations with which he has recently favoured the editor, supposes that it certainly is a distinct species, as no Gull in the immature state of its plumage has a back of an elegant light grey colour." The very great regard we possess for our friend Dr. Latham, and the high opinion we entertain for his ornithological knowledge, would induce us to incline to his opinion in all abstruse points in a science he has so long professed, and which he has handled with such highly merited applause; but we cannot compromise fact. It will be seen in the latest works of Dr. Latham that these birds are brought together as varieties of *Larus ridibundus*, and we have never heard our friend hint at an alteration of that opinion. Under these circumstances we are inclined to suspect that the editor of the late edition of the 'British Zoology' has miscomprehended the Doctor's recent observations, in which he is supposed to have asserted that "no Gull, in the immature state of plumage, has a back of an elegant

light grey colour," because the Doctor's experience must have convinced him that this is diametrically opposite to fact. It should be recollected that in all the intermediate changes of plumage, from the time a bird leaves its nest to the perfect adult state, there is in some species a very great variation at different ages and seasons; but that variation is constantly similar in the same species where there is an uniformity of plumage in the state of maturity. Now it unfortunately happens that the reasons assigned for the Brown-headed Gull being a distinct species is contradicted by the fact that not only the Black-headed, but every other species of Gull whose back is of a grey colour, invariably perfect the feathers of that part and the scapulars first, and always before the coverts of the wings and the tail. In what manner has the editor of the 'British Zoology,' as well as other naturalists, described the Tarrock and the Winter Gulls as the immatured Kittiwake and Common Gulls? Are they not stated to have the back grey, while the coverts of the wings are mottled with brown, and the end of the tail black? Under these circumstances, and with the knowledge that Dr. Latham has himself described these two birds in their different states of plumage as the adult and the young immatured in plumage, it appears obvious that his observations must have been mistaken. Our intention has been to elucidate from practical knowledge, and we do assert that all the Gulls retain the marks of immaturity longest on the head, the coverts of the wings, and the tail; and we again repeat that we have traced the Black-headed Gull through all its changes, in which the Brown-headed is that bird in one of its first mutations. It must also be remarked that in the same edition of the 'British Zoology' the Brown Gull (*Sterna fusca* of Ray) is continued as a distinct species of Gull, with a reference to the Brown Gull of the Second Supplement of Latham's 'Synopsis,' which we have shown is another variety of the Black-headed Gull. It will be observed in vol. vii. of the 'Linnean Transactions' that we had conferred with Dr. Latham upon the subject of this bird, having sent him a specimen with which he was thoroughly satisfied. In a recent letter from our friend Dr. Latham he remarks that the Brown Gull or Tern was originally copied by others from a drawing of Leonard Baltner. "I have," says the Doctor, "seen Baltner's original drawing in the possession of the late Lord Dartmouth, described to be the size of an Ouzel, with brownish lead-coloured plumage, mottled about the head, and sides under the ears: quills and tail even: short

legs and generally black. I can only add that the bill is like that of a Gull." Whether this is the same bird as Mr. Johnson communicated to Ray must be doubted, since he says, "The whole under side is white: the upper brown: the wings partly brown, partly ash-colour: the head black: the tail not forked." The size is not mentioned, but we may conclude it is a variety of some common species, since he remarks that "these birds fly in companies." This bird, described by Ray as a Tern, may be of the same species as that given in the Second Supplement to Latham's 'Synopsis,' which was originally described by Mr. Boys, from a bird killed at Sandwich, and communicated to Dr. Latham as the supposed Brown Tern of Ray, and which we are confident is no other than the young of the Black-headed Gull. But this bird had not a black head, which Ray has described his bird to have; nor did we ever yet obtain any species of Gull or Tern with a complete black head while the wings retained any of the immature brown plumage, but there may be a moment in which such may happen in some individuals, for those parts are perfecting together. The size of Baltner's Gull precludes the possibility of its belonging to *Larus ridibundus*, a bird so vastly superior in size to an Ouzel; indeed there is but one species of *Larus* that bears any similitude in size to that bird, and that is *Larus minutus*, which in length scarcely equals that of the Ring Ouzel. But as the *minutus* is a Siberian species, and never identified as an occasional visitant to Great Britain, the possibility of Baltner's minute Gull belonging to that species has been overlooked by naturalists. As, however, *Larus minutus* has very lately been shot in England, there is great probability that the specimen from which Baltner took his drawing was of this species in one of its intermediate changes. For a description of *Larus minutus* we refer to Gull, Little, of this Appendix. On taking leave of this discussion, we trust the intention cannot be mistaken, as our only motive is elucidation, grounded (if we may be allowed the expression) upon experimental physiology.

Gull, Blacktoed. — *Larus crepidatus*, Gmel. *Syst.* ii. p. 602; *Ind. Orn.* ii. p. 819, 14; *Bewick, Br. Birds*, t. p. 236. *Cataracta Cephphus*, *Raii Syn.* p. 129, 11; *Will.* p. 267; *Ib. Angl.* p. 351, t. 67. *Stercorarius striatus*, *Bris.* vi. p. 152, 2, t. 13, f. 2; *Ib.* 8vo, ii. p. 401. L'Abbe, ou *Stercoraire*, *Buf.* viii. p. 441, t. 34. Black-toed Gull, *Br. Zool.* ii. No. 244, t. 86; *Arct. Zool.* ii. No. 460; *Lath. Syn.* vi. p. 387, 15; *Ib. Sup.* p. 268; *Lewin, Br. Birds*, vi.

t. 216; *Walc. Syn.* i. t. 118. Provincial: Dung-Bird; Boatswain. — The weight of this species is about eleven ounces; length fifteen or sixteen inches. The bill is an inch and a half long; the nostrils are placed in a kind of cere. The head and neck dirty white; the sides of the last marked with dusky; breast and belly white, crossed with numerous dusky and yellowish lines; sides and vent barred transversely with black and white; the back, scapulars, wing-coverts, and tail black, edged with white or pale rust-colour; the shafts and tips of the quills white, the exterior webs and upper half of the interior black; the lower part of the latter white; tail black, tipped with white; the two middle feathers in some near an inch longer than the rest; shafts white; the exterior webs of the outmost spotted with rust-colour; the legs of a bluish lead-colour; lower part of the toes and webs black. We have observed one in the museum of Dr. Latham darker in colour, and mixed with ferruginous; breast mottled with white; the tail a little rounded at the end. This was killed near Horsham in Sussex. Two others only are recorded to have been killed in England; one shot near Oxford, the other in Lancashire. Said to be more frequently met with on the continent, particularly in Denmark. Supposed to breed at Hudson's Bay, arriving there in April, and makes a slight nest of grass; lays two ferruginous eggs, spotted with black.

SUPPLEMENT. — Mr. Dickinson informs us that *Larus crepidatus* has been shot at Tong, in Shropshire. From Lord Stanley we learn that a specimen was shot near Liverpool in the year 1808, and is now preserved in his Lordship's museum. Mr. Neill, Secretary to the Wernerian Natural History Society of Edinburgh, assures us that several Black-toed Gulls were taken off the Bell Rock in the last winter. These he observed did not agree with Pennant's or our description, but exactly with that of Bewick, the description of which we shall here insert, for the sake of making some observations: — "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 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 bird from which Mr. Bewick's figure and description were taken weighed only eight ounces, but was very lean; its length was sixteen inches and a half, and its breadth three feet four inches. This specimen was shot on the coast of Durham on the 1st of October, 1800. When it is recollected how much variation there is in the plumage, and even in the colour, of the bill and legs of all the tribe of Gulls at different ages and in different seasons; when we have considered the adverse opinion of other writers concerning the actual species of this genus, and that no less than four have been made out of one, as we have lately noticed of the Black-headed Gull; and that most other species have been divided into two or more, as season or age produced a variation of plumage, it will not be surprising if *Larus crepidatus* and *parasiticus* should prove to be the same species. We have collated the present subject in other writers, and compared the different descriptions, habitat, and other circumstances, and are led to suspect that this supposed rare species of Gull is in fact no other than a variety of the Arctic Gull. This opinion will perhaps astonish some of our ornithological readers, but it must be recollected that others as apparently distinct have been traced through all their changes, and at last defined to be the same species. That the bird here described from Bewick, and those mentioned by Mr. Neill, which have been considered as the Black-toed Gull, are in fact no other than the Arctic we have very little doubt. It will be observed that the size of these two supposed species is nearly similar, the bill of similar construction, covered with a cere, and the feet of both more or less black. Their habits of pursuing other Gulls, to make them disgorge, are the same. The superior length of the tail in the Arctic Gull creates no objection to our supposition, for the birds of the first year certainly do not possess this character; and probably the old birds, for some months after their annual moulting, have not the two middle feathers much longer than the rest, a circumstance we have noticed in our domesticated Pin-tail Ducks. Upon the whole therefore we really suspect these two birds are one species. The few Black-toed Gulls that have been shot in England have been after the breeding season. Those from which the original descriptions were taken appear to have had only a part of the foot black, and no

mention is made of the thigh and knee being of that colour. In Bewick's bird, not only those parts, but the whole foot is black: and in the specimen of Arctic Gull now before us the black on the foot extends, on the leg, as high as the back toe; and on the thigh extends rather below the knee. These are incidental circumstances changing with age and season. The inclination to the long feathers in the tail of the Black-toed Gull is noticed by all authors; that described in the 'British Zoology' had those feathers an inch longer than the others: those in Bewick's bird, killed in the autumn, had those feathers somewhat longer than the rest. We shall now leave this matter to some of our North British naturalists, whose situation may enable them to trace every change in the *Larus parasiticus*, as effected by age and season, and we trust that our conjectures will be found to be correct. [The Black-toed Gull of Pennant is Richardson's Skua of Yarrell, and identical with Arctic Gull of Montagu. See Gull, Arctic.]

[Gull, Blackwinged.—See Gull, Laughing.]

[Gull, Bonaparte's.—Yarrell, iii. 554. *Larus Bonapartii*, Audubon, *Birds of America*, vol. vii. p. 131, pl. 442; Richardson and Swainson, *Fauna Bor.-Amer. Birds*, p. 425, pl. 72. — "Neck, tail-coverts, tail, whole under plumage, and interior of the wings pure white; hood greyish black, extending half an inch over the nape, and as much lower on the throat; mantle pearl-grey, this colour extending to the tips of the tertiaries, secondaries, and two posterior primaries; the anterior border of the wing white; the outer web of the first primary, and the ends of the first six, are deep black, most of them slightly tipped with white; the inner web of the first primary, with the outer webs of the three following ones, with their shafts, are pure white; bill shining black; inside of the mouth and the legs bright carmine-red; irides dark brown."—Yarrell, iii. 556. A specimen of this beautiful American species was obtained near Belfast, on the 1st of February, 1848, as recorded in the 'Zoologist' for 1849, p. 2069. A second example was shot on Loch Lomond, in April, 1850, as recorded in the 'Zoologist' for 1851, p. 3117.]

Gull, Brown.—See Gull, Black-headed; and Gull, Skua.

Gull, Brownheaded.—*Larus erythropus*, Gmel. *Syst.* ii. p. 597. *Larus ridibundus*, Ind. *Orn.* ii. p. 812, var. γ . Red-legged Gull, *Arct. Zool.* ii. p. 533, E. Brown-headed Gull, *Lath. Syn.* vi. p. 383, 11.—

This bird is undoubtedly a variety of the Black-headed Gull in its approach to maturity. We have seen many with the head and throat mottled brown and white; though it is not uncommon that, when they are so far advanced towards perfection on that part, to find them with the coverts of the wings brown, edged with white, and the tail tipped with black, as this bird is described to be. See Black-headed and Red-legged Gulls. [Yarrell gives this name as a synonym of the Black-headed Gull. See Gull, Blackheaded.]

Gull, Brown and White.—See Gull, Wagel.

Gull, Clovenfooted.—See Tern, Black.

Gull, Common.—[Yarrell, iii. 589; Hewitson, cxxxviii. 495.] *Larus canus*, Lin. Syst. i. p. 224, 3; Gmel. Syst. ii. p. 596; Ind. Orn. ii. p. 815, 9; Bewick, Br. Birds, ii. t. p. 218. *Larus cinereus minor*, Raii Syn. p. 127, A. 3; Will. p. 262, t. 76. *Gavia cinerea*, Bris. vi. p. 175, 8, t. 16, f. 1; Ib. Svo, ii. p. 408. Le Grand Mouette cendrée, Buf. vii. p. 384. White Web-footed Gull, Albin, ii. t. 84. Common Gull, Br. Zool. ii. No. 249, t. 89, f. 2; Ib. fol. 142; Arct. Zool. ii. No. 458; Ib. Sup. p. 70; Will. Angl. p. 345, t. 76; Lath. Syn. vi. p. 378, 8; Lewin, Br. Birds, vi. t. 215; Walc. Syn. i. t. 110; Pult. Cat. Dorset. p. 18; Don. Br. Birds, ii. t. 46. Provincial: Sea Mall, or Sea Mew. — This species weighs fifteen or sixteen ounces; length about seventeen inches. Bill yellow; irides hazel. The head, neck, tail, and under parts of the body white; the back, scapulars, and wing-coverts ash-colour, the former tipped with white; the primary quills black; the two or three first have a spot of white across the ends, but the tips are black, the rest are tipped with white; the secondaries like the back, tipped with white; legs dull white, or tinged with green. This is the description of the bird maturely feathered. In the first year it is more or less mottled all over with brown and white, with a dusky bar across the end of the tail. In the second year the head, neck, under parts, and tail are white, the two first streaked with dusky; the last retains the bar at the end; the back and scapulars are ash-coloured, but the coverts of the wings still retain brown and white mottled feathers. In this state it has long been considered as a distinct species, and called the Winter Mew, or Gull (see that bird). We shall here remark that too much caution cannot be observed with regard to this tribe of birds; none perhaps have puzzled the naturalist more from the variation in plumage at different ages. All

the Gulls found in this country are more or less mottled for the first year, and some probably do not arrive to maturity till the third or fourth year, which we can speak of as a fact from having kept them on purpose to ascertain this point, and which we shall enlarge more upon under the article Herring Gull. The Common Gull is one of the most plentiful species; is found on most parts of our coast. They breed upon the ledges of the rocks close to the sea-shore; sometimes not far above the water. We saw some hundreds sitting on their nests in an island off St. David's; the nests were made of sea-weed, and were placed near together about fourteen feet from the beach. The eggs were two or three in number, of a dull olive-brown, blotched with dusky, the size of a small Hen's egg. When disturbed were exceedingly clamorous, and not much alarmed by repeatedly shooting at. This bird is frequently seen in winter at a considerable distance from the coast; will flock with Rooks in severe weather, and follow the plough for the sake of the larvæ of the chaffer (*Scarabæus Melolontha*) and worms.

SUPPLEMENT.—This, like most others of the Gull genus, has been multiplied into two or three species, especially into what has been termed the Winter Gull (*Larus hybernus*), the synonyms of which should therefore be brought together with *Larus canus*. We have had this species alive for some years, and observed that when it had attained its full mature plumage, in the second year the head and neck are pure white during the summer, but, like the Herring Gull, those parts become streaked and spotted with brown in the autumn, which is continued all the winter, and in the spring become again pure white. This species, in defect of fish or worms, will, when pressed by hunger, pick up grain. It is almost inconceivable that so small a bird should be able to stow within its body an eel of a foot in length, but it is a fact we have frequently witnessed. None of the tribe seem to disgorge more readily on being alarmed than this; no effort appears requisite, but a reversion or contraction of the stomach takes place if in the least frightened, and the complete meal is regurgitated, and as speedily swallowed again when the fright is over.

[Gull, Cuneate-tailed. — See Gull, Ross's Rosy.]

[Gull, Glaucous.—Yarrell, iii. 614; Hewitson, cxli. 504.] *Larus glaucus*, Bewick, Brit. Birds, vol. ii. p. 231,—young, 233; Temminck, Manuel d'Ornith. vol. ii. p. 757. "The adult bird has the bill yellowish white, the inferior angle of the lower

mandible reddish orange; irides straw-yellow; all the plumage nearly white, but with a tinge of skimmed-milk blue over the back and wing-coverts; primaries white, reaching but little, if any, beyond the end of the tail; legs and feet flesh-colour. Old males have been taken measuring, from the point of the beak to the end of the tail-feathers, thirty-two and even thirty-three inches; the wing, from the carpal joint to the end of the longest quill-feather, nineteen inches. In winter the head and neck are slightly streaked with gray."—*Yarrell*, iii. 619: This bird is an inhabitant of the arctic seas, more particularly those of the American continent. Mr. Edmondston, of Shetland, first made it known as a British bird: in those islands it appears to be a regular winter visitor. It has occasionally occurred on almost every part of the coast of Great Britain and Ireland, as well as almost every sea-coast of Europe.]

Gull, Great Blackbacked.—[*Yarrell*, iii. 610; *Hewitson*, cxli. 501.] *Larus marinus*, *Lin. Syst.* i. p. 225, 6; *Gmel. Syst.* ii. p. 598; *Ind. Orn.* ii. p. 813, 6. *Larus niger*, *Bris.* vi. p. 158, 1; *Ib.* 8vo, ii. p. 403. Le Goéland noir, *Buf.* viii. p. 495, t. 31. *Larus maximus ex albo et nigro varius*, *Raii Syn.* p. 127, A. 1; *Will.* p. 261. Great Black and White Gull, *Will. Angl.* p. 344, t. 67; *Albin*, iii. t. 94. Black-backed Gull, *Br. Zool.* ii. No. 242; *Ib.* fol. 140, t. L.; *Arct. Zool.* ii. No. 451; *Lath. Syn.* vi. p. 371, 2; *Lewin, Br. Birds*, vi. t. 208; *Pult. Cat. Dorset.* p. 18; *Walc. Syn.* t. 112. Provincial: Cobb.—The weight of this species is four pounds three-quarters; length near thirty inches; breadth five feet nine or ten inches. Bill bright yellow, very thick and strong, three inches and a half in length; on the lower mandible is a blood-red spot, dusky in the middle; irides fine yellow; eyelids red-orange. The head, neck, rump, tail, and whole under parts white; back and wing-coverts dusky black; prime quills black, the first tipped with white for two inches or more, the second the same, with a black bar across the white, the rest more slightly tipped with white; the secondaries are also tipped more or less with white, as are their coverts and two or three of the scapulars; legs flesh-colour. This bird and the Less Black-backed Gull, hereafter described, have hitherto been confounded for the same species; but from frequent opportunities of observing their manners, as well as by dissection, proving both sexes to be alike in plumage, we are able without doubt to pronounce them distinct species. It is not a very plentiful species, but is sometimes seen on most of our

coasts, but nowhere so plentiful as on the extensive sandy flats of the coast of Caermarthenshire, between Laugharne and Tenbeigh, where we have seen it at all times of the year. They generally keep in small flocks of eight or ten, sometimes in pairs, but never herd with the other Gulls. It was natural to believe, as they were seen on that coast all the summer, they must breed somewhere near, but in our researches from that part as far as St. David's we could not discover where they bred, but were informed by the fishermen (who call them Cobbs) they breed on the Steep Holmes and on Lundy Islands in the Bristol Channel. The Less Black-backed Gull, as well as the Herring Gull, we found the nests of in great abundance; but none of these birds were to be seen in the same places. The young, for the first two or three years, are mottled all over with brown and white; the bill is light horn-colour, tip black; quill-feathers dusky; tail mottled, near the end a dusky bar; tips white; irides and orbits dusky. We shot several birds of this description in company with them, of both sexes; their weight and size little inferior; and as these are always found to associate with them, and as there is no other species of Gull half so large, there can be no doubt of its being the young of this bird. In this imperfect state this has been described by some authors for a distinct species, under the title of Wagel; others, who have not considered the size as essential, may have made the young of the Less Black-backed and Herring Gulls the Wagel; all of which are mottled nearly in the same manner during the first two or three years. We have seen the young of this species with the dark colour appearing on the back. It is a great enemy to the fishermen; will tear and devour the largest fish from the hooks when left dry by the ebbing tide.

APPENDIX.—In a small flat island lying about thirty miles west of the Orkneys, called Soules Kerry, this species of Gull assemble in considerable number in order to breed. Each nest contained four eggs, resembling in colour those of the Herring Gull, but superior in size. (Mr. Bullock).

Gull, Great Black and White.—See Gull, Great Black-backed.

Gull, Great Grey.—The bird given by Ray under this title is evidently the young of one of the larger species of Gulls, probably that of the Herring Gull or Great Black-backed Gull.

Gull, Herring.—[*Yarrell*, iii. 607; *Hewitson*, cxl. 499.] *Larus fuscus*, *Lin. Syst.*

i. p. 225, 7; *Gmel. Syst.* ii. p. 599; *Ind. Orn.* ii. p. 815, 8; *Bewick, Br. Birds*, ii. p. 214. *Larus cinereus maximus*, *Raii Syn.* p. 127, A. 2; *Will.* p. 262. *Larus griseus*, *Bris.* vi. p. 162, 3; *Ib.* 8vo, ii. p. 405. *Gavia grisea*, *Bris.* vi. p. 171, 6; *Ib.* 8vo, ii. p. 407. Le Goéland a manteau gris brun, *Buf.* viii. p. 379. Herring Gull, *Br. Zool.* ii. No. 246, t. 88; *Ib.* fol. 141; *Arct. Zool.* ii. No. 452; *Lath. Syn.* vi. p. 372, 3; *Will. Angl.* p. 345; *Lewin, Br. Birds*, vi. p. 7; *Walc. Syn.* i. t. 113; *Pult. Cat. Dorset.* p. 18.—This species weighs about thirty-three ounces; length twenty-three inches. Bill yellow; on the lower mandible a reddish orange spot; irides light yellow; orbits red. Head, neck, tail, and under parts white; back, scapulars, and wing-coverts ash-colour; quill-feathers dusky, the five first black towards their ends, with a white spot near the tip; legs pale flesh-colour. The young are at first mottled all over with brown and dirty white; the quills dusky, without any white at the tips; tail with a dusky bar at the end; bill horn-colour; irides dusky; legs dark. In the second year the colours continue the same, but rather lighter; in the autumnal moulting the back becomes ash-colour; the irides get lighter, inclining to yellow; the bill the same; the rest of the plumage as before. In this state we have one now living of two years old last breeding season; and now, in October, shows no inclination to make any further change this year; from which we may fairly conclude these birds do not arrive at maturity till the spring of the third year, and perhaps not till the autumn, the principal moulting season. Nor can we be yet certain it is then perfect; for, upon examining specimens we have of the next change, we find the wing-coverts still mottled with brown; the head and neck streaked with dusky brown; the bar in the tail broken by numerous white undulated streaks running down the webs; the quills, back, scapulars, and under parts of the body perfect; bill and irides yellowish; legs pale flesh-colour. This should seem the last stage towards perfection; and as this was killed in the summer, it is most probable they are not perfected till the autumn of the third year. In the two first years the young of this and the Less Black-backed Gull are so much alike that they cannot be ascertained till the matured feathers begin to show on the back. Whether these immatured birds breed we cannot be certain; but we are inclined to believe they do, as we saw a great many of them intermixed with the perfect ones in a Gullery on an island off St. David's, where the nests were innumerable, and were equally clamorous with the others

when disturbed. The nests were on the top of the island, amongst the grass and loose stones; they were composed of a small quantity of long dry grass: the eggs, two in number, of a dark olive-brown, with dusky blotches. This bird, like others of the genus, feeds indiscriminately on fish and various other productions of the sea, particularly the Asterias, or star-fish. It is sometimes observed to trample the soft sand by moving the feet alternately in the same place. For what purpose this singular action is intended we cannot say, unless it is to force up the sand eels, or some hidden prey. The Herring Gull is found plentiful on all our shores, and not less frequent in all the northern parts of Europe, and elsewhere.

SUPPLEMENT.—It is well known that the young of this bird in the first year is mottled all over with brown and white, and no change is made till the autumn of the second year, when the back and scapulars become cinereous grey; the rest of the plumage continuing as before: the bill remains dusky: the irides get somewhat lighter. At the second moulting the bird begins to change the colour of the bill, the base becoming yellow: the irides paler: the head, neck, and under parts of the body white, streaked with dusky: the wings still mottled brown, with a few grey feathers: the tail mottled, and with the terminal bar as at first. After the third moulting, or at four years old, or little more, that is about the month of December, the same Gull from which these observations were taken was not matured, the head and neck streaked with dusky, and the tail was marked with a little dusky down the shafts of the middle feathers. This last may be said to be now the only immatured part of the plumage, since the head and neck in adults always become streaked in the winter; but in the following summer some of these streaks were retained. In the autumn following, at five years old, the tail was perfected, and the streaks increased on the head and neck as they should do at that season. In the succeeding spring the head and neck became pure white, and nothing remained to be perfected but the point of the bill, which was a little dusky. This Gull is now living and in high health, being thirteen years old. It begins moulting about the middle of August, when it annually assumes the mottled head and neck; and about the middle of February the partial spring moulting commences, the mottled feathers are discharged, and succeeded by pure white. This bird has the range of the lawn, but usually takes its station at the kitchen window when hunger presses. When the weather is mild and the ground

moist, it is amusing to observe its method of catching worms, by a perpetual trampling upon the same spot, turning about in all directions, and eagerly examining for those that rise out of the ground, which are instantly seized, and the same work is renewed. Similar means are frequently used by fishermen to procure worms for bait; but it could hardly be conceived that the slight pressure or concussion, occasioned by the trampling of so small a body as a Gull, should force the worms from their retreat, but such is the fact. Thus, where man is directed by reason to procure the object of his search, this bird as successfully obtains it by instinct. In the summer it is equally amusing to see this bird catch chaffers (*Scarabæus Melolontha* and *solstitialis*), and the common large black beetle (*Scarabæus stercorarius*), which fly about in the dusk of the evening throughout the summer months. These are most dexterously caught, if within reach of a flirt with mutilated wings. At four years old its piercing and inharmonious cry became incessant in the spring, from which it may be inferred that at that age this species usually begin to breed, and ours being probably a male, its clamour proceeded from the common impulse of nature. We cannot close this account of a favourite domesticated animal without remarking the several accidents that have befallen it, which prove its hardy nature. It was first obtained by a shot in the wing, which obliged half the wing to be amputated. A few years since, the bone of the thigh was broken by some accident close to the body, and as no art could set the fractured bone in such a situation, it was left to nature, and in two or three months it united, and the limb perfectly restored to action. And lately, by some unaccountable means, the wing which was before mutilated received a compound fracture close to the body, and as it was impossible for nature to form an union of the bone in a limb so situated, and on which the wind had so much power, we determined on amputation, having first applied a ligature just above the part taken off, suffering the ligature to continue; and without any other assistance the poor bird is perfectly recovered. Before we leave the history of this species, we cannot help remarking that none but closet naturalists could possibly have jumbled with this either of the Black-backed Gulls, by supposing either or both to be only differing in sex. It has been our principal object to obtain facts, by attending to these creatures in their native haunts, and strictly investigating their manners and habits, and can therefore speak without doubt as to the identity of them all as perfectly

distinct. There are fifty Herring Gulls to one of the Lesser Black-backed; and five hundred at least, perhaps a thousand, to one of the Larger Black-backed Gulls. But will determined sceptics be convinced, though we assure them that by dissection we have found both sexes in the three species?

[Gull, Iceland.—Yarrell, iii. 594; Hewitson, cxxxix. 498. *Larus leucopterus*, Eyton, *Rarer Br. Birds*, p. 59. *Larus glaucoides*, Temminck, *Manuel d'Ornith.* vol. iv. p. 468. *Larus islandicus*, Selby, *Brit. Ornith.* vol. vii. p. 501.—“Bill, from the division of the feathers upon the forehead to the tip, two inches long; pale flesh-red, or livid, at the base, with the tip blackish, or dark horn-colour. Ground colour of the entire plumage pale yellowish grey; the feathers being barred and mottled with pale broccoli-brown. Quills greyish white, with a slight tinge of broccoli-brown. Tail pale broccoli-brown, marbled with white. Legs and toes pale livid flesh-red. Tarsi two inches and a quarter long. Irides pale yellowish grey. Another specimen in my collection, that was killed in February, 1832, has the ground colour of the plumage nearly white. Head and neck faintly rayed with very pale broccoli-brown. Wing-coverts and back varied with broccoli-brown, but with the bars narrower, and at greater distances than in the bird described above. Quills nearly pure white. Tail white, varied with irregular streaks and bars of broccoli-brown. The under plumage marbled with pale broccoli-brown and white. Bill, legs, and feet as in the former. This appears to be a bird that has undergone two general autumnal moultings. The mature plumage resembles that of the Glaucous Gull; the head, neck, tail, and under parts being of a pure white. Mantle and wing-coverts pale pearl-grey. Quills with their shafts and tips pure white, passing into pale pearl-grey towards the base. In winter the head and neck become streaked with grey.”—Selby, ii. 503. This North-American species was first described by Faber, in his ‘*Prodromus of the Ornithology of Iceland*,’ under the name of *Larus leucopterus*, a name which has been changed for that of *Larus islandicus* by Fleming, Selby, Jenyns, Gould and Yarrell, and for that of *Larus glaucoides* by Temminck as cited above, Mr. Yarrell assigning as a reason for the change that the name of *leucopterus* is not wholly free from objection, as both this species and the Glaucous Gull have the principal wing-feathers white. Without controverting this view of the case, the earlier name is adopted in this work solely in accordance with the law of priority, and without

reference to the merits of either of the names that the species has received. The bird has occurred in Scotland and the Scottish Isles, but is not resident: it breeds in great numbers on the coast of Greenland, and other arctic countries of the North-American continent.]

[Gull, Ivory. — *Yarrell*, iii. 586. *Larus eburneus*, *Bewick*, *British Birds*, vol. ii. p. 234. *Larus candidus*, *Fleming*, *Brit. An.* p. 142. — Beak greenish gray at the base and about the nostrils, the anterior portion yellow; the irides brown; eye-lids red at the edge; the legs black; the entire plumage white. A North-American species, generally residing within the arctic circle, but occasionally observed in Europe, and individuals have been observed on every part of our coast.]

[Gull, Kittiwake. — *Yarrell*, 581; *Hewitson*, cxxxvii. 493.] *Larus Rissa*, *Lin. Syst.* i. p. 224, 1; *Gmel. Syst.* ii. p. 598; *Bewick*, *Br. Birds*, ii. t. p. 229. *Larus tridactylus*, *Ind. Orn.* ii. p. 817, 11. *Le Goeland cendré*, *Bris.* vi. t. 14? Kittiwake, *Br. Zool.* ii. No. 250, t. 89; *Arct. Zool.* ii. No. 456; *Lath. Syn.* vi. p. 393, 19; *Lewin*, *Br. Birds*, vi. t. 213; *Pult. Cat. Dorset.* p. 18; *Walc. Syn.* i. t. 108. Provincial: Annet; Kishifaik. — This species of Gull is about fourteen or fifteen inches in length; weight seven or eight ounces. The bill is greenish yellow; irides dusky; inside of the mouth deep orange. Head, neck, breast, and all beneath white; back and wings cinereous-grey; the first quill-feather has the exterior web black, and the four or five next are tipped the same; the tail is pure white; legs dusky, with a knob instead of a back toe. It sometimes has a dusky spot behind the ear; but this must be considered as a mark of immaturity, and but another remove from the state in which it has been made a distinct species, under the denomination of Tarrock, to the perfect bird here described. These birds had long been considered as distinct species, but are now, without doubt, brought together as one and the same. Under the head of Gull, Tarrock, the synonyms of that bird will be found, with references as usual to the various authors who had considered it as a different bird. The Kittiwake is said to inhabit and breed on the cliffs about Flamborough Head, the Bass Isle, the vast rocks near the Castle of Slains in the county of Aberdeen, and on Priestholm Isle. In the first of these places it is called Petrel. The Tarrock, or immatured birds, are always more or less found in company with them, and no doubt are two or three years arriving to their full plumage. It seems to be a local

species with us, rarely appearing in the more southern parts. Is found in the arctic regions; not uncommon in Iceland and Greenland; has been met with at Kamtschatka.

SUPPLEMENT. — This Gull in its young state has been usually described as a distinct species, under the title of Tarrock; but as there no longer exists any doubt of their being the same, the synonyms should be brought together. It very rarely appears in the southern parts of England; one instance only has occurred. In the month of March, 1806, we observed three of these birds thrown up by the tide on the south coast of Devon, lying close together, as if they had been shot out of a flock, and had floated on shore together. This circumstance makes it clear that it sometimes is induced to leave the more northern parts without being compelled by extreme cold, for that winter had been remarkably mild. These were in complete plumage, and it may not be improper in this place to remark that the four first quill-feathers are tipped with black, but the fourth has a small white spot at the point; the fifth feather is tipped white, with a black bar near the point; the exterior feather has the whole outer web black, and the same line of black continues to the margin of the outer web of the first greater, and some of the next series of coverts; and these markings appear to be constant, and at once pronounce the species, being very different from any other of the Gull tribe. Breeds in the Isles of Bass and Glass, on Troup-head, Fowl's-heaugh, near Montrose, and other parts of Scotland. In the Isle of May, at the mouth of the Forth, the rocks are covered with the dung of this species, being unmolested till the young are fit to take, which, together with Solen Geese and some other rock-birds, are eaten by the inhabitants before dinner, as a whet to their appetites. A story is told that a gentleman went to the Isle of May to eat Kittiwakes, and, after eating a dozen, exclaimed that he did not find his appetite improved. Mr. Boys found these birds at Fowl's-heaugh, near Stonehaven, in vast abundance, where he says they breed in greater numbers perhaps than in any part of Scotland: and having shot them of all ages and sexes, he is thoroughly convinced this and the Tarrock form but one species. [Mr. Yarrell made an unfortunate mistake in stating that the Kittiwake breeds in the Isle of Wight (see foot-note to p. 583, vol. iii.) The bird which Mr. Yarrell saw was probably the Herring Gull; I have seen the Kittiwake about the Needles very rarely, but have never heard of its nest being found, and such excellent naturalists as the Rev.

C. A. Bury, Mr. A. G. More and Mr. Henry Rogers could not possibly have overlooked the fact, had this species "bred there every year in great numbers," which Mr. Yarrell has stated to be the fact: it is very remarkable how few of such errors occur in Mr. Yarrell's most careful compilation.]

Gull, Laughing.—[Yarrell, iii. 576.] *Larus atricilla*, *Lin. Syst.* i. p. 225, 8; *Gmel. Syst.* ii. p. 600; *Ind. Orn.* ii. p. 813, 4. *Larus major cinereus* *Baltneri*, *Raii Syn.* p. 129, 8; *Will.* p. 263, t. 67. *Gavia ridibunda*, *Bris.* vi. p. 192, B. t. 18, f. 1; *Ib.* 8vo, ii. p. 413. *Baltner's* Great Ash-coloured Sea-mew, *Will. Angl.* p. 346, t. 67. Laughing Gull, *Arct. Zool.* ii. No. 454; *Lath. Syn.* vi. p. 383, 12.—This species is larger than the Black-headed Gull; length eighteen inches. It differs from that bird only in the legs, which are black; the bill is, however, stronger, and the head larger: We do not recollect this bird having been noticed in England, or at least recorded in the list of British birds. In the month of August, 1774, we saw five of them together feeding in a pool upon the Shingly Flats near Winchelsea; two only were black on the head, the others were mottled all over with brown. One of them was shot; but although the remaining four continued to resort to the same place for some time, the old ones were too shy to be procured. We also saw two others near Hastings in Sussex. They may easily be known from the Black-headed Gull even flying; the flight is different; the bird appears much larger, and the tail shorter in proportion. It is found in Russia, and in some parts of America; and is said to be plentiful in the Bahama Islands. Is supposed to breed at Hudson's Bay; at least a bird similar to it is said to make its nest in the pine-trees, and lay four lead-coloured eggs. [Possibly the bird here described is identical with the Black-headed Gull, which see.]

Gull, Less Blackbacked.—[Yarrell, iii. 602; *Hewitson*, cxxxix. 496.] *Larus argentatus*, *Gmel. Syst.* ii. p. 600? Silvery Gull, *Arct. Zool.* ii. p. 533, C.; *Ib. Sup.* p. 70; *Lath. Syn.* vi. p. 375, 5. *Larus marinus*, *Ind. Orn.* ii. p. 814, 6, var. β .—This species is greatly inferior in size to the Great Black-backed Gull, and rather superior to the Herring Gull. It weighs about thirty-six ounces, and rarely more; length twenty-four inches. Bill yellow, with an orange spot on the lower mandible; size and shape like that of the Herring Gull; irides pale yellow; orbits red-orange. Head, neck, tail, and whole under parts pure white; back, scapulars, and wings dusky black; prime quills dusky, towards

their ends black; the point of the first is white, with a black tip; the second the same, with only a white spot in the black; the others very slightly tipped with white; two or three of the scapulars are also tipped with white; legs yellow. This bird has been confounded by most authors with the *Marinus*, or Great Black-backed Gull, and both, by the later writers, considered as the Silvery Gull; and in their first plumage, which is mottled all over with brown and white, have been made into another species under the title of Wagel. Both Dr. Latham and Mr. Pennant, in their last works on Ornithology, have, however, made the Wagel no other than the young of one or both these species, as well as the *Argentatus*, or Silvery Gull; but have still blended the two Black-backed Gulls together. The former author has also made the *Larus Nævius* of Gmelin to be a variety of one of these birds, of which there is no doubt. The *Wagellus Cornubiensium* of Ray and Willughby is also considered as the young of one of these species, which is very probable. Lewin has divided the two species, but makes the smaller the male of the Herring Gull, and the mottled Gulls of the same size indiscriminately the females, and erroneously considers the true Herring Gull as the young. It is true no class of birds has occasioned more perplexity than the Gulls, from the length of time most of them are arriving to maturity in plumage; and the species have been greatly multiplied. But we shall here again remark that all the species we are acquainted with are, in their first feathers, mottled all over with brown and white; not to be discriminated but by size. Many of these errors have been corrected by the above authors in their last works; and it is certain there are no such distinct species as the Wagel, the Winter Gull, Tarrock, or Red-legged Gull. The first is the young of both the Black-backed and Herring, the second that of the Common, the third that of the Kittiwake, and the last the young of the Black-headed Gull. It is, however, very extraordinary that the two Black-backed Gulls should have been to this day confounded, as the vast disproportion in size is alone sufficient to discriminate them. One species never exceeds two pounds and a half, the other is nearly double that weight, and as much stronger in the bill and legs in proportion; besides, the legs of the greater species are invariably of a flesh-colour, those of the smaller are yellow; nor has this bird the dark spot in the orange mark on the bill. These two birds are never found to associate, and always breed in distinct places. This congregates

frequently with the Herring Gull, and breeds in the same places, where we have seen them sitting on their nests; but they are not near so plentiful. On Ramsey Island in Pembrokeshire this and the Herring Gulls breed in great abundance, and where we had an opportunity of examining them very attentively, this was not near so plentiful as the other species. The proportion was certainly not more than one in twenty, which must invalidate every idea of its being the male of the other species. Not a single one of the Great Black-backed Gull was to be seen on the island. The eggs and young of this bird which we found in the nests were so like those of the Herring Gull that there was no discriminating mark; the eggs, indeed, were in general larger; the young were covered with a soft brown down, mottled with dusky. This is by far a less numerous species than the Herring Gull, but much more plentiful than the Great Black-backed Gull.

SUPPLEMENT.—In the late Leverian Museum there were two of these birds, one of them retaining a few brown feathers in the smaller coverts, the other perfect. These were erroneously marked as males of the Herring Gull; and this probably led others into the same error. Mr. Bewick has not given this species a separate place in his 'British Birds,' but has figured and described the Great Black-backed species; the leading characters of which, independent of the vast disproportion of size, are properly stated; the black spot in the middle of the orange on the projecting angle of the lower mandible, and the flesh-coloured legs, are invariably specific characters in the matured state of that bird. In the species of Lesser Black-backed Gull the bill is ever destitute of the black spot within the yellow; and the legs are immutably yellow when the plumage has arrived at maturity. Both these species pass through the several changes, and are equally as long arriving at maturity as the Herring Gull. If what we have offered upon the subject of Gulls be attended to, we flatter ourselves every British species may be clearly identified in every change of plumage, and at all ages, except those of the Herring and Lesser Black-backed Gulls in their first, and perhaps second year's dress, at which time they are not to be discriminated from each other.

[Gull, Lesser Whitewinged. — See Gull, Iceland.]

Gull, Little. — [Yarrell, iii. 562; Hewitson, cxxxvi. 490.] APPENDIX.—*Larus minutus*, Ind. Orn. ii. p. 813; Gmel. Syst. p.

595; Nov. Act. Stock, 1783, ii. No. 1, p. 120. Little Gull, Lath. Syn. vi. p. 391, 17. — Length rather exceeding ten inches: length of the bill, to the feathers on the forehead, rather more than three-quarters of an inch; the upper mandible straight for half its length from the base, the other half considerably arcuated; lower mandible straight to the angle (two-thirds of its length from the base), from whence it slopes to the point: the inside of the mouth red-orange. The forehead and crown of the head white: the back of the head, and a trifle of the back of the neck contiguous, dark cinereous, with a hoary tinge: behind the eye a white streak: the lower coverts of the ears black, forming a very conspicuous spot of that colour: between the bill and eye white, but at the anterior corner the orbit is black, from whence to the black spot on the ear is a mixture of dark cinereous and white: the whole upper part of the body appears of a fine cinereous-grey, like that of the Herring and most of the lighter-coloured Gulls, but upon lifting up the scapulars the lower part of the back is black: the upper tail-coverts pure white, except three or four feathers of the last series, which are tipped with dusky: the tail is slightly concave at the end, but as there is not a regular gradation in the length of the feathers, and an evident dissimilarity in the two sides, there can be no doubt but that they have been recently moulted; all the feathers are white, with their tips black for nearly an inch, except the outer feather, which is nearly all white, having only a small dusky spot at the end on the inner web; the tips are slightly edged with dirty white: the wings have a mixture of black, white, and cinereous, but the former greatly predominates; the ridge of the wing, from the body to the elbow, is cinereous intermixed with dusky for nearly half an inch in breadth; all the rest of the coverts are black, several of the lower series slightly tipped with white: the greater quills are elegantly marked, being white, with the exterior web, the shaft, and part of the inner web close to the shaft, the tip and part of the inner margin black, somewhat like the quill-feathers of the Magpie; the three first have a small speck of white at the tip; in the others the white spot increases, till on the seventh feather the white occupies the place of the black at the tip: the secondaries are more or less cinereous on the outer web, edged with dusky black towards the base, their tips and inner webs white, with more or less black towards the point, close to the shaft: the tertials are mostly black, with a slight edging of white at the tip: the whole under part from chin to

tail is pure white, but the cinereous on the back comes very forward on the sides of the breast. The legs rather exceed an inch in length to the knee, and bare of feathers for more than a quarter of an inch above the knee; the foot is small, the inner toe considerably shorter than the others; the middle toe a trifle longer than the outer, measuring rather more than an inch, including the claw; these, with the webs and legs, appear to have been yellowish, for they have a strong tinge of that colour even after drying. The wing appears to exceed the tail above an inch and a half when closed, and the two first quills are nearly of the same length, from the tips of which to the elbow is eight inches and a half. This is another bird of rare occurrence which has fallen to our lot to record in the British Fauna. It was shot on the Thames near Chelsea, and is in the collection of Mr. Plasted of that place, to whom we take this opportunity of expressing our obligations for having suffered the bird to travel into Devonshire for the purpose of inspection. This specimen of *Larus minutus* is the first that has, we believe, been identified in this country, and is probably extremely rare on any part of the continent so far south. It is not in the plumage of maturity, and consequently is more interesting, because we perceive the same gradual changes as have been noticed in all the species of Gulls familiar to us. It is in an intermediate state, or first change between the nestling and the adult. In the adult state of plumage the head and beginning of the neck are black; the rest of the neck, and under parts of the body, white: the back, scapulars, and coverts of the wings cinereous-grey: tail wholly white and even at the end. The bill is said to be reddish brown: irides bluish: legs red. The little knowledge we have had communicated to us of the habits of this bird would not have led us to the discovery of the specimen in question, had we not previously ascertained the changes in plumage to which all our Gulls are subject. Taking for example the several mutations of the Black-headed Gull, we should now have no difficulty in identifying the Little Gull, through all its several changes from the time of its leaving the nest, by comparative reasoning. The second material change of the Black-headed Gull is, without doubt, a good exemplification of the alteration in plumage of the Little Gull. In this state of plumage we have sufficient marks left to inform us what were its infantine colours, and also what it is in a progressive state of acquiring. The markings of these two species are very similar, but where the feathers are brown in one they are black in the other. From the

appearance of the black on the wings, the back under the scapulars, and the tertials, we cannot hesitate to pronounce that the Little Gull is, in its first feathers, of a very dark colour, probably dusky black mixed with grey, similar in markings to that of almost all other of our well-known species, only that their feathers are brown and grey. The dusky appearance of the crown of the head, and particularly the black spot on the coverts of the ears, are true indications of a future black head, evinced by similar markings on the Black-headed Gull; and the black bar at the end of the tail is an invariable character of immaturity in all the well-known species of the Gull tribe. We have been more particular in noticing these characteristic marks of change, in order that this elegant little species may be identified in any state of plumage, since it is at present so little known. Its native country appears to be the southern parts of Siberia and Russia, and the shores of the Caspian Sea, migrating more northward in summer in order to breed, especially up to the Wolga. [The Little Gull has occurred several times in the British Islands since the time of Col. Montagu: Mr. Selby records that a specimen was killed in the Frith of Clyde: Mr. Yarrell mentions a specimen that occurred on the Solway in the autumn of 1824: Mr. Thompson records that an adult specimen, with a fine black head, was shot on the Shannon: Mr. Yarrell mentions others killed in Suffolk in 1832, at Newcastle in 1835, and at Scarborough in 1836. In the volume of the 'Zoologist' for 1845, at page 880, Mr. Rodd records its occurrence in Cornwall. In the volume for 1848, at p. 2069, two specimens are recorded by Mr. Thompson as having been obtained in the estuary at Belfast in December of the year previous. In the volume for 1850, at p. 2653, Dr. Morris records the occurrence of a young specimen at Bridlington Quay, in Yorkshire, on the 20th of October of the previous year: in the same volume Mr. Rodd relates, at p. 2706, that another was killed, on the 16th of January, at Redcar. In the volume for 1851 Mr. Potter records, at p. 3036, the occurrence of a specimen at Lewes: in the same volume, at p. 3118, Mr. Briggs, of King's Newton, Derbyshire, then a most careful observer, states that an example was killed in his own parish on the 22nd of January in the same year. Lastly, in the volume for 1853, at p. 3911, Mr. Dunn records that he shot a specimen in Shetland on the 7th of April of that year.]

[Gull, Masked. — See Gull, Laughing.]

Gull, Pewit, or Puit. — See Gull, Black-headed.

[Gull, Pomarine.— See Skua, Pomarine, where descriptions of Buffon's and Richardson's Skuas will also be found.]

Gull, Redlegged.—*Larus cinerarius*, *Lin. Syst. i.* p. 224, 4; *Gmel. Syst. ii.* p. 597. *Larus ridibundus*, *Ind. Orn. ii.* p. 812, 2, var. β . *Gavia cinerea minor*, *Bris. vi.* p. 178, 9, t. 17, f. 1; *Ib.* 8vo, ii. p. 409. *Larus albus major*, *Raii Syn.* p. 129, 9; *Will. p.* 264. *La petite Mouette cendrée*, *Buf. viii.* p. 430. Greater White Gull of Belon, *Will. Angl. p.* 348. Red-legged Gull, *Arct. Zool. ii.* p. 533, E.; *Lath. Syn. vi.* p. 381, 10. — This bird, spoken of by various authors as a distinct species, is no other than the Black-headed Gull in its different stages of change before it arrives to maturity. See Gulls, Black-headed and Brown-headed. Is frequently known by the name of Red-legs.

[Gull, Ross's Rosy, or Cuneate-tailed. — *Yarrell*, iii. 558. "*Larus Rossii*, *Richardson & Swainson, Faun. Bor.-Amer. Birds*, vol. ii. p. 427; *Wilson, Illust. Zool.* vol. i. pl. 8; *Jardine & Selby, Ornith. Illust.* vol. i. pl. 14; *Gray & Mitchell, Genera of Birds*, vol. iii. pl. 180:" the authorities cited from *Yarrell l. c.* — "*Colour*: Scapulars, interscapulars, and both surfaces of the wings clear pearl-grey; outer web of the first quill blackish brown to its tip, which is grey; tips of the scapulars and lesser quills whitish. Some small feathers near the eye, and a collar round the middle of the neck, pitch-black; rest of the plumage white; the neck above, and the whole under plumage, deeply tinged with peach-blossom red in recent specimens; bill black, its rictus and the edges of the eyelids reddish orange; legs and feet vermilion-red; nails blackish. *Form*: Bill slender, weak, with a scarcely perceptible salient angle beneath; the upper mandible slightly arched and compressed towards the point; the commissure slightly curved at the tip; wings an inch longer than the decided cuneiform tail, of which the central feathers are an inch longer than the lateral; tarsi rather stout; the thumb very distinct, armed with a nail as large as that of the outer toe." A specimen of this arctic species is recorded as having occurred in Yorkshire, by Mr. Charlesworth, in the 1st vol. of the '*Proceedings of the Yorkshire Philosophical Society*,' p. 32; and a second was obtained at Pevensey, in Sussex, as recorded by Mr. Ellman in the '*Zoologist*' for 1852, at p. 3389.]

[Gull, Sabine's.—*Yarrell*, iii. 548. *Larus*

Sabini, Jenyns, British Vertebrata, p. 270. — "The bill one inch long; the base of both mandibles black as far as the angular projection of the lower mandible, the remainder yellow; the inside of the mouth bright vermilion. The irides dark, surrounded by a naked circle of the same colour as the inside of the mouth; a small white speck beneath the eye scarcely perceptible. The whole of the head and upper part of the neck a very dark ash, or lead colour; the remainder of the neck behind and before, as well as the breast and belly, pure white; a narrow black collar surrounds the neck at the meeting of the ash colour and of the white. The back, scapulars, and wing-coverts are ash-coloured, very much lighter than the head, but darker than the corresponding parts of the *Larus ridibundus*; the lower ends of the scapulars are tipped with white. The first five primary quill-feathers with black shafts; the whole outer webs of these black, the edge of their upper webs white to within an inch and a half of the tips, the white sometimes continued to the tip; the tips of the first and second of these quill-feathers in some white, in others black; the tips of the third, fourth, and fifth white, giving the wing when closed a spotted appearance; the sixth primary quill-feather with a white shaft, having the web more or less black, but principally white, with sometimes a black spot near the end; the other primaries, the secondaries, and the tertials white; the whole under parts of the wings white. The wings extend an inch or more beyond the longest feather of the tail. The legs, feet, and claws black; the thigh feathered to within three-eighths of an inch of the knee: the tail with its upper and under coverts white; the tail-feathers twelve, the outer narrower than the centre ones; the outer tail-feathers about one inch longer than those in the middle. It is probable that in its immature and winter state it resembles other black-headed Gulls, in being divested of the dark colour of its head. The whole length is thirteen inches; wing from the wrist, ten inches and three-quarters." — *Joseph Sabine, in the Transactions of the Linnean Society*, vol. xii. p. 520. A specimen of this North American Gull was shot in September, 1822, in Belfast Bay; a second example, shot in Dublin Bay, is in the Museum of the Royal Dublin Society; and a third was shot in October, 1837, by Mr. Dombrain: it has occurred also at Milford Haven and Newhaven, as recorded by Mr. Yarrell.]

Gull, Skua. — [*Yarrell*, iii. 621; *Hewitson*, cxlii. 505.] *Larus catarractes*, *Lin. Syst. i.* p. 226, 11; *Gmel. Syst. ii.* p. 603;

Ind. Orn. ii. p. 818, 12. *Catarractes* et *Catarracta*, *Raii Syn.* p. 128, A. 6; *Ib.* 129, 7; *Will.* p. 265; *Ib. Angl.* p. 348, 349, t. 67. *Larus fuscus*, *Bris.* vi. p. 165, 4; *Ib.* 8vo, ii. p. 405. Le Goéland brun, *Buf.* viii. p. 408. Brown Gull, *Albin*, ii. t. 85. Skua Gull, *Br. Zool.* ii. No. 343; *Ib.* fol. 140, t. L. 6; *Arct. Zool.* ii. No. 531, A.; *Lath. Syn.* vi. p. 385, 14; *Lewin, Br. Birds*, vi. t. 211; *Walc. Syn.* i. t. 117. Skua or Brown Gull, *Bewick, Br. Birds*, ii. t. p. 233. Provincial: Bonxie. — This species is rather superior in size to the Raven; weight three pounds; length two feet. The bill is an inch and three-quarters long, black, and much hooked at the end; is covered for more than half its length with a kind of black cere. The upper part of the head, neck, back, and wings deep brown; the feathers margined with ferruginous; about the forehead and chin tinged with ash-colour; the breast and all beneath pale dusky ferruginous; the quills are brown, white at the base; tail deep brown; roots and shafts white; the legs are black, rough, and scaly; talons black, strong, and much hooked. This is a bold rapacious bird; preys on the lesser Gulls as well as fish; is said to attack the Eagle, and even man if he approaches their nest. It breeds in the Orkney Islands, and is much esteemed in the Isle of Foula, from a supposition that it defends the flocks from the Eagle; is rarely seen in the south; one in the museum of Dr. Latham was killed at Greenwich. It prefers the colder climates; is common in Norway and Iceland; and also found in the southern hemisphere in several of the higher latitudes; has been met with at Falkland Island, and particularly at Port Egmont, where they were called by our circum-navigators Port Egmont Hens.

SUPPLEMENT.—The only instance we are furnished with, of this species being observed in the South of England, is one that was shot at Sandwich, in Kent, in the winter of 1800, the head and legs of which were sent to us for examination by Mr. Boys. We are informed by Mr. Fleming that the Skua breeds in Bonas-hill, and Foulah in Zetland, and that there is no distinction of plumage in the sexes. That which was described in the former part of this work we suspect had not arrived at full maturity, as we have since had a specimen that is plain rusty brown in the parts where that had the feathers margined with ferruginous, and scarcely any appearance of ash-colour about the head. The remarkable hooked talons, especially that of the inner toe, seems to indicate a habit unusual in the Gull tribe, which generally swallow their prey whole. It is reasonable, however, to conclude, from the

great strength and semi-circular shape of the inner claw, that this bird frequently holds its prey under its feet, and tears it in pieces.

Gull, Small Brown.—See Tern, Brown.

Gull, Small Cloven-footed.—See Tern, Black.

Gull, Tarrock.—*Larus tridactylus*, *Lin. Syst.* i. p. 224, 2; *Gmel. Syst.* ii. p. 595; *Ind. Orn.* ii. p. 817, 11, β . *Larus nævius*, *Lin. Syst.* i. p. 225, 5. *Larus cinereus* Bellonii, *Raii Syn.* p. 128, A. 4; *Will.* p. 263, t. 68, p. 266, t. 66. *Gavia cinerea nævia*, *Bris.* vi. p. 185, 11, t. 17, f. 2; *Ib.* 8vo, ii. p. 410. La Mouette cendré tachetée, *Buf.* viii. p. 424. Tarrock, *Br. Zool.* ii. No. 251; *Ib.* fol. 142, t. L. 3; *Arct. Zool.* ii. 533, D.; *Ib. Sup.* p. 70; *Lath. Syn.* vi. p. 392, 18; *Ib. Sup.* p. 268; *Lewin, Br. Birds*, vi. t. 213; *Walc. Syn.* i. t. 109.—This bird had long been considered as a distinct species, but was, in the last works of Mr. Pennant and Dr. Latham, given as the young of the Kittiwake, of which there is no doubt. The size is the same as that bird; the bill is dusky black. In plumage it differs in having some black about the head; generally near each ear is a spot; sometimes a little black under the throat; and others a crescent of that colour on the hind part of the neck; the wing-coverts dusky, edged with grey; the tail tipped with black, except the outer feather on each side; a small protuberance instead of a hind toe. This appears to be the plumage of the second year, when they are found at their breeding-places with the Kittiwake. In the first year no doubt they are more mottled with brown, like all the young Gulls, and are not completed in feather till the third year. See [Gull] Kittiwake.

SUPPLEMENT.—All the synonyma of this bird should be connected with the Kittiwake (*Larus Rissa* of Linnæus), being only the immatures young of that species.

Gull, Wagel.—*Larus nævius*, *Gmel. Syst.* ii. p. 598. *Larus marinus*, *Ind. Orn.* ii. p. 814, 6, γ . *Wagellus Cornubiensis*, *Raii Syn.* p. 130, A. 13; *Will.* p. 262, t. 66. Le Goéland varié, *Grisard, Buf.* viii. p. 413, t. 33. Wagel Gull, *Br. Zool.* ii. No. 247, A.; *Ib.* fol. ii. 422; *Arct. Zool.* No. 453; *Will. Angl.* p. 349, t. 66; *Lath. Syn.* vi. p. 375, 6; *Lewin, Br. Birds*, vi. t. 209; *Walc. Syn.* i. t. 111; *Pult. Cat. Dorset.* p. 18.—With respect to the plumage of this bird all authors pretty nearly agree; but vary considerably as to size. It is generally described to be from the size of the Herring Gull to that of the Great Black-backed Gull. The bill dusky; irides hazel. The

whole plumage composed of a mixture of brown ash-colour and white; quills black; tail mottled black and white, with a black bar near the end; tip white; legs dusky flesh-colour. These birds may be seen in great abundance on all our shores in every season of the year, and is in fact not a distinct species, but the young of both the Black-backed Gulls and the Herring Gull. We have seen all these birds in their different stages of changing their plumage, and at present possess a live specimen which we have had upwards of two years, and now only in the autumn begins to shew the plumage of the Herring Gull, and probably will not be complete till this time next year. For further remarks we refer our readers to Gull, Less Black-backed.

SUPPLEMENT.—This appellation has been assigned to several species of the genus, in their mottled infant plumage; and as there is no such bird claiming specific distinction, it should be erased as such from the pages of Ornithology. [This is properly cited by Yarrell as identical with the Great Blackbacked Gull.]

Gull, White Webfooted.—See Gull, Common.

Gull, Winter.—*Larus hybernus*, Gmel. *Syst.* ii. p. 596. *Larus fuscus*, hybernus, *Raii Syn.* p. 130, A. 14; *Will.* p. 266, t. 66. Guaca-guaca, *Raii Syn.* p. 130, 12; *Will.* p. 268; *Ib. Angl.* 352. *Gavia hyberna*, *Bris.* vi. p. 189, 12; *Ib.* 8vo, ii. p. 411. *Larus canus*, *Ind. Orn.* ii. p. 816, 9, β . *Mouette d'hyver*, *Buf.* viii. p. 437. Winter Mew, *Coddy Moddy*, *Br. Zool.* ii. No. 248, t. 86; *Ib.* fol. 142, t. L. 2; *Will. Angl.* p. 350, t. 66; *Albin*, ii. t. 87; *Lath. Syn.* vi. p. 384, 13; *Walc. Syn.* i. t. 114; *Lewin, Br. Birds*, vi. t. 210; *Don. Br. Birds*, iv. t. 77.—This

is another of the Gulls which has been unnecessarily multiplied into a distinct species, when in fact it is no other than the Common Gull in the second year's plumage, the intermediate stage between the first or nestling feathers and that of the adult. The bill is horn-colour, dusky at the tip; irides hazel. The top of the head, hind part and sides of the neck white, marked with dusky streaks; back and wing-coverts ash-coloured, the latter mottled with brown; under parts white; quills black, more or less tipped with white; the tail white, with a dusky bar near the end; legs whitish. It is probable this and some of the smaller species of Gulls arrive at their full plumage in the summer of the second year; and that this bird having only been observed in winter has occasioned its name: but we have killed it pretty late in the spring. However, the brown mottled coverts of the wing, and the bar on the tail, seem to disappear about the breeding season; but frequently some few dusky streaks on the head and neck are retained longer. These are common on all our shores, and are frequently seen together with the matured birds far inland in the winter season, feeding on the ploughed lands.

SUPPLEMENT.—We have before stated that, as this is nothing more than the young of the Common Gull (*Larus canus*) in an intermediate change of plumage between that of the nestling and the adult, all the synonyma should be connected with that species.

[Gull, Yellowlegged.—See Gull, [Lesser Blackbacked.]

[Gullbilled Tern.—See Tern, Gullbilled.]

Gyrfalcon.—See Falcon, Jer.

H.

[Hackbolt.—A name of the Shearwater: see Yarrell, iii. 650.]

[Hagdown.—A name of the Shearwater: see Yarrell, iii. 651.]

Hagister.—See Magpie.

Harle.—SUPPLEMENT.—Dr. Barry considers the Harle of the Orknies to be the Goosander. Mr. Fleming says the Harle-duck of Zetland is the Dundiver. Mr. Neill thinks it is the Redbreasted Merganser that is so-called in Orkney; but it is probable all have been so denominated by the native islanders.

[Harlequin Duck.—See Duck, Harlequin.]

[Harrier, Hen.—See Hen Harrier.]

[Harrier, Marsh.—See Moor Buzzard.]

[Harrier, Montagu's.—See Falcon, Ash-coloured.]

[Harrier, Ringtailed.—See Hen Harrier.]

[Hawfinch. } See Grosbeak, Haw.]
[Haw Grosbeak.]

Hawk.—A name commonly given to many species of the Falcon genus.

Hawk, Blue.—See Hen Harrier, and Falcon, Peregrine.

Hawk, Dor.—See Goatsucker.

Hawk, Duck.—See Falcon, Peregrine; and Moor Buzzard.

Hawk, Fishing.—See Osprey.

Hawk, Gos.—[Yarrell, i. 69; Hewitson, xi. 34.] *Falco palumbarius*, Lin. Syst. i. p. 130, 30; Gmel. Syst. i. p. 269; Ind. Orn. i. p. 29, 65; Raii Syn. p. 18, 1; Will. p. 51, t. 3 & 5; Lath. Syn. Sup. ii. p. 37; Bewick, Br. Birds, 1, t. p. 24. Astur, Bris. i. p. 317; Ib. 8vo, p. 91. L'Autour, Buf. i. p. 230, t. 12. Goshawk, Br. Zool. i. No. 52, t. 24; Arct. Zool. ii. No. 99; Albin, ii. t. 8; Lewin, Br. Birds, i. t. 9; Lath. Syn. i. p. 58; Ib. Sup. p. 16; Walc. Syn. i. t. 9.—This is a large species of Falcon; is superior in size to the Buzzard; length twenty-two inches or more. The bill is blue, tip black; cere yellow-green; irides yellow. The head, hind part of the neck, back, and wings deep brown; over the eye is a white line, and a broken patch of the same colour on the side of the neck; breast and belly marked with numerous transverse bars of black and white; the tail is long, ash-coloured, with four or five dusky bars; legs yellow; claws black. These birds vary a little in their markings, but the size and elegant slender shape at once point it out. The wing when closed does not reach near the end of the tail. The Goshawk is rarely found in England, but is said to be not uncommon in Scotland in the more wooded parts, where it breeds, and is a great destroyer of game. Is said to build in trees, and to lay four white eggs. Is also found in North America. It was held in high estimation in the days of falconry, and was used for the larger sorts of game.

SUPPLEMENT.—Doctor Latham says this bird is common in the forests in Germany, where it remains the whole year, preying on various kinds of large and small game, amongst others Geese, from whence probably the name of Goose-hawk or Goshawk. Said to be found in abundance in the Azore Islands, and by some supposed to have given the name thereto, as *azor*, in the Spanish tongue, signifies a Goshawk. In Thornton's 'Highland Tour' mention is made of a young Goshawk being sent to him from a neighbouring laird to Raikes, his sporting seat on the river Spey. This author further informs us that he was anxious to make this Hawk manageable, as the English breed of this species had never been tried, at least no mention of such was to be found in the history

of falconry: but we are not informed whether he succeeded. In another part of the same work we are told that in the forest formed by Glenmoor and Rothermurcos (an asylum for stags and roebucks), are some aeries of Goshawks, some of which were seen by the author. The Colonel (to whom we are under obligations for personal information on the subject) says the Goshawk flies at the bolt, and the Falcon is excellent for hares, rabbits, Herons, and Wild Ducks; the Tercel for game: and adds that this species is a short-winged Hawk, being in the same proportion to a Sparrow Hawk (of which kind it is) as a Falcon is to a Merlin. The Goshawk takes its prey near the ground (for it cannot mount), and has great speed for a short distance. If its game takes refuge, there it waits patiently, on a tree or a stone, until the game, pressed by hunger, is induced to move; and as the Hawk is capable of greater abstinence, it generally succeeds in taking it. "I flew a Goshawk (says the Colonel) at a Pheasant without this park (Thornville Royal); it got into cover, and we lost the Hawk: at ten o'clock next morning the falconer found her, and just as he had lifted her the Pheasant ran and rose." Thus we obtain a most excellent account of the nature and habits of this bird, from a gentleman whose celebrity in the field of sports stands unrivalled in this, or perhaps in any other, country; and who (so long in the practice of falconry) had opportunities of obtaining some parts of the natural history of the Falcon tribe and other birds, which was not to be obtained by other means. [In Great Britain the Goshawk is a very rare and uncertain visitor. Six or eight specimens have been killed in Northumberland (Zoologist, 823 and 2765), two in Suffolk (Zool. 2647 and 6443), and two in Norfolk (Zool. 3027 and 6325). It has not occurred in Ireland.]

Hawk, Night.—See Goatsucker.

[Hawk, Owl.—See Owl Hawk.]

Hawk Pigeon.—See Hawk, Sparrow.

Hawk, Sparrow.—[Yarrell, i. 74; Hewitson, xii. 35.] *Falco Nisus*, Lin. Syst. i. p. 130, 31; Gmel. Syst. i. p. 280; Ind. Orn. i. p. 44, 107. *Accipiter fringillarius*, Raii Syn. p. 18, A. 2; Will. p. 51, t. 5. *Accipiter*, Bris. i. p. 310, 1; Ib. 8vo, p. 89. *Epervier*, Buf. i. p. 225, t. 11. Sparrow Hawk, Br. Zool. i. No. 62; Ib. fol. t. A. 10, A. 11; Arct. Zool. ii. p. 226, N.; Hayes, Br. Birds, t. 3; Albin, i. t. 5; Will. Angl. p. 86; Lewin, Br. Birds, i. t. 20; Lath. Syn. i. p. 99, 85; Ib. Sup. p. 26; Walc. Syn. i. t. 20.

New Holland Sparrow Hawk, *Lath. Syn. Sup. ii. p. 51*; *Bewick, Br. Birds, 1, t. p. 28*; *Orn. Danmo. t. 1.*—The weight of the male of this species is about five ounces, that of the female nine; the former measures in length about twelve inches, the latter fifteen. The bill is bluish, dusky at the point; cere yellow; irides bright orange-yellow. In some of both sexes the plumage of the upper parts are of a deep bluish grey; in others brown, edged with ferruginous; the under parts of the female are more fully marked with minute undulated lines of deep brown; the male is inclined to rust-colour on the breast, which in the other is whitish; on the back of the head, in both sexes, is an obscure broken patch of white; quill-feathers dusky, barred with black on the outer webs, and spotted with white at the base of the inner; the tail like the back, with broad bars of dusky black, the extreme point whitish; legs long, slender, yellow. This is a very common species in most of the wooded or enclosed parts of the kingdom, but less frequent in the more champaign parts. It seldom makes a nest, but generally takes possession of that which has been deserted by a crow. It lays four or five eggs of a dirty white, sometimes of a bluish tinge, blotched at the large, and sometimes, though rarely, at the smaller end with rust-colour. The female Sparrow Hawk is a very bold bird; has been trained for hawking with success, though its flight is not so rapid as the longer-winged Hawks. It is a great destroyer of game and young poultry; we have frequently known them carry away half a brood of chickens before the thief was discovered. They fly low, skim over a poultry-yard, snatch up a chick, and out of sight in an instant. It is observable that the most generous Hawks (as they were formerly termed), that is, the most tractable, have long and pointed wings, the second feather being the longest. To this division the Falcons, properly so called, belong; the Hobby, Merlin, and Kestrel are also of this kind. This species, as well as the Goshawk and all the Buzzards, are short-winged. These have the third and fourth feather in the wing nearly of the same length, and longer than the second; so that the wings when spread have a more rounded appearance at the end. The more generous Hawks, we have frequently observed, kill their prey as soon as caught, by eating the head first; whereas the Buzzards, in particular, begin eating their prey indiscriminately. We have several times taken Partridges and other birds from them which had one side of the breast or a thigh devoured, and the bird still alive.

SUPPLEMENT.—That from New Holland

is, according to the observations of Doctor Latham, somewhat larger, and darker-coloured than ours. We have been informed that one of this species, in pursuit of a Pigeon which, to save itself, flew in at a window that was open, was followed by the Hawk, who, perceiving (it is supposed) the representation of the Pigeon in a mirror on the opposite side of the room, dashed at it, broke the glass, and was killed by the blow. A very particular friend informed us he had a brood of young Ducks of a favourite breed upon his bowling-green, and that he lost one daily, until nine out of twelve had been taken, notwithstanding every means had been resorted to for the destruction of the enemy. Cats, rats, and other four-footed depredators were suspected, and traps were set, and sentinels posted at different times. As this daring robbery was committed in mid-day, and generally about the same time, the gentleman, who was a good shot, took his turn of duty to watch, and at last detected the thief just as he had seized the tenth Duck, and shot him as he was flying over the opposite wall; it proved to be a Sparrow Hawk. This species has much of the nature of the Goshawk, and wants only the power of that bird to be equally formidable to the feathered tribe. Like that bird it flies low, skims over hedges and walls, and thus enters a farm-yard or a chicken-court, snatches up a young one, and is again out of sight before the mother of the brood can, by her well-known cry of alarm, call them under her protection. Thus are young broods often diminished, as it were, by magic art, and few suspect the real plunderer.

Hay Bird.—See Pettychaps, Lesser.

[Hay Tit.—A name of the Whitethroat.]

Heather Bleater.—See Snipe, Common.

Heath Cock, or Heath Fowl.—See Grouse, Black.

Heath Thristle.—See Thristle; and Ouzel, Ring.

[Hebridal Sandpiper.—See Turnstone.]

[Hedge Accentor.—See Accentor, Hedge.]

Hedge Chicker.—See Wheatear.

Hedge Sparrow.—See Warbler, Hedge.

[Hedge Warbler.—See Accentor, Hedge.]

Hegrie or Skip Hegrie.—See Heron, Common.

Helligog.—See Razorbill.

[Hemipode, Andalusian.—See Quail, Andalusian.]

Hen Harrier. — [Yarrell, i. 108; Hewitson, xvi. 47.] *Falco cyaneus*, *Lin. Syst. i.* p. 126, 10; *Gmel. Syst. i.* p. 276; *Ind. Orn. i.* p. 39, 94; *Lin. Trans. ix.* p. 182; *Bewick, Br. Birds*, 1, p. t. 34. *Pygargus accipiter* (mas), *Raii Syn.* p. 17, A. 5; *Will.* p. 40, t. 7. *Falco torquatus* (mas), *Bris. i.* p. 345; *Ib.* 8vo, p. 100. *Lanarius cinereus*, *Bris. i.* p. 365, 17; *Ib.* 8vo, p. 106. Oiseau St. Martin, *Buf. i.* p. 212. Hen Harrier, *Br. Zool. i.* No. 58, t. 28; *Ib.* fol. p. 68, t. A. 6; *Will. Angl.* p. 72; *Edw.* t. 2, 225; *Albin*, ii. t. 5; *Hayes, Br. Birds*, t. 1; *Lewin, Br. Birds*, i. t. 18; *Lath. Syn.* i. p. 88; *Ib. Sup.* p. 22; *Walc. Syn.* i. t. 17; *Pult. Cat. Dorset.* p. 3; *Don. Br. Birds*, iii. t. 59. FEMALE, OR RING-TAIL: *Falco Pygargus*, *Lin. Syst. i.* p. 126, 11; *Gmel. Syst. i.* p. 277; *Raii Syn.* p. 17, 5; *Will.* p. 40. *Falco torquatus* (fem), *Bris. i.* p. 345, 7; *Ib.* 8vo, p. 100. La Soubuse, *Buf. i.* p. 215, t. 9. Ring-tail, *Br. Zool. i.* No. 59; *Ib.* fol. p. 68, t. A. 7; *Albin*, iii. t. 3; *Hayes, Br. Birds*, t. 2; *Lewin, Br. Birds*, i. t. 18, F.; *Will. Angl.* p. 72; *Lath. Syn.* i. p. 89, 95; *Ib. Sup.* p. 22; *Walc. Syn.* i. t. 18; *Bewick, Br. Birds*, i. t. p. 36. *Falco Hudsonius*, *Lin. Syst. i.* p. 128; *Gmel. Syst. i.* p. 277; *Bris. vi. Sup.* p. 18; *Ib.* 8vo, p. 119. *Falco Buffoni*, *Gmel. Syst. i.* p. 277. Ring-tail Hawk, *Edw.* t. 107; *Arct. Zool. ii.* No. 106. White-rumped Bay Falcon, *Lath. Syn.* i. p. 54, 34, var. B. Hudson's Ray Ring-tail, *Lath. Syn.* i. p. 91, 76. Cayenne Ring-tail, *Lath. Syn.* i. p. 91. Provincial: Katabella. — It will be manifest, by the above synonyms, that we consider the Hen Harrier and the Ringtail to be of the same species. In this we have followed the example of Dr. Latham, who, in his last ornithological works, has brought them together. We will not, however, take upon us absolutely to determine this point, but shall give such remarks as have recently inclined us to that opinion. The Hen Harrier, in its most perfect state, weighs about thirteen ounces; length eighteen inches and a half. The bill is black; cere and irides yellow. Head, neck, breast, and whole upper parts are of a fine light grey; round the head is a wreath of short stiff feathers white at the base, slightly tipped with grey; the first six quill-feathers black, white at the base, and slightly tipped with grey; the rest of the quills grey on their outer webs and tips, white on the inner webs; tail-feathers white, except the two middle, on which are sometimes a few markings; the exterior webs of all are grey, and not the

least appearance of any bars; vent, upper and under tail-coverts pure white; legs long, slender, yellow. In this bird now before us the wings when closed do not reach to the end of the tail by two inches; the first feather short, the third and fourth the longest, and nearly the same length. Another weighed twelve ounces; length eighteen inches. This is very like the first described, but rather inclined to brown on the scapulars; and the tail-feathers all, except the middle ones, barred on the inner webs more or less; the second and third feathers from the outside a little barred on the outer webs near the shafts. In another specimen the breast was streaked with dusky, and several of the smaller coverts of the wings were ferruginous like the female; so that this part seems to be the last that arrives to perfection. The Ringtail, or female, weighs about eighteen ounces; length twenty inches. Bill, cere, irides, and legs the same as the Hen Harrier. Head and whole upper parts of a deep dusky brown; the feathers on the head, neck, and wing-coverts are margined more or less with rufous: round the head a wreath of short feathers, rather lighter in colour; the under parts are pale rufous-brown, with large dusky streaks; greater quills dusky, with a dash of cinereous on the outer webs; upper tail-coverts white; tail marked with three or four brown and dusky bars, the lighter bars shaded to rufous on the inner webs, which underneath appear whitish: the outer feather in some is of a light colour and plain; the tips of all whitish. Various are the opinions concerning these birds. Some authors have ever considered them as male and female; others have shifted their opinion frequently. That males of the Ringtail are found there is no doubt, two instances of which have come under our inspection lately; not only evident by their inferior size, but proved by dissection. In one of these specimens there are a few grey feathers on one side of the neck, and on one thigh, which indicates a change to the plumage of the Hen Harrier. But what is extraordinary, the Hen Harrier seems full as plentiful as the Ringtail; whereas if the young males are a considerable time arriving at maturity, we ought to see many more in the brown state. During the whole of one summer we happened to be situated where we saw several Hen Harriers every day, frequently three or four on wing together; and yet, from the month of March to September, we never saw but one Ringtail. And Dr. Latham remarks that no author has mentioned the Hen Harrier as a bird of the American continent, though the Ringtail and its

varieties are common throughout. On the other side of the question, the Doctor says that both males and females have been shot from their nests in the north; and speaks of it from the authority of Dr. Heysham. As both these birds are not uncommon in England, and continue with us the whole year, it is remarkable the young ones have never been taken and bred up to ascertain the fact. But what seems to confirm the present opinion more strongly than any other is, that the Hen Harriers are all nearly of the same size, and that no one instance has been given of that bird proving a female by dissection; those we have dissected have always proved males. Much might be extracted from various authors on the subject; but nothing appears to elucidate the matter more than has been here mentioned. The subject has, however, been more largely treated of by Dr. Latham in the Supplement to his 'Synopsis.' To that work therefore we refer our curious readers.

SUPPLEMENT. — Having (in a paper laid before the Linnean Society, and which has been published in the ninth vol. of their 'Transactions') most clearly, and by the most incontrovertible facts, proved that the Hen Harrier (*Falco cyaneus*) and Ringtail (*Falco Pygargus*) are actually the same species, we cannot submit our reasons for such an opinion in this place in a more explicit manner than by transcribing such part of the paper in question as will most fully elucidate the subject. "About the latter end of June, in the year 1805, my friend Mr. Vaughan informed me that his servant had found the nest of a Hen Harrier in some furze, which contained three young and an addled egg; at this time the infant birds were very small, and only covered with white down: it was therefore determined to take them as soon as we deemed them sufficiently large to be brought up by hand: when that period arrived the servant was directed to shoot one, and if possible both of the old birds, previously to his bearing away what was considered a prize of no small value. On the return of the man with the young, he brought with him also the Hen Harrier, which he assured us he had, under concealment in the furze, shot in the act of dropping a thrush into the nest, while the female (as he seemed to consider the other, and which he described to be a brown Hawk) was covering the young. He afterwards shot at and wounded the female, but could not obtain her. Strong as this person's evidence was in our minds, yet it conveyed no more to the public mind than what had been so repeatedly asserted on similar authority; being,

however, in possession of the aerie, the means were in our power of fully determining the point in question; and to enable me to observe and note the changes that might take place in the plumage, I undertook the care of the whole brood. At this time the two largest had thrown out many feathers, sufficient to discover the plumage of the Ringtail approaching: the other, by its appearance, must have been hatched much later. In about a month it was evident, from size, that there was but one male, so that all my hopes rested on this single life. As they became full-feathered there was at first no distinction in plumage, but the eyes of the supposed male were always lighter than those of the others, whose irides were so dark as not to be distinguished at a small distance from the pupil. In the dress of the Ringtail the whole continued through the winter, when the one which had been weakly from the first died: this circumstance induced me to force a premature change in some of the quill and tail-feathers of the others, fearing some accident might frustrate my earnest desire of bringing the matter to a decisive proof, and about the middle of June I was highly gratified by discovering an appearance of the new feathers, in the place of those which had been plucked out, that clearly evinced the smaller bird to be a Hen Harrier, and the larger a Ringtail. Thus I had compelled Nature to disclose her secrets before the appointed time; for in every other respect their plumage was yet similar, excepting about the sides of the face, which were paler in colour in the former; in which also the irides were of a dull yellow, somewhat mottled, whereas in the latter they still continued dark. The shyness of these Hawks had occasioned their breaking most of their larger feathers, although in a place ten feet in length by five in width; and as their regular moulting season was advancing, they were turned into a garden surrounded by a wall, where, after some time, the female died of the cramp in her legs. The male had, about the 20th of July, thrown out many of the new feathers naturally, especially the greater coverts of the wings, and a few grey feathers in different parts of the body. On the 20th of August the greater part of the quill and tail-feathers were grown to their full length, and a gradual increase of grey feathers appeared on most other parts: the eyes also became more orange; but it was not till the middle of October that it had attained that state, which made it desirable to be retained as an existing fact of the change; it was then killed and is now in my museum. In this state the plumage of the Ringtail or

female still remains about the neck, the smaller coverts of the wings, the thighs, and part of the belly intermixed with the male plumage: the top of the head and wreath have also a mixture of the feathers of both sexes: the quills, scapulars, and tail are completely masculine; in the last of these are a few small broken bars of cinereous-brown on a white ground; in the three outer feathers the exterior margins cinereous-grey; the six middle feathers are almost wholly grey, and the markings are very obscure beneath. From the account here given of the Hen Harrier it is quite clear that the change of plumage is effected in the autumn of the year after it leaves the nest, and not in the same year; and as it is between three and four months in the act of moulting, it is certainly very extraordinary that so few instances have occurred of its being killed in that state which might have been decisive. That such has been taken is evident by the description of *Falco Hudsonius* of authors, which is doubtless this bird in change of plumage. I have now only to remark that the nest of this bird was composed of sticks rudely put together, was nearly flat, and placed on some fallen branches of furze that supported it just above the ground. The egg is a little inferior in size to that of the Moor Buzzard, and similar in shape and colour." [The other two British species of *Circus* or Harrier will be found under Moor Buzzard, and Falcon, Ashcoloured.]

↑Hernshaw.—See Heron, Common.]

Heron. — A genus of birds, the characters of which are: Bill long, strong, sharp-pointed. Nostrils linear. Tongue pointed. Toes connected by a membrane as far as the first joint; in some of the species the middle claw is pectinated.

Heron, African.—[Yarrell, ii. 545; Hewitson, lxxxii. 312.] *Ardea caspica*, Ind. Orn. ii. p. 698, 73. African Heron, Lath. Syn. Sup. p. 237; Lewin, Br. Birds, iv. t. 151; Walc. Syn. ii. t. 131. — This bird is smaller than the Common Heron; length three feet. Bill dusky yellow, blackish at the point, seven inches long. The head and greater part of the neck are pale ferruginous; chin and throat white; the feathers on the top of the head long, black, and form a sort of a crest; from the head a list of black runs down the back of the neck for two-thirds its length; from the eye on each side another list continues down to the breast; on the lower part of the neck the feathers are long, loose, and of a deep ash-colour; the breast ferruginous-chesnut; back very deep ash-colour;

quills and tail black; the lower feathers on the rump like those on the fore part of the neck, but mixed with ferruginous; belly pale ferruginous ash-colour; legs dull yellow; the fore part of them, the toes and claws black. Not more than two of this species are mentioned to have been met with in this country, one of which is stated to have been shot in Ashdown Park, near Lambourn, Berks, now in the Leverian museum. Said to inhabit Africa and Asia. [In the 'Zoologist' for 1846 Mr. Rodd records, at p. 1331, the occurrence of a specimen near Killiow House, Truro, in April of that year. In the volume for 1847 Dr. Plomley records, at p. 1777, the occurrence of two examples at Lydd, in Romney Marsh—one, adult, in March; the other, young, in September. In the volume for 1849 are three records—at p. 2497, in Aberdeenshire, in March, 1847; at p. 2591 Rev. F. O. Morris states that a remarkably fine specimen was killed the same year at Lowthorpe, near Driffild; at p. 2600 it is stated, on the authority of Mr. Goatley, that one was killed at Otmoor, and another at Witney, both in Oxfordshire. In the volume for 1850 Mr. Rodd records, at p. 2800, the occurrence of a specimen, in fine adult plumage, at St. Buryan, in Cornwall, on the 8th of April. In the volume for 1852 Mr. Ellman mentions, at p. 3330, the occurrence of a specimen at Catsfield, in Sussex, in October of the previous year. In the volume for 1863 Mr. Stevenson records, at p. 8329, the occurrence of an African Heron at Hoveton Broad, Norfolk, on the 1st of July, 1862. This is the Purple Heron of Jenyns, Gould and Yarrell: the origin of the name "Purple" is difficult to explain, but the reader must please recollect the names are synonymous.]

[Heron, Buff backed. — See Heron, Little White.]

[Heron, Cassian.—See Heron, Squacco.]

Heron, Common. — [Yarrell, ii. 537; Hewitson, lxxxii. 310.] *Ardea major*, Lin. Syst. i. p. 236, 12; Gmel. Syst. ii. p. 627; Raii Syn. p. 98, A. 1; Will. p. 203, t. 49; Ind. Orn. ii. p. 691, 54; Lath. Syn. Sup. ii. p. 303; Bewick, Br. Birds, ii. t. p. 37. *Ardea cristata*, Bris. v. p. 396, 2, t. 35; Ib. 8vo, ii. p. 313. Le Heron huppé, Buf. vii. p. 342, & t. 19 (fem.) Crested Heron, Albin, i. t. 67; Ib. iii. t. 78. Common Heron, Br. Zool. No. 173, t. 61; Ib. fol. 116, t. A; Arct. Zool. ii. No. 343; Lath. Syn. v. p. 83, 50; Lewin, Br. Birds, iv. t. 118; Walc. Syn. ii. t. 129; Pult. Cat. Dorset. p. 14. *Ardea cinerea*, Lin. Syst. i. p. 236, 11 (fem.); Don. Br. Birds, iv. t. 73.

Provincial: Heronshaw; Crane; Hegrie or Skip-Hegrie; Heronsewgh. — The weight of this species is about three pounds and a half; length, to the end of the tail, about three feet four inches. Bill near six inches long, dusky; at the base of the under mandible yellow; irides bright yellow; round the eye the skin is bare and greenish. The forehead and crown of the head white; on the hind part of the head the feathers are of a glossy black, very long, and form a loose pendant crest; the neck is whitish, marked on the fore part with a double row of black spots; scapulars grey and white, which, with those on the lower part of the neck, are long and loose; wing-coverts bluish grey; the bastard wings and greater quill-feathers black; the sides of the body, from the breast to below the thighs, black; middle of the breast and belly white; thighs white, tinged with rust-colour; the tail is short, of a bluish ash-colour; legs very long, of a dull greenish colour; the middle claw serrated. The female wants the black and white feathers on the head, instead of which that part is bluish grey, and not much elongated into a crest, as in the male; the feathers on the breast and scapulars are not so long and loose. The young male birds are like the female for some time. Linnaeus has made the two sexes distinct species; others were long of the same opinion, but later observations have corrected the mistake. This bird is found in most parts of the known world; is common in England. It is a great destroyer of fish, both sea and freshwater; enabled, by the great length of legs, to wade into some depth of water, where it stands motionless till some of the finny tribe approach, when in an instant it darts its bill into them. Its digestion is as quick as its appetite is voracious, and of course it commits vast devastation in ponds and shallow waters. They feed frequently by moonlight, at which time they become tolerably fat, being not only less disturbed in the night, but it has been observed that fish then come into the shoaler waters. Besides fish, frogs and toads have been found in their stomachs. In the breeding season they congregate, and make their nests very near each other; Mr. Pennant mentions having seen eighty nests on one tree. We once saw a heronry on a small island in a lake in the north of Scotland, whereon there was only one scrubby oak-tree, which not being sufficient to contain all the nests, many were placed on the ground. The nest is large and flat, made of sticks lined with wool and other soft materials. The eggs are four or five in number, of a greenish blue, about the size of those of the Duck. Heronries were

held sacred in the days of falconry, being esteemed for the diversion it gave. Some are yet to be seen in several parts of the kingdom.

SUPPLEMENT. — Notwithstanding the great length of the neck of this bird, it possesses only sixteen vertebral joints, and a Ring Ouzel we examined had thirteen. This species was undoubtedly much more numerous formerly than it is at present: it was in the times of falconry considered as royal game, and a severe penal statute enacted for its preservation. In the present day it is, however, sufficiently common, as may be observed by the list of the heronries given in the Second Supplement to the 'General Synopsis of Birds;' to which we could add many more. It is a matter of astonishment to observe the distance this bird is sometimes seen, in the breeding season, from any known community, for like the Rook they usually congregate for the purpose of nidification. We have not heard of any other heronry in the West of England than that at Pixton, the seat of Lord Carnarvon, and one or two others, yet we have seen Herons more than thirty miles from either of these in the height of the breeding season, without being able to discover any nearer place where they resort to breed. From this circumstance, which is equally applicable to many other species, it may be fairly inferred that some, either from youth, age, or defect, are annually sterile. Dr. Heysham has given a singular account of a battle royal between a colony of Herons and a neighbouring one of Rooks; the former having been deprived of their ancient premises by the destruction of the trees, made an attempt to form a settlement in the Rookery, which was effected after an obstinate contest, in which some on both sides lost their lives; but after a second victory of the Herons, in the following year, a truce was agreed upon, and both societies lived in harmony together. A more particular account of this is transcribed into Mr. Bewick's 'History of British Birds.'

Heron, Dwarf.—See Egret.

Heron, Freckled.—[Yarrell, ii. 577]. *Ardealenticinosa* [Temm. *Man. d'Orn.* iv. 381.]

SUPPLEMENT. — The species of this genus are numerous, and subject to considerable variation, so that at present many are in great obscurity. The sexes, too, in some species are greatly dissimilar, which adds to the difficulty of identifying them. In England there are but two species known to breed, but a few others accidentally wander and swell the catalogue of British birds, without enabling us to

elucidate much of their natural history. Thus we have the *Ardea Caspica*, *Gardeni*, and *comata*, of which little more is known than that some species of Heron, supposed to be these, have, from a single instance, had their names recorded, without even a description by which they might be identified in future. The species now before us, shot in the west of England, does not in the least accord with the descriptions of either of those before mentioned, nor indeed sufficiently with any we can find described, to warrant a reference, or to assign it any synonyms at present, though it is probable it may prove a sexual distinction only of some species obscurely known. The length is about twenty-three inches. Bill two inches and three-quarters long to the feathers on the forehead, rather slender, and both mandibles equally turned to form the point; the upper part of the superior mandible dusky; sides and lower mandible greenish yellow. The head is very small; the crown is chocolate-brown, shaded to a dull yellow at the nape, where the feathers are much elongated: the chin and throat white, with a row of brown feathers down the middle; at the base of the lower mandible commences a black mark that increases on the upper part of the neck on each side, and is two inches or more in length; the cheeks are yellowish, with an obscure dusky line at the corner of the eye; the feathers on the neck are long and broad, with their webs partly unconnected; those in front are pale dull yellow, with broad chesnut streaks formed by each feather having one web of each colour, margined, however, with dull yellow on the chesnut side; some feathers have the dark mark in the middle, especially the lower ones; these are all loose as in the Common Bittern; those at the bottom of the neck four inches long, and hang pendant below the breast: the hind neck is bare, and the feathers that fall over that part are pale yellow-brown: the feathers on the breast are also long, and of a fine chocolate-brown, glossed with purple, and margined with dull yellow: belly and sides the same, but not quite so bright, the brown marks becoming speckled: the vent and under tail-coverts yellowish white: the back and scapulars are chocolate-brown with paler margins, minutely speckled and glossed with a tinge of purple in some particular lights: the coverts of the wings dull yellow, darkest in the middle of each feather, the margins prettily speckled: the first and second order of quills, their greater coverts, and the *alulæ spuria* dusky lead-colour, with a cinereous dash; the primaries very slightly tipped with brown; the secondaries and the greater coverts

tipped more deeply with the same, and prettily speckled on the light part; the tertials correspond with the lower order of scapulars, which have their margins chesnut, with small dusky lines and spots: the tail is short, and in colour similar to the tertials: the wings when closed do not reach to the end of the tail: the legs are three inches and three-quarters in length from the heel to the knee: the toes long and slender; the middle one, including the claw (which is three-quarters of an inch in length, and pectinated on the inner side), is as long as the leg; the claws are not much hooked, but the hind one most so, and by far the longest; their colour dusky brown. The colour of the legs, and bare space above the knee (which last is about an inch), appears to have been greenish. The bird from which this description is taken was shot by Mr. Cunningham, in the parish of Piddletown, in Dorsetshire, in the autumn of 1804. This gentleman relates that, when in pursuit of some Pheasants amongst the high banks between the broad ditches of some rich water-meadows, about half a mile distant from the river Froome, this bird rose, and he shot it. Mr. Cunningham further remarks that its flight was rather rapid, and that it made a noise something like the tap on a drum, which induced him to believe it was the Common Bittern, and as such sent it to Colonel George, of Penryn in Cornwall, who at that time was making a collection of birds: At the time Colonel George disposed of his collection this bird was marked in the catalogue *Ardea minuta*, and was purchased for us as such, and is now in our collection. Thus an extremely rare and unknown bird in England, and apparently a nondescript, has been rescued by accident from oblivion. Upon a communication with Colonel George on the subject, he was so obliging as to procure us the particulars from his friend Mr. Cunningham, whose account was most satisfactory, and amply detailed; from which the substance has been extracted as far as relates to the natural history of the bird. The bird was quite fresh when it arrived at Penryn, and was badly prepared by a foreigner, who did not notice the sex; the plumage is, however, in good preservation. Our astonishment was very considerable at receiving this bird for the Little Bittern, to which it is no ways allied either in size or colour. It is in its general appearance more like the Common Bittern, but not much more than half the size, and the plumage altogether much darker, and the markings extremely different: but we are not surprised that a sportsman should be mistaken in supposing it to be the Common Bittern, if he

had not before noticed the very superior size of that species. We at first thought this bird might be a different sex of the *Ardea Gardeni*, but upon thorough investigation we do not find any information to induce that opinion. Nor is it in the least like the female *Nycticorax* in plumage; the shape of the bill, the toes, and the claws are quite different. In fact, we are at present unable to refer this bird to any known species, and yet it is probably a female of some one already described, perhaps of *Ardea ferruginea* or *castanea*, both of which are European species, but their sexual distinction not clearly ascertained. Under these circumstances a specific title became necessary: and we trust this full description of the bird will render it impossible to confound the species, wherever it may hereafter be discovered. [The Freckled Heron of Montagu and Bewick is identical with the American Bittern of Selby, Jenyns, Gould and Yarrell. In addition to Col. Montagu's specimen, Mr. Yarrell mentions that Dr. Moore obtained one, shot at Mothecombe, near Plymouth, on the 22nd of December, 1829; and that another was killed in Dumfriesshire, near the residence of Sir William Jardine, in October, 1844. In the 'Zoologist' for 1846, Mr. Cooper records, at p. 1248, the occurrence of a specimen near Fleetwood; and in the volume for 1848 Mr. Gurney mentions, at p. 1964, that another was killed at Yarmouth during that year.]

Heron, Gardenian.—*Ardea Gardeni*, Gmel. *Syst.* ii. p. 645; *Ind. Orn.* ii. p. 685, No. 32; *Lin. Trans.* v. p. 276. *Botaurus naevius*, Bris. v. p. 462, 31; *Ib.* 8vo, ii. p. 332. *Butor tacheté*, ou *Pouacre*, Buf. vii. p. 427. Gardenian Heron, *Arct. Zool.* ii. No. 355; *Lath. Syn.* v. p. 71, 32; *Pen. Br. Zool. Ed.* v. ii. p. 28, t. 7. Spotted Heron, *Lath. Syn.* v. p. 70, 31.—An instance of this species having been killed in England enables us to add it to the list of British birds. It was shot in Oxfordshire by John Horatio Dickins[on], Esq., and communicated to the Linnean Society, April 3rd, 1798. In size it scarce exceeds that of the Rook; length about twenty inches. Bill dusky, beneath greenish yellow; lore greenish; the plumage above is dusky, spotted and streaked with white, except the lower part of the back, which is plain; the head, neck, breast, and belly whitish, streaked longitudinally with fine short lines of black or dusky; the lesser coverts marked with yellowish spots; greater coverts with a white spot at the tip of each feather, forming two rows across the wing; the greater quills edged with dull white, tips the same; tail dusky; legs of a dirty yellow. This species seems to vary somewhat in

plumage, either from sex or age. In some the dusky parts are more inclined to brown; and the under parts, which in some are whitish, in others are of a light brown. Inhabits South Carolina and Cayenne; frequents ponds, marshes, and rivers, in the interior parts remote from the sea; and feed on frogs and fish.

SUPPLEMENT.—We are informed by the Rev. Mr. Dickinson that the Gardenian Heron noticed in the fifth vol. of the 'Linnean Transactions,' as having been shot by him, was in fact killed by Lord Kirkwall, as it sat upon a tree, near Thame in Oxfordshire, to which it had retired probably after feeding by the side of the adjacent river Thames. Mr. Dickinson remarks that he first ascertained the species, and sent information of it to the Linnean Society. This gentleman further remarks that the description given by Brisson, is by far the most accurate with regard to the specimen in question. Dr. Latham assures us that he had an account from the late Mr. Pennant, of a Heron that was shot near Cliefden, Bucks, in 1797, that exactly answers to the Gardenian Heron in the 'Planches Enluminées,' No. 939. The whole colour of the plumage dusky, the feathers mostly streaked with white. [This is the young of the Night Heron: see Heron, Night.]

Heron, Great White.—[Yarrell, ii. 549.] *Ardea alba*, *Lin. Syst.* i. p. 239, 24; *Gmel. Syst.* ii. p. 639; *Ind. Orn.* ii. p. 695, 65. *Ardea alba major*, *Raii Syn.* p. 99, A. 4; *Will.* p. 205, t. 49. *Ardea candida*, *Bris.* v. p. 428, 15; *Ib.* 8vo, ii. p. 322. Le Heron blanc, *Buf.* vii. p. 365. Great White Heron, *Br. Zool.* ii. p. 175, t. 62; *Ib.* fol. 117; *Arct. Zool.* ii. No. 234; *Ib. Sup.* p. 66; *Will. Angl.* p. 279, t. 49; *Lath. Syn.* v. p. 91, 60; *Lewin, Br. Birds*, iv. t. 150.—The weight is about two pounds and a half; length three feet four inches. The bill is near six inches long, and yellow; the bare skin between that and the eye green; irides and orbits pale yellow. The whole plumage is of a pure white; legs black; the middle claw serrated. One of these birds (we are informed by Dr. Latham) was killed in Cumberland not many years ago. It is said to have been more plentiful in England formerly; is common on the European continent. In America it is found in the southern parts in winter; breeds more northward. We have seen them about New York in the summer, as well as in the lower lands on the banks of small streams in Staten Island.

SUPPLEMENT.—A white Heron made its appearance on the borders of the river Avon, in Devonshire, in the autumn of the year 1805, where it was frequently

observed in company with three or four of the common species, and sometimes alone. The Rev. Mr. Vaughan, who had frequent opportunities of observing it, and used every means to procure it, thinks, from its apparently superior size, it must have been *Ardea alba*, and not a *lusus* variety of *Ardea major*; but its extreme wariness disappointed the many attempts to shoot it, although it continued within the range of a few miles for two months. [In the 'Zoologist' for 1849, at p. 2419, there is a record that a wild-fowl shooter saw one of these birds in Romney Marsh, and shot at it: the record is simply repeated here because it ought not to be omitted: readers must form their own conclusions as to its credibility, seeing the bird was not obtained, and the shooter's name unknown: at p. 2600 of the same volume it is stated, on the authority of Mr. Roundell, that a specimen was killed on the banks of the Isis, not far from Oxford, in September, 1863. Mr. Strickland, in a paper read before the British Association in 1838, mentioned several instances, which he thought reliable, of this bird's occurrence in Britain; and Mr. Yarrell records that a specimen was killed near the village of Tynningham, on the Firth of Forth, in June, 1840.]

Heron, Lesser Ashcoloured.—See Heron, Night.

Heron, Lesser White.—See Egret.

Heron, Little White.—[Yarrell, ii. 557.] SUPPLEMENT.—*Ardea æquinoctialis*, Lin. Syst. i. p. 240; Gmel. Syst. ii. p. 641; Ind. Orn. ii. p. 696, No. 70. *Ardea candida*, Bris. v. p. 435, 18; Id. 8vo, ii. p. 324. *Ardea candida minor*, Bris. v. p. 438, 20; Id. 8vo, ii. p. 325. *Ardea mexicana candida*, Bris. v. p. 437, 19; Id. 8vo, ii. p. 324. Le Crabier blanc à bec rouge, Buf. vii. p. 401. La Garzette blanche, Buf. vii. p. 371. *Ardea alba tertia*, Raii Syn. p. 99, 6; Id. p. 102, 22; Will. p. 206; Id. Angl. p. 280. Little White Heron, Lath. Syn. v. p. 93 and 94, A. B.; Cat. Car. i. t. 77; Arct. Zool. ii. No. 345; Lin. Trans. ix. p. 197.—We had the honour of announcing this species for the first time as British, in the 'Transactions of the Linnean Society,' a female having been shot near Kingsbridge, the latter end of October, 1805, and was placed in our collection by a gentleman to whom we are obliged upon many similar occasions, Mr. Nicholas Luscombe, of that place. The length is about twenty inches: the bill two inches long to the feathers on the forehead, and of an orange-yellow: the lore and orbits the same: irides pale yellow. The whole plum-

age is snowy white, except the crown of the head, and the upper part of the neck before, which are buff: legs three inches and a half long, and one inch and a half bare space above the knee; these parts are nearly black, with a tinge of green; the toes and claws are of the same colour, the middle claw pectinated. The skin was of a very dark colour, almost black, so that on the cheeks and sides of the neck, where the feathers are thin, it is partly seen, or at least gives a dingy shade to the white plumage of those parts. On the back of the head the feathers are a trifle elongated, but scarcely to be called a crest; on the lower part of the neck before, the feathers are more elongated, and, though not slender, hang detached over the upper part of the breast: the tail when closed is in a slight degree forked, and so short as to be entirely covered by the wings when folded. This elegant little species of Heron had been seen for several days in the same field attending some cows, and picking up insects, which were found in its stomach. It was by no means shy, but suffered a bungling marksman to fire twice before he could kill it. The situation where it was shot is the southernmost promontory of Devon very near the coast, between the Start and the Prawl. This specimen appears to be allied to that variety found at Bolonga in Italy, which is described to have the top of the head and neck nearly of a saffron-colour; the breast the same, but paler; perhaps a sexual distinction. The legs in that variety are said to be saffron-colour; it must, however, be recollected that the colour of the fleshy parts, as well as the plumage, sometimes depends on age. Other varieties of this species are found in Carolina and Mexico, and other parts of America; and at Jamaica. [In the 'Zoologist' for 1851 Mr. Cleveland records, at p. 3116, the occurrence of this bird in the south of Devon in April of the previous year. This is the Buffbacked Heron of Selby, Jenyns and Yarrell, the Redbilled Heron of Pennant, and the Rufousbacked Egret of Gould.]

Heron, Night.—[Yarrell, ii. 581; Hewitson, lxxxii. 313.] *Ardea Nycticorax*, Lin. Syst. i. p. 235, 9; Gmel. Syst. ii. p. 624; Raii Syn. p. 99, 3; Will. p. 204, t. 49; Ind. Orn. ii. p. 698, 13; Bris. v. p. 493, 45, t. 39; Id. 8vo, ii. p. 341; Bewick, Br. Birds, ii. t. p. 43. Le Bihoreau, Buf. vii. p. 435, t. 12. Night Heron, or Night Raven, Arct. Zool. ii. No. 356; Will. Angl. p. 279, t. 49; Albin, ii. t. 67; Lath. Syn. v. p. 52; Id. Sup. p. 234; Lewin, Br. Birds, iv. t. 145; Walc. Syn. ii. t. 126. Provincial: Lesser Ash-coloured Heron.

FEMALE: *Ardea Grisea*, *Lin. Syst.* i. p. 239, 22; *Gmel. Syst.* ii. p. 625; *Bris.* v. p. 412, 9, t. 36, f. 1; *Ib.* 8vo, ii. p. 317. — The length of this species is twenty inches. The bill is strong, three inches and three-quarters long, black, with the base yellowish; irides orange; lore, and round the eyes, green. The crown of the head is greenish black, extending a little way down the back of the neck; on the back of the head are three very narrow white feathers near six inches long, with their tips dusky; the hind part of the neck and sides are ash-colour; upper part of the back dull green; the lower part, rump, wings and tail pale ash-colour; the forehead and most of the body white; legs yellowish green; claws dusky. The female is glossy brown on the head; the upper parts of the body the same, but tinged with grey; the hind part of the neck palest; the lower part of the back and rump almost grey; over the eye is a whitish streak; chin white; fore part of the neck grey, streaked with yellowish down the shaft of each feather; the rest of the under parts grey, becoming white at the vent; the wings are greyish brown, streaked with yellowish white; some of the greater coverts tipped with white; quill-feathers cinereous-grey, mostly tipped with white; tail nearly the same; legs greyish brown. This bird is not uncommon in Europe, though one instance only of its being found in England is on record; this was shot near London, in the month of May, 1782, now in the Leverian museum. It is said to be common in Russia, particularly on the river Don, where it builds on trees; is found also in some parts of America. It is also said to lay three or four white eggs.

SUPPLEMENT.—We are informed by Lord Upper Ossory that this species was shot on the border of the river Ouzé in the year 1791, a few miles from Ampthill, and that it is now in his Lordship's museum. It is remarkable, too, that this bird was killed in the summer. A male specimen in our collection has the back and scapulars of a fine dark glossy green: the middle claw is serrated. [In the 'Zoologist' for 1844 the Rev. W. S. Hore records, p. 575, the occurrence of a male in full nuptial plumage, on the 29th of March, at St. John's, in Cornwall. In the volume for 1848, Mr. Montgomery records, at p. 2147, the occurrence of a fine male at Beaulieu, in the county Louth. In the volume for 1849 Mr. Rodd records, at p. 2498, the occurrence of two specimens at the Scilly Islands: Mr. Bulteel states, at p. 2528, that he killed no less than eight specimens in the May of the same year, at Flete, near Erme Bridge, in Devonshire,

four of them being males and four females: one cannot but regret this wholesale destruction of so rare a bird: Mr. Foster says, at p. 2568, that a fine adult male was captured close to the town of Wisbech on the 19th of June in the same year: at p. 2600 of the same volume no less than three specimens are recorded as having occurred near Oxford. In the volume for 1850 Mr. Rodd records, at p. 2825, the occurrence of a specimen at Helston, in Cornwall. In the volume for 1857 Lord Clermont records, at p. 5429, the occurrence of a specimen at Inniskeen, in the county Monaghan, in January, 1855. In the volume for 1861 Mr. Stevenson, of Norwich, records, at p. 7315, the occurrence of a Night Heron in the Caistor marshes, near Norwich, on the 8th of December, 1860.]

[**Heron, Purple.** — The Purple Heron of Yarrell, Jenyns and Gould is identical with Heron, African, of this work.]

Heron, Redbilled. — **APPENDIX.** — The Lesser White Heron is called by this name in the fifth edition of Pennant's 'British Zoology,' Vol. ii. p. 25.

Heronsewgh. } See Heron, Common.
Heronshaw. }

Heron, Spotted. — See Heron, Gardénian.

Heron, Squacco. — [Yarrell, ii. 561.] **SUPPLEMENT.** — *Ardea comata*, *Ind. Orn.* ii. p. 687, 39, y.; *Lin. Trans.* iii. p. 335 (Lambert). *Squacco Heron*, *Lath. Syn.* v. p. 74, 39, Var. B.; *Id. Sup.* ii. p. 302. — Dr. Latham has given a Heron with the above synonyms, which he suspects to be a variety, or sexual difference from the Squacco Heron; and adds that one of the usual sort was shot at Boyton, in Wiltshire, by Mr. Lambert, in 1775. It appears to be the Squacco, *Raii Syn.* p. 99, 8; *Will.* p. 381, 8. *Le Crabier Jaune*, *Bris. Orn.* v. p. 472, 37. *Le Guacco*, *Buf.* vii. p. 392. Mention is made in the minutes of vol. iii. of the 'Linnean Transactions,' that Mr. Lambert presented a drawing of a bird of this species, April 4th, 1797, which was shot at Boyton, as before mentioned. The size is nearly that of a Crow: bill livid-red, with a brown tip: lore greenish: irides yellow: crown of the head much crested, six of the feathers hanging quite down to the back; these are narrow and white, margined with black: the neck and breast pale ferruginous: the feathers on the first very long and loose: back ferruginous, inclining to violet, and furnished with long

narrow feathers, which reach beyond the wing when closed, and fall over them: wings, rump, tail, belly and vent white: the tail pretty long: legs stout, of a greenish yellow: claw of the middle toe serrated within. This elegant species inhabits the southern deserts and bogs of the Caspian Sea. Is found also in Italy about Bologna, from whence the one here mentioned probably strayed. [In the 'Zoologist' for 1843 Mr. E. W. Dowell records, at p. 79, the capture of a specimen of this bird on Ormesby Broad, near Norwich; an attempt to keep it alive was unsuccessful, owing to its proper food not being known. In the volume for 1849 Mr. Rodd records, at p. 2498, that a "flight" of these birds visited the neighbourhood of Penzance in that year, and that three were obtained. In the volume for 1860 Mr. More records, at p. 6855, the occurrence of this bird at St. Helen's, in the Isle of Wight, on the 19th of May, 1858. In the volume for 1862 Mr. Rodd records, at p. 8035, the occurrence of a specimen at Redruth. In the volume for 1863 Mr. Stevenson records, at p. 8725, the occurrence of an adult male at Surlingham Broad, near Norwich, on the 26th of June.]

[Herring Gull,—See Gull, Herring.]

Hew-Hole.—See Woodpecker, Green.

Hick-Wall. — See Woodpecker, Least Spotted.

High-Hoe.—See Woodpecker, Green.

Hiogga.—See Auk, Razorbill.

Hoarse-Gouk or Horse-Gauk.—See Snipe, Common.

Hobby. — [Yarrell, i. 52; Hewitson, ix. 26.] — *Falco subbuteo*, *Lin. Syst.* i. p. 127, 14; *Gmel. Syst.* i. p. 283; *Raii Syn.* p. 15, A. 14; *Will.* p. 49, t. 7; *Ind. Orn.* i. p. 47, 114; *Bewick, Br. Birds*, i. t. p. 41; *Shaw, Zool.* vii. p. 193, t. 25. *Dendrofalco*, *Bris.* i. p. 375, 20; *Ib.* 8vo, p. 109; *Raii Syn.* p. 14, 8; *Will.* p. 47. *Hobreaux, Buf.* i. p. 277, t. 17. *Hobby, Br. Zool.* i. No. 61; *Ib.* fol. p. 69, t. A. 9; *Arct. Zool.* ii. p. 227, C.; *Albin*, i. t. 6; *Lath. Syn.* i. p. 103, 90; *Ib. Sup.* p. 28; *Lewin, Br. Birds*, i. t. 21; *Pult. Cat. Dorset.* p. 3; *Walc. Syn.* i. t. 21; *Don. Br. Birds*, iv. t. 91. — This species weighs about seven ounces; length twelve inches. Bill blue; cere and orbits yellow; irides dusky. The head and upper parts of the body are of a dark dusky brown, almost black, dashed with ash-colour; the feathers margined with pale rufous-brown;

over the eye a light stroke; beneath the eye a black patch, extending in a point from the under mandible down each side of the throat; chin and throat white, extending round each side of the neck, and partly encircles it, but is broken behind by dusky streaks, and the white becomes more ferruginous as it inclines backward; the coverts of the wings like the back, but the feathers more slightly edged; quill-feathers dusky black, with oval ferruginous spots on the inner webs; the breast, belly, thighs, and under tail-coverts ferruginous, palest on the former, marked with dusky streaks; the tail like the back; barred on the inner webs with rust-colour, except the middle feathers; tips whitish; legs yellow; claws black. The female weighs about nine ounces, sometimes more, and very much resembles the male in plumage, but not so dark above, and the lighter parts beneath not so ferruginous. The wings of this bird are long and pointed, but do not reach to the end of the tail when closed; the second feather is longest. This is a migrative species, at least it has never been observed with us in winter, but leaves us the latter end of October, about the time the Merlin arrives in the southern parts. It builds in trees, and sometimes takes possession of a deserted Crow's nest; lays three or four eggs, which are said to be white. We have seen three young ones taken out of a nest; these were not so dark-coloured as the old birds. Small as this species of Falcon is, it is inferior to none in point of courage; will frequently pounce a Partridge; but their favourite game seems to be the Lark, to which it is a great enemy, and is frequently taken in pursuit of them by the bird-catchers in their nets. The Hobby was formerly trained for hawking, but more commonly used for taking Partridges and Larks with a net, which was termed daring; that is, the Hobby was cast off, which so frightened the birds that they readily suffered a net to be drawn over them.

SUPPLEMENT.—A male Hobby perceiving a Goldfinch in a cage, within a window which happened to be open, dashed at the imprisoned bird, notwithstanding several persons were in the room; but being alarmed at the natural vociferations of some young ladies for the safety of their darling, the intruder mistook the passage by which he entered, and flew against the glass, when his retreat was cut off, and he was secured. We have frequently witnessed the flight of this species in pursuit of a Sky-lark, which appears to be its favourite game; and it is astonishing to observe how dexterously the little bird avoids the fatal stroke until it becomes

fatigued. A Hobby in pursuit of a Lark was joined by a Hen Harrier, who, not being so rapid on wing, was usually behind, and ready to avail himself of the sudden turns the unfortunate Lark was compelled to make to avoid the talons of the Hobby; however, after numberless evolutions, the Hen Harrier relinquished, being unequal to the chase, and left the deadly stroke to one better adapted for rapid and durable flight, and aerial evolutions. The country was open, and as far as the eye could discern the chase continued, but doubtless without a chance of the Lark's avoiding the fatal blow.

Holm-Screech.—See Thrush, Missel.

Honey Buzzard.—[See Buzzard, Honey.]

[Hooded Crow.—See Crow, Hooded.]

[Hooded Merganser.—See Merganser, Hooded.]

Hoop.—See Finch, Bul; and Hoopoe.

Hooper.—See Swan, Whistling.

Hoopoe.—A genus of birds, the characters of which are: Bill long, slender, bending. Nostrils small, placed near the base. Toes, three before, one behind; the middle one connected at the base to the outmost.

Hoopoe, Common.—[Yarrell, ii. 181; Hewitson, lxiii. 249.] *Upupa epops*, *Lin. Syst.* i. p. 183, 1; *Gmel. Syst.* i. p. 466; *Raii Syn.* p. 48, A. 6; *Will.* p. 100, t. 24; *Ind. Orn.* i. p. 277, 1; *Bris.* ii. p. 455, t. 43, f. 1. La Huppe, *Buf.* vi. p. 439, t. 21. Hoopoe, *Br. Zool.* i. No. 90, t. 39; *Ib.* fol. 83, t. L.; *Arct. Zool.* ii. p. 283, A.; *Will. Angl.* p. 145; *Albin.* ii. t. 42, 43; *Edw.* t. 345; *Lewin, Br. Birds.* t. 54; *Lath. Syn.* ii. p. 687, 1; *Ib. Sup.* p. 122; *Pult. Cat. Dorset.* p. 7; *Walc. Syn.* i. t. 53; *Don. Br. Birds.* i. t. 9.—The weight of this beautiful bird is about three ounces; length twelve inches. The bill is black, two inches and a half long, slender, and curved; irides hazel. The crown of the head is furnished with a crest composed of a double row of dull orange-coloured feathers tipped with black, lengthening from the forehead backwards, the longest of which is above two inches; the sides of the head, neck, and breast dull orange-colour dashed with brown; upper part of the back browner; belly whitish; the greater quill-feathers are black, with a broad bar of white near the tips; on the secondaries

the white decreases; those next the body are marked with several black and white bars; the coverts are barred in the same manner, those on the upper ridge of the wing like the neck; the rump is white; the tail consists of ten black feathers, crossed with a large semilunar bar of white; the exterior feather white on the outer margin, except at the tip; legs short and black. In some the breast is described to be white; in young birds this part is marked with narrow dusky lines. The female resembles the male. This bird is only occasionally met with in this country; every autumn perhaps produces a few; and instances have not been wanting to prove they have sometimes bred with us. In the Supplement to the 'General Synopsis' an account is given of a young one being shot in May. A pair is also mentioned to have begun a nest in Hampshire, but being disturbed forsook it, and went elsewhere. The nest is said to be made of bents, and lined with soft materials; the eggs, four in number, of bluish white, marked with pale brown spots. It builds in the hollow of a tree, and the nest has been remarked to be extremely fetid; probably occasioned by the fæces of the young, and not by the filthy food by which it has been supposed they feed their young. These birds have been seen in most parts of Great Britain, from Scotland to the most southern parts, as we find on record; and we have known it killed in South Wales and in Devonshire. With us they seem to prefer barren situations. Their food is insects and worms. It is found plentiful in the deserts of Russia and Tartary; are seen in small flocks at Gibraltar, in the month of March, on their passage north, supposed to come from Africa.

[Horned Grebe.—See Grebe, Sclavonian.]

[Horned Owl.—See Owl. Many species, four of them British, have been called by this name.]

Horseman, Greenlegged.—See Green-shank.

Horseman, Redlegged.—See Gambet.

[House Sparrow.—See Sparrow, House.]

Howlet.—See Owl, White.

Huckmuck, Ground.—See Wren, Willow.

Huckmuck, Tree.—See Titmouse, Long-tailed.

I.

Ibis. — A genus of birds, the characters of which are: Bill long, incurved, thick at the base. Face, and sometimes the whole neck, bare of feathers. Nostrils linear. Tongue short. Toes connected at the base by a membrane.

Ibis, Bay.—See Ibis, Glossy.

Ibis, Glossy.—[*Yarrell*, ii. 604; *Hewitson*, lxxxvi. 321.] *Tantalus igneus*, *Gmel.* *Syst.* ii. p. 649; *Ind. Orn.* ii. p. 708, 16. Glossy Ibis, *Lath. Syn.* v. p. 115, 14; *Walc. Syn.* ii. t. 132; *Lewin, Br. Zool.* iv. t. 152; *Don. Br. Birds*, v. t. 118. *Falcinellus*, *Lin. Syst.* i. p. 241; *Gmel. Syst.* i. p. 648; *Ind. Orn.* ii. p. 707. *Numenius viridis*, *Bris.* v. p. 326, 4; *Id.* 8vo, ii. p. 293. *Numenius castaneus*, *Id.* v. p. 329, 5. *Le Courlis verd*, *Buf.* viii. p. 29, and p. 31. Bay Ibis, *Arctic Zool.* ii. p. 460; *Id. Sup.* p. 67; *Lath. Syn.* v. p. 113, 12, and p. 114, 12, A.; *Br. Miscel.* t. 18. *Tantalus viridis*, *Gmel.* i. p. 648. *Numenius viridis*, *N. C. Petr.* xv. p. 462, t. 19. Green Ibis, *Lath. Syn.* v. p. 114, 13; *Lin. Trans.* ix. p. 198. Brazilian Curlew, *Nat. Miscel.* xvii. t. 705. [*Ibis falcinellus*, *Temminck, Man. d'Ornith.* ii. 598.]—This is the only species that has ever been met with in England, and of that only one or two instances. Dr. Latham mentions one in the Leverian museum which was shot in Cornwall. As we have never had an opportunity of seeing a fresh specimen, shall take the liberty of borrowing from the above author's 'Synopsis.' Length almost two feet. Bill five inches, smooth, roundish, much bent, green, fading to olive when dead; eyelids brown; irides olive; eyes placed in a white space; under the chin a small dilatatable pouch; head and neck black; the feathers fringed with white; the rest of the body variegated with blackish blue-green and vinaceous, and in general very glossy; hence the bird, in flying, appears gilded when the sun shines upon it; quills green-gold, and when closed reach the end of the tail; wing-coverts next the body reddish and blue mixed; the next series black, red and green; the last, and quills, green-gold; tail the same, glossed in different lights with red and violet; legs very long, of a bright green; claws crooked, black. This inhabits Russia, chiefly the shores of the Don, and about the Choper; lives on fish and insects; flies in flocks, and builds in trees.

SUPPLEMENT.—It is not a little surprising that the Glossy Ibis should have so long continued multiplied into three distinct species, as it appears to be by no means an uncommon bird in some parts of Europe. The Glossy Ibis has long been admitted into the British Fauna, but has been esteemed extremely rare: it is, however, together with its varieties, the Bay and the Green Ibis, more frequently observed with us than formerly, occasioned perhaps only by the greater attention that in these days is paid to the subject of Natural History. The more frequent occurrence of these birds, be the cause what it may, has enabled us to form an opinion, without much fear of controversy, that these three hitherto supposed species are in fact no other than varieties, with all the intermediate shades that connect them. We consider the variety usually called the Bay Ibis (*Tantalus Falcinellus*) to be the most perfect state of plumage; the Green Ibis (*Tantalus viridis*) to be the first or young bird; and the Glossy Ibis (*Tantalus igneus*), and all its variations, to be the intermediate approaches towards maturity. When the green variety begins to assume the copper or vinaceous colour on the wing-coverts, it is then no other than the Glossy Ibis; and when further advanced, and the strong cast of bay appears about the head and neck, then it has been termed the Bay Ibis. All these varieties, with the several shades and intermediate gradations, have within these few years been shot in England. Two in our collection, shot in Devonshire, are in their first plumage, with very little variation. Another, shot within these two or three years near Liverpool, and now in the collection of Lord Stanley, varies but little from what has been called the Glossy Ibis. One in Mr. Cumming's collection, shot also in Devonshire, in 1805, nearly at the same time as one of ours, is not very dissimilar to the Green variety. That killed in Anglesea, and figured in the 'Naturalist's Miscellany' for the Brazilian Curlew, is very nearly, if not quite, in the plumage of the variety called the Glossy Ibis; but the vinaceous copper on the wings is too highly coloured for the bird it is intended to represent, as we are credibly informed. (See Curlew, Brazilian). In the 'British Miscellany' there is a figure of this bird in nearly its ultimate change, or perfect plumage; the state in

which it is called Bay Ibis, or at least a very near approach to it. The greater proportion of the Green variety has been observed in England, and more of the Glossy than that of the Bay, and all these (perhaps without an exception) have been shot in the autumn. This is consonant with the opinion that they are all one species, and that the Green is in the first plumage, as the young must be more numerous than the old immediately after the breeding season; and possibly the Glossy and Bay may be only a sexual distinction of plumage. It is admitted that all the varieties have been noticed in most parts of northern Europe, and in some parts of the south, and are found together. In its perfect state it is known to breed in Russia, and perhaps Siberia; is said to be common about the Caspian and Black Seas, ascending the rivers to breed. This species, like all the long, soft-billed birds, have their vernal and autumnal migrations; hence in the spring they go to the less inhabited parts of the north, where they find security about the rivers and interior lakes to propagate, after which they retire from a country which no longer affords them food, and spread over the southern parts of Europe, and many probably pass the Mediterranean, and enter Africa and Asia. It is remarkable that rarely, if ever, any instance has occurred, of this and some other species of European birds having been observed to visit England in the spring. This, however, must be accounted for by supposing that birds in their vernal migrations approach their places of summer destination gradually, and not by long flights; consequently are not likely to have their latitudinal course varied by storms: besides the vernal equinox is not so productive of violent gales of wind, nor, indeed, would such blow them to England when on their passage from the south to the north of Europe, because they pass over land the whole way, and can alight when distressed. On the contrary, those who have spread into Denmark, Sweden, and perhaps Lapland, to breed, frequently remain till actually compelled to leave those more frigid climes, and take long flights in nearly a southern direction; and thus, if an autumnal equinoctial gale should overtake them, some are driven from their course, and obliged, after passing a part of the North Sea, to rest and recruit in England. This will account for these birds being occasionally found in the southern parts of England, and much more rarely in the northern parts, or in Scotland. Having endeavoured to elucidate the history of this bird as far as possible, it only remains for us to describe some of the varieties, especially the

Bay and the Green (the Glossy Ibis having been given in the former part of this work), and to remark that the synonyms there given may be added to what now accompanies the history of this bird. It may not, however, be improper to remark that, in all the varieties we have seen of this species, the conformation of the bill and legs, and particularly the toes, as well as the shape, length, and weight of the individuals, coinciding as nearly as might be expected, is a further proof of their being the same. And it should also be remarked that, from all the comparisons we have been able to make between the genus *Tantalus* and that of *Numenius*, there is a strong characteristic distinction in the back toe; that of the former is long, and is a continuation of the heel, or plant of the foot; the latter an appendage to the back of the leg, being seated higher up, is small, and rarely reaches much beyond the heel when it hangs pendent, or at least the base is always at a distance above the heel. We cannot perhaps describe the variety called the Bay Ibis more satisfactorily than in nearly the words of Doctor Latham. Bill nearly four inches long and brown: from the bill to the eye bare, and dusky green: the head and neck are chesnut, verging to brown on the former, where the feathers have pale edges; the upper parts of the body are glossy green, appearing bronzed in different lights: the breast, belly, and under parts are brown, with a gloss of green-gold on the breast: quills and tail darker than the back, and with very little gloss: legs dusky blue: between each toe a small membrane at the base. A variety has the plumage mostly of a glossy chesnut, and the breast has a green tinge. The specimen in the collection of Lord Stanley, before noticed, is rather larger than the Green variety, which corresponds with the supposition that the latter is the young in its first plumage. As his Lordship was so polite as to send us the bird in question for examination, a short description may be acceptable to the naturalist. The bill is about five inches long to the gape, and three-quarters of an inch deep at the base. The head and upper part of the neck brown, faintly speckled with white; lower neck, breast, and all the under parts of the body rusty brown, without gloss: back and scapulars glossy brown, with green and copper lustre, as reflected in different points of view: primary and secondary quills inclining more to green, with a copper tinge: the tertials and tail nearly the same as the back: under scapulars long and refulgent with purple and green: the legs and toes dusky brown like the bill: the legs measure, from the foot to the

knee, three inches and three-quarters. By a comparison of this bird with the Green Ibis, there appears to be that little superiority of size which is natural between the old and the young of the same species; and this is further marked by the superior size of the bill, a circumstance so characteristic of age in similar long-billed birds, the Curlew and Godwit: The examination therefore of this specimen serves to confirm our former opinion. The Green variety of this species we shall describe from those we obtained fresh. Weight about eighteen ounces: length twenty-two inches: breadth two feet nine inches. Bill nearly four inches and a quarter in length to the gape, moderately curved, and of a bluish lead-colour, the sides of the under mandible flesh-colour, the whole fading to a purplish flesh-colour in a few days; from the nostrils, which are linear, a furrow continues to the end of the bill on each side: between the eyes and the bill the bare skin is black: the irides dusky: the head, neck, and all the under parts are dusky, more or less varied with changeable tints of bronze, most so on the breast; the throat and sides of the head minutely speckled with white, with a white feather or two on the upper part of the neck before; and above the eye are several of the same colour, tending obliquely to the hind head, forming an irregular line of white spots: the back and wings, including the scapulars and quills, are resplendent with changeable purple and green, or more properly dark glossy green, changeable to violet and purple in different points of view, somewhat like the tail of a Magpie, but the colours not so strong: the tail consists of twelve feathers, is a trifle forked when closed, and is of the same glossy green as the wings: the legs and toes blue-black; the first are three inches and a half in length to the knee-joint, and an inch and a half bare above the knee; the toes are long, the middle one above two inches, independent of the claw; the hind one an inch, and so placed as to bear its whole length on the ground; the claws are dusky, not much bent, the middle one brought to a sharp edge on the inside, and sometimes slightly but irregularly serrated. Another of these birds in our collection, which proved on dissection to be a female, weighed sixteen ounces: length twenty-one inches. The only difference between this and the one last described is that this has more white spots about the head and neck, especially four transverse white bars on the upper part of the neck before. The first of these birds was shot near Ivybridge by Mr. Rivers, who observed it to alight on the green before his house, and as the sun shone

upon it the resplendent appearance of its plumage attracted his particular attention, and induced him to fetch a gun. The bird was not shy and was readily shot. This was about the middle of September, 1805. By accident it got into the hands of our friend Mr. Vaughan, who kindly presented it to us. The other was shot on a marsh not very distant from Plymouth, and was obligingly sent to us by Sir Wm. Elford, on or about the 12th of October, 1809. That in the possession of Mr. Lamb, which so well connects the Glossy and Bay varieties, was shot in the month of September, 1793, while skimming over the river Thames in company with another, between Henley and Reading. The Ibis is adopted as a part of the arms of the town of Liverpool, and formerly, if not at present, stood conspicuous upon the Guildhall in truly golden array. This is termed a Liver, from which that flourishing town derived its name, and is now standing on the spot where the Pool was, on the verge of which the Liver was killed.

APPENDIX. — It will be seen in the preceding pages we entertained strong suspicions that the Brazilian Curlew (*Numenius Gaurauna* of Latham's 'Synopsis'), introduced into the 'Naturalist's Miscellany' on the authority of the Rev. Hugh Davies, as a British bird, was no other than the Glossy Ibis. We are happy to find, in vol. 2 of the late edition of Pennant's 'British Zoology,' a most ample, candid, and satisfactory apology, inserted by desire of Mr. Davies, which has completely verified our opinion, as that naturalist acknowledges he was led into the mistake by an imperfect specimen, and did not discover his error till several specimens of the Ibis were some time afterwards killed in Anglesea, some of which fell into his hands. [The occurrence of this bird in Great Britain and Ireland is not so uncommon as Col. Montagu seems to have considered. From thirty to forty instances have been recorded in the 'Zoologist' and other periodicals; some of them are enumerated by Mr. Yarrell. The Glossy Ibis is an inhabitant of Africa and Asia, and a frequent straggler into Europe. Audubon says it occurs in vast numbers in Mexico, but a doubt seems to hang over the identity of the American and European birds.]

Ice Bird.—See Auk, Little.

[Iceland Falcon.—See Falcon, Jer: two or more species are possibly comprised under this name: it is one of those critical questions scarcely to be discussed in these editorial additions.]

[Iceland Gull.—See Gull, Iceland.]

Imber.
[Imber, Great.] } See Diver, Imber.

Imber, Lesser. — SUPPLEMENT.—In Bewick's 'British Birds' we find a species of Diver supposed to be new; but

it appears to us only the female of the Common Imber, to which we refer for further particulars. See Diver, Imber.

Immer.—See Diver, Imber.

[Ivory Gull.—See Gull, Ivory.]

J.

Jackdaw. — [Yarrell, ii. 108; Hewitson, lx. 232.] *Corvus monedula*, *Lin. Syst. i.* p. 156, 6; *Gmel. Syst. i.* p. 367; *Raii Syn.* p. 40, t. 5; *Will.* p. 85, t. 19; *Ind. Orn. i.* p. 154, 11; *Bris. ii.* p. 24, 6; *Ib.* 8vo, i. p. 160. *Le Choucas*, *Buf. iii.* p. 69. Jackdaw, *Br. Zool. i.* No. 81, t. 34; *Ib.* fol. p. 78; *Arct. Zool. ii.* p. 251, C.; *Will. Angl.* p. 125, t. 9; *Albin, i.* t. 14; *Lewin, Br. Birds, i.* t. 37; *Lath. Syn. i.* p. 378, 9; *Ib. Sup.* p. 78; *Pult. Cat. Dorset.* p. 5; *Walc. Syn. i.* t. 36. Provincial: Chough; Daw. — This species of Crow weighs about nine ounces; length near thirteen inches. Bill black; irides light grey. The forehead is black; the hind part of the head and back of the neck cinereous-grey; upper parts of the body black, slightly glossed with blue; tail the same; the under parts dusky black; legs black. This very common bird frequents old towers, ruined buildings, and high cliffs, where it builds, as well as in holes of trees. The nest is made of sticks, and lined with wool and other soft materials; the eggs are five or six in number; bluish spotted with black. These birds are gregarious, and frequently flock together with Rooks; feed in the same manner on grain and insects; are fond of cherries, and will devour carrion in severe weather. It is seen to frequently perch on the back of sheep, not only to rob that animal of its wool to line its nest, but also to pick out the ticks with which it is infested. It is a very docile, tractable, and mischievous bird, easily made tame, and may be taught to talk. Some instances are mentioned of its breeding in rabbit-holes. Several varieties of this species are given by different authors; some entirely black, without the grey on the head and neck; others quite white, or mixed black and white. Is found in Denmark, France, and Germany; also in Russia and the west of Siberia; but in most of these places are more or less migratory.

Jack-Saw.—See Dundiver.

[Jack Snipe.—See Snipe, Jack.]

[Jadreka Snipe.—See Snipe, Jadreka.]

[Jager, Arctic.—See Gull, Arctic.]

Jay. — [Yarrell, ii. 124; Hewitson, lx. 237.] *Corvus glandarius*, *Lin. Syst. i.* p. 156, 7; *Gmel. Syst. i.* p. 278; *Raii Syn.* p. 41, A. 2; *Will.* p. 88, t. 19; *Ind. Orn. i.* p. 157, 18. *Garrulus*, *Bris. ii.* p. 47, 1; *Ib.* 8vo, i. p. 168. *Geay, Buf. iii.* p. 107, t. 8. *Jay, Br. Zool. i.* No. 79; *Ib.* fol. t. D.; *Arct. Zool. ii.* p. 252, E.; *Will. Angl.* p. 130, t. 19; *Albin, i.* t. 16; *Hayes, Br. Birds, t.* 7; *Lewin, Br. Birds, t.* 38; *Lath. Syn. i.* p. 384, 19; *Ib. Sup.* p. 79; *Pult. Cat. Dorset.* p. 5; *Walc. Syn. i.* t. 37; *Don. Br. Birds, i.* t. 2; *Ib. ii.* t. 34. — This beautiful species of Crow weighs seven ounces; length near thirteen inches. The bill is dusky; irides whitish. The forehead is white, streaked with black; chin whitish; a broad streak of black runs from the corners of the mouth under each eye, pointing downwards; on the crown of the head the feathers are long, and erectable in form of a crest; the hind part of the head, the sides, neck, breast, back, and scapulars vinaceous; the lesser wing-coverts inclining to bay; the greater coverts are elegantly barred with a rich blue and black alternately, the rest black; the greater quill-feathers dusky; the exterior webs ash-colour, except the first; six of the secondary quills are black, white on the exterior webs near the base, and tinged with blue; the two next entirely black; those nearest the body bay, tipped with black; rump, upper and under tail-coverts white; the tail black; legs brown. This bird is found in tolerable plenty in most of the wooded parts of this kingdom, but are never gregarious. It makes a nest most commonly in high coppice-wood or hedges; sometimes against the side of a scrubby tree; it is formed of sticks, lined with fibrous roots; lays five or six eggs of a light brown-colour, not very unlike those of the Partridge, but smaller, and obscurely marked with a darker shade of brown. The Jay is a cunning, crafty bird; is a great devourer of fruit and grain, and seems particularly fond of cherries and peas; will frequently plunder the smaller birds' nests of their eggs and young, and

sometimes pounce the old birds, on which it preys, as well as on mice. Its common notes are various, but harsh; will some time in the spring utter a sort of song in a soft and pleasing manner, but so low as not to be heard at any distance; and at intervals introduce the bleating of a lamb, mewing of a cat, the note of a Kite or Buzzard, hooting of an Owl, and even the neighing of a horse. These imitations

are so exact, even in a natural, wild state, that we have frequently been deceived. In the autumn it feeds on acorns, which it has been said to hoard for the winter; but this is certainly a mistake; such hoards found in our woods belong either to the squirrel or some species of mouse.

Judcock, or Juddock. — See Snipe, Jack.

K.

Kae.—See Jackdaw.

Kae-Cornwall.—See Crow, Red-legged.

Kastril, or Kistril.—See Kestrel.

Katabella.—See Hen Harrier.

Kate.—See Brambling.

Katogle.—See Owl, Great-eared.

Kelockdoe.—See Grouse, Black.

[Kentish Plover.—See Plover, Kentish.]

Kertlutock.—See Shoveller, Blue-winged.

Kestrel. — [Yarrell, i. 64; Hewitson, x. 32.] *Falco tinnunculus*, *Lin. Syst.* p. 127, 16; *Gmel. Syst.* i. p. 278; *Raii Syn.* p. 16, 16; *Ib.* p. 180, 2; *Will.* p. 50, t. 5; *Ind. Orn.* i. p. 41, 98; *Bewick, Br. Birds*, i. t. p. 38, 40, M. and F.; *Lath. Syn. Sup.* ii. p. 43, 44, No. 48, and var. C. D.; *Shaw, Zool.* vii. p. 179. La Cresserelle, *Buf.* i. p. 280, t. 18; *Bris.* i. p. 393, 27. *Accipiter alaudarius*, *Bris.* i. p. 379, 22; *Ib.* 8vo, p. 100; *Gmel. Syst.* i. p. 279. Kestrel, Stannell, or Windhover, *Will. Angl.* p. 84, t. 5. Kestrel, *Br. Zool.* i. No. 60; *Ib.* fol. p. 68, t. A.; *Arct. Zool.* ii. p. 226, N.; *Hayes, Br. Birds*, t. 4; *Albin*, iii. t. 5 & 7; *Lewin, Br. Birds*, i. t. 19, M. & F.; *Lath. Syn.* i. p. 94, 79; *Sup.* p. 25; *Walc. Syn.* i. t. 19; *Pult. Cat. Dorset.* p. 3; *Don. Br. Birds*, iii. t. 51 (M.); *Ib.* 63 (F.) Provincial: Kastril, or Kistril; Steingal, or Stonegall. — The male of this species of Falcon weighs about seven ounces; length thirteen inches. Bill lead-colour; cere yellow; irides dusky and large. The crown of the head is of a fine cinereous-grey; throat whitish; under the eye a broad dusky streak pointing downwards; the back, scapulars, and wing-coverts are of a fine red-brown, spotted and barred with black; the under parts light ferruginous, spotted with black; thighs and vent generally plain; greater quill-feathers

black, very slightly tipped whitish; the wing pointed; the second feather the longest; tail fine cinereous-grey, with a broad black bar near the end; tip white; legs yellow. The female is considerably larger, and is distinguished from the other sex by the head and tail being of the same colour as the back, which is not so bright a red-brown as the male; the under parts are also lighter, and the black spots not so distinct, but more in streaks of dusky; the tail is marked with transverse dusky bars, with a broad one near the end. This beautiful species of Hawk feeds principally on mice, in search of which it is frequently seen hovering in the air, and quite stationary for a great length of time. We never have seen the Kestrel in pursuit of small birds, nor have we ever found feathers in the stomach, but chiefly the fur of mice, and the exuviae of beetles; but no doubt it will sometimes prey on small birds, as it is occasionally taken by bird-catchers in the act of pouncing their call-birds. This is one of our most common species, especially in the more rocky situations and high cliffs on our coasts, where they breed. The nest is made of sticks, and lined with wool and other soft materials; sometimes they build in trees, or content themselves with the deserted nest of a Crow or Magpie. The number of eggs are four or five, of a dirty white, blotched over with rust-colour of various shades; sometimes wholly covered with a deep rusty red: these are rather inferior in size to those of the Sparrow-hawk. The young males resemble the female in plumage till after the winter of the first year, when they assume the grey head and tail.

SUPPLEMENT. — A female of this species of Hawk, which we had bred up from a nestling, made her escape from our garden to that of a neighbour, scarcely a quarter of a mile distant, where she produced two eggs, and sat upon them. This bird is in some places called Creshawk, from Krysat, in the Cornish language.

Kiddaw.—See Guillemot, Foolish.

Killegrew.—See Crow, Red-legged.

[King Duck.—See Duck, King.]

Kingfisher. — A genus of birds, the characters of which are: Bill long, strait, sharp-pointed. Tongue short, broad, sharp-pointed. Legs short. Toes, three forward, one backward; three lower joints of the middle toe closely joined to the outmost.

[Kingfisher, Belted. — *Yarrell*, ii. 236. *Alcedo Alcyon*, *Wilson*, *Am. Ornith.*, *Jardine's Edition*, i. 348.—“The whole length of this bird is very nearly fifteen inches. From the point of the bill to the feathers on the forehead two inches; the bill quadrangular in [shape], but higher than broad, straight and pointed, culmen grooved on each side, in colour a shining bluish black; under mandible lighter at the base, the commissure straight; irides hazel; the feathers of the head and cheeks dark blue, with a white spot just before, and another under the eye; central feathers on the crown of the head and on the occiput elongated, forming a crest; a narrow streak of dark blue descends from the angle of the gape upon the broad white band covering the chin and upper part of the side of the neck; lower part of the neck, all the back and wing-coverts, bluish grey, the latter varied with small spots of white; the primaries black, spotted and tipped with white; secondaries and tertiaries black, the outer edge of each bluish grey, with white specks and white tips; upper tail-coverts bluish grey, slightly varied with lighter-coloured specks; tail-feathers bluish black, both webs barred transversely and tipped with white, the central feathers with lighter-coloured edges on the outer side; round the lower part of the neck in front, and over that part above the wing, a band of chestnut-brown, varied with bluish grey; below this is a band of pure white; below this again a band of pale chestnut; the sides under the wings, and extending to the flanks, similar in colour; under surface of the wings, the belly, vent, and under tail-coverts white; under surface of the tail-feathers dry slate-grey, barred with white; legs and toes short, in colour orange-brown, the claws black. The wing from the bend six and a-half inches in length, the first and the fourth feathers three-eighths of an inch shorter than the second and third, which are the longest in the wing.”—*Yarrell*, ii. 239. Two instances of this North American species having occurred in Ireland have been recorded in the ‘*Zoologist*’: the first in the volume for 1846, at page 1212, relates that a specimen was shot at Annsbrook, in the

county Meath; and that another was seen by Mr. Latouche's gamekeeper at Lugelaw. This second specimen was afterwards obtained. The bird has no claim whatever to a place in the British list.]

Kingfisher, Common.—[*Yarrell*, ii. 228; *Hewitson*, lxiv. 255.] *Alcedo Ispida*, *Lin. Syst.* i. p. 179, 3; *Gmel. Syst.* p. 448; *Raii Syn.* p. 48, A. 1; *Will.* p. 101, t. 24; *Ind. Orn.* i. p. 252, 20; *Bris.* iv. p. 471, 1; *Ib.* 8vo, ii. p. 176; *Bewick, Br. Birds*, ii. t. p. 19; *Nat. Miscel.* t. 129; *Shaw, Zool. Lect.* i. t. 59. *Martin pêcheur*, *Buf.* vii. p. 164, t. 9. *Kingfisher*, *Br. Zool.* i. No. 88, t. 38; *Ib.* fol. 82, t. 1; *Arct. Zool.* ii. p. 280, A.; *Will. Angl.* p. 146, t. 24; *Albin*, i. t. 54; *Lewin, Br. Birds*, ii. t. 52; *Lath. Syn.* ii. p. 626; *Ib. Sup.* p. 115; *Walc. Syn.* i. t. 52; *Pult. Cat. Dorset.* p. 6; *Don. Br. Birds*, iv. t. 100.—The weight of this beautiful bird is an ounce and a half; length seven inches. The bill is two inches long and black, tinged with orange at the base of the lower mandible; irides hazel. The crown of the head is of a dark changeable green-blue, with numerous small transverse bars of bright azure; from the upper mandible to the eye a dusky streak; the sides of the forehead rufous; behind the eye a broad stripe of red-orange, at the lower angle of which, on each side, commences a yellowish white stripe, which almost meet on the back part of the neck; from the base of the lower mandible springs a blue streak, which runs to the side of the neck; the throat is buff-coloured; the under parts of a dull orange; darkest on the breast; the wing-coverts like the upper part of the head, but not so much spotted; down the middle of the back, the rump, and upper tail-coverts fine bright azure; tail deep blue; legs red-orange. The bill of the female is not so long as in the other sex. This bird is found most frequently about clear running streams and rivers, in the banks of which it generally takes possession of a rat's-hole to deposit its eggs. The many curious accounts which have been given of the nest of this bird induced us to take some pains to discover the fact. The result of our researches are, that the hole chosen to breed in is always ascending, and generally two or three feet in the bank; at the end is scooped a hollow, at the bottom of which is a quantity of small fish-bones, nearly half an inch thick, mixed in with the earth. This is undoubtedly the castings of the parent birds, and not the young, for we have found it even before they have eggs, and have every reason to believe both male and female go to that spot for no other purpose than to eject this matter for some time before the

female begins to lay, and that they dry it by the heat of their bodies, as they are frequently known to continue in the hole for hours long before they have eggs. On this disgorged matter the female lays to the number of seven eggs, which are perfectly white and transparent, of a short oval form, weighing about one dram. The hole in which they breed is by no means fouled by the castings; but before the young are able to fly it becomes extremely fetid by the fæces of the brood, which is of a watery nature, and cannot be carried away by the parent birds, as is common with most of the smaller species. In defect of which instinct has taught them to have the entrance to their habitation ascending, by which means the filthy matter runs off, and may frequently be seen on the outside. We never could observe the old birds with anything in their bills when they went in to feed their young; from which it may be concluded they eject from their stomach for that purpose. Small fish, such as banistickles and minnows, seem to be their principal food. But it is a mistaken notion that these birds suspend themselves on wing, and dart on their prey like the Osprey; the fact is, they sit patiently on a bough over the water, and when a small fish comes near the surface they dart on it, and seize it with their bill. The Kingfisher is rarely seen about the rocky rapid waters where the Water Ouzel chiefly resorts, but is frequently found about fish-ponds. It flies with great rapidity notwithstanding its wings are very short; but the motion of the wings are so very quick as scarce to be perceptible. When the young are nearly full feathered they are extremely voracious; the old birds not being capable of supplying them with food sufficient to satisfy the calls of hunger, they are continually chirping, and may be discovered by their noise. The suspension of this bird by a thread, under the notion of its breast always turning to the north, is as fabulous as that it will preserve woollen cloth from the moth. The poetic fictions of the older authors, with respect to the Halcyon, are too copious to be stated in this place. Those who wish to see the marvellous accounts given by Aristotle, Virgil, Ovid, and others, may peruse Mr. Pennant's history of this bird, where the essence is extracted from those authors. The sailors of the present day do not find it has the power to calm the storm, or hush the wind. The Kingfisher is found throughout Europe, Asia, and Africa; the only species out of nearly fifty that is found in the colder parts.

SUPPLEMENT. — The Kingfisher will occasionally suspend itself on wing and

pounce on its prey; but more frequently springs from a spray. Is not confined to fresh water, but is found to inhabit the shores of large salt-water rivers and estuaries. A young bird, full-feathered, was kept in a cage for some time, and became extremely docile, but as it would eat nothing but fish, and in consequence was obliged to be frequently fed with what was not fresh, it died in the course of five or six weeks for want of proper food. It would shuffle along the floor to the hand that offered it fish, which it devoured greedily.

[Kinglet.—See Wren, Goldencrested.]

Kirmew.—See Tern, Common.

Kite. — [Yarrell, i. 78; Hewitson, xiii. 36.] *Falco Milvus*, *Lin. Syst.* i. p. 126, 12; *Gmel. Syst.* i. p. 261; *Raii Syn.* p. 17, A. 6; *Will.* p. 41, t. 6; *Ind. Orn.* i. p. 20, 37; *Shaw, Zool.* vii. p. 103; *Lath. Syn. Sup.* ii. p. 30; *Bewick, Br. Birds.* i. t. p. 22. *Milvus regalis*, *Bris.* i. p. 414, 35, t. 33; *Ib.* 8vo, p. 118. Milan royal, *Buf.* i. p. 197, t. 7. Kite, *Br. Zool.* i. No. 53; *Ib.* fol. t. A. 2; *Arct. Zool.* ii. p. 223, H.; *Will. Angl.* p. 74, t. 6; *Albin.* i. t. 4; *Hayes, Br. Birds.* i. t. 5; *Lewin, Br. Birds.* i. t. 10; *Lath. Syn.* i. p. 61, 43; *Sup.* p. 17; *Pult. Cat. Dorset.* p. 3; *Walc. Syn.* i. t. 10; *Don. Br. Birds.* ii. t. 47. Provincial: Glead; Puttock; Gled or Greedy-Gled. — This species of Falcon weighs about two pounds six ounces; length two feet two inches. The bill yellowish, point dusky; cere yellow; irides the same, but of a light colour. Head grey, streaked down the middle of each feather with dusky; back and wing-coverts dusky, edged with ferruginous; the under parts more or less ferruginous, streaked with dusky, lightest on the breast; quill-feathers dusky black; from the fifth to the tenth dashed with ash-colour, with a few dusky bars, and white at the base and on the inner webs; the rest are dusky, with obscure bars; the tail is of a bright ferruginous-colour, the two exterior feathers dusky on the outer webs, the first barred on the inner web the same; the legs are yellow; claws black. The tail of this bird at once distinguishes it from all others of the genus, being much forked; the exterior feathers are twelve inches in length. The female is somewhat larger, measuring in length two feet four inches; breadth five feet six inches; in colour much resembling the other sex, but in general not so ferruginous. The Kite chiefly inhabits wooded situations, but frequently changes its abode in the winter, though it never wholly quits this country. It makes a nest early in the spring in the fork of some

large tree, composed of sticks, and lined with wool, the inner bark of some tree, hair, and other soft materials, such as bits of cloth or rags. The eggs are generally three in number, rarely four; these are rather larger than those of a Hen, of a dirty white, with a few rusty spots at the larger end; sometimes quite plain; their weight is nearly two ounces. This bird, from its great length of wings and tail, is capable of supporting itself in the air with very little motion, and for a great continuance, but is slow in flight; its depredations therefore are confined to such animals as are found on the ground, young rabbits, hares, and game of all kinds, poultry, and young birds incapable of flying. It will also destroy young lambs, and feed greedily on carrion; in defect of these it readily eats mice, worms, and insects, and even snakes, the bones of which we have taken from the nest. It frequently resorts to the environs of towns to feed on offal, and is seen to sweep such matter from the surface of water with great dexterity. Is said to be met with in Sweden, and even as far as Guinea and Senegal.

SUPPLEMENT.—Shy and guarded as birds of prey usually are, it is curious to observe how totally they are off their guard when intent upon their prey, especially if pressed by hunger. "A remarkable instance of this (says the Rev. Mr. Wheatear, in a letter to the author) at a farm-house in this neighbourhood (Hastings) will serve as proof. A servant girl, the only person in it (for all the rest of the family were at church), was alarmed by an unusual uproar amongst the poultry; on looking out she saw a large bird hovering close to the window, over some coops, in which were some broods of Ducks and chickens; upon this she sallied forth to drive the bird away, but he took so little notice of her that she snatched up a broom, and actually knocked him down and killed him. It proved to be a Kite, which had probably a nest in a neighbouring wood." A circumstance similar to the above relation we witnessed in one of this species, that afforded us no small entertainment. A poor woman was washing some entrails in a stream of water, part of which extended a few yards out of the basket, placed in the water: the hungry bird had long been hovering over, viewing with anxious eye so delicious a bait, and took the opportunity of actually pouncing upon and carrying off a part, in spite of all the woman's efforts with hands and tongue, the latter of which might have alarmed a more powerful enemy. In addition to these remarkable circumstances in the biography of this noble bird, we remember an instance of two males, in the spring of the

year, being so intent in combat for the softer sex, that they both fell to the ground, holding firmly by each other's talons, and actually suffered themselves to be killed by a woodman who was close by, and who demolished them both with his hook. It is said the Kite is not uncommon in the temperate and well-inhabited parts of Russia, is more scarce in Siberia, and does not venture further to the north; is not unfrequent about Lake Baikal, but none beyond the Lena. In England it is chiefly observed in the more wooded districts, where timber trees abound: is common in the eastern parts, rare in the north, and more rare in the west; for in twelve years' residence in Devonshire we never observed but one in the southern district of that county.

[Kite, Swallowtailed.—Yarrell, i. 84. *Falco furcatus*, Wilson, *Amer. Ornith.*, *Jardine's Edition*, i. 75.—"The Swallow-tailed Hawk measures full two feet in length, and upwards of four feet six inches in extent; the bill is black; cere yellow, covered at the base with bristles; iris of the eye silvery cream, surrounded with a blood-red ring; whole head and neck pure white, the shafts fine black hairs; the whole lower parts also pure white; the throat and breast shafted in the same manner; upper parts, or back, black, glossed with green and purple; whole lesser coverts very dark purple; wings long, reaching within two inches of the tip of the tail, and black; tail also very long, and remarkably forked, consisting of twelve feathers, all black, glossed with green and purple; several of the tertials white, or edged with white, but generally covered by the scapulars; inner vanes of the secondaries white on their upper half, black towards their points; lining of the wings white; legs yellow, short, and thick, and feathered before half-way below the knee; claws much curved, whitish; outer claw very small. The greater part of the plumage is white at the base; and when the scapulars are a little displaced they appear spotted with white."—Wilson, i. 76. Mr. Yarrell quotes two instances of the Swallowtailed Kite having occurred in Britain: the first, from Dr. Walker's 'Adversaria' for 1772, page 87, records that a specimen was taken at Balacholish, in Argyleshire, in that year: the second, from the fourteenth volume of the 'Transactions of the Linnean Society,' p. 583, records that a specimen was taken alive in Shaw-gill, near Hawes, in Wensleydale, Yorkshire, on the 6th of September, 1805.]

[Kittiwake.—See Gull, Kittiwake.]

Knot.—[Yarrell, iii. 55.] *Tringa Canutus*, *Lin. Syst.* i. p. 251, 15; *Gmel. Syst.* ii. p. 679; *Raii Syn.* p. 108, A. 5; *Will.* p. 224, t. 56; *Ind. Orn.* ii. p. 738, 44; *Bris.* v. p. 258, 21; *Ib.* 8vo, ii. p. 276. *Le Canut*, *Buf.* viii. p. 142. Knot, *Br. Zool.* ii. No. 193; *Ib.* fol. 123, t. E. 2, f. 1; *Arct. Zool.* ii. No. 384; *Will. Angl.* p. 302; *Edw.* t. 276; *Lath. Syn.* v. p. 187, 36; *Lewin, Br. Birds*, v. t. 178. — The weight of this species of Sandpiper is four ounces and a half; length about nine inches. Bill dusky brown, an inch and a quarter long; irides hazel. The top of the head, neck, back, and wings ash-colour; from the bill to the eye a dusky streak; over the eye a white one; coverts of the wings edged with white; the lower order deeply tipped and margined, forming a bar across the wing; greater quills dusky, with white shafts; the rump and tail-coverts white and dusky, transversely marked in curved lines; the under parts, from throat to vent, white; the neck and breast streaked with brown; the sides and thighs crossed with dusky lines; tail ash-colour, the outer feather whitish; legs bluish ash-colour. In some the forehead, chin, and lower part of the neck is brown, inclining to ash-colour; back and scapulars deep brown, edged with ash-colour. These and other little variations in plumage are common in most of this genus of birds. This species is chiefly confined to the fens of Lincolnshire, the Isle of Ely, and a few other places. In the first place they are taken in great numbers on the coast by means of nets, and when fattened are esteemed equal to the Ruffs. It should seem they first appear in the month of August, as from that time to November is the season of catching them; but are said generally to disappear with the first frost. We have received from the coasts of Devonshire and Cornwall, in August, a species of Sandpiper in every respect like this described, except that the feathers on the back and wing-coverts are margined with a small semicircular line of black; the extreme edges light cinereous-brown. This we have considered as the young of the Ash-coloured Sandpiper, and cannot help expressing doubts whether the Knot may not hereafter prove to be that bird in one state of its plumage, probably the most perfect. Mr. Pennant and Dr. Latham both describe their Ash-coloured Sandpiper to have the back and wing-coverts varied with concentric semicircles of black, ash-colour, and white, which brings it near to the bird above mentioned. There is no genus of birds more obscure than the Sandpipers; and as few of them

remain with us the whole year, it will in all probability be no inconsiderable time before we shall be able to clear up the many doubts respecting them. We cannot, however, help expressing our opinion that the species are unnecessarily multiplied. The Knot is said to be found in various parts of Europe; has been met with also in Asia and America. It should seem they breed with us from Mr. Lewin's account, who says they appear with the Ruffs, and has given a figure of its egg, which is pale ferruginous, marked with spots and streaks of rust-colour and cinereous; in size rather inferior to that of the Lapwing's.

SUPPLEMENT.—In the former part of this work we expressed an opinion that the *Tringa Canutus*, or Knot, and the *Tringa cinerea*, or Ash-coloured Sandpiper, were the same species; in this we are by late observations more confirmed, and think that the synonyms of these birds should be brought together under this title, being in its state of maturity. The Knot in the late Leverian Museum was the same as those in our museum, from which was described our Ash-coloured Sandpiper; the description therefore of that bird must be applied to the Knot, being no other. The young of this bird, mentioned also under the article Knot, in the former part of this work, distinguished by the semicircular markings on the upper part of the bird, is undoubtedly the *Tringa cinerea* of Pennant and Latham, and may be found in flocks together with the matured birds in the autumn, upon many of our shores. Mr. Lewin was certainly deceived; the Knot does not breed with us, and is never taken till the autumn, according to the assertion of the Lincolnshire bird-catchers; indeed none have been taken in nets for many years, nor did they ever appear in the fens, but were formerly caught on or near the sea-shore. Mr. Towns, the noted Ruff-feeder at Spalding, assured us he had not seen one for twenty years; but said they never were taken except in the autumn; and further remarked that they fed equally well in confinement as the Ruffs, and on the same food. In the collection of Mr. Vaughan is a young Knot in the plumage that was supposed to constitute it a distinct species, and originally described in the 'British Zoology' as the Ash-coloured Sandpiper. This specimen came amongst a large package of skins from Senegal. It has the semilunar black and white lines on the scapulars and coverts of the wings, like the British specimen, and is in fact similar in every respect.

L.

[Landrail.—See Gallinule, Crake.]

Lanner.—*Falco lanarius*, *Lin. Syst.* i. p. 129, 24; *Gmel. Syst.* i. p. 276; *Raii Syn.* p. 15, 13; *Will.* p. 48; *Ind. Orn.* i. p. 38, 92; *Bris.* i. p. 363, 16; *Ib.* 8vo, p. 105. Le Lanier, *Buf.* i. p. 243. Lanneret, *Albin*, ii. t. 7. Lanner, *Br. Zool.* i. No. 51, t. 23; *Arct. Zool.* ii. p. 125, K.; *Will. Angl.* p. 82; *Lewin, Br. Birds*, i. t. 17; *Lath. Syn.* i. p. 86, 72; *Ib. Sup.* p. 21; *Walc. Syn.* i. t. 16. — This species of Falcon is rather less than the Buzzard. Bill bluish; cere greenish blue; irides yellow. The crown of the head brown, mixed with yellowish white; the rest of the head, upper part of the neck, and the body above are brown, the feathers edged with a paler colour; over the eye a broad whitish line; beneath the eye a black stroke pointing downwards; the throat, breast, and belly whitish, tinged with dull yellow on the two last parts, which, with the thighs and vent, are marked with brown strokes; quills and tail dusky, with oval ferruginous spots on the inner webs; legs bluish, short, and strong; claws black. This is a very bold bird, and was formerly used in falconry. Is rarely met with in England, but is said to breed in Ireland. Mr. Pennant speaks of one being caught in a decoy in Lincolnshire, pursuing some Wild Ducks under the nets. The Lanner is found in many parts of Europe; inhabits Iceland and the Ferroe Isles, Denmark and Sweden; frequent in the Tartarian deserts; said to build among the low trees and shrubs in the deserts about Astrachan.

SUPPLEMENT.—In another place we have expressed a doubt whether this is any other than a variety of the Peregrine Falcon. See Falcon, Peregrine. [There is no reliable record of the occurrence, in Britain, of *Falco lanarius* of Linneus, which may be supposed to be the Lanner of the English authors cited above.]

[Lapland Bunting. — See Bunting, Lapland.]

Lapwing. — [Yarrell, ii. 515; Hewitson, lxxviii. 301.] *Tringa Vanellus*, *Lin. Syst.* i. p. 248, 2; *Gmel. Syst.* ii. p. 670; *Raii Syn.* p. 110, A. 1; *Will.* p. 228, t. 57; *Ind. Orn.* ii. p. 726, 2; *Bris.* v. p. 94, i. t. 8, f. 1; *Ib.* 8vo, ii. p. 236. Le Vanneau, *Buf.* viii. p. 48, t. 4. Lapwing, or Bastard Plover, *Br. Zool.* ii. No. 190; *Ib.* fol. 121, t. C*, f. 1; *Arct. Zool.* ii. p. 480, D.; *Albin*,

i. t. 74; *Will. Angl.* p. 307, t. 57; *Hayes, Br. Birds*, t. 11; *Lath. Syn.* v. p. 161, 2; *Lewin, Br. Birds*, v. t. 167; *Pult. Cat. Dorset.* p. 15; *Walc. Syn.* ii. t. 145; *Don. Br. Birds*, ii. t. 25. Provincial: Pewit; Green Plover.—This species of Sandpiper weighs between seven and eight ounces. Bill black, an inch long; irides hazel. The upper part of the head is black, glossed with green; on the back part the feathers are elongated into a crest, some of which are above three inches in length and very narrow, reflecting a little at the ends; the sides of the neck and round the eye is white; beneath the eye is a black streak; the fore part of the neck and upper breast black; the hind part brown, intermixed with white; back and coverts of the wings brown-green, glossed with purple and blue; quills black, with a white spot on the tips of the first four; the secondaries are white half-way from their base; breast and belly white; vent and upper tail-coverts pale ferruginous; the base half of the tail white, the ends black; legs dull orange. The female is less brilliant in colour, and the crest much shorter. This bird is common in most parts of the kingdom; it breeds early in the spring upon heaths and upland situations, as well as in fens and moist fields, and not unfrequently in old fallow land. It lays invariably four eggs on the bare ground; these are of an olivaceous-brown, blotched with black, and, what is remarkable, the eggs are always placed in a quadrangular manner, touching each other at the smaller ends, by which they occupy the least possible space. This is common to all the Sandpiper, Plover, and Snipe genus hitherto noticed, the eggs of which are commonly four, much tapering to the smaller end. The young make use of their legs as soon as they are hatched, but are not capable of flying till nearly full-grown; they are led by the parent birds in search of food, but are not fed by them. At this time the old birds use every art to entice an intruder from their young; will strike at a dog, and then flutter along the ground as if wounded, to entice him from the place where the young are concealed, and are very clamorous. In the autumn these birds congregate in large flocks, and frequent marshy places. At this time they are esteemed not unsavoury food; the eggs are also considered as a delicacy, and are frequently brought to the markets of London for sale. Its principal food is

worms, slugs, and various insects; when partly domesticated and kept in gardens, will eat bread or meat. It runs fast, and has a singular motion with the head, frequently putting its bill to the ground without picking anything up. Its note has given rise to one of its common names, as it resembles the word pe-wit; the name of Lapwing has also been given from the constant flapping of its wings in flight.

Lark.—A genus of birds, the characters of which are: Bill strait, slender, sharp-pointed, bending a little towards the end. Nostrils covered partly with feathers and bristles. Tongue cloven at the end. Toes divided to their origin; claw of the back toe very long, and little crooked. Their motion running, not hopping.

Lark, Bunting.—See Bunting, Common.

[**Lark, Calandra.**—“*Alauda Calandra*, *Gmel. Syst.* i. 799, sp. 9; *Lath. Ind.* ii. 496, sp. 17;” *Temm. Man. d’Ornith.* i. 276. —**MALE**: “Upper parts of the body reddish gray, the middle of each feather brown; these brown spots are larger in the middle of the back: throat, belly, and vent pure white: a large black space on each side of the neck: flanks and breast white tinged with ochre; on the latter are some lanceolate brown spots; remiges edged and tipped with white: middle quill-feathers terminated by a large white space: outside feather of the tail almost entirely white, the next bordered exteriorly with white, whole except the middle ones tipped with white: back gray tipped with brown. Length seven inches. **FEMALE** with the black space on the sides of the neck smaller. Inhabits the North of Africa and the South of Europe, Turkey, Spain, and France; equally common in the South of Asia: occurs only as an accidental migrant in some of the central provinces of France; and less commonly in Germany. Feeds on grasshoppers, small worms, and corn. Builds its nest in the grass: lays four or five eggs of a bright purple, marked with large gray spots and dark brown dots.”—*Temminck*, i. 276. A single British specimen of the Calandra Lark is in the collection of Mr. Pincombe, birdstuffer, of Devonport, as recorded by Mr. Gatecombe in the ‘*Zoologist*’ for 1863, p. 8768: it is a species very likely to occur in the southern counties of England.]

[**Lark, Crested.**—*Yarrell*, i. 480; *Hewitson*, xlv. 178. *Alauda cristata*, *Tem. Man. d’Ornith.* i. 277.—“The beak of the Crested Lark is thicker, stronger, and more curved than that of the Sky Lark, brown

along the ridge and at the point, but paler on the sides and at the base; the crown of the head reddish brown, with a few feathers elongated, forming a crest and pointing backwards; irides hazel; from the eye passing over the ear-coverts a streak of buffy white; ear-coverts and back of the neck dark brown; back, wing-coverts, and wings brown, the shaft and central portion of each feather dark brown; the wing-coverts and tertials edged with buffy white; the two middle tail-feathers nearly uniform light brown; the outer tail-feather on each side light brown, with a buffy white outer margin; the other tail-feathers dark brown. The chin white; neck in front, breast and under parts pale yellow-brown; the breast and flanks streaked with darker brown; legs, toes, and claws pale brown. The whole length of the bird is six inches and three-quarters; length of wing from the anterior bend to the end of the second quill-feather, which is longest, four inches and one-eighth; length of beak along the ridge seven lines; the tarsus one inch; the hind toe and claw nine lines. Mr. Gould mentions that the females of this species are smaller than the males, and have a shorter crest.”—*Yarrell*, i. 430. The first notice of which I am cognizant of the occurrence of this species in the British Islands is anonymously recorded in the ‘*Dublin Penny Magazine*,’ vol. iv. p. 276. In the ‘*Zoologist*’ for 1846 we find two specimens were killed between Marazion and Penzance in September of that year, as recorded by Mr. Rodd at p. 1497; and a third near Penzance, in October, 1850, as recorded by the same indefatigable ornithologist at p. 3033 of the volume for 1851. This bird is of so frequent occurrence on the continent of Europe that we may expect many more records of its occasional visits.]

Lark, Field.—[*Tree Pipit* (*Anthus arboreus*), *Yarrell*, i. 447; *Hewitson*, xlii. 171]. *Alauda minor*, *Gmel. Syst.* ii. p. 793; *Ind. Orn.* ii. p. 494, 8. Lesser Field Lark, *Will. Angl.* p. 207. Field Lark, *Br. Zool.* No. 139; *Arct. Zool.* ii. p. 395, D.; *Lath. Syn.* iv. p. 375, 6; *Lewin, Br. Birds*, iii. t. 92; *Walc. Syn.* ii. t. 192; *Pult. Cat. Dorset.* p. 8. Provincial: Short-heeled Field Lark, and Meadow Lark; Tree Lark. —The length of this species is six inches and a half; weight five drams forty-five grains. Bill dusky above, whitish beneath; irides hazel. The colour of the plumage [on the upper parts is a light yellowish brown, the middle of each feather dusky brown; the wing-coverts tipped whitish; rump plain light brown; throat and breast ochraceous yellow, the latter streaked with black; belly yellowish white;

the tail-feathers are somewhat pointed; the exterior one half white; the next slightly tipped the same; the legs yellowish brown; claws horn-colour; hind claws short and hooked. No bird has been more confounded than this species of Lark. It visits this country in the spring, but is rarely seen till the beginning of May, and is most frequently mistaken for the Tit-Lark, to which it bears great resemblance in plumage and habits; but as a special mark of distinction the base of the bill in this is broader, and the hind claw is much shorter and more hooked; the throat and breast is also much more inclined to yellow than the Tit-Lark is found to be in the spring. But it must be remarked that bird assumes much of that colour in the winter, which has occasioned Mr. Lewin and others to conclude this bird is found with us in that season; and the same author has evidently given the figure of the Tit-Lark for the Field Lark, by the length and straitness of the hind claw. The bill and hind claw of this bird are unerring marks of distinction by which it may at once be discriminated from the other. The legs of this are also uniformly of the same pale yellowish brown colour, never becoming dusky as in the matured birds of the other species. We have been more particular in describing the difference between these two species as we have frequently received one for the other. Dr. Latham showed us several Larks that were sent to him out of Yorkshire, amongst which one of this species was marked Tit-Lark, and two of those birds called Field Lark and Pipit. Mr. Pennant says the birdcatchers about London take a bird in the autumn they call Pipit, but does not describe it. We have great reason to believe the bird so called is the Pipit Lark of this work, not the Tit-Lark, and certainly not the Grasshopper Warbler, which we believe has been called Pipit; nor is it likely to be this bird, which leaves us at that season in the same solitary manner they come to us, and are never known to be gregarious in this country. The Tit-Larks assemble in small flocks in autumn, and remain with us the whole year, which Mr. Lewin denies; and we mention this as another proof that he has completely confounded the two species. But this need scarcely be insisted on, for it is obvious when he asserts that the hind claw of the Field Lark is longer and stouter than in the Tit-Lark. This species is by no means plentiful, but appears to be thinly scattered over most of the enclosed parts of England; is never met with on the moors or downs where the Tit-Lark is most frequent. Its song is vastly superior to that bird, though something similar: this it

delivers from the branch of a tree, or on wing, as it is descending to the ground. From the beginning of May to July it may be seen mounting in the air in a fluttering manner, at the same time uttering a twittering note, and then descends to some neighbouring tree with motionless wing and the tail thrown up. At this time it sings, but never when rising. And it is observable that it rarely pitches on the ground again until it has perched, and it always mounts in the like manner from a tree before it descends to the ground. The Tit-Lark, it is true, has much of these manners, but after mounting in the air either returns to the ground or pitches on some low bush. The Field Lark generally makes a nest amongst the high grass or green wheat, and resides wholly in the more cultivated parts, and that only where there are trees. The nest is composed of dry grass, fibrous plants, and sometimes a little moss, and lined with fine dry grass and horse-hair. The eggs are four in number, of a dirty bluish white, thickly blotched, and spotted with purplish brown. We have found this bird as far west as Devonshire, but rarely in Cornwall; also in the westernmost parts of South Wales, and in most of the southern parts of England; but nowhere so plentiful as in the north of Wiltshire.

SUPPLEMENT.—Mr. Bewick has most certainly confounded this bird with *Alauda campestris* of Linnæus; and what he has denominated the Tree Lark, at the end of the description of Grasshopper Lark, is without doubt our Field Lark: The *campestris*, we believe, has never appeared in England; but both these having been called, in English, Field or Meadow Lark, has occasioned confusion, and therefore it would be better to continue Willughby's name to this species, Lesser Field Lark, the *Alauda minor* of Latham. Similar confusion has also obscured the Grasshopper Lark of Mr. Bewick, who under that title has confounded the history of the Pippet Lark (*Alauda trivialis* of Linnæus) with the Grasshopper Warbler (*Sylvia Locustella* of 'Index Ornithologicus.') The deceitful noise made by the *Locustella*, mentioned by Mr. White, and its habits of creeping in thickets, bespeaks the Warbler, not the Lark. In 'Harmonia Ruralis' this bird is figured for the Lesser-crested Lark. This confirms our former opinion that there is in fact no distinct species under the title of *Alauda cristata minor*, as originally described by Ray, but that it is synonymous with Lesser Field Lark. See the former part of this work, under Lark, Lesser-crested.

Lark, Grasshopper.—See Warbler, Grasshopper.

Lark, Lesser Crested. — *Alauda nemorosa*, *Gmel. Syst.* ii. p. 797. *Alauda cristata minor*, *Raii Syn.* p. 69, A. 5; *Will.* p. 152; *Bris.* iii. p. 361, 9; *Ib.* 8vo, i. p. 411. *Alauda cristatella*, *Ind. Orn.* ii. p. 499, 26. *Le Lulu*, *Buf.* v. p. 74. Crested Lark, *Br. Zool.* i. No. 141; *Ib.* fol. 95. Lesser Crested Lark, *Will. Angl.* p. 207; *Lath. Syn.* iv. p. 391, 24; *Lewin, Br. Birds*, iii. p. 9. — This species has long remained in obscurity. Aldrovandus is the only author who seems to have given an original description of it, from which all others appear to have copied; and as we have never been fortunate enough to meet with it, must do the same. That author observes, Vol. ii. p. 371, that it is not so brown as the Greater Crested Lark, and the tuft on the head larger in proportion to the size of the bird, and that the legs are red. Dr. Latham remarks that it is said it flies in flocks; and that it is for the most part met with in woods and thickets, where it makes a nest. The same author observes that it is said to be found in plenty in Yorkshire. It seems, however, very unlikely that if it was a distinct species it should remain so long in obscurity, at a time when the researches in Natural History are so general; especially as it has been said to be plentiful. From the description there is greater reason to believe the bird mentioned by Aldrovandus is no other than the Field Lark of this work. Mr. Bolton informed Mr. Pennant it was found plentiful in Yorkshire. Amongst a variety of Larks sent from that county to Dr. Latham (we believe from Mr. Bolton) one was marked Lesser Crested Lark, which was evidently the Field Lark. Is said to be met with in many parts of Europe, Italy, Austria, Poland, and Siberia. Buffon and Brisson have both mentioned it, and neither of them speak of the Field Lark; but we have little doubt their bird is that species. [Apparently an imaginary species.]

Lark, Lesser Field. — See Lark, Field.

Lark, Meadow. — See Lark, Field; and Lark, Tit.

Lark, Pipit. — [Meadow Pipit (*Anthus pratensis*), *Yarrell*, i. 452; *Hewitson*, xlv. 173.] *Alauda trivialis*, *Lin. Syst.* i. p. 288, 5; *Gmel. Syst.* ii. p. 796; *Ind. Orn.* ii. p. 493, 6. *Alauda sepearia*, *Bris.* iii. p. 349, 5; *Ib.* 8vo, i. p. 407. *Alouette pipi*, *Buf.* v. p. 39, t. 4. Pipit Lark, *Albin*, i. t. 44. — The weight of this species is about five drams and a half; length six inches and a half. Bill dusky; the sides and base of the upper mandible dull yellow; irides hazel. The top of the head and whole upper parts of

the body of a rusty olivaceous-brown, streaked with dusky, the middle of each feather being of that colour; the rump plain; the coverts and quill-feathers dusky; the former margined the same as the back, but lighter; the primary quills slightly edged with olive-green; those next the body margined like the coverts; the whole under parts pale ferruginous, darkest on the breast, vent, and under tail-coverts, and lightest on the chin; the sides of the neck, breast, and sides of the body marked with oblong spots of dusky; the two middle tail-feathers dusky brown, paler on the margins; the outer feather on each side is white, except towards the base of the inner web; and the outer web is brownish towards the point; the second is white only at the tip; the rest dusky black, slightly edged with greenish brown; legs dull yellow; claws horn-colour; hind claw rather longer than the toe, a little bent. This we believe is the species known in the neighbourhood of London by the name of Pipit, and is frequently taken by the birdcatchers when they first appear in flocks in the autumn. It has no doubt been frequently confounded with the Tit-Lark, which also flock at that season of the year, and perhaps sometimes together. They are only to be discriminated by their superior size, olivaceous colour on the superior parts, and being much more ferruginous-yellow beneath. We have never been able to procure one specimen in the summer, nor could we till lately identify the species. The Pipit Lark is probably not less common than the Tit-Lark with us in winter; it frequents the same places. We have killed it in Cornwall, in very severe weather, in the month of December. Mr. Pennant in his 'British Zoology,' and Dr. Latham in his 'Synopsis,' have made the *Alauda trivialis* of Linnæus the Grasshopper Warbler; but the latter author has, in his 'Index Ornithologicus,' placed all the synonyms to this which he had given to that bird.

APPENDIX. — This is only a variety of the Tit-Lark. See a further account of that bird in the following pages, under Lark, Tit.

Lark, Red. — *Alauda rubra*, *Gmel. Syst.* ii. p. 794; *Ind. Orn.* ii. p. 494, 10. *Alauda Pennsylvanica*, *Bris. Sup.* p. 94; *Ib.* 8vo, i. p. 419, 13. *Alouette à joues brunes de Pensylvanie*, *Buf.* v. p. 58. Lark from Pennsylvania, *Edw.* t. 297. Red Lark, *Br. Zool.* No. 140; *Arct. Zool.* ii. No. 279; *Lath. Syn.* iv. p. 376, 8; *Lewin, Br. Birds*, iii. t. 93. — This species is rather superior in size to the Sky Lark. The bill is dusky above, whitish beneath,

except at the point; irides hazel. The upper part of the head, hind part of the neck, and back rufous-brown, each feather a little dusky in the middle; over the eye a pale ferruginous streak; chin and throat the same; the ear-coverts inclining to dusky; from the bill under the eye a narrow dusky line; the sides of the neck and breast ferruginous, with dusky spots; belly and under tail-coverts ferruginous-white; greater quill-feathers dusky, slightly edged with yellowish white; the rest of the quills deeply margined with rufous; some of the larger coverts the same, but those immediately impending the secondary quills have whitish tips, making a small bar across the wing; one row also of the smaller coverts are tipped with white, making another line of that colour across the superior part of the wing; the two middle feathers of the tail are dusky, deeply margined with rufous-brown; the outer feather is white, the next is white on the exterior web, and part of the inner web towards the tip; the shaft dusky; the rest are dusky; legs yellowish brown; hind claws as long as the toe, and somewhat curved. The above description is taken from a specimen which was killed in Middlesex, and now in our possession. It is a rare species in England, but perhaps has sometimes been confounded with the Sky Lark, which occasionally partakes of the ferruginous colour. The hind claw, however, if every other mark of distinction was wanting, is sufficient to separate it from that bird; it is not so long, and is considerably curved, whereas that of the other is nearly straight. One in the Leverian Museum differs a little from the above. Said to inhabit North America, and is sometimes found in the neighbourhood of London.

APPENDIX. — It should appear that this rare British bird is subject to that sort of variety in plumage, from season, which has been mentioned with respect to the Tit-Lark. A specimen with which we have been favoured by Mr. Foljambe for examination, has none of that rufous-colour from whence the name was derived, but is of a pale brown above, lightest on the margins of the wing-coverts and tertials; the under parts are also rather paler than usual, but the breast and sides of the body are pale rufous: the cheeks, sides of the neck, and upper breast spotted in the usual manner: the tail is marked with white on the lateral feathers as usual. In fact, the size, the bill, legs, and the hind claw bespeak the species; especially the great length of the tail in proportion to the wings, which, when closed, do not reach within two inches of the end. Whether this may be considered

as a usual variety, or accidental, the rarity of the bird will not at present enable us to determine. It was taken in the winter, 1812, near Woolwich, in a net with other Larks. It measures full seven inches and a half in length. [Probably a variety of the Skylark.]

[Lark, Richard's. — Richard's Pipit (*Anthus Ricardi*), *Yarrell*, i. 461; *Hewitson*, xlv. 175; *Temm. Man. d'Ornith.* i. 263. — "Bill having the upper mandible brown, and the lower one (except the tip) sienna-yellow. Crown of the head and hind part of the neck deep brown; the feathers being margined with yellowish brown. Eye-streak and chin yellowish white. Throat yellowish white, surrounded by a gorget composed of lanceolated brown spots. Breast yellowish brown, with oblong dark brown spots. Belly and abdomen white, with a tinge of wood-brown. Flanks yellowish brown. Back, wing-coverts, and scapulars blackish brown; the feathers being deeply edged with yellowish brown, and having a slight tinge of oil-green. The middle feathers of the tail deep brown, with paler edges; the outer feather on each side almost entirely white, and the next to it having the anterior part white, the shaft and basal part black. Tail extending nearly two inches beyond the tips. Legs and feet yellowish brown; the tarsi long and stout; hind claw much produced, and slightly curved." — *Selby*, i. 265. In the 'Zoologist' for 1843 Mr. Greenwood mentions, at p. 190, the occurrence of four specimens of this rare bird in Cornwall, two at Marazion and two at Penzance. In the volume for 1844 the Rev. W. S. Hore records, at p. 496, that four specimens were obtained at Stoke, Devonport, in December, 1841. In the volume for 1846 Mr. Bold records, at p. 1210, the occurrence of a female at the Town Moor, Newcastle, on the 9th of October, 1845. In the volume for 1851 Mr. Rodd records, at p. 3300, the occurrence of a specimen at St. Mary, in the Scilly Islands, in the October of that year. In the volume for 1865 Mr. G. F. Mathews records, at p. 9457, the occurrence, at Braunton Burrows, in Devonshire, of a specimen, which he was so good as to send for examination, and which is certainly the present species; it was killed on the 30th of December, 1864: and at p. 9466 of the same volume Mr. Dawson Rowley mentions the occurrence of a specimen at Brighton, on the 20th of January of that year.]

Lark, Rock. — [Rock Pipit, *Yarrell*, i. 457; *Hewitson*, xlv. 174.] *Alauda obscura*, *Ind. Orn.* ii. p. 494, 7. *Alauda Petrosus*, *Lin.*

Trans. iv. p. 41, egg, t. 2. Dusky Lark, *Lewin, Br. Birds*, iii. t. 94. *Don. Br. Birds*, iv. t. 76. Sea Lark, *Walc. Syn.* t. 193. — The length of this species is six inches three-quarters; weight about seven drams. The bill is dusky, near seven-eighths of an inch long from the apex to the corner of the mouth; irides hazel. Upper part of the head, back of the neck, and tail-coverts are of a dark brown; back and scapulars of the same colour, obscurely marked with dusky strokes; above the eye and beneath the ear is a lightish-coloured stroke; the throat whitish; breast and belly yellowish white, the former blotched with large dusky spots; the sides marked with strokes of the same; under tail-coverts light brown; the two middle feathers of the tail dark brown, the others dusky; outer one of a dirty yellow, white on the interior web and the point of the exterior; in the second feather the light colour is just visible at the end; the quill-feathers and coverts are dusky, slightly edged with light brown; legs and toes dusky; claws black; hind claw four-tenths of an inch long, and somewhat crooked. Both sexes are alike. The young birds are not maturely feathered till after the winter of the first year; till then the upper parts have a tinge of olivaceous ash-colour; beneath the lighter parts are yellowish, and the coverts of the wings more deeply margined with light brown; the base of the under mandible and legs less dusky. It is probable Mr. Pennant first noticed this species in his folio edition of 'British Zoology,' Pl. p. 1, and calls it a variety of Tit-Lark with dusky legs. Long after the last works of that author on Zoology, in which nothing more is said of it, Dr. Latham favoured us with this bird amongst a parcel of other Larks, stating he had received it from Mr. Lewin. At that time we were unacquainted with the bird, and for distinction returned it by the name of Dusky Lark, which Mr. Lewin adopted in his publication on 'British Birds;' and Dr. Latham, in his 'Index Ornithologicus,' calls it *Alanda obscura*. Soon after these works had been given to the public we discovered these birds in great plenty on the coast of South Wales, where it was known by some of the natives by the name of Rock Lark; and afterwards found it not uncommon on all the coasts from Kent to the Land's End in Cornwall, where the shores were abrupt; and have no doubt it inhabits most of the rocky shores throughout the kingdom. It seems wholly confined to the neighbourhood of the sea, and is never found, even in winter, more remote than in the contiguous marshes within the occasional influx of the tide, depending chiefly on marine

insects for its subsistence, and has never been observed to be gregarious. The song, the manner of flying, and its habits in general, are so like those of the Tit-Lark that it is probably owing to this circumstance it had laid so long in obscurity. It begins breeding early in the spring. The nest is made of dry grass, marine plants, and very little moss externally, and lined with fine grass, with a few long hairs. This is generally placed on the shelf of a rock near the sea; sometimes at a considerable height, where there are a few scanty bushes or tufts of grass. It lays four or five eggs, of a dirty white, sprinkled with numerous specks of brown, darker and confluent at the larger end, so as to appear on that part wholly of that colour; in size they rather exceed those of the Tit-Lark, weighing about thirty-six grains.

Lark, Sea. — See Lark, Rock; Plover, Ringed; and Bunting, Tawny.

[**Lark, Shore.**—*Yarrell*, i. 465; *Hewitson*, xlv.* 178*. *Alanda alpestris*, *Temm. Man. d'Ornith.* i. 279.—'The adult male has the beak bluish horn-colour, almost black; the irides hazel; the lore, or space between the beak and the eye, and the cheeks black; the ear-coverts and a streak over the eye yellow; the forehead also yellow, bounded on the top of the head by a broad black transverse band, which ends on each side with a few elongated and pointed black feathers; these the birds can elevate at pleasure; the occipital portion of the head, the nape, back, and upper tail-coverts hair-brown, the central line of the feathers being darker than the edges; the back of the neck and the smaller wing-coverts tinged with red, the latter tipped with white; the greater wing-coverts and tertials dark brown, with light brown margins; wing-primaries and secondaries dark brown, with very narrow light-coloured edges; the two centre tail-feathers dark brown, with light brown margins; the others pitch-black, except part of the edge of the outer web of the outside feather on each side, which is white; chin, throat, and sides of the neck primrose-yellow; upper part of the breast with a gorget of black; the lower part of the breast, the belly, and under tail-coverts dull white; flanks tinged with reddish brown; legs, toes, and claws bluish black, the hind claw straight and longer than the toe. This is the plumage of autumn. In winter the black on the crown of the head, on the cheeks and chest, becomes dusky brown. In summer, Mr. Audubon says, the brownish black bands on the head and neck become deep black; the throat and frontal

band white, and the upper parts of the body light brownish red."—*Yarrell*, i. 470. In the 'Zoologist' for 1852 the Hon. T. L. Powys has recorded, at p. 3707, an instance of the Shore Lark's breeding in Britain, which I extract:—"On the 12th July, 1851, my friend Mr. W. Buller found a nest of the Shore Lark near Exmouth, South Devon, among some bent grass close to the sea, and containing four eggs. The eggs were very much like those of the Woodlark. The hen bird was caught on the nest, and is in my friend's possession." In the volume for 1851 Mr. Gurney records, at p. 2985, the occurrence of a specimen near Yarmouth in November, 1850. In the volume for 1856 Mr. Stevenson mentions, at p. 4947, the occurrence of a specimen at Holkham, in Norfolk, in the first week in December of the previous year. In the volume for 1862, no less than six specimens are mentioned: Mr. Stevenson, at p. 7845, gives the dates and localities of three, *viz.*, at Yarmouth on the 7th, at Sherringham on the 9th, and at Yarmouth on the 12th November, 1861: at p. 7931 the same indefatigable ornithologist adds two others killed at Sherringham on the 9th and 10th of January, 1862; and at p. 8090 another at Yarmouth on the 25th of April of the same year. In the volume for 1863 Mr. Roberts mentions, at p. 8446, the occurrence of a specimen on the Denes, near Norwich, on the 28th of November, 1862; this is now in Mr. J. H. Gurney's collection.]

Lark, Shorthoeled.—See Lark, Field.

[Lark, Short-toed.—*Yarrell*, i. 488; *Hewitson*, xlv. 181. *Alauda brachidactyla*, *Temm. Man. d'Ornith.* i. 284.—"The male has the top of the head and all the upper parts of a yellowish or sandy brown, with the centre of each feather darker; the quills and tail of a dusky brown, the two outer feathers of the latter having their external edges yellowish white; a whitish yellow streak over each eye; throat and belly white; the chest and flanks being tinged with yellowish brown; bill and feet light brown. The sexes are not distinguishable by the colouring of their plumage; the tints of the female are, however, somewhat duller than those of the male. The young during the first autumn have the outer edges of each feather margined with buff. The whole length of the Shrewsbury specimen was five inches and three-quarters; the tarsal bone three-quarters of an inch; the hind toe half an inch; the claw of it only one-quarter of an inch; the wing, from the carpal joint to the end of the longest quill-feather, three inches and a half; the second quill-

feather the longest in the wing; the first and third feathers a little shorter; the tertial extend backwards as far as the end of the closed wing."—*Yarrell*, i. 489. An extremely rare bird; only four or five instances of its occurrence in Britain have been recorded. From Mr. Yarrell we learn that a specimen of the Short-toed Lark was caught in a net near Shrewsbury on the 25th of October, 1841. In the 'Zoologist' for 1854 Mr. Rodd records, at p. 4477, the occurrence of a specimen in the Scilly Islands during that year; Mr. Rodd's communication is dated September 23rd: in the volume for 1855 the Rev. Arthur Hussey records, at p. 4558, the capture of a specimen in a net near Brighton; the bird was kept alive for some time, but the date is not given: in the volume for 1862 the Rev. Pemberton Bartlett narrates, at p. 7930, the capture of a living specimen at Southampton; this bird seems to have done well in captivity.]

Lark, Sky.—[*Yarrell*, i. 472; *Hewitson*, xlv. 176.] *Alauda arvensis*, *Lin. Syst.* i. p. 187, 1; *Gmel. Syst.* ii. p. 791; *Ind. Orn.* ii. p. 491, 1; *Lath. Syn. Sup.* ii. p. 226; *Bewick, Br. Birds*, i. t. p. 182. *Alauda vulgaris*, *Raii Syn.* p. 69, A. 1; *Will.* p. 149, t. 40; *Bris.* iii. p. 335, 1; *Ib.* 8vo, p. 404. *L'Alouette*, *Buf.* v. p. 1, t. 1. Common Field Lark, or Sky Lark, *Will. Angl.* p. 203. Sky Lark, *Br. Zool.* i. No. 136; *Ib.* fol. 93, t. S. 2, f. 7; *Arct. Zool.* ii. p. 394, A.; *Lath. Syn.* iv. p. 368, 1; *Albin*, i. t. 41; *Ib. Song Birds*, p. 38; *Lewin, Br. Birds*, iii. t. 89; *Walc. Syn.* t. 189; *Pult. Cat. Dorset.* p. 7. Provincial: Lavrock.—The length of this species is seven inches. Bill dusky; the base of the under mandible yellowish. The feathers on the top of the head are dusky, bordered with rufous-brown; they are rather long and erectable, in form of a short crest; the hind part is plain, inclining to ash-colour; on the upper parts of the body the feathers are reddish brown, darker in their middle, the edges pale; the under parts are dirty buff-colour, darkest on the neck and breast, which parts are streaked with dusky; quills brown, lighter on the outer webs and tips; the tail is dusky brown, the two middle feathers darkest, with light rufous margins; the outer feather is white on the outer web and tip of the inner; the second feather white on the outer web only; the third is inclining to white on the margin of the outer web; legs dusky in old birds, but lighter in young; claws dusky; the hind one very long and strait. This bird is common in the greater parts of this kingdom, but most plentiful in the more open and highest cultivated situations abounding with corn, and rarely seen on the

extended moors at a distance from arable land. The nest is placed on the ground amongst grass or corn; it is formed of dry grass and other vegetable stalks, lined with fine dry grass. The eggs are generally four in number, rather larger than those of a Tit-Lark, weighing about fifty grains, of a dirty white, blotched and spotted with brown. It begins to breed in May, and will lay as late as September if their first nests are destroyed. The history of this delightful singing bird is so generally known that to say more of it is useless. It has been asserted that the Sky Lark never perches; but this is a mistake, for we have frequently seen it perch on the top of a bush, and sometimes on the branch of a tree.

SUPPLEMENT.—Doctor Latham remarks that the duty paid at Leipsic for Larks amounts to 12,000 crowns per annum, at a grosch or twopence-halfpenny sterling for every sixty Larks. The quantity may seem prodigious, but the fields appear to be covered with them from Michaelmas to Martinmas. These birds are seen in Egypt, about Cairo, in like number, the beginning of September, and continue for some days; are supposed to come from Barbary, and are called, in Egypt, Asfour Dsjebali or Mountain Birds. Whether any portion of the northern breed of these birds visit us in winter is not certain, but it is obvious that at particular times they are infinitely more abundant in the southern provinces than at others; possibly they only quit one part of the kingdom and assemble in another, where the climate is more mild. In the winter of 1803 large flocks of these birds were seen in every stubble-field in the south of Devon, in number far beyond anything that has since appeared.

[Lark, Tawny, or Tawny Pipit.—*Anthus campestris*, Meyer, *Taschenb. Deut.* i. 257? *Anthus rufescens*, Temm. *Man. d'Ornith.* i. 267.—“Upper parts of the body isabelline gray: on the middle of each feather a slight tint of brown; above the eyes a broad whitish band; throat of the same colour; all the other under parts isabelline white; on each side of the throat a small narrow streak, and on the breast eight or ten very small spots scarcely discernable; wing-coverts and remiges brown, bordered with isabelline red; tail-feathers blackish brown, the two middle ones edged with rufous, the outer one almost wholly white, and having a white shaft; the second on each side reddish white; on the outer web, as well as on a part of the tip, the shaft brown; the claw of the hind toe shorter than the toe, and very slightly bent. Length six inches and

five or six lines. The young of the year have all the upper parts dark brown, each feather being embroidered with white or very bright rufous; the wing-coverts, the secondaries, and the tail-feathers have a broad rufous border; black moustaches on the sides of the neck; large black spots form longitudinal rays on the breast and flanks; the stripe above the eyes varies in width.”—*Temminck*, i. 267. This Pipit is common in France and Germany, but is of rare occurrence in Britain, and seems to occur only on the south coast. The first notice of this species as British is by Mr. Dawson Rowley, in the ‘*Ibis*’ for January, 1863; and the second in the ‘*Zoologist*’ for 1864, p. 9327, by the same excellent ornithologist; this last was caught in a clap-net near Brighton, on the 30th September. *Temminck* considers this the *Anthus campestris* of Meyer, the Willow Lark of Pennant’s ‘*British Zoology*,’ p. 95, t. Q. f. 4.]

Lark, Tit.—*Alauda pratensis*, *Lin. Syst.* p. 287, 2; *Gmel. Syst.* ii. p. 792; *Ind. Orn.* ii. p. 493, 5; *Raii Syn.* p. 80, 4; *Will.* p. 150; *Bris.* iii. p. 343, 3; *Ib.* 8vo, i. p. 406. *Sipola altera* Aldr, *Raii Syn.* p. 80, 4; *Will.* p. 153—171. *L’Alouette de près*, *Buf.* v. p. 31, t. 3. Tit-Lark, *Br. Zool.* No. 138; *Ib.* fol. 94, t. Q. f. 6; *Arct. Zool.* ii. p. 395, C.; *Will. Angl.* p. 110? 206; *Albin.* i. t. 43; *Ib. Song Birds*, t. p. 53; *Lath. Syn.* iv. p. 374, 5; *Lewin, Br. Birds*, iii. t. 98; *Walc. Syn.* ii. t. 191; *Pult. Cat. Dorset.* p. 8.—This species weighs about four drams forty grains; length nearly five inches and three-quarters. Bill slender, dusky, except at the base of the under mandible; irides hazel. The upper part of the head and whole plumage above is of a dusky brown, with paler margins; from each side the under mandible a dusky line passes down the side of throat; the throat and under parts dirty white; the sides of the neck and breast marked with oblong spots of dusky; quills dusky brown, slightly edged with a paler colour; tail the same, the outer feather white, except at the base of the inner web; the next has a little white at the point; legs brownish. No birds have caused greater confusion than several of the smaller species of Larks; the Field Lark and Pipit having always been more or less confounded with this bird. The Tit-Lark remains with us the whole year, but after the autumnal moulting assumes more of an olivaceous tinge on the upper parts, and beneath is of a yellowish white. In this state it has been taken for the Field Lark by those who have not attentively examined the bill and hind claw. In these parts it more resembles the Pipit; but that bird is much

superior in size, and the whole plumage is much more ferruginous. The Tit-Lark is a very common bird in most parts of the kingdom; is partial to barren situations, and is found equally on the mountainous parts as well as in the low and swampy places. In Scotland it is almost the only bird found upon the vast extended tracts of heath, amongst which it breeds. The nest is placed on the ground amongst furze or long grass; is composed of bents, dry grass, and stalks of plants, lined with fine dry grass, and sometimes long horse-hair. The eggs vary considerably in colour; sometimes of a dark brown, others whitish, thickly speckled all over with rufous-brown, or of a pale brown tinged with red; these are generally six in number. In the winter these birds mostly frequent the lower grounds in search of insects and worms, and fly in small flocks; possibly they may congregate with the Pipits, who come to us at that season, and may then be readily confounded. We have found the eggs of this bird from different nests weigh from twenty-four to thirty-four grains.

APPENDIX. — The various and fluctuating opinions concerning the distinction between the Pipit and Tit-Lark have been the means of calling our particular attention to the subject. It will be seen in the 'Ornithological Dictionary' that we ventured to make these birds distinct, but more recent observations induce us to recall that opinion, and to bring them together as one species. We before noticed that the Tit-Lark remained with us the whole year, changing its plumage in the autumn and becoming more olivaceous-yellow. The supposed Pipit, on the contrary, was believed to appear in this country only in the autumn, and nothing further had been traced of this bird. With the knowledge that the annual change in plumage has so frequently deceived the most able naturalists (a circumstance we have proved in so many instances), we were anxious to push our researches further respecting these two supposed species. A bird so common as the Tit-Lark was easily procured at different periods throughout the summer months, from the time of incubation till the autumn. We have taken its nest with young, and have shot young Tit-Larks in the month of July, some time after they had left their nest, when all their feathers were perfect, and have invariably found them in the plumage of the supposed Pipit, differing considerably in the tints from the parent birds. We have also shot the old birds in all the latter months of the year, and have found that their feathers become more like the plumage of the young birds in the

autumn, and when completely moulted are not to be distinguished. This plumage which has been assigned to the Pipit is continued through the winter, but the brighter hue of the olivaceous-yellow becomes faded towards the spring, and the throat, breast, and margins of the feathers of the upper part of the body continue to grow paler as the summer advances, until they are thrown off in the autumn. With considerable attention to the weight and measurement, it has been found that they are subject to a little variation, but the last variation is found to be as great in one state of plumage as in the other. After having brought the Pipit and Tit-Larks together as one species, it may be suspected by some persons that the Field Lark (*Alauda minor*) may also belong to the same species; but if all other characters of distinction were wanting, the short, hooked hinder claw of that bird is a clear mark of discrimination. The habits of the Field Lark are also extremely different: its song is delightful, to which the paltry notes of the Tit-Lark cannot be compared. The eggs too are essentially different from all the several varieties observed amongst those of the Tit-Lark. In a late summer's tour through the Orkney islands, Mr. Bullock shot a species of Lark upon the hills amongst the heath, which he thought to be new; but this supposition arose more from its apparent habits than from plumage. It was difficult to rouse from the thick heath, and flew but a short distance before it again pitched. This unusual action appears to have been occasioned by an incomplete plumage. Several of these birds were sent to us by Mr. Bullock, and were found to be in moult; some wanted the wing and others the tail-feathers, and the quills were yet tender, so that a defect in flight probably occasioned a sort of necessity for concealment, or at least an unwillingness to take wing. The great similitude of this bird to the Tit-Lark in its autumnal plumage, or that state in which it has been called Pipit, would not have admitted a momentary hesitation in pronouncing it to be such, had not the manners appeared rather unusual. These birds were shot in the month of September, and as we happened to have a specimen of the Tit-Lark killed in the same month of the same year, and which had not been exposed, so as to have produced any change in the colour of the plumage (a circumstance which causes great deception), we had a fair opportunity of comparison. But to prevent all dispute we caused fresh specimens to be shot throughout the winter and spring of the year, when the Tit-Lark commenced breeding, and, by strict comparison with all, we

could not perceive the smallest difference, further than those shades of colouring found to vary in the individuals of each. We have been particular in speaking of this Orkney Lark on account of the representation we have had of its habit of concealment; for though no distinction is observable between it and the Tit-Lark, we must always bear in recollection the impossibility of separating the Rook and the Crow but by the voice and habits. We have before remarked that the Tit-Lark is amongst the few birds found to inhabit the heathy mountains of Scotland, perhaps the only small species that is known to breed in those extensive wastes destitute of every other shelter. In various parts of the Highlands we have noticed the Tit-Lark in summer, and have taken its nest, and we are assured by Mr. Fleming that it is common in the Orknies amongst the heath, where it is known by the name of Teeting. Is said to reside the whole year in the Orknies, and to frequent the seashore in winter; possibly the Dusky Lark may have been confounded with it in winter on the shores, where at all seasons that bird finds a plentiful supply of food, and has no occasion to migrate.

Lark, Tree.—See Lark, Field.

[Lark, Water, or Water Pipit.—*Anthus aquaticus*, *Bechst. Naturg. Deut.* iii. 745. *Alauda campestris spinoletta*, *Gmel. Syst.* i. 794. *Anthus rupestris*, *Nils. Ornith. Suec.* i. 245. The following passage, by Mr. John Pratt, extracted from the 'Zoologist' for 1864, at p. 9279, is the only instance in which this species has been noticed as British:—"By the help of Mr. Bree's valuable work on the 'Birds of Europe,' I have identified two Pipits the names of which have hitherto been unknown to us: we have had them some time waiting to be named, and at last find them to agree with the Water Pipit (*Anthus spinoletta*), a species found in many parts of Europe, breeding in mountainous districts, and in the winter found generally in the vicinity of rivers or pools of water in lower countries. This species has been confounded with the Rock Pipit (*A. aquaticus*), from which, however, upon examination, it proves to be as distinct as it is from the Pennsylvanian Pipit (*A. ludovicianus*), the species obtained by Mr. Macgillivray near Edinburgh, in June, 1824, and by Mr. Gray near Glasgow. I have compared them with different Rock Pipits, and find them to differ even more than Mr. Bree's description shows. The following are a few of the chief distinctions between the two species:—

"WATER PIPIT.—General tinge of whole

bird brown or reddish brown. Head and hind neck gray; back brown, changing into richer brown on the rump. Superciliary ridge white, extending to the occiput; in one specimen intersected by a patch of gray, the extreme end appearing as a white dot. Throat and sides of neck whitish, changing into tawny on the breast: under parts white, with a few faint streaks on the flanks. First primary shorter than next three, which are about equal in length. Tertiaries five-eighths of an inch shorter than longest primary.

"ROCK PIPIT.—General tinge of whole bird olive-green. Head, hind neck and back olivaceous. Superciliary ridge yellowish white, distinct over the eye, and but very faintly indicated behind it. Sides of neck same as the back; throat, breast and all under parts yellowish white; on the breast thickly striped with dark brown. First primary the longest; the next three successively shorter. Tertiaries barely one-fourth of an inch shorter than longest primary. They are also very distinct from *A. ludovicianus*, which in colour is almost exactly like the Meadow Pipit, and has the first primary the longest. One specimen was killed near Worthing, and the other on the beach near Brighton, where the tide flows in forming several large pieces of water. I suppose this is the first recorded occurrence of this species in our country."

Temminck gives *Anthus aquaticus* of Bechstein, *Anthus rupestris* of Nilsson, and *Anthus campestris spinoletta* of Gmelin, as synonymous, but adopts the name of *aquaticus*, and refers to the 'Planches Enluminees,' 661, fig. 2, as an "exact" representation of this species: the name given in that work is *Alouette pipi*. Professor Blasius appears to regard this bird as a variety of our Rock Pipit (*A. petrosus*).]

Lark, Willow.—See Warbler, Sedge. [This name seems also to have been applied by Pennant to the Tawny Lark (*Anthus campestris*) of this work.]

Lark, Wood.—[Yarrell, i. 484; Hewitson, xlv. 179.] *Alauda arborea*, *Lin. Syst.* i. p. 287, 3; *Gmel. Syst.* ii. p. 793; *Raii Syn.* p. 69, A. 2; *Will.* p. 149, t. 40; *Ind. Orn.* ii. p. 492, 3; *Bris.* iii. p. 340, t. 20, f. 1; *Ib.* 8vo, i. p. 405; *Bewick, Br. Birds*, t. p. 189; *Orn. Danmo.* i. t. 3. *L'Alouette de bois*, ou le Cujelier, *Buf.* v. p. 25. Wood Lark, *Br. Zool.* No. 137; *Ib.* fol. 94, t. Q. f. 3; *Arct. Zool.* ii. p. 395, B.; *Will. Angl.* p. 204; *Albin*, i. t. 42; *Ib. Song Birds*, t. p. 46; *Lath. Syn.* iv. p. 371, 3; *Lewin, Br. Birds*, iii. t. 90; *Pult. Cat. Dorset.* p. 8; *Walc. Syn.* ii. t. 190.—This species weighs about eight

drams; length six inches. Bill dusky; whitish at the base of the under mandible; irides hazel. The general plumage much resembles the Sky Lark; the feathers on the top of the head and whole upper parts are dusky, margined with a light reddish brown; on the crown of the head the feathers are long, and capable of being erected in the form of a short crest; from the bill over the eye is a narrow band of yellowish white surrounding the crown of the head; the coverts of the ears brown, beneath which is another light-coloured stroke; the neck and breast yellowish white, tinged with brown, marked with narrow dusky spots; belly dirty white; quill-feathers dusky, slightly edged with brown; the tail is short; the two middle feathers are brown, the next dusky, and the four outer ones on each side are black, tipped with dirty white; the tail-coverts are brown, and reach within half an inch of the end of the tail; legs yellowish flesh-colour; hind claw long and nearly strait. The Wood Lark is by no means a plentiful species, but is met with in most parts of the kingdom sparingly. It sings delightfully on wing, but rarely when sitting on the ground, though sometimes when perched on a tree. The song is much more melodious than that of the Sky Lark, but does not consist of so great a variety of notes; but then it sings almost throughout the year, except in the months of June and July. It does not mount in the air in the perpendicular manner, and continue hovering and singing in the same spot like the Sky Lark, but will sometimes soar to a great height, and keep flying in large irregular circles, singing the whole time with little intermission; and will thus continue in the air for an hour together. It is a very early breeder, beginning to build in March. We have found the nest with eggs as early as the 4th of April. It is placed on the ground, most commonly in rough and barren land, under a tuft of high grass, furze, or some low bush; is made of dry grass, lined with finer, with sometimes a few long hairs. The eggs are generally four in number, brown, mottled with dusky and cinereous, mostly at the larger end; are somewhat less than those of the Sky Lark; their weight from forty to fifty grains. These birds rarely assemble in larger flocks than six or seven; most probably the family, which associate together till the returning spring. Their food is grain and seeds of various kinds, as well as insects.

SUPPLEMENT.—The Wood Lark will frequently sing in frosty weather, after Christmas, if the weather is bright in mid-day. The Hedge Warbler, Redbreast, Missel, and Thristle will do the same; all these

are early breeders. This species is more numerous in Devonshire at all times of the year than in any other part of England, particularly in the winter season.

[Laughing Goose.—See Goose, White-fronted.]

[Laughing Gull.—See Gull, Laughing.]

Lavrock.—See Lark, Sky.

Lavy.—See Guillemot, Foolish.

[Leach's Petrel.—See Petrel, Leach's.]

[Ling-Bird. — A name of the Meadow Pipit. See Lark, Pipit.]

Linnet, Brown.—[Yarrell, i. 577; Hewitson, li. 200.] *Fringilla Linota*, Gmel. *Syst.* ii. p. 916; *Ind. Orn.* i. p. 457, 81. *Linaria*, *Raii Syn.* p. 90, A. 1; *Will.* p. 190; *Ib. Angl.* p. 258, t. 46; *Bris.* iii. p. 131, 29; *Ib.* 8vo, i. p. 343. *La Linotte*, *Buf.* iv. p. 58, t. 1. Common Linnet, *Br. Zool.* No. 130; *Ib.* fol. 110; *Albin, Song Birds*, t. p. 31; *Lewin, Br. Birds*, ii. t. 83; *Lath. Syn.* iii. p. 402, 73; *Pult. Cat. Dorset.* p. 12; *Walc. Syn.* ii. t. 221. — This bird is generally described to be of the same size as the Greater Redpole, or Red-headed Linnet. The plumage, on comparison of the various authors who have given it as a distinct species, makes it nearly the same as that bird, but not quite so rufous on the upper parts. The principal distinction seems to be in the breast being of a fine crimson colour, and none of that colour on the head. Linnæus does not appear to have considered these birds as distinct; and we have no doubt he was perfectly right, for they are to be met with in all gradations with respect to the red markings on the head and breast; sometimes on one of those parts only, at other times on neither: this depends wholly on age and season. From the vast number we have killed at all seasons of the year, in which the greatest variety of those markings were observed, we do not hesitate to pronounce them one and the same species. For further remarks, see Redpole, Greater.

[Linnet, Common.—See Linnet, Brown.]

Linnet, Green.—See Grosbeak, Green.

Linnet, Grey.—See Linnet, Brown.

Linnet, Mountain.—See Twite.

Linnet, Red. } See
Linnet, Redheaded. } Redpole, Greater.

LINNET.

Linnet, Redheaded, Lesser. — See Redpole, Lesser.

[Longeared Owl. } See Owl, Longeared.]
[Longhorned Owl.]

[Longlegged Plover. — See Plover, Longlegged.]

Longneck. — See Bittern, Little.

[Longtailed Tit. — See Titmouse, Longtailed.]

[Longtailed Herald. } See
[Longtailed Duck. } Duck, Longtailed.]

Longtailed Capon. } See Titmouse, Long-
Longtailed Mag. } tailed.

MAGPIE.

Loon. — A common name given to several species of the Divers and Grebes.

Loon, Ashcoloured. } See Grebe, Tippet.
Loon, Greater.

Loon, Redthroated. — See Diver, Redthroated.

Loon, Sprat. — See Diver, Speckled.

[Lough Diver. — Bewick's name of the Smew.]

Lumme, Sprat. — See Diver, Blackthroated.

Lunda. — See Puffin.

Lyre, or Lyrie. — See Shearwater.

M.

Madge-Howlet. — See Owl, White.

Magpie. — [Yarrell, ii. 114; Hewitson, lx. 234.] *Corvus pica*, *Lin. Syst.* i. p. 157, 13; *Gmel. Syst.* i. p. 373; *Raii Syn.* p. 41, A. 1; *Will.* p. 87, t. 19; *Ind. Orn.* i. p. 162, 32; *Bris.* ii. p. 35, 1; *Ib.* 8vo, i. p. 164; *Lath. Syn. Sup.* ii. p. 113; *Bewick, Br. Birds*, i. t. p. 78; *Shaw, Zool.* vii. La Pie, *Buf.* iii. p. 85, 87. Magpie, or Pianet, *Br. Zool.* i. No. 78; *Ib.* fol. p. 77, t. D. 2; *Arct. Zool.* ii. No. 136; *Will. Angl.* p. 127, t. 19; *Albin*, i. t. 15; *Hayes, Br. Birds*, t. 8; *Lewin, Br. Birds*, t. 39; *Lath. Syn.* i. p. 392, 29; *Ib. Sup.* p. 80; *Pult. Cat. Dorset.* p. 5; *Walc. Syn.* i. t. 39; *Don. Br. Birds*, iv. t. 95. Provincial: Hagister. — This species of Crow is about eighteen inches in length; weight between eight and nine ounces. Bill black; irides hazel. The breast, upper part of the belly, and scapulars white; the rest of the plumage black; the wings and tail beautifully glossed with blue, green, and purple; the ten first quill-feathers are white in the middle on the inner web; the tail is nine inches and a half long, and very cuneiform, the outer feathers not being much above half as long as the middle ones; legs and claws black. The female differs only from the other sex in being rather less, and in the tail being shorter. It has been very justly remarked that England does not produce a more beautiful bird than the Magpie; but that those who have only seen the dirty mutilated specimens in captivity can form no idea of its native beauty. These birds generally continue in pairs the whole year; and though shy it rarely removes far from the habitation of man. Its attachment, however, is

governed by self-interest; is a great enemy to the husbandman, but has cunning enough to evade his wrath. No animal food comes amiss to its carnivorous appetite; young poultry, eggs, young lambs, and even weakly sheep, it will attempt to destroy by first plucking out their eyes; the young of hares, rabbits, and feathered game share the same fate; fish, carrion, insects, and fruit; and lastly grain, when nothing else can be got. It is an artful, clamorous bird, proclaiming aloud any apparent danger, and thereby gives notice to its associates. Neither the fox or other wild animal can appear without being noticed and haunted; even the fowler is frequently spoiled of his sport, for all other birds seem to know the alarming chatter of this bird. Its nest is curiously built for the defence of its young; it is of an oval shape, made of sticks, generally the blackthorn, strongly woven together, with only a sufficient entrance on one side; the bottom is plastered with earth, and lined with fibrous roots. It lays six or seven eggs early in the spring, of a yellowish white, spotted with brown and cinereous. The place of nidification is various; sometimes on the top of a high tree, in a thick bush or hedge, and frequently at a small distance from the ground. From these circumstances it has been supposed there are two species, and have sometimes been denominated the Tree-Mag and the Hedge-Mag. In winter these birds assemble in great numbers to roost in some coppice or thicket, but separate again in the day. When reclaimed the Magpie is a very docile bird, and seems to have its natural faculties heightened by domestication, imitating the human voice, and various other sounds.

SUPPLEMENT. — The Magpie is subject to some defects in plumage, such as white or cream-colour: one formerly in the Leverian Museum was nearly white, streaked with black. Is said to be not uncommon in the temperate and southern latitudes of Russia as well as in Siberia, and even at Kamptschatka. Has not been found on the American continent, but according to Clayton's account of Virginia a Magpie is valued as much as the Red-bird is in England.

Magpie, Mountain. — See Shrike, Cinereous.

Mallard.—See Duck, Common.

Mallamock, Malmock, or Mallduck.—See Fulmar.

[**Manx Puffin.**
[**Manx Shearwater.**] See Shearwater.]

Marrot. — See Puffin; Razorbill; Guillemot, Lesser.

[**Marsh Harrier.**—See Moor Buzzard.]

Marsh Hen.—See Gallinule, Common.

[**Marsh Titmouse.**—See Titmouse, Marsh.]

Martin. — [Yarrell, ii. 255; Hewitson, lxxv. 261.] *Hirundo urbana*, Lin. Syst. i. p. 347, 3; Gmel. Syst. ii. p. 1017; Ind. Orn. ii. p. 573, 3. *Hirundo rustica*, sive *agrestis*, Raii Syn. p. 71, A. 2; Will. p. 155, t. 39; Bris. ii. p. 490, 2; Ib. 8vo, i. p. 295. *Hirondelle à cul blanc*, Buf. vi. p. 614, t. 25, f. 2. Martin, Martlet, or Martinet, Br. Zool. i. No. 169; Ib. fol. 96, t. Q. f. 2; Arct. Zool. ii. No. 331; Will. Angl. p. 213, t. 39; Albin, ii. t. 56, a; Lath. Syn. iv. p. 564, 3; Ib. Sup. p. 192; Lewin, Br. Birds, iii. t. 124; Pult. Cat. Dorset. p. 13; Walc. Syn. ii. t. 252. By some called Window Swallow. Provincial: House Martin. — This species of Swallow is rather inferior in size to the Chimney Swallow; the length is about five inches and a half. Bill black; irides hazel. The whole upper parts are of a glossy blue-black, the rump excepted, which, with the under parts from chin to vent, is white; the tail is blue-black, and forked; the legs are covered with a white down; the claws white. This well-known species visits England in the spring rather later than the Common Swallow. It first makes its appearance in low, warm situations, and if the weather is fine begins building early in May. The nest is generally placed under the eaves of a house; sometimes against rocks or cliffs con-

tiguous to the sea. It is built with mud externally, and lined with feathers, with a small hole on one side for entrance. The eggs are four or five in number, of a pure white. The young never quit the nest till they are able to fly well, and are fed by the old birds frequently on wing. At the time of incubation, and when the young are first hatched, it is not uncommon to see both the old birds in the nest together, in which place the act of consummation is performed. These birds, like the rest of the genus, are constantly on wing, are rarely seen to perch on a tree, and seldom settle at all during the day, except in the autumn, just before their winter migration, at which time they assemble in large flocks on the roofs of houses and other buildings, exposing themselves to the influence of the sun; but we have never been able to ascertain where they roost at night after they have forsaken their nests; but most probably in holes under the tiles and thatch of houses. Much has been said by various authors concerning the winter state and abode of this bird and its congeners. To attempt to refute the absurd idea of their immersion would be a trespass on the patience of our readers. It must, however, be observed that their internal formation absolutely prevents it; nor is there any occasion to resort to such unnatural means when no birds are furnished with more ample powers for migration. That a few instances of their having been found in old shafts of mines, and in similar situations, we will not dispute; though it is somewhat extraordinary that those who have stated such as facts do not mention which species of Swallow was so found; nor have we been able to find a single person of good authority who ever saw the fact. Why these birds should ever have been denied their migrative powers we cannot conceive, when others, much less qualified for long flights, have not been doubted. That this bird, as well as the Chimney Swallow, are now and then seen flying about long after the general disappearance of these birds, we have more than once had ocular proof of. But these instances must be attributed to some accident or individual defect, which prevented them from performing their usual autumnal flight. It is well known that in some animals, whose radical heat is sensibly affected by cold, the power of action is lost when the fluids become languid, and animal life is as it were suspended. The bat, the dormouse, and hedgehog become torpid in winter, when the mean state of the air is below 45 degrees; and their heat seems to keep pace nearly with the state of the atmosphere. But even at this season the general warmth of the sun

regenerates their benumbed limbs, and the bat is sometimes seen flying about at mid-day, but returns again to its former state for weeks, and perhaps months, if the air proves colder. Thus it is with the Martin and Swallow who have been accidentally detained in this northern climate; they are roused by a certain degree of heat, and the calls of hunger induce them to fly abroad for food; and it is much to be doubted whether this sudden return of all the animal functions does not prove fatal, from not being able to find sufficient food to supply the natural excretions, which in a torpid state have been observed to be little or none. It cannot be supposed it was intended by nature that birds who have the power of shifting their quarters in so expeditious a manner, and with such ease, should ever repose during the colder season. It is therefore most reasonable to suppose such accidental migrative birds, who are detained in a climate unsuitable to their nature, perish before the return of the warmer months. We have known several instances of a single bird of this species flying about in search of food after the middle of November, but never for two days together, nor after the latter end of that month. Found in most parts of Europe, and in Asia.

[**Martin, American.** — *Hirundo bicolor*, Vieillot; *Newton, Zool.* 7145. *Hirundo viridis* (Green, Blue, or Whitebellied Swallow), *Wilson, Amer. Ornith., Jameson's Edition*, ii. 48. *Severn Swallow*, *Wolley, Zool.* 3806. — "The White-bellied Swallow is five inches and three-quarters long, and twelve inches in extent; bill and eye black; upper parts a light glossy greenish blue; wings brown-black, with slight reflections of green; tail forked, the two exterior feathers being about a quarter of an inch longer than the middle ones, and all of a uniform brown-black; lores black; whole lower parts pure white; wings, when shut, extend about a quarter of an inch beyond the tail; legs naked, short and strong, and, as well as the feet, of a dark purplish flesh-colour; claws stout. The female has much less of the greenish gloss than the male, the colours being less brilliant; otherwise alike." — *Wilson*, ii. 49. In the 'Zoologist' for 1853 the late lamented Mr. Wolley recorded, at p. 3806, the occurrence of this North-American bird at Derby in 1850, and in 1860 Mr. Newton exhibited the specimen at a meeting of the Zoological Society of London, and read a short memoir thereon, which appeared in the 'Proceedings,' under date of February 28, 1860, and subsequently in the 'Zoologist' for 1860, p. 7145. No doubt has been thrown on the authenticity of this specimen as British,

but the accidental occurrence of a purely North-American bird in England gives it no claim to be added to our list.]

Martin, Bank. — See Martin, Sand.

Martin, Black. — See Swift.

[**Martin, Common.**] } See Martin.
Martin, House.

[**Martin, Purple.** — *Yarrell*, ii. 267. *Hirundo purpurea*, *Wilson, Amer. Ornith. Jameson's Edition*, ii. 32. — "Is eight inches in length and sixteen inches in extent; except the lores, which are black, and the wings and tail, which are of a brownish black, he is of a rich and deep purplish blue, with strong violet reflections; the bill is strong, the gape very large; the legs also short, stout, and of a dark dirty purple; the tail consists of twelve feathers, is considerably forked, and edged with purple-blue; the eye is full and dark. The female measures nearly as large as the male; the upper parts are blackish brown, with blue and violet reflections thinly scattered; chin and breast grayish brown; sides under the wings darker; belly and vent whitish, not pure, with stains of dusky and yellow-ochre; wings and tail blackish brown." — *Wilson*, i. 38. Mr. Yarrell says that a specimen of this bird has been killed in Ireland, but gives no date; and that two others were shot at Kingsbury Reservoir in September, 1842, by Mr. John Calvert, of Paddington.]

Martin, Sand. — [*Yarrell*, ii. 261; *Hewitson*, lxx. 264.] *Hirundo riparia*, *Lin. Syst.* i. p. 334, 4; *Gmel. Syst.* ii. p. 1019; *Raii Syn.* p. 71, A. 3; *Will.* p. 156, t. 39; *Ind. Orn.* ii. p. 575, 10; *Bris.* ii. p. 506, 12; *Ib.* 8vo, i. p. 299. L'Hirondelle de rivage, *Buf.* vi. p. 632. Sand Martin, or Shore-bird, *Br. Zool.* i. No. 170; *Ib.* fol. 97, t. Q. f. 1; *Arct. Zool.* ii. No. 332; *Will. Angl.* p. 213, t. 39; *Albin*, ii. t. 56, b.; *Lath. Syn.* iv. p. 568, 10; *Lewin, Br. Birds*, t. 125; *Walc. Syn.* ii. t. 253; *Pult. Cat. Dorset.* p. 13. Provincial: Bank Martin. — This is the smallest species of British Swallow; length four inches and three-quarters. Bill dusky; irides hazel. The whole upper parts of the plumage are of mouse-coloured brown; the under parts white, except across the breast, which is brown; legs dusky, a little feathered behind. The Sand Martin is not near so plentiful, and is more local than the other species. It visits England about the same time as the Swallow, resorting only to such places as are convenient for breeding; is frequently seen about rivers, where it makes a nest in the banks, but most commonly in sand-pits,

where it can with more ease excavate the sand in order to form a secure place for its nest. The holes are generally horizontal, and their depth two or three feet. Sometimes they build in old walls, and, we are told, in hollows of trees. The nest is composed of straw and dried fibres, lined with feathers. The eggs are four or five in number, quite white, like those of the Martin, but rather smaller; weighing about twenty-two grains. The manners of this species are much like those of the common Martin, and they are often seen in company together skimming over water in pursuit of gnats and other subaquatic insects. This, as well as the other species, have been supposed to lay torpid in their holes all the winter; and many fruitless attempts have been made to discover them at that season by digging to the bottom of those holes where they resort in summer. It is found in most parts of Europe, and is said to be common in America, where it is called Ground Swallow.

Martinet. }
Martlet. } See Martin.

[Masked Gull.—See Gull, Laughing.]

Mattages.—See Shrike, Cinereous.

Mavis.—See Thristle.

[Mealy Redpole.—See Redpole, Mealy.]

Merganser. — A genus of birds, the characters of which are: Bill slender, a little depressed, furnished at the end with a crooked nail; edges of each mandible very sharply serrated. Nostrils, near the middle of the mandible, small and suboval. Toes three before, webbed, the outer one the longest; hind toe furnished with a fin.

[**Merganser, Hooded.** — *Yarrell*, iii. 386. *Mergus cucullatus*, *Lin. Syst.* i. 207; *Lath. Ind. Orn.* ii. 830; *Wilson, Amer. Ornith.* 8, 82, p. 69, f. 1; *Selby, Brit. Ornith.* ii. 383. — **ADULT MALE**: "Top of the head, dorsal plumage, upper small wing-coverts, quills, and tail blackish brown. Sides of the head, neck, bars upon the shoulders, scapulars, tertiaries, and bases of the secondaries and greater coverts, glossy greenish black. Broad bar behind the eye, through the middle of the crest, alternate bars upon the shoulder, tips of the greater coverts, exterior borders of the secondaries, central stripes on the tertiaries, and under plumage white. Flanks finely undulated with yellowish brown and black. The crest, according to *Wilson*, is composed of two separate rows of feathers, radiating from each side of the head, and

which can be easily divided by the hand. Irides golden or king's yellow." — *Richardson, Faun. Bor.-Am.* ii. 463. **YOUNG FEMALE**: "Length nearly eighteen inches. Bill, from the forehead to the tip, about one inch and a half long: rather slender, and not so thick at the base as in the Smew; the serratures broad, with sharp edges. The colour of the bill appears to have been orange at the base, and darker towards the tip. Chin greyish white, speckled with pale broccoli-brown. Crown of the head inclining to liver-brown, the occipital crest (which is large and semicircular) passing into pale reddish brown. Face, cheeks, and neck pale broccoli-brown, or mouse-colour. Breast and sides of the lower parts of the neck broccoli-brown, deeply margined with pearl-gray. Upper parts of the body brownish black; the feathers upon the mantle and scapulars being margined with obscure greyish brown. Outer edges of the exterior webs of the secondaries white, forming a small speculum in the middle of the wing. Under plumage white. The sides and flanks broccoli-brown, with paler margins. Tail composed of fourteen feathers, deep clove-brown, and reaching nearly three inches beyond the closed wings. Legs and feet brown, tinged with red. Tarsus one inch in length." — *Selby*, ii. 385. Mr. Selby informs us that a specimen of this North-American species was killed at Yarmouth, in Norfolk, during the winter of 1829. Mr. Eyton, in his 'Rarer British Birds,' mentions a second specimen, killed near Bangor in the winter of 1830; and Mr. Yarrell records two others — one at Stoke Nayland, in Suffolk; the other at Benton Park.]

Merganser, Minute. — *Mergus minutus*, *Lin. Syst.* i. p. 209, 6? *Faun. Suec.* No. 138; *Ind. Orn.* ii. p. 575, 10; *Gmel. Syst.* ii. p. 548, 6. *Mergus glacialis*, *Raii Syn.* p. 135, A. 3; *Will.* p. 254. *Merganser cristatus minor*, *Bris.* vi. p. 243, 3, t. 24, f. 2; *Ib.* 8vo, ii. p. 426. *Weesel Coot*, *Albin*, i. t. 88. *Red-headed Smew*, or *Lough-Diver*, *Br. Zool.* ii. No. 263?; *Ib.* fol. 144, t. Addend.? *Arct. Zool.* ii. p. 540, A.; *Ib. Sup.* p. 741; *Will. Angl.* p. 338; *Walc. Syn.* i. t. 83; *Pult. Cat. Dorset.* p. 19. *Minute Merganser*, *Lath. Syn.* vi. p. 429, 6; *Lewin, Br. Birds*, vi. t. 235; *Don. Br. Birds*, t. 52. — This bird is about the size of a Teal; the length rather exceeds fourteen inches. Bill black; irides hazel. The upper part and sides of the head, taking in the eyes, dusky ferruginous, almost black about the eye, especially between that and the bill; on the back part of the head the feathers are long and slender; the chin, throat, and upper part of the neck before are white; the lower part of the neck and

breast dusky and cinereous-grey mixed; the under parts white; the back, rump, and scapulars black; the last as well as the upper part of the back, dashed with cinereous; primary quills dusky; secondaries glossy black, slightly tipped with white; their coverts tipped with the same, forming two slender bars across the wing; on the upper coverts a large patch of white; tail somewhat cuneiform, dusky; legs dusky. This bird is subject to vary a little in colour about the head; some are more ferruginous than others; and sometimes that part is dusky with only a reddish tinge. No birds have perplexed the naturalist more than some species of Mergansers; and various are the opinions concerning the one before us. If we consider that the young may not arrive at maturity in plumage for two or three years, it may admit of great doubt whether this may not be the young or female of the Smew. Dr. Latham, in his *Essay on the Tracheæ of Birds*, published in the fourth volume of the 'Linnæan Transactions,' considers that there are but three distinct species of Merganser which migrate into this country; and says he has found the labyrinth of the supposed male of this bird in every respect similar to that of the male Smew; from which he concludes it is that bird not arrived to maturity in plumage. We have long had our suspicions of what the Doctor has asserted; and we strongly recommend attention to this new field of investigation, particularly in this and the Duck tribe, from which considerable knowledge is to be expected. It is not frequently met with in the South of England, and only in winter when the weather is severe; and rarely otherwise than single, or at most two together. Its principal food is fish, after which it dives with great ease, and remains long under water.

SUPPLEMENT.—The number of tail-feathers in this bird is the same as the Smew is found to possess. This being without doubt the female, or young of the Smew in the first plumage, the synonyms should be brought together. See Smew.

Merganser, Redbreasted.—[Yarrell, iii. 392; Hewitson, cxix. 437.] *Mergus serrator*, *Lin. Syst.* i. p. 208, 3; *Gmel. Syst.* ii. p. 546, 3; *Ind. Orn.* ii. p. 829, 4; *Lath. Syn. Sup.* ii. p. 337; *Lin. Trans.* iv. p. 121, t. 16, f. i. 2 (trachea); *Bewick, Br. Birds*, ii. t. p. 261; *Ger. Orn.* v. t. 509; *Sepp. Vog.* iii. t. 124, 125. *Mergus cirrhatus fuscus*, *Raii Syn.* p. 135, A. 4; *Will.* p. 255, t. 64. *Mergus cristatus*, *Bris.* vi. p. 237, 2, t. 23; *Ib.* 8vo, ii. p. 424. Le Harle huppé, *Buf.* viii. p. 273. Redbreasted Merganser, *Br. Zool.* ii. No. 261, t. 93; *Ib.* fol. 147; *Arct. Zool.* ii. No. 466;

Edw. t. 95; *Albin*, ii. t. 101; *Lath. Syn.* vi. p. 423, 3; *Lewin, Br. Birds*, vi. t. 233; *Walc. Syn.* i. t. 81; *Pult. Cat. Dorset.* p. 18; *Don. Br. Birds*, ii. t. 38. Provincial: Red-breasted Goosander; Lesser-toothed Diver; Serula; Harle.—This species is about twenty-one inches in length; weight two pounds. The bill is three inches long; the upper mandible dusky, the lower red; irides purplish red. The head and part of the neck black, glossed with green; on the back of the head the feathers are long, forming a sort of pendant crest; the rest of the neck and under part of the body white; breast ferruginous, mixed with black and white; upper part of the back glossy black; rump marked with brown and cinereous transverse streaks; the scapulars and wing-coverts are some black and some white; quills dusky; tail brown; legs orange; claws black. The female has the upper part of the neck and head dull ferruginous; fore part of the neck and breast the same, mottled with black and white; the greater part of the neck behind, back, rump, and scapulars cinereous; lower part of the breast and belly white. Both sexes are subject to some variety in plumage. These birds sometimes appear in the South of England in winter, but more frequently in the north; are said to breed in Scotland in some of the lochs. Is found in the Russian dominions, about the great rivers of Siberia. Is said to breed on the shores of Greenland, and are observed at Hudson's Bay in large flocks; breeds there as well as at Newfoundland, chiefly on the islands. The nest is said to be made with dry grass, lined with down; the eggs are white; sometimes as many as thirteen in a nest, about the size of those of a Duck.

SUPPLEMENT.—This may be considered a rare species in the South of England. In 1808, we are informed by Mr. Comyns that he bought a male of a poulterer in Exeter; and in the same year, on the 15th of November, Mr. Holdsworth shot a female on Slapton Ley, which he obligingly sent to us. As everything relating to this intricate tribe of birds may serve to elucidate its history, we shall without apology record a full description of this female specimen, proved to be such by dissection. It weighed twenty-two ounces and a half; length twenty inches; breadth twenty-nine and a half. Bill two inches long from the forehead; the upper mandible dusky brown, with the sides orange; the under mandible wholly of the last colour; irides pale orange. The feathers on the top of the head dark ferruginous-brown; the sides of the head, and a little way down the sides of the neck, ferruginous, becoming paler underneath, so as to be

almost white on the chin and throat, with only a dash of ferruginous: the feathers on the back of the neck are dusky brown, with a rusty tinge: back and whole upper parts of the body, and smaller coverts of the wings, dusky, dashed with cinereous; the shafts are darkest, and the plumage in general above, upon close inspection, is observed to be finely clouded or undulated with darker and lighter shades: the middle part of the neck before is clouded brown and white: the lower part and all the body beneath white, except behind the vent, which is mottled: the prime quills dusky black; the four first secondaries next to them slightly tipped white, and partially so on the inner webs; the six next are white for two-thirds of their length, their base black on the outer webs; the greater coverts immediately impeding these are also white, with their base black, forming together a white patch on the wing; the eleventh secondary quill is of a sullied white, with the margin of the outer web black: the tertials are dusky, dashed with cinereous, darkest on their outer margin: the tail consists of twenty cinereous-brown feathers, with black shafts, and is rounded at the end: legs and toes dingy orange; webs dusky brown. There did not appear anything remarkable upon dissection; the trachea was plain; the ovaries remarkably small; the gizzard was also very small, but the part between the oesophagus and the gizzard was large. The skin was firmly attached to every part of the body. It was very poor, but did not dissect like a young bird. There was scarcely anything in the stomach, but a bee in the oesophagus shews that it was feeding at the time it was shot. Whether the female or immatured young of this species may at any time have been confounded with either of the other Mergansers, we will not pretend to say; but there can be no doubt that the male of this, as in the Smew, is at first very similar in plumage to the female. The trachea of the male of this species has an enlargement about the middle, consisting of bony plates of the same texture as the rest of it: at the lower part is a large labyrinthic bony cavity, of an irregular heart-shape, with two openings on one side and one on the other, all of which are covered with fine membranes, and from the bottom of this the two branchi spring and enter the lungs. But for a figure of this singular apparatus we refer the curious reader to the 'Linnean Transactions' quoted, where an excellent paper on the subject of extraordinary tracheae, by Dr. Latham, is highly worth the attention of the practical Ornithologist. Mr. Pennant says this species breeds in the Isle of Elay, on the shores

amongst the loose stones. ('Voyage to the Hebrides.')

Merlin. — [Yarrell, i. 60; Hewitson, x. 30.] *Falco Csalon*, Gmel. *Syst.* i. p. 284; *Ind. Orn.* i. p. 49, 119; *Raii Syn.* p. 15, 15; *Will.* p. 50, t. 3; *Bris.* i. p. 382, 23; *Ib.* 8vo, p. 111. *Merlin*, *Br. Zool.* i. No. 63; *Ib.* fol. t. A. 12; *Will. Angl.* p. 85; *Lewin, Br. Birds*, i. t. 22; *Latn. Syn.* i. p. 106, 93; *Ib. Sup.* p. 29; *Pult. Cat. Dorset.* p. 3; *Walc. Syn.* i. t. 22; *Don. Br. Birds*, iv. t. 94. — The weight of the male of this species of Falcon is about five ounces; length ten inches. Bill bluish lead-colour; cere greenish yellow; irides dusky. The crown of the head is dusky brown, streaked with black down the shafts of each feather; on the back of the head the feathers are white at the base, tipped with ferruginous; the middle of each feather black at the point; the back, scapulars, rump, and wings cinereous lead-colour, each feather marked with a long slender line of black down the shaft; greater quills black; the inner webs marked with many oblong white spots; those next the body are coloured like the back on the outer webs; the inner webs spotted as the others; the two first feathers are much indented towards the point of the inner web, as if cut with a pair of scissors; the third feather rather exceeds the second in length, and is the longest; the throat is nearly white; breast, belly, sides, and thighs ferruginous, streaked with dusky; vent and under tail-coverts pale ferruginous; the under wing-coverts are rufous-brown, with round white spots on each web; tail like the back, crossed with six or seven bars of black; the end black for almost an inch, slightly tipped with white; legs yellow; claws black. The female weighs about nine ounces; length twelve inches and a half. Bill, cere, and irides the same. The whole upper parts of the plumage are brown, tinged with ferruginous, with dusky streaks on the shafts; beneath yellowish white, with broad dusky brown streaks; tail brown, like the back, with five or six narrow bars of yellowish white, tipped with the same. The above description is taken from the birds now before us; but these birds seem to vary a little in the markings. Mr. Pennant observes, the bars on the tail are generally from thirteen to fifteen in number; but remarks in one specimen there were only eight. The male above described was recently taken alive in a trap-cage hung in a passage of a house, in which there was a Bulfinch; and what was extraordinary it had lost an eye. We kept it alive for some time, and found it extremely docile; and what was remarkable, would drink freely

whenever water was offered it, and shewed signs of distress when long kept without it. This remarkable thirst, so unusual in predaceous birds, which we have kept for years without ever attempting to drink, was certainly occasioned by fever, for it died of an inflammation on its lungs. The Merlin is exceedingly rapid on wing, and was used formerly in falconry, being esteemed for its courage, though inferior in size. The female will kill a Partridge at a single pounce; but the male is contented with humbler game. The wing of this species is not so long and pointed as that of the Hobby; when closed it does not reach to the end of the tail by an inch and a half. It flies low, and is generally seen skimming along the side of a hedge, or over the surface of the ground, in pursuit of small birds. These birds visit the South of England in October, about the time the Hobby retires, but have never been observed to breed further south than Cumberland, where, Dr. Latham informs us, it has been found more than once with four young ones, placed on the ground. In the middle of a high clump of heath upon the moors in Northumberland we found three young ones about half-grown, but no nest. They were well concealed, and would not have been discovered but by a setting-dog making a point at them. The eggs are said to be of a plain chocolate-colour, and that an instance has been known of its depositing them in a deserted Crow's nest.

Mew.—See Winter Mew.

[Migratory Pigeon.—See Pigeon, Passenger.]

[Minute Tringa.—See Sandpiper, Little.]

Mire-Drum.—See Bittern.

Missel-Bird.—See Thrush, Missel.

Mitty.—See Petrel, Stormy.

Mock Nightingale.—See Blackcap.

[Montagu's Harrier.—See Falcon, Ash-coloured.]

Moor Buzzard.—[Yarrell, i. 104; Hewitson, xvi. 44.] *Falco aeruginosus*, Lin. Syst. i. p. 130, 29; Gmel. Syst. i. p. 267; Raii Syn. p. 17, A. 4; Will. p. 42, t. 7; Ind. Orn. i. p. 25, 53. *Circus palustris*, Bris. i. p. 401; Ib. 8vo, p. 115. Busard, Buf. i. p. 218, t. 10. Moor Buzzard, Br. Zool. i. No. 57; Ib. fol. 67, t. A. 5; Arct. Zool. ii. p. 225, L.; Will. Angl. p. 75, t. 7; Albin,

i. t. 3; Lewin, Br. Birds, i. t. 8; Lath. Syn. i. p. 53; Ib. Sup. p. 15; Walc. Syn. i. t. 8; Pult. Cat. Dorset. p. 3. — The specimen now before us of this species of Falcon is a female; its weight twenty-eight ounces and a half; length twenty-three inches and a half. Bill black; cere and irides yellow. The whole plumage is of a chocolate-brown, tinged more or less with ferruginous; the crown of the head is of a dull yellow; legs long and yellow; claws black. The male is somewhat less, weighing about twenty-one ounces; length twenty-one inches; plumage the same, but generally brighter in colour. These birds are subject to some variety in markings: sometimes the crown of the head is white; others have the whole head white, or yellowish; the shoulders are said to be sometimes yellow; and we have seen a specimen with the head, part of the wing-coverts, and the four first quill-feathers white. These markings are considered as mere varieties, as some are said to be found wholly of a chocolate-brown: such, however, are by no means so common as those with a yellow crown, or of various shades of that colour to white. In more than twenty specimens we have examined, this was the constant mark, except as above described. This species appears to be local, mostly frequenting swampy moors and barren situations; and though rarely met with in the more cultivated parts, it is the most common of the Falcon tribe about the sandy flats on the coast of Caermarthenshire, where they prey upon young rabbits; and we have seen no less than nine feeding at one time upon the carcase of a sheep. It will sometimes feed on frogs, lizards, worms, and even the larger insects. The nest is most frequently made on the ground amongst short wood, furze, or fern. It is composed of sticks, rushes, or coarse grass; sometimes, though rarely, it builds in the fork of a large tree. In both these situations we have found the nest with eggs. These are perfectly white, without any spots; considerably less than those of the Common Buzzard. It is by no means a bird of rapid flight, and therefore pounces its prey on the ground; for which purpose it is generally seen skimming over the surface of the ground like the Ringtail. It is said to prey on fish occasionally, and on young Ducks and other water-fowl; from which circumstance it has in some parts obtained the name of Duck Hawk. In the breeding season, when the female is setting, the male will soar to a considerable height, and remain suspended on wing for a great length of time.

Monk.—See Finch, Bul.

Moor-Cock.—See Grouse, Red.

Moor-Hen.—See Gallinule, Common.

Moor-Titling.—See Stonechat.

Morillon.—Anas Glaucion, *Lin. Syst. i.* p. 201, 26; *Gmel. Syst. ii.* p. 525; *Raii Syn.* p. 143, 11; *Ib.* p. 144; *Will.* p. 282; *Ind. Orn. ii.* p. 868, 88. Morillon, *Bris. vi.* p. 406, t. 36, f. 1, 2; *Ib.* 8vo, ii. p. 468. Glaucion, or Morillon, *Br. Zool. ii.* No. 277; *Arct. Zool. ii.* p. 573, F.; *Will. Angl.* p. 367; *Lath. Syn. vi.* p. 537, 77; *Walc. Syn. i.* t. 70.—Although a bird of the Duck kind has been given under this denomination by a variety of authors of repute, we confess to be unacquainted with such as a distinct species. The Golden-eye, Tufted, and Scaup Ducks have been given the name of Morillon; that which Linnaeus calls the Glaucion is supposed to be the Morillon of Brisson. Dr. Latham, whose excellence and attention in the study of Ornithology is so well known, acknowledges, in his 'Synopsis,' his doubts as to the identity of this bird, though he has continued it as a distinct species in his 'Index Ornithologicus.' That gentleman mentions having received a pair by the name of Morillon, which were so like the female Golden-eye that he was struck with the circumstance; and we have every reason to believe the Morillon of Brisson to be no other than a variety of the male Golden-eye, or Tufted Duck. The former of these birds is subject to great variety, probably from age; and we have seen it accord so nearly with the description given of this bird, that there seems to be little doubt they are one and the same species. The description given of this bird is that it is rather less than the Golden-eye; length near fifteen inches. Bill lead-colour; irides golden yellow; the head is somewhat crested; that and most of the neck black, glossed with violet; the lower part of the neck rufous-brown; the back, scapulars, and rump glossy blackish brown, with a slight tinge of violet; the feathers on the breast brown, deeply edged with white; belly white, mixed with brown near the vent; wing-coverts blackish brown; most of the inner ones have a cast of green; the ten first quills are blackish brown; of these from the fourth to the tenth are marked with grey more or less in the middle of the outer web near the shaft; the eleventh and twelfth pale grey, with brown tips; the eight following white, tinged as the last; the inner of these brown on the inner web; the six next the body dark brown, and the outer one of these has a white spot on the outer web; tail violet-brown; legs lead-colour;

claws black. The description given by Mr. Pennant differs considerably from that of Brisson. The bill is of a yellowish brown; irides gold-colour; the head of a dusky rust-colour; round the upper part of the neck is a collar of white, beneath that a broader of grey; the back and coverts dusky, with a few white lines; the greater coverts dusky, with a few great spots of white; the primaries black; the secondaries white; breast and belly white; tail dusky; the sides above the thighs black; the legs yellow. The same author adds that the bird described was bought in the London market, but was doubtful of the sex. And further remarks that about the same time he was favoured with an account of two birds of this species shot in Essex; both agreed in colour, but one weighed twenty-six ounces, the other only nineteen. In the second edition of the 'British Zoology' this bird is called Grey-headed Duck. This seems to be the bird figured by Lewin, vol. vii. t. 256, and is called Brown-headed Duck. We believe there is little doubt this is no other than a variety of the Golden-eye in one stage of plumage before it arrives to maturity; many of which we have seen, and proved to be such by the singular structure of the windpipe. In Brisson's bird, the head being black and the legs lead-coloured induce us to think it is a variety of the Tufted Duck, especially as he mentions the head to be somewhat crested; for many of them are without the long pendant feathers. We must, however, leave the subject to future Ornithologists, who may hereafter be able to determine with more certainty if such a bird as the Morillon actually exists as a distinct species. And we strongly recommend to their attention a careful examination of the trachea or windpipe, which subject is so ably handled by Dr. Latham in the fourth volume of the 'Linnean Transactions,' accompanied with excellent figures of the windpipes of a variety of birds; amongst these are those of the Golden-eye and Tufted Duck, the structure of which may be consulted. [This is the female Golden-eye.]

Morrot.—See Guillemot, Lesser.

[**Moss-Cheeper.**—Mr. Thompson gives this as the Irish name of the Meadow Pipit (*Anthus pratensis*).]

[**Mountain Bunting.**—See Bunting, Snow.]

Mountain Cock.—See Grouse, Wood.

[**Mountain Finch.**—See Brambling.]

[**Mountain Linnet.**—See Twite.]

MOUNTAIN SPARROW.

[Mountain Sparrow.—See Sparrow, Tree.]

[Moustache Tern.—See Tern, Whiskered.]

Muggy.—See Whitethroat, Common.

[Mullet Hawk.—A provincial name of the Osprey, as communicated to Mr. Yarrell by the Earl of Malmesbury.]

Mumruffin.—See Titmouse, Long-tailed.

NIGHTINGALE.

Murdering Bird. } See Shrike, Cinereous.
Murdering Pie. }

Murre.—See Guillemot, Foolish; and Razorbill.

[Mute Swan.—The common domesticated Swan, not given by Colonel Montagu as a British bird.]

N.

Nettle-Creeper. } See [Blackcap and]
Nettlemonger. } Whitethroat.

Night Hawk.—See Goatsucker.

[Night Heron.—See Heron, Night.]

Nightingale.—[Yarrell, i. 318; Hewitson, xxxiii. 124.] *Motacilla Luscinia*, Lin. Syst. i. p. 328, 1; Gmel. Syst. ii. p. 950; Raii Syn. p. 78, A. 2; Will. p. 161, t. 41; Bris. iii. p. 397, 13; Ib. 8vo, i. p. 420. *Sylvia Luscinia*, Ind. Orn. ii. p. 506, 1; Lath. Syn. Sup. ii. p. 233; Bewick, Br. Birds, i. t. p. 206. Le Rossignol, Buf. v. p. 81, t. 6, f. 1. Nightingale, Br. Zool. i. No. 154; Ib. fol. 100, t. 8, 1, f. 2; Arct. Zool. p. 416, A.; Will. Angl. p. 220, t. 41; Albin, iii. t. 53; Ib. Song Birds, t. p. 67; Lath. Syn. iv. p. 408, 1; Ib. Sup. p. 180; Lewin, Br. Birds, iii. t. 99; Walc. Syn. ii. t. 229; Pult. Cat. Dorset. p. 8; Don. Br. Birds, v. t. 108.—This species of Warbler is about the size of the Sky Lark, but of a more slender and elegant form. Its weight is six drams; length near seven inches. Bill brown; irides hazel. The head and upper parts of the body pale tawny; the under parts cinereous-brown; tail deep tawny red; quills brown; the outer webs reddish brown; legs long, and of a light brown. The female is rather less, but in plumage both sexes are nearly alike. This is the largest species of the Warbler genus; it appears with us sometimes in April, but most commonly not till the beginning of May. The females do not arrive till a week or ten days after the males; so that on the first arrival of these birds none but males are caught, which has given rise to a supposition that the proportion of males are greater than those of the other sex. But was this the case, those males who were not fortunate enough to procure a mate would sing all the summer through; whereas they are all silent by the latter end of June. If by accident the female is killed, the male

assumes his song again, and will continue to sing very late in the summer, or till he finds another mate. This we have proved by taking the female on her nest, when the male assumed his usual vociferous notes, which attracted another female. In birds that pair there is no doubt nature has given an equal proportion of both sexes; and yet, what is extraordinary and unaccountable, if either sex is destroyed before the great demand of nature is perfected, the remaining sex generally finds a second mate. This we have observed in many species; and Mr. White, in his 'History of Selborne,' remarks the same with respect to Partridges. The male Nightingales, as well as all the migrative species of Warblers, never quit the place they first resort to, but attract the females by their song. It is probable, therefore, that such females as have not at first paired, or by accident lose their mate, are continually wandering in search of the other sex. The local situation of this bird, as well as many others, is probably occasioned by a peculiarity of food, which may be found in some places, and not in others. The Nightingale is said to be found only as far north as Yorkshire; and certainly not farther west than the eastern borders of Devonshire; although they are plentiful both in Somersetshire and Dorsetshire. Why they should not be found in all the wooded parts of Devonshire and Cornwall, which appear equally calculated for their residence, both from the mildness of the air and variety of ground, is beyond the naturalist's penetration. The bounds prescribed to all animals, and even plants, is a curious and important fact in the great works of Nature. It has been observed that the Nightingale may possibly not be found in any part but where cowslips grow plentifully; certainly with respect to Devonshire and Cornwall this coincidence is just. This bird resides wholly in woods and thickets, and so concealed that it is seldom seen. It prepares

a nest the latter end of May, made of dry leaves, generally of the oak, and lined with dry grass, usually placed on the ground amongst the same materials with which it is composed; so that it is not easily discovered. The eggs are four or five in number, of a uniform dark brown colour, rather larger than those of a Hedge Sparrow; their weight about forty-seven grains. As soon as the young are hatched its song ceases, and it is no more heard during the remainder of its stay with us. It is a mistaken notion that this or any of the later breeding birds have a second brood in the same season; and we may be assured whenever a later brood than usual is found some accident has befallen the first. We have before asserted that the song of birds is the effusion of love; and though there are some who frequently sing in the autumn, and even in winter, if the weather is mild, it does not follow they have a nest; but their testes will always be found enlarged: these are only such as are early breeders, the Redbreast, Wren, and Wood Lark. Mr. Pennant has been very diffuse on the subject of this bird, in his usual elegant manner; but as we confine our pen to the facts of Natural History, as far as relates to birds in this country, we must refer our readers to the 'British Zoology' for the more elegant and classical information. The variety of this bird's notes certainly exceeds all others. Of a still summer's night, when all is hushed in silence, the vocal powers of the Nightingale are most distinctly heard: in confinement it is much longer in song; but it is much to be questioned if its notes are so strong and pure. The young are difficult to be raised by hand; at first they are fed with mealworms, and afterwards with sheep's-heart boiled. The winter residence of this bird is said to be in Asia, and that it migrates as far north as Siberia, and is found at Kamtschatka. Has not been noticed in Ireland.

SUPPLEMENT.—We took a nest of young Nightingales early in June, and placed them in a cage in order to observe what they were fed with by the parent birds, and which appeared to be principally small green caterpillars. Mr. Dickinson, who resides in Warwickshire, on the borders of Shropshire, is clearly of opinion the Nightingale does not visit that part of the country. We could not discover this bird in Lincolnshire, although the Greater Petychaps, and Lesser Whitethroat were not uncommon; possibly this defect may be occasioned by the want of wood; for near Peterborough, in Northamptonshire, on the borders of Lincolnshire, several were heard; and from thence to Oundle plentiful, where it was wooded and enclosed.

In Whitlebury Forest frequent, as well as the other Warblers before mentioned. By experience we learn that this as well as other birds accidentally vary from their line of migration, or extend beyond their usual limits. Thus, for the first and only time, we heard this charming bird in the south of Devon, near Kingsbridge, pouring forth his matchless song, on the 4th of May, 1806, to our great astonishment; but to our no small mortification (though expected) he did not remain longer than one day. We have been told the Nightingale has been noticed about Doncaster, in Yorkshire, the limits hitherto prescribed to its northern range in England. But in the 'Tyne Mercury' for the beginning of August, 1808, the following paragraph appeared, and was copied into the 'Sun' and other papers:—"It may be worthy of remark, that the Nightingale has been heard frequently during the present summer in the garden belonging to the Earl of Lonsdale, in Fisher Street, Carlisle. We have heard it observed that this bird was never farther north than Yorkshire, nor more to the west than Devonshire. Our woods are rendered melodious by the Thrush, the Linnet, and the Blackbird; but like the groves of Scotland, we believe they were never before visited by the sweet and tender strains of this nocturnal Warbler." Although the Nightingale finds the South of England most congenial, and has perhaps never been observed north of the Tweed, yet on the continent of Europe it is not uncommon much farther north than any part of Scotland. Is said to breed in Sweden, and Germany near Dresden. Is mentioned as being common in the most eastern parts of Egypt; and at the time of migration is plentiful in the islands of the Archipelago. Is also plentiful in lower Egypt in the winter; in different parts of the Delta, amongst the thickest coverts, several were observed; but they did not sing, but only used the common note of alarm so frequently heard in England, especially when any one approaches their nest. They arrive in Egypt in autumn, and depart in spring. (Sonnini's 'Travels into Egypt,' ii. p. 51). A very curious account of the keeping and feeding Nightingales, by a gentleman of Highgate, related in the 'Monthly Magazine,' for 1808, may be perused with advantage by those who wish to preserve these birds in health.

Night Jarr.—See Goatsucker; and Shrike, Cinereous.

[Noddy.—See Tern, Noddy.]

Nope.—See Finch, Bul.

[Norfolk Plover. — See Bustard, Thick-kneed.]

[Northern Diver.—See Diver, Northern.]

Nun.—See Titmouse, Blue.

Nutcracker.—[Yarrell, ii. 130]. *Corvus caryocatactes*, *Lin. Syst.* i. p. 157, 10; *Gmel. Syst.* i. p. 370; *Raii Syn.* p. 42, 5; *Will.* p. 90, t. 20; *Ind. Orn.* i. p. 164, 39; *Shaw, Zool.* vii. p. 353, t. 43; *Bewick, Br. Birds.* i. t. p. 82. *Nucifraga*, *Bris.* ii. p. 59, 1, t. 5, f. 1; *Ib.* 8vo, i. p. 171. *Casse-noix*, *Buf.* iii. p. 122, t. 9. Nutcracker, *Br. Zool. App.* t. 1; *Arct. Zool.* ii. p. 252, D.; *Will. Angl.* p. 132, t. 20; *Edw.* t. 240; *Lath. Syn.* i. p. 400, 38; *Sup.* p. 82; *Lewin, Br. Birds.* t. 40; *Walc. Syn.* i. t. 38; *Don. Br. Birds.* iv. t. 80. — This species of Crow is about the size of a Magpie; length thirteen inches. The bill is two inches long, nearly strait, and black; irides hazel. The feathers that reflect over the nostrils are bordered with brown; upper part of the head and nape of the neck black; the general colour of the plumage rusty brown, marked with triangular white spots, which are larger on the under parts; the vent white; quills and tail black, the last tipped with white; legs black. These birds are said to vary in size; and a variety is mentioned spotted black and white. It is a rare species in England; two instances only on record: one shot in Flintshire, the other in Kent. Most frequent in Germany; found also in Sweden and Denmark; said to visit Burgundy in vast flocks. The Nutcracker is said to lay up a store of acorns and nuts for winter; but we much doubt the fact, as no animal but such as become partly torpid in cold weather require such a provision. Such stores are most probably the collection of dormice, or some such animals, which being found by this bird is plundered. The same faculty is attributed to the Jay and Nuthatch; but they only rob the granary of mice, who frequently deposit their winter store in the hollow of a tree; such as beans, peas, corn, nuts, and acorns. This bird, whose partial food seems to be the kernels of nuts, most probably breaks the shell in the manner of the Nuthatch, by hacking a hole in it, or splitting the shell by reiterated strokes of the bill, for which that part seems better calculated than for cracking it by compression, as the Grosbeak breaks the stones of the haw, whose bill is short and strong, and furnished with muscles of prodigious strength. It is said in some parts to keep chiefly in the pine forests, probably for the sake of the seed of that tree. Is also said to make its nest in the hole of a tree, which it

perforates, or at least enlarges what has already been begun by the Woodpecker: the bill seems not ill suited to this purpose. Is found common in the pine forests of Russia and Siberia, and all over Kamtschatka.

SUPPLEMENT. — Mr. Anstice assures us he saw one of this rare species near Bridgewater, upon a Scotch fir, in the autumn of 1805. This accurate observer of nature could not be deceived, as he examined the bird, and attended to its actions for some time with the aid of a pocket telescope, which he usually carries with him for similar purposes. In August, 1808, one of these birds was shot in the north of Devon, now in the collection of Mr. Comyns. Another is stated to have been shot in Cornwall. ('Monthly Magazine' for December, 1808). [In the 'Zoologist' for 1845, at p. 824, Mr. W. R. Fisher mentions a peculiarity in the beak of a Nutcracker killed at Rollesby, near Yarmouth; the upper mandible projected considerably beyond the lower: its stomach contained nothing but the remains of coleopterous insects. In the same volume Mr. Borrer records, at p. 868, that a Nutcracker was obtained at Alfristone, in Sussex, in May, 1833. At p. 1073 Mr. Fisher figures the specimen killed at Rollesby, together with the beaks of two supposed species, for which the names of *Nucifraga caryocatactes* and *N. brachyrhynchus* have been proposed by De Selys Longchamps, the former having the beak long and slender, and the upper mandible considerably longer than the lower; and the latter having the beak much shorter, much stouter, and the mandibles of equal length.]

Nuthatch. — A genus of birds, the characters of which are: Bill strait, strong, sharp-pointed. Nostrils covered with reflected bristles. Tongue short, horny, and jagged at the end. Toes three forward, one backward; middle toe closely joined at the base to the others; back toe as large as the middle one.

Nuthatch, European.—[Yarrell, ii. 188; Hewitson, lxii. 247.] *Sitta Europæa*, *Lin. Syst.* i. p. 177, 1; *Gmel. Syst.* i. p. 440; *Raii Syn.* p. 47, A. 4; *Will.* p. 98, t. 23; *Ind. Orn.* i. p. 261, 1; *Bris.* iii. p. 588, 1, t. 29; *Ib.* 8vo, i. p. 474. La Sittelle, ou Torchepot, *Buf.* v. p. 460, t. 20. Nuthatch, *Br. Zool.* i. No. 89, t. 38; *Ib.* fol. 81, t. H.; *Arct. Zool.* ii. No. 170; *Will. Angl.* p. 142, t. 23; *Albin.* ii. t. 28; *Lewin, Br. Birds.* ii. t. 53; *Lath. Syn.* ii. p. 648; *Sup.* p. 117; *Walc. Syn.* i. t. 51; *Pult. Cat. Dorset.* p. 5; *Don. Br. Birds.* iv. t. 81. Provincial: Nutjobber; Woodcracker. — This is the only species met with in England. It is

about the size of a Sparrow; length near six inches; weight rather more than six drams. The bill is about three-quarters of an inch long, both mandibles equally convex, and a little compressed sideways; the upper one dusky, lower one whitish at the base; irides hazel. The crown of the head and whole upper parts of the body are of a bluish grey; from the upper mandible through the eye is a black streak passing backwards down the neck; chin and cheeks whitish; breast and belly buff-colour; sides and thighs ferruginous chestnut; quills dusky; under coverts of the tail white, margined with ferruginous; tail short, composed of twelve feathers, but not stiff, as in the Woodpeckers; the two middle ones bluish grey; the outer one is black, tipped with grey, separated by a white bar; the second nearly the same, but the spot of white is only on the inner web; the rest are black, more or less marked with a little grey and white at the ends; legs pale yellowish; claws large; the hind one very strong. The female is lighter coloured beneath, especially about the sides and thighs. The singular noise produced by some species of Woodpeckers, by reiterated strokes of the bill against the decayed limb of a tree, has been erroneously ascribed to this bird. It remains with us the whole year, but is a local bird, and not to be found in several parts of the kingdom. We have never observed it far north, nor so far west as Cornwall. It chiefly affects wooded and inclosed situations, choosing the deserted habitation of a Woodpecker in some tree for the place of nidification. This hole is first contracted by a plaster of clay, leaving only sufficient room for itself to pass in and out. The nest is made of dead leaves, most times those of the oak, which are heaped together without much order. The eggs are six or seven in number, white, spotted with rust-colour, so exactly like those of the Great Titmouse in size and markings that it is

impossible to distinguish a difference. If the barrier of plaster at the entrance is destroyed when they have eggs, it is speedily replaced; a peculiar instinct to prevent their nest being destroyed by the Woodpecker and other birds of superior size who build in the same situation. No persecution will force this little bird from its habitation when sitting; it defends its nest to the last extremity, strikes the invader with its bill and wings, and makes a hissing noise; and, after every effort of defence, will suffer itself to be taken in the hand rather than quit. The Nuthatch is more expert in climbing than the Woodpecker, for it runs in all directions up and down a tree; whereas the other is never observed to descend. The stiff tail of those birds support them in the act of climbing and hacking. The flexible tail of the Nuthatch gives it no such advantage, nor does it seem to want it, for its most favourite position, when breaking a nut, is with the head downwards. In the autumn it is no uncommon thing to find, in the crevices of the bark of an old tree, a great many broken nut-shells, the work of this bird, who repeatedly returns to the same spot for this purpose. When it has fixed the nut firm in a chink, it turns on all sides in order to strike it with most advantage. This, with the common hazel-nut, is a work of some labour; but it breaks a filbert with ease. In defect of such food, insects and their larvæ are sought after amongst the moss on trees and old thatched buildings. It is commonly met with about orchards, and is sometimes seen in the cyder season picking the seeds from the refuse of the pressed apples. The note is various; in the spring it has a remarkable loud, shrill whistle, which ceases after incubation; in the autumn a double reiterated cry.

Nutjobber.—See Nuthatch.

O.

Oar Cock.—See Rail, Water.

Oat-Fowl.—See Bunting, Snow.

Oke.—See Auk, Black-billed; and Razorbill.

[Olivaceous Gallinule.—See Gallinule, Olivaceous.]

Olive.—See Oyster-catcher.

[Orangelegged Hobby. } See Falcon,
[Orangelegged Falcon.] Redfooted.]

Oriole.—A genus of birds, the characters of which are: Bill strait, conic, sharp-pointed; edges cultrated, inclining inwards; mandibles of equal length. Nostrils small, partly covered. Tongue divided at the end. Toes three forward, one backward; middle one joined near the base to the outmost.

Oriole, Golden.—[Yarrell, i. 237; Hewitson, xxvi. 94.] *Oriolus Galbula*, *Lin. Syst.* i. p. 160, 1; *Gmel. Syst.* i. p. 382; *Ind. Orn.* i. p. 186, 45; *Lath. Syn. Sup.* ii. p. 126; *Nat. Miscel.* viii. t. 285; *Shaw, Zool.* vii. p. 408, t. 53. *Galbula*, *Raii Syn.* p. 68, 5; *Will.* p. 147, t. 36, 38. *Oriolus*, *Bris.* ii. p. 320, 58; *Ib.* 8vo, i. p. 247. *Le Lorient*, *Buf.* iii. p. 254, t. 17. Yellow Bird from Bengal, *Albin*, iii. t. 19. Witwall, *Will. Angl.* p. 198. Golden Thrush, *Edw.* t. 185. Golden Oriole, *Br. Zool. App.* 4, t. 4; *Lewin*, *Br. Birds*, ii. t. 43; *Lath. Syn.* ii. p. 449, 43; *Ib. Sup.* p. 89; *Don. Br. Birds*, i. t. 7.—This is the only species ever found in England, a few instances of which are only on record. It is about the size of a Blackbird; length nine inches and a half. The bill is brownish red; irides red. General colour of the plumage fine golden yellow; between the bill and eye a streak of black; the wings black, marked here and there with yellow, and a patch of the same in the middle of the wing; the two middle feathers of the tail are black, inclining to olive at the base, the very tips yellow; the base half of the others black, the rest yellow; legs lead-colour; claws black. The female is of a dull greenish brown in those parts where the male is black; wings dusky; tail dirty green; all but the two middle feathers yellowish white at the ends. This beautiful bird is not uncommon in France, where it breeds. The nest is curiously constructed, in shape like a purse: it is fastened to the extreme forked branches of tall trees, composed of fibres of hemp or straw, mixed with fine dry stalks of grass, and lined with moss and liverwort. The eggs are four or five in number, of a dirty white, marked with small dark brown spots, which are thickest about the larger end. She is said to be so tenacious of her eggs as to suffer herself to be taken with the nest. Their food is figs, grapes, and cherries, in the season; at other times insects. Their note is a loud, shrill cry, which may be heard at a great distance. It is found in various parts of the European continent during the summer months, but rarely so far north as England or Sweden; has been observed in Malta in September on its passage southward, and on its return in the spring northward; supposed to winter in Africa and Asia. Is met with in China and Bengal, as well as at the Cape of Good Hope.

SUPPLEMENT.—In the 'Monthly Magazine' for December, 1809, mention is made of two having been shot in Cornwall. The nest of the Golden Oriole, figured by Sepp, appears to be composed of pale moss mixed with feathers. In the first plumage the males resemble the other sex. Are said

to inhabit the greater part of the old Continent, migrating from one part to another at different seasons: in their passage through Egypt, which is of short duration, they are there taken for food. Is supposed to be the Mango-bird of India. [In the 'Zoologist' for 1845 the Rev. J. Pemberton Bartlett records, at p. 824, an instance of the Golden Oriole breeding at Ord, in East Kent, in June, 1836; the young were taken, but could not be brought up by hand; two years previously several young Orioles were shot in the neighbourhood. In the same volume, at p. 868, Mr. Borrer informs us that three males were shot near Alfristone, Sussex, in May, 1833. In the volume for 1849 Mr. Ellman informs us, at p. 2496, that a pair of Orioles nested at Elmstone, in Kent, during the summer of that year; the nest, eggs and parent birds were all obtained; the nest was suspended from the top branch of an oak tree, and was composed of wool carefully bound together with dried grass; there were three eggs, pure white mottled with black. In the volume for 1865 Mr. Rodd records, at p. 9616 and 9617, the occurrence of several specimens in the Scilly Islands in April of that year. There is not the least doubt these beautiful birds would breed freely in this country were they not wantonly destroyed immediately on their arrival.]

Orpheus Warbler.—See Warbler, Orpheus.

[Ortolan.—See Bunting, Greenheaded.]

Osprey.—[Yarrell, i. 30; Hewitson, vi. 19.] *Falco Haliaetus*, *Lin. Syst.* i. p. 129, 26; *Gmel. Syst.* i. p. 263; *Ind. Orn.* i. p. 17, 30; *Bewick, Br. Birds*, t. p. 13; *Shaw, Zool.* vii. p. 82. *Morphnos*, seu *Clanga*, *Raii Syn.* p. 7, 6; *Will.* p. 32; *Ib. Angl.* p. 63. *Baldbusardus Anglorum*, *Raii Syn.* p. 16, A. 3; *Will.* p. 37; *Ib. Angl.* p. 69, t. 6. *Baldbuzard*, *Buf.* i. p. 103, t. 2; *Bris.* i. p. 440, 10, t. 34; *Ib.* 8vo, p. 126. *Osprey*, *Br. Zool.* i. No. 46; *Ib.* fol. p. 65, t. A. 1; *Arct. Zool.* ii. No. 91; *Lewin, Br. Birds*, i. t. 5; *Lath. Syn.* i. p. 45; *Sup.* p. 13; *Walc. Syn.* i. t. 5; *Pult. Cat. Dorset.* p. 2; *White, Hist. Selb.* p. 97; *Don. Br. Birds*, iii. t. 70. Provincial: Fishing Hawk; Fishing Eagle; Bald Buzzard.—This large species of Falcon weighs between four and five pounds; length near two feet. The bill is black; cere blue; irides yellow. The feathers on the head are brown, with white margins; the back part of the head, throat, and neck white, with a little mixture of brown; beneath the eye is a band of brown reaching almost to the shoulder; the body is brown above, the under parts

are white; the feathers of the tail are transversely barred with white on the inner webs, except the two middle ones, which are wholly brown; legs short, strong, naked, of a bluish ash-colour; claws long, much hooked, and black; the outer toe turns easily backwards; and, what is remarkable, the claw belonging to it is larger than that of the inner toe. These birds seem to vary a little in plumage; that from which Mr. Pennant took his description had a spot of white on the joint of the wing next the body; the breast spotted with dull yellow; the greater quills black; the interior webs varied with brown and white. This species is now rarely met with in England; it resides chiefly near water, especially large rivers and lakes. Its principal food is fish, which it catches with great dexterity, by pouncing on them with vast rapidity, and carrying them off in its talons. We are informed it is frequently seen about the Lake of Killarney, in Ireland, at particular seasons; no doubt breed there. It is said to make its nest generally on the ground by the side of water, composed of flags and rushes; but we once saw the nest of this bird on the top of a chimney of a ruin in an island on Loch Lomond, in Scotland: it was large and flat, formed of sticks laid across, and resting on the sides of the chimney, lined with flags. It is said to lay three or four white eggs, of an elliptical form, rather less than those of a Hen. Many of the ancient writers have described this bird to have one foot subpalmed; a circumstance that has never occurred in any animal; each side always corresponds in size and shape. The Osprey can neither swim nor dive, but takes its prey as they approach the surface of the water.

SUPPLEMENT.—This species of Falcon seems to be more plentiful in Devonshire than any part of the kingdom; for many years past one or two within our knowledge have been shot almost every year: three have come under our inspection since the year 1805, and these were all males, weighing from three pounds six ounces to four pounds. These were nearly similar in plumage, but as they are somewhat different from that described in the former part of this work, which was probably a female, it may be proper to describe a male. Length about two feet; breadth about five feet six inches. The sides of the head behind the eyes are white, extending to the hind head, at which part it is mixed with brown: on the chin a few slender dusky streaks: across the upper breast a very broad band of brown, the feathers margined paler: all the other parts beneath white, like the former. The upper parts also like the

former: the quills dusky, some that had not been moulted are brown: the tail dusky brown, the pale bars not very conspicuous on the upper side: the legs and toes are remarkably roughened with scales, and on the inner side of the extremity of the outer toe are two or three spines. This was shot in July. Another shot in November has the plumage much brighter; the upper parts darker, being dusky brown, and all the feathers on those parts, even the quills, are slightly tipped with yellowish white: the dark streak or patch behind the eye is destitute of white tips to the feathers: the under parts like the last. The third, shot in October, is like that killed in November. In the Falcon tribe it is usual for the feathers on the thighs to be long, and hang down below the knees; but in this the feathers on those parts are remarkably short, and consequently better adapted for submersion, or pouncing on its scaly prey. The roughened feet and the unusual disposition of the talons, which are formidable, greatly contribute towards securing it. Short downy feathers continue half-way down the front of the legs, but not behind. An Osprey was seen to stoop and carry off a young Wild Duck, half-grown, from the surface of the water at Slapton Ley; the Duck by struggling fell from the talons of the Eagle, but was again recovered before it reached the water. Near the above lake a specimen that was shot in October, 1809, was found to be plentifully gorged with perch. As we were crossing the bridge over the river Avon, at Aveton Gifford, on the 9th of April, 1811, we observed an Osprey hawking for fish; at last its attention was arrested, and, like the Kestrel in search of mice, it became stationary, as if examining what had attracted its attention. After a pause of some time, it descended to within about fifty yards of the surface of the water, and there continued hovering for another short interval, and then precipitated itself into the water with such great celerity as to be nearly immersed. In three or four seconds the bird rose without any apparent difficulty, and carried off a trout of moderate size, and, instead of alighting to regale upon its prey, it soared to a prodigious height, and did not descend within our view. This bird flies heavily, not much unlike the common Buzzard; but not unfrequently glides slowly with motionless wing. When examining the water for prey, its wings are in continual motion, although it remains stationary for a considerable time; its superior weight, perhaps, renders it difficult to continue suspension in the air, with an almost imperceptible motion of the wings, like the Kestrel. Possibly the Osprey was formerly trained for

hawking of fish, as we find, by an act passed in the reign of William and Mary, persons were prohibited at a certain period of the year, from taking any salmon, salmon-peal, or salmon-kind, by Hawks, racks, gins, &c.

Ouzel, Black.—See Blackbird.

Ouzel, Mountain.—See Ouzel, Ring.

Ouzel, Penrith. — SUPPLEMENT. — *Lath. Syn. Sup.* ii. p. 177; *Br. Zool.* Ed. v. i. f. p. 399. — Dr. Latham has described a bird, in his second Supplement to the 'General Synopsis,' under the above title. It is said to be superior in size to the common Water Ouzel; the head and whole upper parts dusky: chin and throat white: at the bottom of the last a bar of dusky: breast, belly, and thighs white, with short black streaks pointing downwards, more numerous towards the lower belly and thighs: vent rusty yellow, crossed with bars of black: legs rusty yellow. The Doctor observes that he took the account out of the late Mr. Pennant's notes of a journey from Downing to Ashton Moor, in which is painted a figure of the bird. Mr. Pennant thought it to be a new species; and is said to be found about Penrith: was given to Mr. Pennant by Miss Calvin. A single instance of a bird being found in England of so considerable a size, not noticed in any other part of the world, must be received as a distinct species with great caution: indeed we have scarcely a doubt but the bird in question is actually a *lusus* variety of the Water Ouzel.

APPENDIX. — We are glad to find that the Editor of the late Edition of Pennant's 'British Zoology' has justly considered this bird as a variety of the Water Ouzel; but we are rather surprised to observe that the *cinclus* has changed its place, as Mr. Pennant originally removed it from the genus *Sturnus* to that of *Turdus*, to the last of which it is more nearly allied, though in fact it should constitute a distinct genus.

Ouzel, Ring. — [*Yarrell*, i. 228; *Hewitson*, xxv. 93.] *Turdus torquatus*, *Lin. Syst.* i. p. 296; *Gmel. Syst.* ii. p. 832; *Ind. Orn.* i. p. 343, 56; *Bewick, Br. Birds*, i. t. p. 96. *Merula torquata*, *Bris.* ii. p. 235, 12; *Ib.* 8vo, i. p. 223; *Raii Syn.* p. 65, A. 2; *Will.* p. 143, t. 37. Le Merle à plastron blanc, *Buf.* iii. p. 340, t. 31. Ring Ouzel, or Amsel, *Br. Zool.* No. 110, t. 46; *Ib.* fol. 92, t. P. 1, f. 1; *Arct. Zool.* ii. p. 344, H.; *Will. Angl.* p. 194; *Albin*, i. t. 39; *Lewin, Br. Birds*, ii. t. 62; *Lath. Syn.* iii. p. 46, 49; *Ib. Sup.* p. 141; *Walc. Syn.* ii. t. 202; *Pult. Cat. Dorset.* p. 10; *White, Hist. Selb.*

p. 34, 56, 66, 71, 84, 96; *Don. Br. Birds*, iii. t. 61. Provincial: Rock, or Mountain Ouzel; Michaelmas Blackbird; Tor Ouzel. — This species of Thrush is rather larger than the Blackbird; length about eleven inches. Bill dusky; irides hazel. The general plumage is black; the feathers on the upper parts are slightly margined with ash-colour, those of the rump and belly deeply bordered with grey; on the breast is a large patch of white, somewhat in the shape of a crescent, with the horns pointing upwards. This mark, however, is subject to much variation; in some it is of a light brown, in others wholly wanting: the former is generally the female, the latter young birds not arrived at maturity. This is not a common species in England, but are sometimes seen in small flocks in different parts in the spring and autumn, migrating from one part to another: in such cases they remain but a short time in a place. It is generally believed they do not winter with us, but are known to breed in many of the barren and mountainous parts, particularly in Scotland and the north of England, as well as in some parts of Wales, on Dartmoor in Devonshire, and near the Land's End in Cornwall. We have also received it from the mountainous parts of Ireland. It is said to be found in many parts of the old continent, both in the warmer as well as colder regions; also in Africa and Asia; and in all these places noticed as migratory. The nest is generally placed on the ground, under some small bush; is formed like that of a Blackbird; and the eggs, in number, size, and colour, are much like those of that bird. It is rarely that more than one pair are seen near the same spot in the breeding season. They are very clamorous when disturbed, especially when they have young. Their food is snails, insects, and berries, particularly those of the juniper. The young birds, before the white on the breast appears, have been considered as a different species, under the name of Rock Ouzel; and, in the 'Catalogue of Dorset Birds,' we are told these birds appear in Portland in their spring and autumnal flights, and are there called Michaelmas Blackbirds.

SUPPLEMENT. — By Mr. Ray's account this bird has been called the Heath Thristle, in Craven. A specimen shot in the neighbourhood of Kingsbridge, on the 25th of March, may be supposed to be in full plumage. It weighed full four ounces, and was eleven inches in length. The bill was partly orange-yellow, especially the under mandible, all but the tip; the point and the base of the upper mandible more dusky: irides dark hazel: the whole upper part of the bird is black, with

scarcely any grey on the margins of the feathers: tail also black: the quills and wing-coverts dusky, more or less bordered with pale grey, most so on the secondaries and their larger coverts: the under parts black, with cinereous edges to the feathers on the body and under tail-coverts: gorget pure white: under wing-coverts pale brown, with broad grey margins: legs dusky brown. It is probable the young birds do not attain the pure white on the breast till the following spring, and at that time the bill becomes partly yellow, perhaps completely so in old birds, as in the Blackbird. Those that are destitute of the mark on the breast are probably in their nestling feathers, which usually change in part before they leave us in the autumn, unless a very late brood: indeed as late as the 26th of September we have seen a specimen with scarcely any appearance of the gorget; the feathers on the breast were only a trifle paler than the rest of the body: Portland Island, in Dorsetshire, seems to be one of the points from which these birds take their departure, when they go to the Continent to winter; and also a landing-place on their return in the spring. Our late friend Mr. Bryer, of Weymouth, assured us that in the autumn of the year 1802 these birds were more numerous than usual in their autumnal visit to Portland.

Ouzel, Rock.—See Ouzel, Ring.

Ouzel, Rosecoloured. — [Yarrell, ii. 52; Hewitson, lv. 217.] *Turdus roseus*, *Lin. Syst.* i. p. 294, 15; *Gmel. Syst.* ii. p. 819; *Ind. Orn.* i. p. 344, 59; *Nat. Miscel.* t. 231; *Bewick, Br. Birds*, i. p. 85. *Turdus Seleucis*, *Gmel. Syst.* ii. p. 837. *Merula rosea*, *Raii Syn.* p. 67, 9; *Will.* p. 143; *Bris.* ii. p. 250, 20; *Ib.* 8vo, i. p. 228. *Merle couleur de rose*, *Buf.* iii. p. 348, t. 22. Rose-coloured Thrush, or Ouzel, *Br. Zool. App.* No. 5, t. 5; *Arct. Zool.* ii. p. 344, G.; *Will. Angl.* p. 194; *Edw.* t. 20; *Lewin, Br. Birds*, ii. t. 64; *Lath. Syn.* iii. p. 50; *Ib. Sup.* p. 142; *Walc. Syn.* ii. t. 203; *Pult. Cat. Dorset.* p. 11. [Rose-coloured Pastor of Selby, Jenyns, Gould and Yarrell.] — This beautiful species of Thrush is rather less than the Blackbird; length near eight inches. Bill three-quarters of an inch long, a little bent, of a flesh-colour, blackish at the base; irides pale. The head, which is crested, neck, wings, and tail are black, glossed with blue, purple, and green, as viewed in different lights; back, rump, breast, belly, and lesser wing-coverts pale rose-colour, with a few irregular dark spots; legs pale red; claws crooked and brown. These birds vary considerably with respect to the shades of the roseate-colour; some are much darker than others; the females are

pale. It is rarely met with in England. There are, however, several instances on record: about Ormskirk, in Lancashire, one or two is said to be shot almost every season. In France it is more frequent, especially about Burgundy, in its passage to other parts. Is found also in many other parts of Europe, and in Asia. Said to visit Aleppo in great numbers in July and August in pursuit of the swarms of locusts; from which it is called Locust-bird, and is held sacred by the Turks. It is also seen in abundance in the south of Russia and in Siberia, where it is said to breed in the rocks about the rivers Don and Irtisch; is mentioned as a bird of Switzerland and Lapland; but probably is rare in the latter.

SUPPLEMENT.—In the 'Naturalist's Miscellany' mention is made of one of this species having been killed in Oxfordshire in the year 1794.

Ouzel, Tor.—See Ouzel, Ring.

Ouzel, Water. — [Yarrell, i. 191; Hewitson, xxii. 77.] *Sturnus cinclus*, *Lin. Syst.* i. p. 290, 5; *Gmel. Syst.* ii. p. 803; *Ind. Orn.* i. p. 343, 57. *Turdus cinclus*, *Bewick, Br. Birds*, ii. t. p. 16. *Merula aquatica*, *Raii Syn.* p. 66, A. 7; *Will.* p. 104, t. 24; *Bris.* v. p. 252, 19; *Ib.* 8vo, ii. p. 275. *Le Merle d'eau*, *Buf.* viii. p. 134, t. 11. Water Ouzel, *Br. Zool.* No. 111; *Ib.* fol. 92, t. P. 1, f. 2; *Arct. Zool.* ii. p. 332, B.; *Will. Angl.* p. 149, t. 24; *Albin*, ii. t. 39; *Lath. Syn.* iii. p. 48; *Sup.* p. 142; *Lewin, Br. Birds*, ii. t. 63; *Walc. Syn.* ii. t. 196; *Don. Br. Birds*, t. 24. Provincial: Water Crike; Water Crow; Piet; Dipper; Water Colly.—This singular bird, according to the latest authors, is placed in the Thrush genus, to which it certainly has more affinity than to the Stare. It is less than the Blackbird; length seven inches and a half. The bill is three-quarters of an inch long, nearly strait, black; the upper mandible a little turned down at the point; irides hazel. The upper part of the head and neck deep brown; the eyelids, chin, fore part of the neck, and breast white, beneath which is a band of rufous-brown; the rest of the upper parts, the belly, vent, and tail are black; the feathers on the back and wings are edged with ash-colour; legs black; the tail much shorter than is usual in the Thrushes. This species is a retired solitary bird, rarely seen but on the banks of rapid rocky rivers, or streams of water, particularly in the mountainous parts, as in Scotland and Wales; is not unfrequent in Devonshire. In these places it breeds, and continues the whole year. The nest is very large, formed of moss and water-

plants externally, and lined with dry oak-leaves; in shape it resembles that of the Wren, but not so deep, with a dome or covering; it is usually placed in some mossy bank impending the water, in which situation we have frequently found it. The eggs are five or six in number, of a semi-transparent white. The tinge of bluish colour which they are said to have is occasioned by the yolk, and disappears when they are blown. These are considerably less than those of the Blackbird; their weight rather more than one dram. A pair of these birds, which had for many years built under a small wooden bridge in Caermarthenshire, we found had made a nest early in May. It was taken, but had no eggs, although the bird flew out of it at the time. In a fortnight after they had completed another nest in the same place, containing five eggs, which was taken; and in a month after we took a third nest under the same bridge, with four eggs; undoubtedly the work of the same birds, as no others were seen about that part. At the time the last nest was taken the female was sitting, and the instant she quitted her nest plunged into the water, and disappeared for a considerable time; at last she emerged at a great distance down the stream. At another time we found a nest of this bird in a steep projecting bank over a rivulet clothed with moss. The nest was so well adapted to the surrounding materials, that nothing but the old bird flying in with a fish in its bill would have led to a discovery. The young were nearly full-feathered, but incapable of flight, and the moment the nest was disturbed they fluttered out and dropped into the water, and to our astonishment instantly vanished, but in a little time made their appearance at some distance down the stream; and it was with difficulty two out of five were taken, as they dived on being approached. The aquatic habits of this bird have not escaped the notice of many Ornithologists, some of whom speak of their flying under water. If, indeed, the wings being in motion can be called flying, it certainly does; but this is no more than is common to all diving birds, which, in pursuit of fish, or to escape danger, always use their wings to accelerate their motion. In this case, however, the wings are not extended, for that would retard their progress; but it is effected by short jerks from the shoulder-joint. Whether these birds can run at the bottom of the water, as some have asserted, is much to be doubted, as it is requisite all birds should use a considerable exertion to keep them under water, by reason of their specific gravity being so much less. It is certainly a most curious and singular

circumstance that a bird, not apparently in the least formed for diving, should pursue its prey under water, living chiefly on small fish and aquatic insects. It cannot, however, swim on the surface. The young birds which were taken showed no inclination to dive in a tub of water, but showed great uneasiness by struggling on the surface. They refused all food, and soon perished. These birds will sometimes pick up insects at the edge of the water; when disturbed it usually flirts up the tail, and makes a chirping noise. It sings prettily in the spring. Their flight is even and rapid, like the Kingfisher, as their wings are short. It is said to be met with in many parts of Europe, and even as far as Kamtschatka, and in some places is supposed to be migratory.

SUPPLEMENT.—This bird is amongst the few that sing so early in the year as the months of January and February. In a hard frost on the 11th of the latter month, when the thermometer in the morning had been at 26° , we heard this bird sing incessantly in a strong and elegant manner, and with much variation in notes, many of which were peculiar to itself, intermixed with a little of the piping of the Woodlark. At the time it was singing the day was bright, but freezing in the shade; the sun had considerably passed the meridian, and was obscured from the bird by the lofty surrounding hills. The Water Ouzel devours a considerable quantity of fishes' spawn, especially the large ova of salmon. According to Acerbi, is not found in Italy, but, in his travels through Sweden, he noticed it near Yervenkyle, in Finland, where he observed that during winter it flies near the cataract. We have seen the Water Ouzel walk into the water, and as it were sink beneath the surface, as if its specific gravity was actually greater than that element; but doubtless some exertion must be used to keep itself at the bottom, besides that of simple walking, or it would instantly rise and float on the surface; for, as well as all other birds, its specific gravity is greatly inferior to that of water. In one or two instances where we have been able to perceive it under water, it appeared to tumble about in a very extraordinary manner with its head downward, as if pecking something; and at the same time great exertion was used both by the wings and legs. The idea of any bird being capable of walking beneath a fluid so infinitely more dense than itself, does not require any depth of philosophical reasoning to refute. Birds, of all animals, have the least specific gravity, and consequently require great exertion to keep themselves under water. The Water Ouzel has been seen to float on

the surface of the water, and from thence dive.

APPENDIX.—The following description of a very elegant variety of this species was obligingly communicated to us by Mr. James Wilson, of Edinburgh, in whose collection the bird is preserved. Length about seven inches: the bill and irides as usual. The upper part of the head and neck are of a bluish black, with a slight mixture of brown, the middle of each feather being lighter than the margins; the back, scapulars, rump, and coverts of the wings bluish black, dashed with hoary grey, the middle of the feathers being of the latter colour; the primary and the secondary quills black, tipped with white: the tail wholly black: the throat, breast, and belly white, the extremity of each feather marked with a black semicircular line, which gives those parts a pretty, undulated appearance; these markings are fainter on the throat than on the other parts, and not the least appearance of the rufous band on the lower breast usual in the species: vent and thighs bluish black, the former with a mixture of white, the latter with brown: the legs and toes black. This bird was shot early in the spring, at Roslin, near Edinburgh. Another specimen, very similar to the above, which Mr. Wilson had an opportunity of examining, was shot in a different part of Scotland, at the commencement of the breeding season. It was in company with its mate, which appeared to be somewhat similar in plumage, but as it was never afterwards observed, that fact could not be ascertained. It will be recollected that a new species had been created out of another variety of the Water Ouzel, upon the authority of the late Mr. Pennant, called the Penrith Ouzel. That which we have just described has a better claim to specific distinction than the solitary instance described of the Penrith Ouzel: indeed it is remarkable that two specimens of the Scotch variety should be procured exactly similar. Such a circumstance might lead some periodical writers to constitute a new species, but we are inclined to the opinion of Mr. Wilson, that it is only one of those numerous variations incidental to the plumed part of the creation; and that we may fairly conclude it to be a *lusus* of *Turdus cinclus*.

Owl.—A genus of birds, the characters of which are: Bill strong, much hooked, but not furnished with a cere. Nostrils oblong; that and great part of the bill covered with bristly feathers. Head large; both ears and eyes large. Tongue bifid. Face surrounded by a series of small close-set feathers. Toes four, the outmost capable

of being turned backwards. Claws hooked, and very sharp-pointed. The exterior web of the outer quill-feather serrated.—The Owl is a nocturnal bird, mostly preying by night, or at least when most other birds are at roost. The pupil of the eye is capable of great extension; it is also furnished with a strong nictitating membrane, with which it frequently covers the eye when exposed to a strong light, instead of closing the eyelid. Some species occasionally prey by day when the weather is cloudy, but mostly by twilight, or by the light of the moon; for they can no more see in total darkness than any other animal.

Owl, Barn.—See Owl, White.

Owl, Black.—See Owl, Brown.

Owl, Brown.—Mr. Pennant has given, in his 'British Zoology,' a species under this denomination, and makes it distinct from the Tawny Owl; but says that both these kinds agree entirely in their markings, and differ only in the colours. In this the head, wings, and back are of a deep brown, spotted with black in the same manner as the Tawny Owl; the coverts of the wings and the scapulars are adorned with similar white spots; the exterior edges of the four first quill-feathers in both are serrated; the breast in this is of a pale ash-colour, mixed with tawny, and marked with oblong jagged spots; the feet too are feathered down to the very claws; the circle round the face is ash-coloured, spotted with brown. The colour of the irides is not mentioned by the above author; but as he seemed to be well acquainted with this bird, as he speaks of the manners and habits to be the same as the Tawny Owl, certainly he would have informed us if they had differed in that particular. Various have been the opinions concerning this bird; but we have no hesitation in declaring it to be a mere variety of the Tawny Owl, and not the female of that species, as some have conjectured; for we have found both sexes perfectly according with the above description, but most commonly females. What seems to place the matter beyond doubt is, that we have killed this bird with the Tawny Owl from the same nest. The young birds are also some tawny, others brown; but the latter is most probably the variety, not being so common. Dr. Latham has made the Tawny and Brown Owls distinct; but in his 'Index Ornithologicus' he has expressed his doubts. [It is difficult to conceive why two such Ornithologists as Pennant and Latham should have separated this from the Tawny Owl, which see.]

[Owl, Canada.—See Owl, Hawk.]

Owl, Church.—See Owl, White.

Owl, Churn.—See Goatsucker.

Owl, Eagle.—See Owl, Great-eared.

Owl, Fern. }
Owl, Goat. } See Goatsucker.

Owl, Great.—See Owl, Great-eared.

Owl, Great-eared.—[Yarrell, i. 121; Hewitson, xvii. 50.] *Strix Bubo*, *Lin. Syst.* i. p. 131, 1; *Gmel. Syst.* i. p. 286; *Ind. Orn.* i. p. 51, 1; *Raii Syn.* p. 24, 1; *Will.* p. 63, t. 12; *Bris.* i. p. 471, 1; *Ib.* 8vo, p. 139; *Lath. Syn. Sup.* ii. p. 55; *Bewick, Br. Birds.* i. p. 47; *Shaw, Zool.* vii. p. 211, t. 28; *Neill, Tour in Orkney*, p. 195; *Hist. of Orkney*, p. 312. Le grand Duc, *Buf.* i. p. 332, t. 22. Great-eared Owl, *Br. Zool.* i. No. 64, t. 19; *Ib.* fol. p. 4, t. 6; *Arct. Zool.* ii. No. 114; *Will. Angl.* p. 99, t. 12; *Albin*, iii. t. 6; *Lewin, Br. Birds.* i. t. 23; *Lath. Syn.* i. p. 116, 1; *Sup.* p. 40; *Walc. Syn.* t. 23. Provincial: Great, or Eagle Owl; Great Horned Owl; Stock Owl.—This species is almost equal to an Eagle in size. Irides bright yellow. The plumage of the whole bird is a mixture of black-ferruginous, brown, and cinereous, elegantly varied with lines, spots, and specks; the wings are very long, the second and third quill-feathers being the longest; tail short, marked with dusky bars; legs strong, covered thickly with a light-coloured down quite to the claws, which are strong, much hooked, and dusky. This bird is rarely met with in England; a few instances only are on record. It has been shot in Yorkshire and in Sussex, as well as in Scotland, but is more plentiful in Norway and other parts of Europe. Is said to inhabit mountainous and rocky situations, and not woods, being rarely known to perch on trees. It preys on hares, rabbits, moles, and other inferior animals; and even snakes and toads. The eggs are said to be larger than those of a Hen, mottled like the bird; and that only two are found in a nest. Dr. Latham has mentioned three varieties, one of which has the legs bare of feathers; and he considers the Black-winged Horn Owl of Albin to be a mere variety.

SUPPLEMENT.—This species seems to be pretty universally spread over both the old and new Continent. Levaillant met with it, as also the Long-eared Owl, on the borders of the Elephant's river, in Africa. It should seem this bird is well known in the Orkney islands, for, says Mr. Neill,

"In addition to Dr. Barry's account of this bird, it may be added, that it often attacks rabbits and Red Grouse, which are abundant in several of the islands." By the natives is called Stock Owl or Katogle, which is from the Norwegian name, Katugle. [In the 'Zoologist' for 1846 Mr. Hall records, at p. 1496, that a specimen of this noble Owl was caught in a hedge near Temple House, Hampstead, on the 3rd of November, 1845, in all probability an escaped bird: in the volume for 1849 Mr. Briggs states, at p. 2477, that several have been killed near Melbourne, in Derbyshire; and the Rev. Andrew Matthews mentions, at p. 2596, that two have occurred in Oxfordshire. Mr. Hewitson represents the egg as white and unspotted.]

Owl, Great Horned.—See Owl, Great-eared.

Owl, Grey.—See Owl, Tawny.

[Owl, Hawk.—Yarrell, i. 155; Hewitson, xviii. 65. *Strix funerea*, Chouette Caparacoch, *Temm. Man. d'Ornith.* i. 86; *Gould, Birds of Europe*, pl. 45.—"Facial disk small and incomplete, the inner feathers of each side projecting over and almost concealing base of bill and cere: nostrils large, oval, and placed obliquely at the margin of the cere: exposed portion of bill white: lower mandible horn-colour, nearly hid by the curling upwards of bristly feathers: eyebrows projecting; irides straw-colour: feathers of facial disk dull white, terminating in dark, purplish, black points, forming a curved band, extending from above external canthus of eye to lower edge of disk, and thence continued to front of wing. Just behind the ear is given off another, though less distinctly marked band, passing down to point of shoulder: chin and front of throat dusky; sides of throat nearly white, with black lines, giving them a strigose appearance: crown and back of head black, with numerous round white spots; each feather is furnished with three white spots on a black ground; on the nape of the neck the spots are larger, but less regular: upper part of the back and shoulders dull white, mottled with brownish black: back sepia-brown, irregularly blotched with white: primaries and secondaries sepia-brown; the former having four or five distinct and nearly equidistant white spots on outer web, towards the tips; the latter are adorned with large, nearly square, white spots on outer web, forming two or three irregular white lines; a few of the secondaries have white spots on their inner webs; tertials long and downy, with large, white spots on their outer webs, forming,

when the wing is closed, a broad elongated band of white, with a few transverse, irregular brownish bars: rump and upper tail-coverts umber-brown, with irregular white markings and a broad terminal white spot: tail seven inches and a half long, projecting three inches and a quarter beyond the closed wings, cuneiform, containing twelve feathers, of which the centre pair are one inch and a half longer than the outer; upper surface sepia-brown, with nine or ten whitish bars (three upper bars concealed by upper tail-coverts). A broad terminal white band. The bars are most strongly marked on the inner webs; the white is but slightly seen on the outer webs, and only in the form of indistinct spots. The striated appearance is best seen on the under surface, where the bars form, when the tail is expanded, eight or nine crescentic bands of dull white; when the tail is closed they form transverse bars: under tail-coverts with broad, white, and narrow brown bands: in front of the point of either wing is a blackish blotch, connected with the opposite with an irregular band of dull white feathers, having stripes and spots of sepia-brown; beneath this, and across upper part of breast, is a broad pale band, sparingly marked with brown: lower part of breast, belly, and sides dull white, with numerous transverse, slightly waved bars of hair-brown: legs and feet thickly covered with yellowish brown feathers, barred with dark brown: claws bluish black, long, curved, and sharp; middle claw furnished with a projecting sharp inner edge. Total length $14\frac{1}{2}$ inches; from point of wing to tip $9\frac{1}{2}$ inches; length of central tail-feathers $7\frac{1}{2}$ inches. First quill-feather shortest; third longest; fourth a little shorter; second less than fourth: feathers on under surface of wing white, with sepia-brown bands, which on some are regularly transverse, but in others the brown is placed alternately on inner and outer webs."—*Higgins, Zool.* 3029. In the 'Zoologist' for 1851 Mr. E. T. Higgins records, at p. 3029, that the only British-killed specimen of this bird "was shot on the 25th or 26th of August, 1847, about two o'clock in the afternoon (the sun shining bright at the time), whilst hawking for prey on Backwell Hill, near the Yatton Station, on the Bristol and Exeter Railway." Mr. Thompson records, in the 'Proceedings of the Zoological Society' for 1835, the capture of a Hawk Owl on board a collier brig a few miles off the coast of Cornwall, in March, 1830. The following note is from the pen of the late lamented Mr. John Wolley:—"The Hawk Owl is not uncommon [in Lapland]. It flies much in the daytime, and, with its long tail, short

wings and quiet flight has a very Hawk-like appearance in the air, when its large square head is not seen. Its cry near its nest is also similar to a Hawk's; and it often sits on the bare top of an old dead fir, to watch intruders, where it seems to have no idea that it can be in danger. It carries itself much after the fashion of the more regular Owls; but whilst all the feathers at the back give a great breadth to its full face, there is quite a 'table' at the top of its head. It casts its bright yellow eyes downwards with the true air of half-puzzled wisdom, or turns its head round for a leisurely gaze in another direction; to glance backwards is out of the question, and to look at any one with a single eye much beneath its dignity. I have seen it from my window fly down from its stand and take the mouse it caught back to the tree before it began to eat it; but it shifted its place several times before it found a convenient spot for finishing the meal. I do not know whether it is in the habit of hunting on the wing, but this year mice are so abundant that such exertion would be superfluous. When disabled from flight, it at once 'squares' itself for defence, putting on its most formidable countenance, guarding its back, and presenting its front to the enemy; silently and calmly it maintains its ground, or springs from a short distance on its foe. So, bravely it dies, without a thought of glory, or without a chance of fame, for of its kind there are no cowards. One day I heard a low noise in the woods which surprised me; I thought it must be the whine of a dog that was very eager, after some animal it could not get at; I even guessed it might be a wolf. After a careful stalk I came upon a family of Hawk Owls, one of which dropped a mouse as I fired. It was in the day time; they were very little alarmed, and I could have shot them all. I am told that they breed in 'tyllyrs.' I have not found a nest, but shall set up some convenient houses for them this autumn. 'Tyllyrs' are the nest-boxes set up by the Lapps and other inhabitants of the far North for the accommodation of the Golden-eyed Duck, or rather for their own, and it is a case of 'Sic vos non vobis.' Is this the species of Owl of which Linneus (as may be seen in Yarrell's 'British Birds,' iii. 270) found a couple of young ones hung up *in terrorem*, in consequence of their parents having appropriated a box to themselves?"—*Zool. for* 1854, p. 4203. Owl, Hawk, is also a provincial name of the Short-eared Owl.]

Owl, Hissing.—See Owl, White.

Owl, Horn.—See Owl, Long-eared.

Owl, Horn, Blackwinged.—See Owl, Great-eared.

Owl, Ivy.—See Owl, Tawny.

Owl, Little.—[Yarrell, i. 158; Hewitson, xix. 67.] *Strix passerina*, *Lin. Syst.* i. p. 133, 12; *Gmel. Syst.* i. p. 296; *Ind. Orn.* i. p. 65, 46; *Bewick, Br. Birds*, i. p. 57. *Noctua minor*, *Raii Syn.* p. 26, 6; *Will.* p. 69, t. 13; *Bris.* i. p. 514, 5; *Ib.* 8vo, p. 150. La Chevéche, ou petite Chouette, *Buf.* i. p. 377, t. 28. Little Owl, *Br. Zool.* i. No. 70; *Ib.* fol. 73, t. B. 5; *Arct. Zool.* ii. No. 126; *Will. Angl.* p. 105, t. 13; *Edw.* t. 228; *Albin*, ii. t. 12; *Lewin, Br. Birds*, i. t. 29; *Lath. Syn.* i. p. 150, 40; *Walc. Syn.* i. t. 28. Passerine Owl, *Shaw, Zool.* vii. p. 264.—This elegant little species of Owl is the smallest that has been found in England. The length little more than eight inches; size not much superior to that of a Blackbird. The bill is dusky, with a yellowish tip; irides pale yellow. The head and upper parts are brown, tinged with olive; the former, with the wing-coverts, are spotted with white; the feathers that compose the circle round the face are white, tipped with black; under parts of the body white, spotted with brown; the tail is brown, barred transversely with rufous, and tipped with white; but in this part they are subject to vary, as Mr. Pennant and Dr. Latham both say the tail is barred with white likewise: the legs are covered with down of a grey colour; claws brown. Other varieties of this bird are also spoken of with the colours darker, as well as the irides being black. It is perhaps difficult to say what changes climate may produce. We know season alone in the same country effects extraordinary changes; but we have ever held the colour of the eyes as a characteristic mark, which in adults never change. It is true many birds, before they arrive at maturity, have dark irides, which afterwards become yellow. This might be the case with the bird here mentioned. The Peregrine Falcon has been taken with yellow irides, but for the first two or three years are dusky. A young Herring Gull, which we have at this time, only begins to appear yellowish in that part at two years and a half old. The eye, therefore, being subject to such a certain change by age, must be considered as the effect of maturity when they become of a lighter colour. The Little Owl is a very rare species in England. In France it is said to frequent ruined edifices. It makes a nest in the holes of rocks and walls, and lays five or six eggs, spotted with yellowish and white. It is said to fly by day, and to give chase to small birds; but its principal food is mice. Is said to

build in chimneys in Carniola; and Mr. Edwards mentions two having been taken in England by coming down chimneys. It is found at Hudson's Bay, and has been received from the West Indies.

SUPPLEMENT.—We are assured by Mr. Comyns that a neighbour shot at one of this species in the North of Devon in the autumn of 1808.

Owl, Little Horned.—[Yarrell, i. 127; Hewitson, xix. 54.] APPENDIX.—*Strix Scops*, *Lin. Syst.* i. p. 129; *Gmel. Syst.* p. 290; *Ind. Orn.* i. p. 56. *Scops Aldrovandi*, *Raii Syn.* p. 25; *Will.* p. 65, t. 12. Le Scops, ou Petit Duc, *Buf. Ois.* i. p. 353, t. 24; *Plan. Enl.* 436. Le petit Duc, *Bris. Orn.* i. p. 495, t. 37, f. 1; *Id.* 8vo, p. 44. Little Horn Owl, *Will. Orn.* p. 101, t. 12. *Scops Eared Owl*, *Lath. Syn.* i. p. 129; *Id. Sup.* i. p. 43.—It is with pleasure we have to announce this species of Owl as having been occasionally shot in Great Britain within these few years, upon undoubted authority. Mr. Foljambe, of Osberton, an accurate Ornithologist, assures us that he has a specimen in his collection that he believes was shot in Yorkshire; and that Mr. Fothergill, of York, has another which was shot in the spring of 1805, near Weatherby, in that county. Mr. Foljambe further remarks, in a letter to the author, that he has heard of others which had been seen in the same neighbourhood. This species is about the size of the Little Owl (*Strix passerina*). Length seven inches and a half. The bill is black; irides yellow. The whole plumage is variegated with dusky, rufous, brown, and grey; on the upper parts the brown predominates; on the under parts the grey: the quills are transversely barred with rufous-white: the legs are covered to the toes with rufous-grey feathers, spotted with brown: the toes and claws are also brown. The feathers termed the ears appear to be very indistinct in a dead bird, being very short, and composed of three feathers on each side of the head. From the size and general resemblance of the Scops and Passerine Owls, it is not unlikely they are frequently confounded, especially as the longer feathers on the head of the former are not at all times discoverable, and that both are subject to considerable variation in plumage. Buffon, who probably had frequent opportunities of examining these birds, especially the Scops, which is plentiful in France, says the irides of the Scops are of a deeper yellow, and the bill entirely black, which in the other is brown with the tip yellow. The plumage is also dissimilar; the number and regular disposition of the white spots on the wings and body are wanting.

As the Scops appears to be a migrative species on the continent, coming with the Swallow into France, and re-migrating about the same time that bird takes its departure, it is rather surprising no naturalist has till lately identified the species in England. As the Scops have been known to assemble on the continent in parts where field-mice abound, in order to prey upon them, it has been suspected that a similar occurrence mentioned by Dale, in his Appendix to the 'History of Harwich,' must have been this species. With this persuasion Buffon relates the circumstance as belonging to the history of the Scops; whereas there can be no doubt it was the Short-eared Owl (*Strix brachyotos*), a bird (in some respects) of similar habits. Dale, from Childrey, says, "In the year 1580, at Hallowtide, an army of mice so overrun the marshes near South Minster, that they eat up the grass to the very roots. But at length great number of *strange painted Owls* came and devoured all the mice. The like happened in Essex in 1648." Dale ascribes this to the Long-eared Owl, but we conceive he is equally mistaken in the species. It will be recollected by the Ornithologist that *Strix brachyotos* is, of more modern discovery, identified as a species; about which there have been various opinions. To Mr. Pennant, we believe, Science is indebted for the first specific distinction of that bird. Buffon, it is true, knew something of the Short-eared Owl, but, not having noticed the auricles, he described and figured it as the Brown Owl (*La Chouette*, ou *Grand Cheveche*, Planch. Enl. 438). The same confusion which has attended this bird from its earliest discovery, will be handed down by all translators and commentators of Buffon's works. Even in the last edition of Smellie; by Mr. Wood, we find a very good representation of the Short-eared Owl given for the Brown Owl, considered as destitute of auricles. In a late edition of Pennant's 'British Zoology' a variety of the Tawny Owl is still inserted as a distinct species, under the original name of Brown Owl. If the Scops retire from France at the same time as the Swallows, it is highly improbable they should come into England in November, the time that the "Strange painted Owls" (related by Dale) appeared in such number. We must rather look for such autumnal migrations northward, as we do for those of the vernal southward; and we know of no species of Owl which visits Great Britain in the autumnal season, with certainty or in any number, but *Strix brachyotos*: and we have recent accounts of this species assembling in different parts of England

to wage war against an over-grown colony of mice, which would otherwise become the scourge of mankind. See Owl, Short-eared. [Mr. Rodd records, at p. 1773 of the 'Zoologist' for 1847, the occurrence of this small Owl in the Scilly Islands, on the 11th of April of that year: in the volume for 1848 Mr. Poole mentions, at p. 2019, the occurrence of a specimen at Wexford on the 19th of April of that year.]

Owl, Long-eared.—[Yarrell, i. 131; Hewitson, xvii. 55.] *Strix otus*, *Lin. Syst.* i. p. 132, 4; *Gmel. Syst.* i. p. 288; *Raii Syn.* p. 25, A. 2; *Will.* p. 64, t. 12; *Ind. Orn.* i. p. 53, 7. *Asio*, *Bris.* i. p. 486, 4; *Ib.* 8vo, p. 142. *Le Hibou*, ou *moyen Duc*, *Buf.* i. p. 342, t. 22. Horn Owl, *Albin*, ii. t. 10; *Will. Angl.* p. 100. Long-eared Owl, *Br. Zool.* i. No. 65, t. 30; *Ib.* fol. t. B. 4, f. 1; *Arct. Zool.* ii. No. 115; *Lewin, Br. Birds*, i. t. 24; *Lath. Syn.* i. p. 121; *Sup.* p. 42; *Walc. Syn.* i. t. 24; *Pult. Cat. Dorset.* p. 3. —This beautiful species is nearly fifteen inches in length; weight nine or ten ounces. The bill is black; irides orange-yellow. The feathers, of a hair-like form, that cover the bill, are white, with black shafts; over the eye and round the angle next to the bill is black; cheeks pale rufous; over the eyes are two tufts of feathers, erect like ears, composed of six feathers that appear in front, gradually lengthening from the first to the last; the hindmost is an inch and a half long, black, bordered with dull yellow; the circle round the face is white, speckled with black and rufous; those that immediately cover the ears are tipped only with black, forming a semicircular line of that colour; the general colour of the bird is an ochraceous-yellow, elegantly streaked above with black, and speckled with the same, ash-colour, and white; beneath the feathers are tinged with light ferruginous, streaked with black down the shafts; the quills are barred with black and cinereous; on the primaries are two bars of dull yellow; the tail is barred, and speckled with dusky and cinereous; legs and toes are covered with down of a yellowish buff-colour; claws dusky. This description is taken from a female; the male differs in nothing but in being rather less. The wings of this species are very long, reaching beyond the tail when closed, and crossing each other at the points; the second feather is the longest. This is by no means so common as the Tawny or White Owls; and though it is frequently taken in England, very little is known of its habits. It is said to make no nest, but to take possession of that of a Magpie or Crow; and that it lays four or five eggs. It remains with us the whole year, having

killed them both in summer and winter; of course they must breed with us. An ingenious friend informed us he found an Owl's nest in a tree covered with ivy, which had three white eggs; and that from the appearance of the bird as it flew out he had no doubt it was this species. It must be observed, the other Owls of this country are never known to build amongst the branches of trees; from which we may conclude the nest above mentioned was of this species. This bird frequents large woods, and wooded tracts; is partial to fir, box, or holly plantations, where it more readily conceals itself by day amongst the evergreen foliage, as well in winter as in summer. The one before us was killed in the winter as it was flying out of a large holly-bush in Cornwall; and we have seen others in several parts of the kingdom. Its principal food is mice, and sometimes small birds taken at roost. Is never seen to fly in the day except disturbed. The note of this species is unknown; most of the genus make a screeching noise, but the Tawny Owl is the only one with us that is known to hoot, and is so commonly heard in the evening. It is said to be far from uncommon in France, and many other parts of Europe, as far as the northern parts of Russia. It is also found in some parts of America, and is common at Hudson's Bay.

[Owl, Long-horned — See Owl, Long-eared.]

[Owl, Red, or Owl, Mottled. — ? *Strix Asio*, Linn. ? *Strix nævia*, Mottled Owl, Wilson, *Amer. Ornith.* i. 96, *Jameson's Edition*. ? *Strix Asio*, Red Owl, Wilson, *Amer. Ornith.* i. 99 of *Jameson's Edition*. — In the 'Naturalist' for 1855 appears a figure and description of this North-American Owl, a specimen of which is stated to have been killed in the breeding season of 1852, in Hawksworth cover, near Kirkstall Abbey: a pair were seen, but one only obtained. Mr. Yarrell, in the third edition of his invaluable 'History of British Birds,' published four years subsequently, recites these particulars, but gives no figure or description of the bird, thus showing a disinclination to add the species to the British list, a disinclination in which others participate. It is, moreover, somewhat difficult to decide as to the species of this supposed wanderer.]

[Owl, Scops Eared. — See Owl, Little Horned.]

Owl, Screech. — See White and Tawny Owls.

Owl, Short-eared. — [Yarrell, i. 135 ;

Hewitson, xvii. 58.] *Strix brachyotos*, Gmel. *Syst.* i. p. 289; *Ind. Orn.* i. p. 55, 11; *Lath. Syn. Sup.* ii. p. 56; *Bewick, Br. Birds*, i. t. p. 50, and p. 52; *Shaw, Zool.* vii. p. 223. *Strix ulula*, mas. and fem., *Sepp. Vog.* i. t. p. 63. *Strix Arctica*, *Mus. Carls.* fasc. iii. t. 51. Short-eared Owl, *Br. Zool.* i. No. 66, t. 31; *Ib.* fol. p. 71, t. B. 3, and B. 4, f. 2; *Arct. Zool.* ii. No. 116; *Lath. Syn.* i. p. 124, 9; *Sup.* p. 43; *Lewin, Br. Birds*, i. t. 25; *Walc. Syn.* i. t. 25; *Don. Br. Birds*, t. 35; *Pult. Cat. Dorset.* p. 4. Provincial: Mouse Hawk; Woodcock Owl; Hawk Owl. — This species weighs eleven ounces; length near fifteen inches. Bill dusky; irides bright yellow. The feathers immediately surrounding the eyes are black; those that cover and surround the bill white; the wreath round the face beautifully speckled with light ferruginous, black, and white, except at each ear, where it is wholly black; on the top of the head, above each eye, is a tuft of feathers, which it can erect at pleasure, the foremost of which are black on the outer webs, and white on the inner; the rest of the head, neck, back, and scapulars dusky, bordered more or less with light ferruginous; breast and belly yellowish white, streaked with dusky down the shafts; the greater quills are light ferruginous on the outer webs; the three first have a single bar of black each, and deeply tipped the same; the others have two bars each, their tips brown, inclining to greyish; the inner webs have one, or part of an irregular bar; the coverts of the primaries black; on the coverts of the secondaries are several large spots of white; the second feather in the wing is the longest; the feathers of the tail are light ferruginous, crossed with four dusky bars on the six middle ones, and marked with dusky spots on the yellow bars of the two middle feathers; the bars on the outer feathers are not so numerous or so perfect, and the yellow is shaded off to almost white on the exterior feathers, which have only irregular circles of dusky brown on the inner webs; the legs are covered down to the claws with light yellow feathers. The above description is taken from a male killed near Bristol. The female is rather less bright in colour, and somewhat superior in size. This bird is distinguished from all the other species by the smallness of its head; which has occasioned it to be called in some places by the name of Hawk Owl, or Mouse Hawk. To Mr. Pennant the British Fauna is indebted for the first discovery of this bird. But that excellent naturalist has described it to have only one feather on each side of the head which is erectable; which mistake has been followed by all other ornithologists. It must,

however, be remarked that these tufts, or ears, are never erected but when the bird is in a quiescent state. A few years since one of this species was taken alive in a Lark-net, making a pounce at the decoy bird; and we bought it of the birdcatcher in order to observe its manners. In a few months it became tolerably tame, and when hungry would take food from the hand. It was mostly fed with small birds and mice, but would eat any raw meat, which it first took in its bill, and immediately placed in its talons, and devoured it by piecemeal. When it was asleep or undisturbed the aurated feathers were very distinguishable, standing above the rest about half an inch; but on being disturbed they were instantly depressed, and the head apparently enlarged by the feathers round the face being somewhat raised. Upon minute examination these tufts were found to consist of a series of feathers very little if anything longer than the rest. While we were in possession of this we received a dead specimen, in which one feather was visibly longer than the rest in the tuft: this might have led to the mistake before mentioned. The Short-eared Owl comes to us in October, about the time the Woodcock makes its appearance, and departs at the same time with that bird in March; hence the name of Woodcock Owl. With us this bird is observed never to perch on a tree, but generally hides itself in long grass, fern, or the like; and seems partial to open, barren situations. When disturbed it flies a little way, and lights again on the ground. In dusky weather it will prey by day, and sometimes fly at small birds as well as mice. It is a bold bird, but seems contented in confinement. That above mentioned never drank for the six months it was in our possession. How long it lived after it was given away, we never heard. It may, however, be presumed, contrary to the general opinion, that Owls, as well as all predacious birds, bear confinement, whether taken young or old; which we have experienced as well in the Tawny and White Owls as in this. Is supposed to breed in the Orkneys, and probably in Norway; visits Hudson's Bay in May; makes a nest of dry grass on the ground, and lays three or four white eggs. We have great reason to believe this bird is the Chouette, or Grand Cheveche, of Buffon, and perhaps has been noticed by other authors; but from the circumstance of the ears not being mentioned, which are not discoverable in a dead specimen, confusion has arisen.

SUPPLEMENT.—Doctor Latham imagines that this bird is the Hawk Owl of Edwards. Mr. Pennant, in his Supplement

to the 'Arctic Zoology,' considers the *Moyen Duc ou Hibou* of the 'Planches Enluminées,' as well as *La Chouette* of Buffon, to be this species. It must be admitted that the synonyms of this species are in great obscurity, occasioned by its very different appearance about the head. While living it is capable of erecting a series of feathers on each side of the head, but which in dead specimens are scarcely obvious. These erectable feathers, that form the auricles when alive, are scarcely longer than the rest, and are always depressed in a dead bird. Sometimes, indeed, one feather is somewhat longer than the rest, but doubtless it has most commonly been taken for a smooth-headed bird, and described as such for a different species. It is a northern species, is not confined to Europe, but is said to be common on the American Continent; and two specimens (we are informed by Doctor Latham) were brought over by Captain Dixon from the Sandwich Islands. Mr. Bewick mentions a circumstance which implies that this species is occasionally gregarious, twenty-eight having been found in a turnip field in November; but perhaps the following statement, from an attentive observer of Nature, may serve to elucidate the cause of this assembly. Mr. Anstice assures us that a few years since, mice were in such vast abundance as to destroy a large portion of vegetation in the neighbourhood of Bridgewater; and in the autumn a great many of the Short-eared Owls resorted to that part in order to prey on them. They were found in the fields amongst the high grass. We never observed it so far west as Devonshire till the latter end of the year 1809, when about the middle of November our friends supplied us with two specimens. In the stomach of one were the fragments of a Sky Lark and a Yellow Hammer. There is nothing remarkable in the trachea of this bird, but in being considerably compressed.

Owl, Snowy.—[Yarrell, i. 150; Hewitson, xviii. 64.] APPENDIX.—*Strix nyctea*, Lin. *Syst.* i. p. 132; *Faun. Suec.* No. 76; *Gmel. Syst.* i. p. 201; *Ind. Orn.* i. p. 57. *Le Harfang*, *Buf.* i. p. 387; *Pl. Enl.* 458. *Strix alba freti Hudsonis*, *Bris.* i. p. 522; *Id.* 8vo, p. 152. Great White Owl, *Edw.* ii. t. 61. Snowy Owl, *Lath. Syn.* i. p. 132; *Arct. Zool.* ii. No. 121, t. Front.—We are happy to be enabled to add this species to the catalogue of British birds upon the best authority. Mr. Bullock, to whom we are obliged for this information, says he received a specimen from Norwich about two years since, with an assurance of its having been killed in that neighbourhood. But this naturalist, by a perseverance in

the pursuit of natural objects (to obtain which neither trouble nor expense is spared, as the most extensive collection now in the kingdom will evince), has been fortunate enough to discover that the Snowy Owl actually breeds in the more northern part of these realms. In a tour to the Orkney and Shetland Islands, Mr. Bullock was informed, on his landing at North Ronaldshaw, on the 3rd of July, 1812, that a large white bird, with a head like that of a cat, had been seen on the island for upwards of a month; and in consequence of a gentleman of the island assuring him that he had seen the bird (which he described to be as large as a Goose) the evening before, he determined to lose no time in pursuit. The place where this Owl was always seen is a rabbit-warren, called the Links; to that place therefore Mr. Bullock, in company with two other persons, bent their course, and found the bird exactly in the place it had been so often seen. It was on the ground contiguous to the shore, and doubtless frequented the warren for the sake of making a prey of the rabbits. The bird suffered Mr. Bullock to approach within forty yards, and by means of a glass he minutely examined it, and discovered that it was a male by its being of an immaculate white. When it rose it was fired at, but unfortunately was not stopped, and it flew about a mile. A reward being offered, all the guns in the island were put in instant requisition, and the consequence was that by being repeatedly shot at by bad marksmen, the bird flew at last from the island, in the direction of the isle of Sanda. It appears that the female nyctea had been shot on the island a few weeks before, and plucked for the sake of the feathers: this was mottled with brown. Upon visiting the isle of Westra a few days after, Mr. Bullock was informed that a similar bird had been seen there a few days before on a rabbit-warren. In Shetland Mr. Bullock was more successful, for in Unst, the most northerly of the islands, he not only procured a specimen of the Snowy Owl, but found that it bred as well there as on the neighbouring isle of Yell. From the observations of this gentleman it appears that this species of Owl preys in mid-day, as well perhaps as in the morning dawn or dusk of the evening. This circumstance is not singular, since the Short-eared Owl and some others do the same. It does not conceal itself like most of the genus, but prefers resting upon the ground, where it can look around, and perceive the approach of an enemy; and when roused it flies slow and heavily. We do not recollect that this hardy bird, which braves the winters of the polar regions,

has ever been before noticed to breed so far south as that of Shetland. It has generally been esteemed an Arctic species, residing the whole year amongst the glaciers and snowy mountains, where, except the white bear, the Arctic fox, the ermine, and the Ptarmigan, scarcely anything living is to be found in the colder months. Mr. Pennant says it is common in Hudson's Bay, in Lapland, and in Norway. In Sweden is said to prey upon the Ptarmigan and Alpine hare, whence the Swedish name *Harfang*. It has been generally supposed that the Snowy Owl changes its plumage with the season, and that the snowy whiteness of its colour, observable in the winter, was thrown off on the approach of the warmer months, in exchange for that of a mixture of brown and white. From the observations of Mr. Bullock this is not strictly true, since in the early part of July this bird was noticed of a pure white, as far south as the Orkneys, in latitude 59. The female indeed was mottled, and possibly the young male birds for a year or two may not be pure white, but they may become whiter in their autumnal moulting. This noble species rather exceeds the size of the Eagle Owl (*Strix bubo*), being nearly two feet in length, and sometimes weighing above three pounds. The bill is black: irides yellow. The plumage varies from pure white to that of being marked on the head with small brown spots, and with narrow lines of the same, transversely placed on the back; and under the wings on the sides: the quills are also spotted with brown, as well as the feathers of the tail: the legs and toes are covered with close white feathers: the claws are black, very large, and much hooked. [Mr. Gurney records, at p. 1769 of the 'Zoologist' for 1847, that a Snowy Owl was shot at St. Andrews, in Suffolk, by a Mr. Adams; and at p. 2765 of the volume for 1850 mentions two others—one shot at Cromer, on the 22nd of January; the other at St. Faith's, at the end of February: in the volume for 1855 Sir William Milner records, at p. 4594, the obtaining of a fine adult specimen at Altnaharrow, in Sutherlandshire. In 1857 five specimens were shot by Mr. Millbank in the Western Islands; Mr. Graham records this at p. 5831 of the 'Zoologist' for 1857, but does not give the dates. In the volume for 1861, at p. 7415, Mr. Newton relates that a specimen was captured at Ballycroy, in Ireland, in the autumn of 1859; it was sent alive to the Gardens of the Zoological Society of London, where I have often seen it: eight or nine other specimens have been obtained in Ireland. A summary of the records of this rare bird in the Shetland Islands will be found in

the volume for 1863, p. 8633; and many additional and interesting particulars at p. 9318 of the volume for 1864: both of these papers are from the pen of Dr. Saxby.]

Owl, Stock.—See Owl, Great-eared.

Owl, Tawny.—[Yarrell, i. 145; Hewitson, xviii. 63.] *Strix stridula*, *Lin. Syst.* i. p. 133, 9; *Gmel. Syst.* i. p. 294; *Ind. Orn.* ii. p. 58, 25; *Bewick, Br. Birds*, i. t. p. 55. *Strix* Aldrov, *Raii Syn.* p. 25, A. 2; *Will.* p. 65, t. 14; *Bris.* i. p. 500, 1; *Ib.* 8vo, p. 146. Le Chathaunt, *Buf.* i. p. 362, t. 25. Common Brown, or Ivy Owl, *Will. Angl.* p. 102, t. 14; *Albin*, i. t. 9. Tawny Owl, *Br. Zool.* i. No. 68; *Ib.* fol. 7, t. B. 3; *Arct. Zool.* ii. p. 237, B.; *Lewin, Br. Birds*, i. t. 27; *Walc. Syn.* i. t. 27; *Doq. Br. Birds*, v. t. 121; *Pult. Cat. Dorset.* p. 4. *Strix* Aluco, *Lin. Syst.* i. p. 130, 7? *Gmel. Syst.* i. p. 292? *Ind. Orn.* i. p. 59, 26. *Ulula*, *Bris.* i. p. 507, 3? *Ib.* 8vo, p. 148? *Aluco* prior Aldr., *Will.* p. 68; *Ib. Angl.* p. 104, t. 13. *Ulula*, *Will.* p. 68, t. 13. *Hulotte*, *Buf.* i. p. 358? *Black Owl*, *Albin*, iii. p. 4, t. 8? *Brown Owl*, *Br. Zool.* No. 69, t. 32; *Ib.* fol. p. 72, t. B. f. 1; *Arct. Zool.* ii. No. 125; *Lewin, Br. Birds*, i. t. 28. *Aluco* Owl, *Lath. Syn.* p. 134, 20. *Wood Owl*, *Shaw, Zool.* vii. p. 253.—The length of this species is fifteen inches; weight about nineteen ounces. The bill is light brown; irides dusky; the feathers round the bill are white and narrow; those between the bill and eyes have black shafts; the general plumage of the bird is deep tawny, darkest on the head, and brightest on the breast, streaked, and in some parts speckled with black; the feathers on the belly are tawny, with white margins, and a black streak down the shafts; the exterior webs of the outer scapulars are white, and a few of the exterior greater coverts of the secondary quill are marked with a white spot on their outer webs; these form two obscure blotches of white; the quill-feathers are barred with light tawny-brown and dusky, the light colour gradually changing to white at the base; the two middle feathers of the tail are like the rump, plain tawny; the rest are more or less barred alternately with tawny and dusky; the legs are well clothed with grey feathers, or rather down, speckled with brown; claws dusky. This is the description of the female. The male only differs in size; the length is thirteen inches; weight between fifteen and sixteen ounces. The plumage of the sexes is exactly alike, but the female is most commonly less tawny; in which state it has been made a distinct species. We have before observed, in our remarks on the Brown Owl, that we

believe that is not a distinct species, and have there given our reasons, to which we refer our readers. This is by far the most plentiful species of Owl in England. It resides chiefly in woods and plantations of fir, concealing itself in the thickest places; sometimes it settles on the ground, but on being disturbed takes shelter in a neighbouring tree. It is rarely seen on wing by day, except forced from its haunts. The light is very offensive to it, and in the sun it can scarcely see at all; so defective is it of sight in a bright day that it is no uncommon thing for boys to hunt them down with sticks and stones. The eye is much larger than any of the British species, and the pupil incapable of sufficient contraction to enable it to see distinctly by daylight. This bird breeds in the hollows of trees, and sometimes in barns, which last it frequents for the sake of mice; and as it is a better mouser than a cat, the farmer holds it in great estimation, and leaves a hole in his barns and granary for its egress. It prepares very little nest, and sometimes deposits its eggs on the decayed wood, which are two in number, and rarely three, of a dull white, not glossy, and of a roundish form. The young are covered with a light-coloured down; are at first very shy, but soon become tame if fed by hand. If put out of doors within the hearing of the parent birds, retain their native shyness, as the old ones visit them at night, and supply them with ample provision; amongst which we have found young hares, young rats, and mice; but the last is their principal food. We have taken this bird in its mature state as well as young, and found no difficulty in either case of preserving them alive. They were never observed to drink; and indeed for many months together had no water offered them. This is the only species known to hoot; besides which it makes a disagreeable screaming noise. By some it is called Wood Owl and Screech Owl. It is a great destroyer of young Pigeons, and frequently resorts to Pigeon-houses for that purpose.

SUPPLEMENT.—We are glad to find Doctor Latham is of our opinion, that the Brown Owl does not constitute a distinct species from this. We have always been clearly of opinion that they are the same, and had brought all their synonyms together in the former part of this work. What seems to have puzzled our scientific friend in the former part of his works was the drawing of an Owl sent to him by Mr. Pennant, which had yellow irides, and was called Tawny Owl. No such bird, however, exists in England, and we must therefore conceive the figure had been taken from a preserved specimen in some collection, and might really have been the

true Tawny Owl of this country, but unfortunately it is too frequently the case that persons employed to stuff birds put in any eyes that may be handy, or perhaps that they think most attractive, without regard to Science; such we have frequently met with, and such no doubt deceived Mr. Pennant in the bird, the drawing of which he sent to Dr. Latham. We are credibly informed that it is no uncommon occurrence for the Tawny Owl to make its nest in an ivy-bush, or on the stump of an old pollard tree in Devonshire. This we believe is not the natural inclination, but the necessity of the bird, for in the part of Devonshire alluded to there is scarcely a tree large enough, in the hollow of which an Owl could conceal itself.

[Owl, Tengmalm's.—*Yarrell*, i. 162; *Hewitson*, xix. 66. *Strix Tengmalmi*, *Temm. Man. d'Ornith.* i. 94. *Noctua Tengmalmi*, *Selby, Brit. Ornith.* i. 105.—“Bill much curved and compressed; the culmen and tip yellowish white; the sides dark grey. Facial disk black at the posterior and anterior angles of the eye-orbits: the rest greyish white, mixed with black. Ear-conch large, with a narrow operculum. Velvety feathers behind the auditory opening brownish black. Crown, nape, and hind part of the neck liver-brown, spotted with white; those upon the latter part large, and surrounded by a margin of liver-brown. Back, wing-coverts and scapulars liver-brown, spotted with white; the spots upon the mantle nearly concealed by the over-lying tips of the feathers. Quills liver-brown; their exterior webs having three or four oval white spots, forming imperfect bars. Points of the outer barbs of the whole of the first quill open and reverted; those of the second the same for one-half of its length; of the third a small portion only near the tip; third and fourth quill-feathers the largest in the wing; the third rather exceeding the fourth, the first and second having their inner webs notched, the second and third with their outer webs sinuated. Tail extending nearly an inch beyond the closed wings, liver-brown, crossed by five interrupted white bars, or rather rows of spots, the last about half an inch from the tip. Under plumage white, varied with paler liver-brown. Legs having the tarsi short, and, as well as the toes, thickly clothed with soft hair-like feathers. Claws of a tolerable length, and moderately incurved.”—*Selby*, i. p. 106. This little Owl appears to be migratory on the continent of Europe, arriving and departing with the Swallow. Mr. Hogg, in his ‘*Natural History of Stockton-on-Tees*,’ says that it breeds in Castle Eden Dene, in the

county of Durham; and thirty or forty records of its occurrence in England have appeared in *Yarrell's* ‘*British Birds*,’ the ‘*Zoologist*,’ and other works; how far and what portions of these records are reliable seems difficult to decide, as the bird is very imperfectly known.]

Owl, White.—[*Yarrell*, i. 140; *Hewitson*, xvii. 61.] *Strix flammea*, *Lin. Syst.* i. p. 133, 8; *Gmel. Syst.* i. p. 293; *Rail Syn.* p. 25, A. 1; *Will.* p. 104, t. 13; *Ind. Orn.* i. p. 60, 28; *Bris.* i. p. 503, 2; *Ib.* 8vo, p. 147; *Lath. Syn. Sup.* ii. p. 69; *Bewick, Br. Birds*, i. t. p. 53. *Aluco minor* *Aldrov*, *Will.* p. 67, t. 13. *L'Effraie*, *Buf.* i. p. 366, t. 26. White Owl, *Br. Zool.* i. No. 67; *Ib.* fol. p. 71, t. B.; *Arct. Zool.* No. 124; *Will. Angl.* p. 104, t. 13; *Albin*, ii. t. 11; *Lewin, Br. Birds*, i. t. 26; *Lath. Syn.* i. p. 138, 26; *Sup.* p. 46; *Walc. Syn.* i. t. 26; *Don. Br. Birds*, v. t. 113; *Pult. Cat. Dorset.* p. 4. Barn Owl, *Shaw, Zool.* vii. p. 258, t. 33. Provincial: Barn Owl; Gillihowter; Howlet; Madge-Howlet; Church Owl; Hissing Owl; Screech Owl.—The weight of this species is about eleven ounces; length between thirteen and fourteen inches. The bill is light-coloured; irides dusky. The feathers round the eyes yellowish; the circle round the face white; the upper parts of the body, coverts, and secondary quills pale dull yellow, with two white and two grey spots placed alternately on each side the shafts; prime quills dull yellow on the outer webs, the inner white, marked on each side with four black spots; the whole under side white; the interior webs of the tail-feathers are white, the exterior marked with obscure dusky bars; legs covered with white down; the toes only with short hairs; middle claw serrated. This elegant bird mostly frequents the habitations of man; is rarely found in woods, but resorts chiefly to barns for the sake of mice, for which reason it is a welcome guest to the farmer. Like the rest of the genus it chiefly lies concealed in the day, but will sometimes, when pressed by hunger, prey by daylight, especially in winter, or when it has young. It breeds in old decayed trees in the neighbourhood of farm-houses or villages, and oftentimes in barns; makes very little nest; lays three or four white eggs, not so round or so large as that of the Tawny Owl. Their food is chiefly mice, which they swallow whole, and, like other predaceous birds, eject the bones and fur in large pellets, which are termed castings. Some bushels of this ejected matter are found in the hollows of old trees. This species is never known to hoot, but its notes are screaming and harsh; besides which it makes a snoring and hissing noise. When alarmed it snaps its bill

together with great force. It becomes exceedingly tame when taken young. We bred up one together with a Sparrow Hawk and a Ring Dove, who were confined together, and lived in great harmony; but the latter was the most quarrelsome, and was master of the triumvirate. After living together for six months they were given their liberty, and the Owl was the only one that returned. Cats are known to kill but never to eat the Shrew, which has been supposed to possess some poisonous quality. We have, however, taken from the stomach of one of these birds no less than five.

SUPPLEMENT.—This species is said to be common at the Cape of Good Hope, where it builds a nest amongst the rocks, composed of a few twigs and dried leaves, and lays seven or eight eggs. Is called by the natives Doodvogel (bird of death), and the other kinds of Owls, Uylers, the usual name for all night birds.

Owl, Wood.—See Owl, Tawny.

Owl, Woodcock.—See Owl, Short-eared.

[Owl, Yellow.—See Owl, White.]

Ox-Bird.—See Purre.

Oxeye.—See Titmouse, Great, and Long-tailed; Purre; and Creeper.

Oystercatcher. — A genus of birds, the characters of which are: Bill long, compressed, cuneated at the end. Nostrils linear. Tongue scarce one-third the length of the bill. Toes three; no back toe; the exterior joined to the middle by a strong membrane.

Oystercatcher, Pied. — [Yarrell, ii. 525; Hewitson, lxxx. 305.] *Hæmatopus ostralegus*, Lin. Syst. i. p. 257; Gmel. Syst. ii. p. 694; Raii Syn. p. 105, A. 7; Will. p. 220, t. 55; Ind. Orn. ii. p. 752; Bewick, Br. Birds, ii. t. p. 7. *Ostralega*, seu *Pica marina*, Bris. v. p. 38, t. 3, f. 2; Ib. 8vo, ii. p. 221. L'Huitrier, Buf. viii. p. 119, t. 9. Sea Pie, or Pied Oystercatcher, Br. Zool. ii. p. 213, t. 74; Ib. fol. 127, t. D. 2; Will. Angl. p. 297; Albin, i. t. 78; Hayes, Br. Birds, t. 12; Lath. Syn. v. p. 219, t. 84; Lewin, Br. Birds, v. t. 188; Walc. Syn. ii. t. 166; Don. Br. Birds, iii. t. 62; Pult. Cat. Dorset. p. 15. Provincial: Pienet; Olive; Tirma; Sea-piot or piet; Trillichan; Chalder; Chaldrick; Skeldrake or Skelderdrake; Scolder.—The weight of the Pied Oyster-catcher is about seventeen ounces; length sixteen inches. Bill three inches long, strait, compressed, the tip wedge-shaped, the colour orange; irides

crimson; orbits orange-yellow. The head, neck, upper part of the back, scapulars, and lesser wing-coverts black; a small spot of white under the eyelid, and a crescent of the same across the throat; but this last is by no means a general character, for in more than twenty specimens we never have found it, although such are to be seen in different collections. The greater coverts are white, the next above them tipped with white; the quills are black, with more or less white on the inner webs; the lower part of the back, rump, breast, and under parts are white; the base half of the tail is white, the end black; legs red-orange; claws black. This bird is common on our shores, but never quits the sea-coast. In winter they assemble in small flocks. Their principal food is marine insects and shell-fish; and from their adroitness in getting at an oyster they have taken this name. This, however, can only be done when the shells are partly open; it is then the bill is inserted to kill the oyster. It makes no nest, but deposits its eggs on the bare ground above high-water mark; generally four, of an olivaceous-brown, blotched with black, somewhat larger than that of the Lapwing. At the time of incubation the male is very watchful, and upon the least alarm flies off with a loud scream, upon which the female instantly runs from her eggs to some distance, and then takes wing. It is a shy bird, but when the young are hatched becomes bolder. The young is capable of running as soon as it quits the egg, and is led by the parent birds to its proper food. These birds are subject to some variation in plumage. In most the white under the chin is wanting; in some that mark is mottled with black, and the white spot under the eyelid wanting. Whether these are varieties, or depending on age or sex, has not been thoroughly ascertained; perhaps both: but we have killed both sexes at all seasons without the white on the throat. Dr. Latham observes it is easily tamed when taken young, and has been known to attend the Ducks and other poultry to feed and shelter at night. The only known species of this genus.

SUPPLEMENT.—This species appears to be more abundant on some parts of the sandy flat coast of Lincolnshire than on any other part we recollect to have noticed; and we were surprised to observe a very large flock of these birds assembled together in the midst of the breeding season. Upon enquiry we found that at the time of incubation a remarkable high tide had swept away all their eggs, together with those of the Ring Plover and Lesser Tern, which usually lay their eggs a little above

high-water mark. On that coast near Skegness, at a point called Gibraltar, there is an isolated part of a marsh, where Oystercatchers breed in such abundance that a fisherman informed us he had taken a bushel of eggs in a morning. Instinct has directed these and other shore birds to deposit their eggs above the flux of the highest spring tides, and therefore it must have been a very unusual high tide to have caused such devastation amongst the eggs. The number of eggs laid by this bird is invariably four, deposited in a small excavation without any nest, and, like others of a

similar nature, the bird always disposes them so as to occupy the least possible space, that they may be equally exposed to the incubating temperature of her body; that is with the smaller ends inwards. The weight of the egg is about an ounce and a half. It is said that the Oystercatcher has no aversion to take the water; probably, like the Curlew, it is not distressed on the water, and can occasionally make its escape by swimming if wounded; a circumstance not unusual with the common Sandpiper.

P.

[Parrot Crossbill.—See Crossbill, Parrot.]

[Parrot, Sea.—See Puffin.]

Partridge.—A genus of birds, the characters of which are: Bill convex, strong and short. Nostrils covered above with a callous prominent rim. No naked skin above the eyes; but in some species more or less warty excrescences round the eyes. Legs naked, some species furnished with spurs behind. Tail short.

[Partridge, Barbary.—Yarrell, ii. 400. *Perdix gambra*, Temm. *Man. d'Ornith.* ii. 487. — "The beak and a bare space round the eyes red; irides hazel; sides of the head above and below the eye bluish ash; ear-coverts light brown; top of the head and back of the neck rich chesnut-brown, which ends in a broad collar of the same colour descending to the bottom of the neck in front, and prettily varied with small round white spots; back and tail greyish brown; wing-coverts tinged with blue and edged with rufous; wing-primaries brownish black on the inner web; the outer web of the first greyish brown; of the others light wood-brown; throat and neck in front, above and below the collar, bluish ash; breast buff; feathers of the sides and flanks barred with white, black, and bright chesnut; belly, vent, and under tail-coverts reddish buff; legs, toes and nails red. The length of the male is thirteen inches; wing from the anterior bend six inches; the legs armed with blunt spur-like protuberances. The female is rather smaller than the male, the general plumage less brilliant in colours, and the legs without any spur-like protuberances."—Yarrell, ii. 402. An African species, introduced into the British list on the faith of a specimen picked up dead in a field at Edmondthorpe, about six miles from Melton Mowbray, as recorded by Mr. Yarrell.]

Partridge, Common.—[Yarrell, ii. 383; Hewitson, lxxi. 281.] *Tetrao Perdix*, Lin. *Syst.* i. p. 276, 13; *Gmel. Syst.* ii. p. 757. *Perdix cinerea*, *Raii Syn.* p. 57, A. 2; *Will.* p. 118, t. 28; *Ind. Orn.* ii. p. 645, 9; *Bris.* i. p. 219, 1; *Ib.* 8vo, i. p. 61; *Lath. Syn. Sup.* ii. p. 279; *Rural Sports*, ii. t. p. 401, and t. p. 406; *Bewick, Br. Birds*, i. t. p. 317. *La Perdix grise*, *Buf.* ii. p. 401. Common Partridge, *Br. Zool.* i. No. 96; *Ib.* fol. 86, t. M.; *Arct. Zool.* ii. p. 319, A.; *Will. Angl.* p. 166, t. 28; *Albin*, i. t. 27; *Lath. Syn.* iv. p. 762, 8; *Lewin, Br. Birds*, iv. t. 136; *Walc. Syn.* ii. t. 184; *Pult. Cat. Dorset.* p. 7.—This species is so well known as to require very little description. Length about thirteen inches; weight fifteen ounces. The bill is bluish brown; irides hazel. General colour of the plumage cinereous-brown and black mixed; some of the back and coverts streaked with buff; sides of the head bright rust-colour; behind the eye a naked, red warty skin; on the breast a deep bay-coloured mark, in the form of a horseshoe. The tail consists of sixteen feathers of a bright rust-colour, except the four middle ones, which are like the back; legs bluish grey. The female weighs about fourteen ounces; the head is less bright, and the coverts of the ears inclining to grey; the horseshoe on the breast is white for the first year, afterwards more or less like the male, and by the third year is no longer a mark of distinction; whereas by the head the sexes may always be known; the bare skin behind the eye is less conspicuous, and very little red. It has been long an esteemed opinion amongst sportsmen as well as naturalists, that the female Partridge had none of the bay feathers on the breast like the male. This, however, is a mistake, as we have proved by the unerring rule of dissection; for happening to kill nine old birds one day, with very little variation as to the bay markings on the breast, we

were led to open them all, by which we discovered five of them were females; and by re-examining the plumage found the males could only be known by the superior brightness of colour about the head, which alone seems to be the mark of distinction after the first or second year. This bird is found in all parts of Great Britain where corn is cultivated, but never at any great distance from arable land: upon the barren mountains of the north it is never seen. In Scotland the Partridge, the Grouse, and the Ptarmigan each have their district: the first is only found in the glens or valleys; the second on the first hills; the last on the summits of the highest mountains; and it is very rare that they intrude upon each other; though we have killed the three species in the same day. The Partridge is very prolific, laying from twelve to twenty eggs. It makes no nest, but scrapes a small hollow in the ground, placing a few contiguous fibres therein to deposit its eggs on; these are of a light brown colour. The old birds sit very close on their eggs when near hatching; and we have been informed by a gentleman of veracity that he saw this bird taken with her eggs on the point of hatching, and carried in a hat to some distance; and that she continued to sit in confinement, and brought out her young. The time of incubation is three weeks; the young leave the nest in twelve hours; the parent birds are equally tenacious of their young, and lead them immediately to ant-hills, on the eggs of which they principally feed at first. These birds flock together in broods till the returning spring. Sometimes three or four coveys will assemble in winter, and are then exceedingly shy. In vain may the sportsman pursue them, unless by surprise he can break and scatter the covey. About the middle of February they begin to pair. In June they lay, and the young are excluded about the middle of July; and in about three weeks are capable of flying. This is one of the few birds under the denomination of game, and protected by the legislature. But notwithstanding many severe penal laws are enacted for its preservation, it is a query if the breed is not decreased thereby. The great demand of the luxurious and wealthy, and the high price given for these birds, is too great a temptation to the poacher; and he risks his liberty to supply the tables of the rich. Thus the several laws respecting game are ineffectual; they only serve to enhance the price, and hold out a temptation for the husbandman to ruin himself and family; whereas if the penalty was made much greater, and that wholly confined to the buyer, it would fall upon the tempters,

who should be the only persons obliged by law to pay for their luxuries. The late act of Parliament for confining the killing of this species between the 14th of September and the 12th of February only tended, in some degree, to preserve them from the fowler, but not from the nets of the poacher. There are several varieties mentioned of this bird, but they are merely accidental defects. Four entirely white were taken alive out of one covey, by order of the late Lord Courtenay, at Powderham in Devonshire; three of which we saw. These were intended to be given their liberty in the spring, in hopes of propagating the breed; but we never heard if it had the effect, or what became of them.

SUPPLEMENT.—In the 'Rural Sports' we are informed that out of a covey of eight birds, four were of a clear white, and three pied; taken near Market Weighton at Mr. Barnard's. The same author mentions the singular circumstance of a Partridge making her nest, or more properly depositing her eggs, on the top of a pollard-oak, close to a foot-path, into which the bars of a stile were fastened: in this situation sixteen eggs were hatched, and the young escaped. It does not appear that there is any instance on record of the Common Partridge breeding in confinement, for those mentioned in the 'Tableau Elementaire' as having been bred in confinement by a Carthusian Monk were undoubtedly of the Red-legged species (*Perdix rufa*, not *cinearea*). We have known seven or eight that were troublesomely tame, and that lived together for several years, yet never produced eggs. We bred up some young Partridges under a common domestic Hen, which became so tame as to feed from the hand. In their infant state they were chiefly fed with alum-curd and groats or grits, and occasionally with emmets and their eggs; and it was remarkable, that although they devoured with avidity one or two species of the black sort, they would not touch the red or tawny emmets. Hard corn was given to them sparingly, and it was found to lie in their crop too long, and actually killed one of the brood. Barley and other similar grain should therefore be soaked for twenty-four hours at least, previously to its being given them. In cases of such indigestion, several whole pepper-corns is a good stimulant, with which they must be crammed; and soft food only should be given, especially such greens as they will eat, amongst which chick-weed seems to be a favourite aliment; bread is also a good change of diet, but grasshoppers are the best physic, and will tempt them to come to hand at all times. These insects appear to afford a most grateful nourishment to numerous species

of birds; Turkeys and other domestic fowls eat them with avidity, and Pheasants and Partridges in their wild state devour vast abundance. As these young Partridges required fresh greens, they were, at six weeks' old, allowed to range in a walled garden, their foster-mother only being confined under a coop; and as a change of food, hemp and canary seeds were given to them occasionally, which were preferred to other seed or grain. By this treatment Partridges may be raised with ease. Upon the approach of the ensuing spring the male (for there was only one out of four) showed evident signs of love, by spreading his tail and courting his favourite female; for to one only was he attached, and occasionally drove away the other two. He was never a moment separate from his favourite lady, and if he found an insect or delicate morsel he uttered a call, something like the clucking of a common Hen to her chicken, picked it up, and let it fall from his bill to entice her, and repeated it till she accepted his offer. To one of the females he was so extremely savage that she was obliged to be removed; to the other he was only civil. The female taken from the menagerie was turned into a walled garden, where, to our astonishment, she soon attracted a wild mate, as late as the month of May, and hopes were entertained that a brood between them might have ensued; these hopes, however, were of short duration, as a cat killed the female. The attached pair in the menagerie did not breed, and towards autumn the female fell a sacrifice to the same feline enemy. The remaining female, together with the male, were confined in a smaller place during the winter, and were both attacked with the vermicular distemper, which killed the female, and the male was with difficulty recovered. Of this dreadful disorder, that commits such devastation amongst our domestic fowls, we shall have occasion to speak more fully under the article Pheasant. These two Partridges had been confined with some Ruffs and Land Rails, and none of those were ever affected with the distemper. The Partridge that died by suffocation was opened, and the trachea found stuffed with vermes: the other was turned out where it could collect more and a greater variety of vegetables, and had no water but what was strongly impregnated with rue and garlic, and, though excessively bad, recovered in three weeks; even in the first week some of the violence had abated. Mr. Vaughan informs us that he had a brood of thirteen young Partridges in the latter end of July, 1808, that were hatched under a domestic Hen, and in less than a month all died but one, of the distemper called the gapes.

Partridge, Guernsey. — [Yarrell, ii. 394; Hewitson, lxxi. 282.] *Tetrao rufus*, Lin. Syst. i. p. 276, 12; Gmel. Syst. ii. p. 756; Ind. Orn. ii. p. 647, 12. *Perdix græca*, Raii Syn. p. 57, A. 5; Will. p. 121, t. 29; Bris. i. p. 241, 12, t. 23, f. 1; Ib. 8vo, i. p. 67. La Bartavelle, Buf. ii. p. 420. Greek, or Red Partridge, Lath. Syn. iv. p. 767, 12; Will. Angl. p. 169; Albin, i. p. 27. *Perdix rubra*, Bris. i. p. 236, 10; Ib. 8vo, i. p. 66. *Perdix rufa*, Raii Syn. p. 57, A. 5; Will. p. 167, 29; Rural Sports, ii. t. p. 408. *Perdix rouge*, Buf. ii. p. 431, t. 15. Guernsey Partridge, Will. Angl. p. 167, t. 29; Albin, i. t. 29; Lath. Syn. iv. p. 768; Sup. p. 220. *Perdix rubra barbarica*, Bris. i. p. 239, 11; Ib. 8vo, i. p. 67. *Perdix rouge de Barbarie*, Buf. ii. p. 445. Barbary Partridge, Edw. t. 70; Lath. Syn. iv. p. 770. Guernsey Partridge, Lewin, Br. Birds, iii. t. 137; Pult. Cat. Dorset. p. 7. — It is much to be doubted whether this species has any claim in the British Fauna, for it does not seem even naturalised like the Pheasant; and most probably the few that have been met with at large had only escaped from the ornithones of the curious. As it has, however, been killed in a state of liberty, we shall give it a place in this work. This bird is rather larger than the common species. Bill, irides, and legs red. The upper part of the head is red-brown; greyish on the forehead; chin and throat white, encircled with black; over each eye a band of white; fore part and sides of the neck cinereous, spotted with black; back, wings, and rump grey-brown; breast pale ash-colour; belly rufous; sides marked with lunular streaks of black, white, and orange; the tail composed of sixteen feathers of a rufous colour, except the six middle ones, which are more or less grey-brown. The habits of this species differ somewhat from the preceding. This frequently perches on a tree, and will breed in confinement, which the other is never known to do. Why this should be called Guernsey Partridge we cannot imagine, since we are credibly informed it is very rare in that island. The common species breed there, but are scarce; whether this ever bred there is uncertain, though they are known to breed in the island of Jersey. It is also found in various parts of the European continent, Asia, and Africa, and is called by the name of Red-legged Partridge.

SUPPLEMENT. — Notwithstanding many gentlemen have turned out the Red-legged Partridge upon their estates, with a view to propagate the species at large, few have succeeded. Mr. Daniel, however, assures us that they are now plentiful near Orford, in Suffolk, by the Marquis of Hertford having imported many thousand eggs,

which were hatched under Hens and liberated. This gentleman further says that he found a covey of these birds, in 1777, near Colchester, consisting of fourteen, several of which he shot. From another respectable quarter we have been informed that many coveys of Red-legged Partridges may be found in one day in the neighbourhood of Ipswich, on manors that are preserved; and that they do not frequent the corn-fields so much as the waste heathy ground. In the year 1809 one of the species was shot in the autumn by a gentleman of Newbury, in Berkshire, out of a covey of Common Partridges. It is a curious fact that the Red-legged species should be so much changed in its nature by only passing the British Channel from Picardy, in France, to Kent, in England, not above the third of a degree difference in point of latitude; yet prolific as it is on the south side of the channel, it becomes less inclined to propagation, even in the same sort of soil, on the north side, so that every exertion to generally naturalize it has hitherto proved abortive. In Spain and Portugal this species is very abundant, frequenting the vineyards especially in the winter. [This bird is plentiful in some of the eastern counties of England, and appears to breed freely.]

[Partridge, Redlegged. — See Partridge, Guernsey.]

[Partridge, Virginian. — See Quail, American.]

Partridge, White.—See Ptarmigan.

[Passenger Pigeon.—See Pigeon, Passenger.]

[Passerine Warbler. — See Pettychaps, Greater.]

[Pastor, Rosecoloured.—See Ouzel, Rose-coloured.]

[Pectoral Sandpiper. — See Sandpiper, Pectoral.]

Peesweep.—See Lapwing.

Pelican. — A genus of birds, whose characters are: Bill long, strait, hooked at the end. Nostrils none; face and gullet destitute of feathers, the latter capable of great distention. Toes four, all webbed together.—The only British species of this genus are the Corvorant, Shag, and Gannet. [See the editorial note on the Gannet, at page 114, as to the supposed absence of nostrils.]

SUPPLEMENT. — In the British Museum

is a Memoir, in MS. of T. Brown, of Norwich, giving an account of the Great White Pelican having been shot in England, May, 1663, at Horsey Fen; and measured three yards from tip to tip of the wings. A query is here put whether it might not be one of the King's Pelicans, kept at St. James's, which had been lost about the same time. Doctor Latham also says that Doctor Leith assured him that a few years since, in the month of May, he saw a Pelican fly over his head on Blackheath, in Kent, and that it was of a brownish colour; and which the former conjectures might be his brown species. The first of these in the relation has been accounted for as a bird escaped from the King's Mews. The last, with all deference to Doctor Leith, who only saw the supposed Pelican at a distance flying over him, we are induced to believe was an immatured Swan in its brown plumage, which at a moderate distance might have deceived him. We do not believe the *Pelecanus fuscus* has been observed out of America; it appears to be truly a transatlantic species.

Penguin.—See Auk, Great.

[Penrith Ouzel.—See Ouzel, Penrith.]

[Peregrine, or Peregrine Falcon. — See Falcon, Peregrine.]

Petrel. — A genus of aquatic birds, the characters of which are: Bill strait, but bent at the end. Nostrils contained in one tube. Legs naked a little above the knee. Toes three, forward, webbed; a spur behind instead of a back-toe.

[Petrel, Bulwer's.—Yarrell, iii. 664. *Procellaria Bulwerii*, Jardine & Selby, *Illustr. Ornith.* ii. Pl. 65. *Thalassidroma Bulwerii*, Gould, *Birds of Europe*; Yarrell, iii. 664.—“The bill is black; the irides nearly so; the whole of the plumage almost uniformly sooty black, rather paler on the edges of the great wing-coverts; tail rounded; legs and toes dark reddish brown, the interdigital membranes dark brown. The whole length from the point of the beak to the end of the tail is ten inches and a half; the wing from the anterior bend to the end of the longest quill-feather eight inches; the bill is three-quarters of an inch in length from the base; the tarsus and the middle toe, including the claw, each one inch and one-sixteenth.”—Yarrell, iii. 666. Mr. Gould adds this species to the British list on the authority of Colonel Dalton, of Skellingford, near Ripon, a single example having been found on the banks of the Ure, near Tanfield, in Yorkshire, on the 8th of May, 1837.]

[Petrel, Capped. — *Yarrell*, iii. 643. *Procellaria hæsitata*, *Forster's MS.*; *Newton*, *Zool.* 3691. — "The whole of the beak is black; from the crown of the head to the nape of the neck the feathers are white at the base, broadly tipped with dark brown, so as to present, except at the edges of the patch, which is nearly circular, a uniform surface of the latter colour; in front and below the eye are a few greyish black feathers extending over the ear-coverts; the orbits are surrounded by a ring of sepia-brown feathers. The forehead, face, neck, breast, belly, sides, and under tail-coverts are nearly pure white, but there are also a few dark feathers on the flanks. The back and shoulders are covered with brownish grey and blackish brown feathers, the former appearing to have been but lately assumed, but many of the latter are sedgy and worn at the edges; all these feathers are white at the base, but that colour does not show on the surface. The rump and upper tail-coverts are white, the feathers of the latter elongated. The tail is rounded, and consists of twelve feathers, the outer pair white, edged and broadly tipped with blackish brown; the next four pairs are similarly coloured, but only slightly edged, the tips of each pair being darker as they approach the middle; the shafts of the quills in all these are white; the middle pair of quills are brownish black nearly all their length, their basal being white, and have their shafts corresponding in colour to their webs. The wing-coverts are blackish brown, bordered with a lighter shade of that colour, the borders of the middle and lower coverts being so broad as to appear like two light-coloured bars across the wing; the quill-feathers are blackish brown, with shafts of the same, the first quill-feather being the longest; the under surface of the wings, as far as can be seen, is white. The naked parts of the tibiae, the tarsi, and the basal halves of the toes and interdigital membranes appear to have been dusky yellow; the rest of the feet and claws are black. The specimen was a female, and when newly killed the irides were hazel-brown. The whole length is sixteen inches: from the carpal joint to the end of the longest wing-feather rather more than twelve inches. The length of the naked portion of the tibiae is rather more than half an inch; of the tarsus rather less than an inch and a half; length of the middle toe, without the claw, about one inch and three-quarters." — *A. Newton*, l. c. This species is of very rare occurrence in any part of the world: examples have been obtained in the Indian Ocean, in the South Seas, and in the West Indies. The only record of its occurrence in Britain is from the pen of Mr. Newton,

in the 'Zoologist' for 1852: it is stated at p. 3691 of that volume that a specimen was taken alive at Southacre, near Swaffham, in Norfolk, in the spring of 1850.]

[Petrel, Dusky. — *Yarrell*, iii. 659. *Puffinus obscurus*, *Gould*, *Birds of Europe*. *Procellaria obscura*, *Temm. Man. d'Ornith.* ii. 808. — "The whole length of the bird is eleven inches; bill to the feathers on the forehead one inch; the nail curved and shining black; the other parts bluish black; the top and sides of the head, including the eyes, the neck above, the back, upper tail-coverts, upper surface of the tail-feathers, and the same parts of all the wing-feathers, ink-black; chin, sides of the head below the eyes, throat, neck, breast, belly, under wing and tail-coverts white; on the sides of the neck, at the junction of the dark and light colour, the feathers are barred slightly; axillary plumes white; under surfaces of the primaries blackish grey; darkest near the shaft of each feather, becoming lighter in colour over the outer part of each broad inner web; under surface of tail-feathers uniform lead-grey; legs with the tarsal bones very much compressed, blackish grey; toes the same, the interdigital membranes reddish brown; irides brown." — *Yarrell*, iii. 663. This species is Atlantic and Mediterranean: a single specimen has occurred off the coast of Ireland, as recorded by Mr. Yarrell, l. c.]

[Petrel, Forktailed. — *Yarrell*, iii. 671; *Hewitson*, cxlv. 520. *Procellaria Leachii*, *Jenyns*, *Brit. Vert.* 286. *Thalassidroma Leachii*, *Temm. Man. d'Ornith.* ii. 842. — "The bill is black; the irides dark brown; the head, neck, and back sooty black, the back rather the darkest in colour; wing-coverts rusty brown; the tertials tipped with white; upper tail-coverts white; primaries and tail-feathers black; the tail forked, the outer feathers being half an inch longer than those in the middle; breast and belly sooty black; behind each thigh, and extending over the sides of the vent and lateral under tail-coverts, an elongated patch of white; the vent and middle under tail-coverts sooty black. The whole length is seven inches and a quarter; from the anterior bend of the wing to the end six inches; the length of the leg one inch. The sexes in plumage are alike." — *Yarrell*, iii. 674. First obtained by Mr. Bullock in the summer of 1818, at St. Kilda; but since that date many specimens have been found in various parts of the British Islands and on the continent of Europe, as recorded by Mr. Yarrell and in the 'Zoologist.' To Sir William Milner is due the credit of discovering the breeding-

place of this interesting bird: he relates, in the 'Zoologist' for 1848, at p. 2059, that he found the Forktailed Petrel breeding in the Island of Dun, one of the St. Kilda group; he writes:—"Not far from the top of the cliff were a colony of the Forktailed Petrel, breeding, like the Stormy Petrel, under the stones and rock, about a yard deep. We were first attracted to them by a low chirping noise, which from time to time the females made while sitting upon their eggs. In one hole only did we find the male and female together. The egg is considerably larger than that of the Stormy Petrel, and resembles it in being surrounded at the larger end by a beautiful zone of red freckles. They are nearly three weeks before the Stormy Petrel in depositing their eggs; and in the locality where we found the Forktailed Petrel there was not a single Stormy Petrel."

Petrel, Little.—See Petrel, Stormy.

Petrel, Manks.—See Shear-water.

Petrel, Stormy.—[Yarrell, iii. 675; Hewitson, cxlv. 517.] *Procellaria pelagica*, Lin. Syst. i. p. 212; Gmel. Syst. ii. p. 561; Ind. Orn. ii. p. 826, 19; Bris. vi. p. 140, 1, t. 13, f. 1; Ib. 8vo, ii. p. 398; Bewick, Br. Birds, ii. t. p. 249. Oiseau de tempête, Buf. ix. p. 327, t. 23. Stormfinch, Will. p. 306; Ib. Angl. p. 395. Stormy Petrel, Br. Zool. ii. No. 259, t. 91; Ib. fol. 146, t. L. 5; Arct. Zool. ii. No. 464; Edw. t. 90; Albin, iii. t. 92; Borlas. Cornw. p. 247, t. 29; Lath. Syn. vi. p. 411, 18; Sup. p. 269; Lewin, Br. Birds, vi. t. 219; Pult. Cat. Dorset. p. 19; Walc. Syn. i. t. 91. Provincial: Little Petrel; Witch; Mother Cary's Chicken; Mitty; Assilag; Spency; Sea-Swallow; Allamotti. — This species is about the size of a Swallow, and in its general appearance and flight not unlike that bird. Length about six inches; colour of the plumage above is black; beneath sooty brown, or dusky; some of the secondary quills are white at the ends; rump and vent white; tail white at the base of the inner webs; legs black. The Stormy Petrel is rarely seen on our shores, except in some of the northern islands, where it is said to breed in the holes of rocks. It is a pelagian bird, living at all other seasons remote from land. They are seen in numbers all over the vast Atlantic Ocean, and will frequently follow a ship for many days; supposed for the purpose of sheltering themselves in the wake of the vessel, but more probably for the sake of the various matter thrown overboard, for they will stoop and pick up bits of biscuit or meat. Supposed to be seen only before stormy weather, and

of course not a welcome visitor to the sailors. Are said to be excellent divers, and capable of remaining under water a great while. The body is of so oily a nature that if a wick is drawn through from the mouth to the vent and lighted, will burn as a lamp; and is said to be actually used for that purpose in the Ferroe Islands. Some few instances are recorded of its being killed far inland: one is mentioned in Latham's 'Synopsis' to have been shot at Oxford. We are also informed that some are annually seen on the western part of the peninsula of Cornwall, about Marazion and Penzance; in the former of which we saw one that was taken.

SUPPLEMENT.— There appears to be some difference in the plumage of this species, for two now before us weighed about an ounce each: the coverts of the secondary quills are tipped with white, not the quills themselves; and a little white is observable on the under part of the wing: the vent in these is not white, but the rump and over the thighs are of that colour: the feathers of the upper tail-coverts are white at the base, with black tips: the tail is composed of twelve very broad feathers, and when closed is nearly even at the end, their colour dusky black, with more or less white at the base of all except the two middle ones. We find this species breeds on the rocky coast of the north of Cornwall, from whence a gentleman in our neighbourhood, who is a collector of birds, received specimens taken off their eggs, in the month of June. Like other rock birds, the Stormy Petrel makes no nest, but deposits one large egg, about the size of that of the Blackbird, but more regularly oval, of a white colour, with an obscure zone of purplish brown, formed by minute specks at the larger end. Mr. Fleming assures us that the Stormy Petrel breeds in all the islets of Zetland, but is never seen on land in the winter. Thus it has been found to be truly indigenous to the British dominions, extending from the southern to the most northern extremity. It is, however, local, and by no means generally diffused, but is attached to particular spots for the purpose of nidification. It is no uncommon occurrence to find birds of this species dead in places contiguous to the coast, and sometimes remote; such as we have had brought to us several times in the months of October and November. A specimen was killed near Bath; and one is said to have been shot so far inland as Derbyshire. From these circumstances it is understood that they sometimes fly across the land; but what occasions the annual mortality which has been noticed in different parts is

difficult to determine: perhaps illness is the occasion of their flying to the shore, to make a shorter cut across promontories, or in a weak state to avoid a storm or an opposing wind, and, being unable to proceed far, are found dead on land. We believe the assertion that this bird is expert in diving to be without foundation: the form and levity, too (from having a large proportion of feather, like the Gulls), should alike render them incapable of immersion. They have not the form for pursuing their prey under water, nor do they appear to possess the means of diving: it is from the surface of the sea that they collect their sustenance. Stormy Petrels fly in small flocks, and are the only species of the feathered creation that dare venture so far from shore as the middle of the Atlantic Ocean, where they appear to find subsistence, and only retire during the breeding season. In a voyage to America we noticed two or three small congregations, and these generally followed the ship for several hours, flying round, and playing about in the manner of Swallows, frequently stooping to pick up bits of biscuits thrown over for the purpose. Fortunately, however, we looked in vain each time for the accompanying tempest which these bewitched chickens of Mother Cary were supposed to forbode. Sailors, naturally superstitious, have always considered this little bird the forerunner of stormy and tempestuous weather, as the appearance of the Kingfisher denoted fine weather, denominated halcyon days by the ancients. These auguries, however, may be founded in fact, for as the Kingfisher is only on the sea-shores, or on the coasts of bays and estuaries, in the temperate months, so the Petrel, whose rapid wing outstrips the wind, flies from the storm, and in its passage over the vast Atlantic may truly warn the mariner of the approaching tempest. Thus all that is related is not fiction; thousands have witnessed the tempest that has succeeded the appearance of these little harbingers of Æolus; the fact is only known to the mariner; he does not reason upon the occurrence, and, unable to account for their sudden appearance, calls in the aid of superstition.

[Petrel, Wilson's.—Yarrell, iii. 667. *Procellaria Wilsoni*, *Jenyns, Brit. Vert.* 286. *Thalassidroma Wilsoni*, *Temm. Man. d'Ornith.* iv. 512. — "The bill is black; the irides dark brown; the head, neck, back, wing-primaries, and the tail-feathers dark brownish black; greater wing-coverts and the secondaries dark rusty brown, lighter in colour near the end, with the extreme edges and tips white; upper tail-coverts

white; chin, throat, breast, and all the under parts sooty black, except the feathers near the vent on each outside, which are white, and some of the under tail-coverts are tipped with white; legs long and slender, with the toes and their membranes black, but with an oblong greyish yellow patch upon each web. The whole length of a fine specimen is seven inches and a half; the wing from the anterior bend to the end of the longest quill-feather six inches and one-eighth; length of tarsus one inch three-eighths; middle toe and claw one inch and three-sixteenths." —Yarrell, iii. 670. Mr. Yarrell records the occurrence of this North-American bird in Cornwall, Norfolk, Sussex and Cumberland: like the other Petrels, it is only driven inland by stress of weather; but its having been found here shows that it may have spontaneously visited our seas. Mr. Audubon, in the 'Zoological Journal,' vol. i. p. 425, gives a most interesting account of the breeding of this bird, as observed on some small islands situated off the southern extremity of Nova Scotia, and formed of sand and light earth, scantily covered with grass.]

Pettychaps, Greater.—[Garden Warbler, Yarrell, i. 331; Hewitson, xxxiv. 128.] *Motacilla hortensis*, *Gmel. Syst.* ii. p. 955. *Sylvia hortensis*, *Ind. Orn.* ii. p. 507, 3; *Lath. Syn. Sup.* [ii. p. 234. *Currucæ, Bris.* iii. p. 372, 2; *Ib.* 8vo, i. p. 414. *La Fauvette*, *Buf.* v. p. 117, t. 7. Pettychaps, *Lath. Syn.* iv. p. 413, 3; *Lewin, Br. Birds*, iii. t. 100; *Walc. Syn.* ii. t. 230. *Fauvette*, Pettychaps, *Bewick, Br. Birds*, 1, p. 218. *Die Bastardnachtigale*, *Naturf.* 27, s. 39, 1 (*Beckstein*). — Length six inches; weight about five drams. Bill dusky above; base of the under mandible yellowish; irides hazel; orbits white. General colour of the plumage above light brown, inclining to olive; below the ear is a dash of ash-colour; throat, neck, breast, and sides dirty white, inclining to brown on the two last; belly and under tail-coverts white; quills and tail-feathers dusky, edged with olive; legs bluish brown. This species of Warbler, which is not very plentiful in England, was first discovered in Lancashire, and sent from thence to Dr. Latham by Sir Ashton Lever. However, since it has been better known, it is found to arrive in several of the southern counties about the latter end of April or beginning of May. Its song is little inferior to that of the Nightingale. Some of the notes are sweetly and softly drawn; others quick, lively, loud, and piercing, reaching the distant ear with pleasing harmony, something like the whistle of the Blackbird, but in a more hurried cadence: sings

frequently after sunset. This bird chiefly inhabits thick hedges, where it makes a nest composed of goose-grass, and other fibrous plants, flimsily put together, like that of the common White Throat, with the addition sometimes of a little green moss externally: the nest is placed in some bush near the ground. It lays four eggs, about the size of a Hedge Sparrow's, weighing about thirty-six grains, of a dirty white, blotched all over with light brown, most numerous at the larger end, where spots of ash-colour also appear. In Wiltshire, where we have found this species not uncommon, it resorts to gardens in the latter end of summer, together with the White Throat and Blackcap, for the sake of currants and other fruit. The Pettychaps of Mr. Pennant seems to correspond with this, except that the inside of the mouth of this is more inclined to yellow than red. That author also says, in Yorkshire this is called the Beambird, from its nesting under beams in outbuildings. But as he quotes the *Motacilla Hippolais* of Linnæus, we must conclude he means the Lesser Pettychaps of Latham's 'Synopsis,' and of this work. But in either he must have been deceived as to its making a nest in outbuildings; and we are rather inclined to think the habits of the Spotted Flycatcher have been given him with his Pettychaps; that bird having obtained the name of Rafter in some parts from the circumstance of building its nest on rafters and beam-ends in old buildings and outhouses.

SUPPLEMENT. — M. Beckstein observes that this bird, which he calls *Bastardnachtigale*, is found throughout Sweden and Germany, departing thence the latter end of August. Till recently we had not traced this species so far west as Devonshire; but in 1806 we heard several in the month of June, in the thickets that border the river Avon, within a few miles of its junction with the sea, singing most charmingly; their notes being so mellow, and so singularly elegant, that no one conversant in the song of birds can possibly be mistaken. We afterwards saw two or three pairs of them. In a tour across the kingdom from the western to the eastern coast, this bird frequently occurred between the eastern parts of Somersetshire and Lincolnshire, and nowhere more abundant than between Spalding and Boston, in the last-mentioned county; and indeed everywhere that shelter could be found, even in the few hedges about the village of Wainfleet, and in the thickets surrounding the decoys on the fens in that neighbourhood. It is necessary to notice the mistake that Mr. Bewick has fallen into with respect to this and some others of similar habits,

which he has termed (after Buffon) *Fauvettes*. The birds in question are his Pettychaps, Passerine Warbler, Yellow Willow Wren, and Least Willow Wren. The first of these, by the description, and more particularly by its manners and habits, is the Greater Pettychaps, but unfortunately he has affixed to it the synonyms of the Lesser Pettychaps (*Motacilla hippolais* of Linnæus). The second is without doubt the Reed Wren (*Sylvia arundinacea*) of this work, not the Passerine Warbler, which, though a continental species, has not, we believe, been found in this island. The third is our Wood Wren; and the fourth is the *Motacilla hippolais* of Linnæus, the Lesser Pettychaps of this work. This remark is obviously necessary to prevent these birds from being confounded; and as we shall have occasion to speak again of these Warblers in their turn, we shall conclude our history of this species by a few remarks on a note of Mr. Bewick's, at the bottom of page 219. "We have" (says this author) "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. ii. p. 264, 1st ed.), and the Lesser Pettychaps of Latham, which he says is known in Yorkshire 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." That the unfortunate Beambird of Willughby has caused much perplexity must be admitted, though it is, undoubtedly, the Spotted Flycatcher: yet in the latter works of Pennant he suspected it might be the *Motacilla hippolais*, the Lesser Pettychaps of Latham, not this bird. The Greater Pettychaps has been long known; was first discovered in Lancashire, and we may now conclude, from what Mr. Bewick relates, that it is met with about Newcastle, which at present is its utmost northern range noticed in England. We were not personally able to ascertain it in Northumberland, although we were in that county for several summer months.

Pettychaps, Lesser. — [Chiff Chaff (*Sylvia rufa*), *Yarrell*, i. 360; *Hewitson*, xxxvi. 139.] *Motacilla Hippolais*, *Lin. Syst.* i. p. 330, 7; *Gmel. Syst.* ii. p. 954. *Sylvia Hippolais*, *Ind. Orn.* ii. p. 507, 4; *Lath. Syn. Sup.* ii. p. 236. *Ficedula septima* Aldrovandi (Pettychaps), *Raii Syn.* p. 79, A. 7; *Will.* p. 158; *Ib. Angl.* p. 216. Lesser Pettychaps, *Br. Zool.* i. No. 149? *Arct. Zool.* ii. p. 418, G.; *Ib. Sup.* p. 64; *Lath. Syn.* iv. p. 413, 3*; *Lewin, Br. Birds*, iii. t. 101; *Walc. Syn.* ii. t. 231; *Pult. Cat. Dorset.* p. 9. Least Willow Wren, *Bewick, Br. Birds*, i.

p. 232. *Motacilla Fitis*, *Naturf.* 27, S. 50, 5. Provincial: Chip-chop; Chiff-chaff; Choice and Cheap. — Weighs about two drams; the length exceeds four inches and a half. This species is inferior in size to the Yellow Wren. In its plumage it so much resembles that bird that we shall only make mention here of any essential marks of distinction, and refer our reader to the Yellow Wren. Its general colour is not so much tinged with yellow, and the legs are dusky, which in the other are brown. These two birds have been, and are frequently, confounded, and with them the Wood Wren of this work; but this last is at once distinguished by the under tail-coverts being a pure white, and the plumage of a more lively green on the upper parts than either of the others. The nest, eggs, and notes will be found also different by consulting and comparing the history of each. This is the first species of Warbler that pays its annual visit to us in the spring, and is generally heard on or before the 1st of April repeating its song, if it may be so called, for it consists only of two notes, which seem to express the words "chip, chop," four or five times successively. It is a busy, restless bird, always active amongst the trees and bushes in search of insects. The plumage of the sexes are alike. The nest is oval, with a small hole near the top, composed externally of dry leaves, and then coarse dry grass, and lined with feathers; and is generally placed on or near the ground, frequently of a ditch-bank, in a tuft of grass or low bush. The eggs are six in number, white, speckled with purplish red at the larger end only, with here and there a single speck on the sides. It seems to be the hardiest and more generally diffused of all our summer visitants; is found in all parts of the kingdom where wood or hedges afford them shelter and food. Their note is heard long after the Yellow Wren is silent; and they remain with us later than any other migrative species; not unfrequently to the latter end of October. We must conclude this is the bird Mr. Pennant says is called in Yorkshire the Beam-bird, as he quotes this bird of Linnæus and other authors for his Pettychaps. Dr. Latham says this is called in Dorsetshire the Hay-bird; but as we are inclined to believe the three species before mentioned have been confounded, it is more probable that the Yellow Wren should obtain that name, as its nest is composed of that material.

SUPPLEMENT.—This is the *Motacilla hippolais* of Linnæus, the *Sylvia hippolais* of Doctor Latham. The provincial names here specified are all expressive of the double note which it reiterates throughout

the summer months, and even till late in the autumn. It is of all the migrative Warblers the earliest in its vernal visit; and is perhaps the only one that has occasionally been observed with us during the winter; and that probably confined to a small district in the mildest part of England. From its very early cry in our neighbourhood in the south of Devon, we had long suspected this hardy little species might not wholly quit these parts, and we were confirmed in this opinion in the winter of 1806, one having been seen in the garden about Christmas; and in the latter end of January following we had ocular proof of the fact, by observing two of these little creatures busied in catching small winged insects, which a bright day had roused in great abundance about some fir-trees. These they collected by frequently springing from the ends of the branches, and while thus employed we shot one of them. This was a remarkable mild winter; the thermometer had never but once been below the freezing point, and that only about half a degree. In the year 1808, on the 16th of December, we observed two more of these birds in the same fir-trees; there had been a frost the preceding night, but the sun had roused a small species of *Culex*, which the Pettychaps were feeding on. The weight of one of these, which we also killed, was one dram thirty-three grains. The other was frequently seen afterwards as late as the middle of January. It may now be easy to account for the very early cry of this bird occasionally in the spring; for probably such had remained with us all the year, but are wholly silent in the winter: the earliest we ever heard in Devonshire was on the 14th of March, 1804, at which time vegetation was unusually forward. The Lesser Pettychaps and the Long-tail Titmouse are the smallest birds in England, and perhaps in Europe, the Golden-crested Wren excepted: their weight is nearly similar. The specimen of the Pettychaps, weighed in winter, was unusually small, though not in bad condition. The note of this bird is truly simple, but pleasing from the concomitant, being the first harbinger of spring. During the breeding season their binotonous cry is incessant, and has caused a variety of similies. Some liken it to a repetition of "chiff chaff," others to "twit twit:" and M. Beckstein thinks it expresses the word "fit," repeated. Doctor Cornish informs us that about Totnes it is known by the name of Choice and Cheap, from their notes; but of all the similies the words "chip chop, chip chop," seem best to represent the notes.

Pewit.—See Lapwing; and Gull, Black-headed.

Phalarope. — A genus of birds, the characters of which are: Bill strait. Nostrils minute. Body and legs in every respect like the Sandpiper. Toes furnished with broad and generally scalloped membranes.

Phalarope, Brown.—See Phalarope, Red.

Phalarope, Grey.—[Yarrell, iii. 97; Hewitson, civ. 308.] *Tringa lobata*, Lin. Syst. i. p. 249, 8; Gmel. Syst. ii. p. 674. *Phalaropus lobatus*, Ind. Orn. ii. p. 776, 2. *Phalaropus*, Bris. vi. p. 12, 1; Ib. 8vo, ii. p. 361. Le Phalarope, à festons dentelés, Buf. viii. p. 226. *Phalaropus glacialis*, Ind. Orn. ii. p. 776. *Tringa glacialis*, Gmel. Syst. i. p. 675. Great Coot-footed *Tringa*, Edw. t. 308. Grey Phalarope, Br. Zool. ii. No. 218, t. 76; Ib. fol. 126, t. E. 1, f. 3; Arct. Zool. ii. No. 412; Lath. Syn. v. p. 272, 2; Lewin, Br. Birds, v. t. 194; Walc. Syn. ii. t. 156; Pult. Cat. Dorset. p. 15. Plain Phalarope, Arct. Zool. ii. No. 415; Lath. Syn. v. p. 173. — In size is rather superior to the Purre; weight one ounce. Bill black, flattened near the point, about an inch long; irides dark. Hind part of the head and neck dusky brown, dashed with ash-colour; upper part of the body, scapulars, and wing-coverts cinereous-grey, the feathers on the last darkest, and edged with white; forehead, crown of the head, chin, and whole under parts pure white, except at the bend of the wing on the sides of the breast, which is ash-colour; a dusky spot on the cheek; quills black; tail dusky, edged with ash-colour; legs compressed, like the Diver's, of a light colour; toes scalloped; membranes serrated on their margins. This description is taken from a specimen killed at a pond at Alderton in Wiltshire, now in my museum. The sex my notes do not inform me; but it seems to be subject to some variety, either from sex or age. Dr. Latham mentions one to have the back, rump, and scapulars deep dove-colour; legs black. It seems to be a solitary and scarce bird with us. We once had an opportunity of seeing one swimming in a small pool of water left by the tide on the Sussex coast. It was continually dipping its bill into the water, as if feeding on some insects, and so intent as to suffer us to approach within a few yards. It never attempted to dive, and when disturbed flew only a small distance, very like the Purre. Is said to inhabit the northern parts of Europe, and to congregate about the borders of the Caspian Sea.

APPENDIX.—The rare occurrence of this

species in Great Britain has not allowed us to examine it at different seasons of the year, but from the plumage of three specimens, sent to us at different times in the autumn of 1812, it appears that the young, if not the old birds, undergo a change of plumage at that season. What the colour of this bird is in its breeding dress has not, we believe, been clearly recorded, as we cannot find any account of it in the breeding season, nor of its nest or eggs. It is, however, evident that the young birds, at first, have none of that fine cinereous-grey on the upper parts, from which its name has been taken; instead of which the feathers are more or less black, margined with dull yellow, or rufous; the coverts of the wings are dashed with cinereous, and have their margins pale yellowish, the lower series nearly white. In this state it is the Plain Phalarope of the 'Arctic Zoology.' We are indeed told that the toes of that species are bordered with a plain or unscallop membrane; but we have shown, in a variety of the following species (which we conceive to be the Brown Phalarope of the same work), that the lobated membranes of the toes are not obvious in dried birds of this genus. It requires much nicety to preserve this character in drying; for if they are not pinned out in a moist state, the lobes, or scallops, fold underneath, leaving only a plain margin, and are so thin and delicate as to pass unnoticed. A variety of the Grey Phalarope now before us was shot towards the latter end of October, which clearly demonstrates the changing its plumage from the *glacialis* to the *lobatus*, possessing a sufficient number of cinereous feathers on the back and scapulars to show that it really is the *lobatus*, besides having been shot in company with another further advanced in its winter plumage. Whether, as in many aquatic birds, the old ones of this species change their grey plumage immediately after breeding, and become dusky and rufous above, like the young, we have not the means of ascertaining; but we are rather inclined to believe that those which appear with us in the autumn, in the dusky plumage, more or less, are the young only, varying by having been hatched sooner or later in the preceding summer. We have now under examination four specimens in the different gradations of change, from the commencement of the first moulting to the most perfect state of grey plumage. The single instance on record of the Plain Phalarope of Mr. Pennant (which we consider as the grey species in its nestling plumage), was taken in the Frozen Sea, lat. 69½, long. 191½; but by whom or in what month we are not informed. It is

evident, however, it must have been in the summer, for our navigation so far north is obstructed by the month of September. In one of the four specimens alluded to, there are only a few of the recently-moulted grey feathers on the back and scapulars, mixed with the dusky ones, that make it vary in the least from the Penantian species. But in order to give others a comparative view, we shall transcribe the description of the Plain Phalarope from the 'Arctic Zoology,' and afterwards that of its first change, which indicates the species to which it really belongs. "With a slender black bill, dilated at the end: crown dusky and dull yellow; across each eye a black line: cheeks and fore part of the neck pale clay-colour: breast and belly white; back and tertials dusky, edged with dull yellow: coverts, primaries, and tail cinereous; the last edged like the tertials: legs yellowish: toes bordered with a plain or unscaloped membrane." Such is the description given by Mr. Penant, and copied by all succeeding authors. The following is a description of the bird before us, just commencing its first moult:—The whole upper part of the head, back of the neck, upper and lower parts of the back under the wings, and rump black, more or less margined with dull yellow or rufous, except on the back of the neck, which is plain: the middle of the back and scapulars are partly of the same colour, but mixed with some plain cinereous-grey feathers: the coverts of the wings dusky, tinged with cinereous, partly margined with pale rufous, and partly white: the forehead and cheeks are white, with a tinge of yellow on the latter: across the eye, or rather behind it, is a black stroke: the whole under parts white, except the neck, which is of a pale clay-colour: the tertials and tail-feathers edged with yellowish white. In another specimen further advanced towards maturity, the crown of the head is more mixed with white, and the back has less of the rufous-margined feathers, and more of the cinereous-grey, but there remains of the former three lines down the back, besides a few such feathers scattered on other parts: the neck before has also less of the clay-colour: the legs are flesh-colour, tinged with yellow on the inside; the outside dusky; the webs partly dusky, partly yellow. In the genus Phalarope there are some characters which have not been generally known, by which they might be always discriminated from Sandpipers, independent of the feet. The plumage is much thicker on the under parts, similar to most truly aquatic birds, and notwithstanding the tail is longer than most Sandpipers, the under coverts are numerous

and extend quite to the extremity: the bone of the leg is also more compressed than in the Sandpipers.

Phalarope, Plain.—See Phalarope, Grey.

Phalarope, Red.—[Yarrell, iii. 102; Hewitson, civ. 370.] Mas: *Tringa hyperborea*, *Lin. Syst. i. p. 249, 9*; *Gmel. Syst. i. p. 675*. *Phalaropus hyperboreus*, *Ind. Orn. ii. p. 775, 1*. *Phalaropus cinereus*, *Bris. vi. p. 15, 2*; *Ib. 8vo, ii. p. 362*. *Larus fidipes alter nostras*, *Raii Syn. p. 132, A. 7*; *Will. p. 270*. *Le Phalarope cendré*, *Buf. viii. p. 244*. *Cock Coot-footed Tringa*, *Edw. t. 143*. *Red Phalarope*, *Br. Zool. ii. No. 219, t. 76*; *Lath. Syn. v. p. 270, 1 (mas)*, *271 (fem.)*; *Lewin, Br. Birds, v. t. 193*; *Walc. Syn. ii. t. 157*. FEM: *Tringa fulicaria*, *Lin. Syst. i. p. 249, 10*; *Gmel. Syst. ii. p. 676, 6*. *Phalaropus rufescens*, *Bris. vi. p. 20, 4*; *Ib. 8vo, ii. p. 363*. *Le Phalarope rouge*, *Buf. viii. p. 225*. *Red Coot-footed Tringa*, *Edw. t. 142*. *Red-necked Phalarope*, *Br. Miscel. i. t. 10, fem.* *Phalaropus Williamsii*, *Lin. Trans. viii. p. 264*. —Size of the preceding species; length eight inches; bill black, an inch long, slender, strait, except at the end, which bends downwards. Top of the head, hind part of the neck, back and scapulars deep ash-colour; through the eye, from the base of the bill, a dusky streak passing backwards; quill-feathers dusky; some of the secondaries tipped white; wing-coverts ash-colour, the greater darkest, and tipped with white; the whole under parts, from chin to vent, white; in some the under part and sides of the neck are ferruginous, and the breast cinereous; in others the rump and upper tail-coverts are banded dusky and white; tail dusky, dashed with cinereous; legs and feet black, or lead-colour. FEMALE: The head, throat, hind-neck, back, scapulars, and upper tail-coverts black, margined rufous; over the eye a pale rufous-brown streak; rump white, spotted with dusky; under parts from the throat dusky red; wings and tail as in the other sex. From the authority of Dr. Latham we give this as the female. It is so rare a species in England that few come under examination in a fresh state. Their manners and habits are probably the same as the other species before mentioned. Inhabits the north of Europe; said to breed at Hudson's Bay, and lays four eggs. Sometimes called Small Cloven-footed Gull, Scallop-toed Sandpiper.

SUPPLEMENT. — A specimen of the Red Phalarope in our collection has the throat white; the upper part of the neck before, and on the sides, bright ferruginous; the lower part of the neck banded with cinereous: the upper part of the back, and

scapulars, a mixture of ferruginous and deep ash-colour: the secondary quills are, in part, very slightly tipped with white, but the greater coverts largely so, especially those of the secondaries, which are nearly one-half white, and form a very conspicuous bar across the wing: the quills have white shafts: the middle tail-feathers are dusky, the others cinereous, the outer one margined with white on the exterior web. This, according to late observation, should be a female, and which we have described as differing from what was given in the former part of this work. In the 8th vol. of the 'Transactions of the Linnean Society' we find descriptions of both sexes of this species under the title of *Phalaropus Williamsii*, differing very little from the usual specific characters. Six females and two males were dissected, by which means it was ascertained that the former sex was rather the largest, and only had the fore part of the neck of a ferruginous colour: the males were variegated on that part with cinereous, rusty, and white. These were taken in Sanda and North Ronaldsha, the most northern of the Orkney Islands, on the borders of fresh-water lakes, in the summer; so that no doubt exists of their breeding there. It is remarked that the bellies of the males were deficient of feathers, from which it is supposed that sex alone performs the business of incubation. To this, however, we cannot assent, as it is highly unnatural; but there is no doubt the males take a part in that patient and necessary duty. In the stomachs of these we observed the remains of *Onisci* and *Monoculi*. Mr. Simmonds, the author of this paper, suspecting these might differ from the Red Phalarope, gave them another name; but the variation is so trifling that it scarcely makes a distinction between their summer and winter plumage, so that no doubt can exist of their being the red species. In the 'British Miscellany' mention is made of this bird having been found in those islands above mentioned, in the month of July: and the figure of a female given proved to be such by dissection. In this the throat is white: sides of the neck bright ferruginous, slightly uniting on the lower part in front; the plumage of the upper parts of the bird appears to be dusky, inclining to rufous-brown, dashed with cinereous. Some doubts have existed whether the Red and Grey Phalaropes may not be the same species. Had not what we have just related fairly determined the contrary by dissection, we should have entered more on the subject; but we shall here remark that an attention to the bill, which is so essentially different, will leave no doubt in the mind of

the critical naturalist. In this the bill is very slender, and acuminate at the point, where it bends a trifle: in the Grey species the bill is not so slender, and terminates rather broad, and sub-compressed. Acerbi gives this in his list of Lapland birds.

APPENDIX.—We have before mentioned that this bird had been observed in the Orkneys in considerable abundance in the summer, and that no doubts were entertained of its breeding there, although the nest had not been found. To Mr. Bullock therefore we are indebted for the further elucidation of the natural history of this elegant little bird. In a letter to the author this gentleman says:—"I found the Red Phalarope common in the marshes of Sanda and Westra in the breeding season, but which it leaves in the autumn. This bird is so extremely tame that I killed nine without moving out of the same spot, being not in the least alarmed at the report of a gun. It lays four eggs of the shape of that of a Snipe, but much less, of an olive colour, blotched with dusky. It swims with the greatest ease, and when on the water looks like a beautiful miniature of a Duck, carrying its head close to the back, in the manner of a Teal." Mr. Bullock further observes that the plumage of the female is much lighter, and has less of the rufous than the other sex. A variety of the Red Phalarope was shot in the autumn of 1812, on a lake in Yorkshire belonging to Mr. Danby, of Swinton, whose game-keeper had unfortunately stuffed and baked it before it was sent to an ornithological friend, Colonel Dalton. In drying, the lobated membranes that margin the feet (the usual character of distinction between the two genera *Phalaropus* and *Tringa*) had so contracted as not to leave the smallest vestige of them; and as the plumage is so essentially different from either of the Phalaropes, and from any described species of *Tringa*, it became an object of more close investigation. With the description of the bird, accompanied by a very elegant drawing, executed by Mrs. Dalton, we were favoured, and we are not surprised that the bird should have puzzled any naturalist who might not have had the means of comparison (for the Red Phalarope was not in the Colonel's collection). The connecting membranes between the toes were all that were discoverable, but those some of the Sandpipers possess more or less. In the hasty drying another difficulty was occasioned, by the bill being considerably incurved. Upon a comparison, however, of the drawing with the Phalaropes, to which we were led by the feet, which were represented to have a connecting membrane between the

middle and each of the interior toes, more than usual in the *Tringa* genus, we had reason to suspect, that as the shape of the bill, the slenderness and length of the bill, and toes corresponded so closely with the Red Phalarope, that upon soaking the feet of the bird in water the marginal lobes would be found, and which we are assured was the result. This circumstance (however trifling it may appear to some) shows how easy it is to be deceived in dried or ill-preserved birds, by those who, not knowing better, have destroyed the little discriminating character they possess, and evinces how necessary it is for naturalists to minutely investigate.* The bird in question is probably a female in the first plumage, as the whole under part, from the chin to the under tail-coverts, is white, except the breast, which is faintly mottled with pale ferruginous; the crown of the head dusky black, with a few white spots on the top: the forehead and cheeks white, the latter with a long black mark behind the eye, taking in the coverts of the ears; at the anterior corner of the eye is also a little black: the back of the neck pale brown: the back and scapulars black, with a slight purple gloss, the former margined with rufous, the latter edged with white: the wings and tail appear to be nearly the same as usual in this species. This is an interesting variety of the Red Phalarope, because it comes so near to what has been described as a distinct species, under the title of Brown Phalarope (*Phalaropus fuscus*), that we have very little doubt the synonyms ought to be brought together. Mr. Pennant appears to have first described the Brown Phalarope from a specimen which flew on board a ship off the coast of Maryland, and he refers to a figure in Edwards. Long received as a good species, the same description has been transcribed into other works. In the 'Index Ornithologicus,' ii. 776, will be found the following synonyms:—*Tringa fusca*, *Gmel. Syst. i. p. 675.* *Phalaropus fuscus*, *Bris. vi. p. 18, 3; Id. 8vo, ii. p. 363.* *Fulica fusca*, *rostro tenui, Klein. Av. p. 151, 3.* Coot-footed *Tringa*, *Edw. t. 46.* Brown Phalarope, *Arct. Zool. ii. No. 414; Lath. Syn. v. p. 274, 4.* The description in the 'Arctic Zoology' is as follows:—"With a slender black bill, a little bending at the end: crown black: cheeks and neck of a light ash-colour, tinged with bloom-colour; breast and belly white: back, wings, and tail dusky; greater

primaries and greater coverts tipped with white: legs like the Red Phalarope." Mr. Pennant adds that the form of the bill is a specific distinction from the Red species. The stress which this naturalist appears to have laid on the trifling curvature of the bill, which he considers as a specific distinction, is by no means to be depended upon in dried birds; for, in the act of drying hastily, all slender and soft bills become more or less flexuous by partial contraction. It was this circumstance, as well as the non-appearance of lobes on the feet, that caused a momentary hesitation in identifying the variety or young of the Red Phalarope above mentioned, which was communicated to us by Colonel Dalton, and which we really think is so nearly allied to the Brown Phalarope of Mr. Pennant as to require their being brought together. [Bewick, Gould, Yarrell and Hewitson call this bird the Rednecked Phalarope.]

[Phalarope, Rednecked. — See Phalarope, Red.]

Pheasant. — A genus of birds, the characters of which are: Bill short, strong, convex. The sides of the head bare, carunculated. Legs most commonly furnished with a spur.

Pheasant, Common. — [Yarrell, ii. 320; Hewitson, lxviii. 276.] *Phasianus colchicus*, *Lin. Syst. i. p. 270, 3; Gmel. Syst. i. p. 741; Raii Syn. p. 56, A. 1; Will. p. 117, t. 28; Ind. Orn. ii. p. 629; Bris. i. p. 262, 1; Ib. 8vo, p. 73.* *Le Faisan*, *Buf. ii. p. 328, t. 11.* Common Pheasant, *Albin, i. t. 25, 26; Hayes, Br. Birds, t. 20; Will. Angl. p. 163, t. 28; Lath. Syn. iv. p. 712, 4; Lewin, Br. Birds, iii. t. 31; Walc. Syn. ii. t. 178; Don. Br. Birds, v. t. 101; Pult. Cat. Dorset. p. 7.* — Weight of a full-grown bird near three pounds; length three feet; bill pale yellowish horn-colour; irides yellow; sides of the head bare, granulated, crimson, minutely speckled with black. This part is considerably brighter and much dilated in the courting season; at which time also it erects a tuft of ear-like feathers on each side of the head. The various tints of green-gold, blue, and violet, in the plumage, exceeds description, and is too well known to require it. The tail consists of eighteen feathers, very cuneiform, the two middle ones about eighteen or twenty inches long; the legs are furnished with a spur three-quarters of an inch long; toes joined by a strong membrane at the base. The female is not so large, of a rufous-brown colour, mixed with grey and dusky; the bill is brown; irides hazel; and the sides of the head

* This occasioned the Plain Phalarope of the 'Arctic Zoology' to be made a distinct species, whereas it is only the young of the Grey species.

covered with feathers; tail of the same shape, but not so long as in the male. It is difficult perhaps to trace the origin of this species, where it came from, or when first introduced into this country. It is now found in a state of nature in almost every part of the old continent, except the northern, but is not known in America. It bears confinement tolerably well, and produces a great many eggs in that state. The female will sometimes incubate if not disturbed by the male, which is too often the case; on which account the eggs are generally put under a common fowl to be hatched: by this means a great many are reared and given their liberty every year by gentlemen of property. Were it not for this probably the breed would be extinct in a few years in spite of the severity of the game laws. The demand for them at the tables of the luxurious, and the irresistible mark they offer to the sportsman, would soon cause their destruction in this age of excellence in the art of shooting flying. It is a foolish bird; when roused will frequently perch on the first tree, and is so intent upon the dogs as to suffer the sportsman to approach very near. At the time they perch they most frequently crow, or make a chuckling noise, by which the unfair sportsman is led to their destruction. The poacher will catch them in nooses made of wire, horse-hair twisted, and even with a briar set in the like manner at the verge of a wood, for they always run to feed in the adjacent fields morning and evening. Besides this they are taken by a wire fastened to a long pole, and by that means taken off their roost at night; or, by fixing a bunch of matches lighted at the end of a pole, are suffocated, and drop off the perch. Foxes also destroy a great many, in particular the females when sitting on their nest. The Pheasant is found partially in most parts of England, but not so plentiful in the north, and rarely in Scotland. Wood and corn land seem necessary to its existence: it is partial to oak and beech woods, on the seed of which they feed; buckwheat is also a favourite food. In the autumn they frequent turnips. Large wooded tracts only produce them in abundance, and they mostly frequent the thickest and most impenetrable coverts, or such as are covered with long grass, which the female generally makes choice of to deposit her eggs, scraping together a few surrounding dry vegetables for a nest, and laying from eight to twelve eggs. The male is frequently heard to crow in spring, clapping his wings at the same time. In confinement the female sometimes assumes the plumage of the male; at this time she becomes barren, and is equally buffeted by both sexes.

This strange change of plumage does not seem to be the effect of age, for we have been assured by our noble friend Lord Carnarvon, who has had several in that state, that it takes place at three or four years old. In the one that nobleman favoured us with the colours were not so bright as generally found in the other sex. Whether barrenness is the occasion of this change, or whether the want of commerce with the other sex, by reason of the male plumage, is the occasion of her not breeding, is yet to be discovered by dissection; for if in the breeding season there should appear any eggs in the ovarium, and those distended, there can be no doubt of the latter cause. In a state of nature this circumstance probably does not take place. This bird does not appear to pair; but the female carefully hides her nest from the male; and we are informed where they are in plenty, and food provided for them, the two sexes do not in general feed together. Domestication generally produces variety, and we find this bird mixed more or less with white: sometimes wholly so. In the 'Naturalist's Calendar,' published in 1795, from the papers of the late Rev. Gilbert White of Selborne, a plate and description is given of a singular bird killed in Hampshire, which he considered as an hybrid between the Pheasant and domestic fowl. The head, neck, breast, and belly glossy black; the back, wing-feathers, and tail pale russet, streaked somewhat like the upper parts of a Partridge; the tail was even at the end, and not very long; legs bare of feathers, and destitute of a spur; round the eye the skin was bare and scarlet; weight three pounds three ounces and a half. By the drawing there also appears to be some white on the shoulder, and some dark feathers in the middle of the tail beneath. It is generally believed the Pheasant and domestic fowl will breed together; if so, possibly the colour of the spurious breed would depend much on that of the common fowl. Some authors have given a description of such, but not at all like Mr. White's bird. One in the Leverian Museum is almost throughout of a dingy reddish brown colour, with very few markings. Surely if it was common (as some have asserted) for male Pheasants to mix breed with our tame fowls in farm-yards contiguous to their natural haunts, more would be known of the spurious breed: at present no one has determined whether such a produce are mules or not. A variety called the Ring Pheasant is not uncommon in this country. See that bird.

SUPPLEMENT. — In the 'General Synopsis of Birds,' vol. iv. p. 672, the author mentions two instances, to his knowledge,

of the Pea-hen having assumed much of the plumage of the male, particularly the ocellated train, or coverts of the tail; one of these, which originally belonged to Lady Tynte, and afterwards preserved in the Leverian Museum, is represented, Tab. 60. This curious and unnatural change is well known to take place occasionally in the Common Pheasant. The circumstance is not only mentioned by Edwards and Salerne, but an ingenious paper on the subject was given in vol. 70, p. 527, of the 'Philosophical Transactions,' by Doctor Hunter. Doctor Latham says that the female of the Rock Manakin is said to obtain the plumage of the opposite sex after a number of years. Age, however, does not appear to be the cause of this singular *lusus* of nature, as we have before remarked; but what the cause may be that produces such a different secretion for colouring the feathers than is usual, or that occasions such a superior luxuriance of growth, as in the train of the Pea-hen, is at present a matter of conjecture only. That few species produce this phenomenon, and those rarely, is well known; and we suspected that this happened only in confinement, until the contrary had been well authenticated with respect to the Pheasant. This change therefore is not wholly the consequence of domestication; though daily experience convinces us that the want of a variety of food and range has produced a variety of plumage *ad infinitum* in the Pigeon, the common Fowl, the Duck, and even in the Turkey; though no instance, in either of these, has occurred of a complete change in the sexual characters of plumage. The domestic Hen has never appeared in the long tail-feathers of the Cock; the Duck has never thrown out the curled middle feathers of the tail. Age, however, will produce some trifling alterations, but it does not appear that such a total metamorphose in sexual plumage is occasioned by extraordinary age, since it has occurred at five or six months old, of which the following is a proof. From the indubitable authority of the Honourable Rev. George Herbert, we are informed that it is by no means an uncommon circumstance for the hen Pheasant to assume the male plumage in the woods of Norfolk. This gentleman assures us that he shot three such birds last year (1811), and further remarks that as a proof of this extraordinary change not being the effect of age, a clutch of eggs that were brought in from the field, in hay-harvest, were hatched under a domestic Hen, and one of the young females, at the usual time, in the same autumn, when the sexual feathers appear, assumed the male plumage. The head and neck resemble those of the male,

but are not so brilliant, having a tinge of brown: the breast not so dark: the back and tail resemble those of the female. A female Painted Pheasant (*Phasianus pictus*), bred in the menagerie belonging to the late Lord Carnarvon, at Highclere, became male-feathered, and that nobleman, with his usual politeness and attention to our pursuits, sent the bird to us, accompanied with a letter, stating some particulars concerning her. The purport of the letter was, that the bird was about six years old, and had produced some broods, but that for the last two years she had not bred; that in the spring of the year in which she became barren, or did not lay any more eggs, visible marks of change to the male plumage began to appear, and, in the autumnal moulting following, the tail and other coloured feathers were evident marks of this strange assumption of plumage. What additional change took place the succeeding spring was not noticed, but her autumnal plumage of that year was perfected before her decease, which took place on the 10th of Dec. 1803. In this state of change, which appears to have been progressive, there are evident marks of her sex, especially on the back and rump, which had not attained the full yellow, nor the long narrow crimson coverts of the tail: but the beautiful yellow silky crest, and the orange hood on the hind part of the head, composed of long truncated feathers, with their tips barred with purple, that fall over the neck, are as perfect as in the male. The putrid state in which the bird arrived did not admit of any inspection of the ovaries. From these and many other accounts it is quite clear that age has nothing to do with this phenomenon. In the 'Osterly Menagerie' we are told that some instances had occurred where the female Painted Pheasant had assumed the plumage of the other sex. One of these birds, belonging to the Duke of Leeds, could only be distinguished from a male by the difference in the eyes, the inferior length of the tail, and want of the spurs. Edwards speaks of the common female Pheasant in the menagerie of the last-mentioned nobleman having also assumed the male plumage. We were also favoured with a pied variety of the Common Pheasant hen alive, from the present Lord Carnarvon, that had become male-feathered; this died of a decayed liver, and was so emaciated as to render the ovaries inconspicuous. Birds in a state of domestication or confinement not uncommonly make a total change in the colour of their plumage. A friend had a beautiful hen of the common domestic fowl, which was kept on account of her beauty and diversity of colours, that, after rearing several broods of

chicken, became entirely white, and continued so. Mr. Anstice assures us that a neighbour has a common cock of the Java breed, which originally was black and red, like some of the English game breed, that on the third year became mottled with white, and in the fourth moulting was clothed in pure unsullied white. We are frequently told that it is no uncommon occurrence, in the parts of the kingdom where Pheasants are plentiful, for the male to repair to the neighbouring farmyards, and propagate with the domestic hens. That those who have related such accounts had been so informed we do not doubt; and we know that birds, reputed to be the offspring of such commerce, have been sold as such, merely to enhance their value; but we have no doubt that, if such a mixture has ever taken place in an unconstrained state, it is extremely rare, and by no means common in confinement. All our many attempts to procure a breed between the male Pheasant and Bantham hen, as well as the Bantham cock and Pheasant hen, have proved ineffectual, though attended with every care: we have reason therefore to conclude such a spurious breed is merely accidental, and by no means to be commanded. We are assured that a gentleman in the west of England had a mixed breed between the China or Pencil Pheasant and the common species. However this may be, it has hitherto failed with us. Both the present and the late Lord Carnarvon endeavoured to obtain a mixed breed between the Heath Grouse and the Common Pheasant, without effect. 'The strange bird which is figured in the *'Naturalist's Calendar,'* and which was supposed to be a hybrid between the Pheasant and domestic fowl, certainly has more appearance of a mixture between the Black or Heath Grouse and the Pheasant; and we should conceive such had not been produced in a state of nature, but had made its escape from some menagerie. If it had been a hybrid produced at large, more would probably have been discovered in the same neighbourhood, as a brood must have existed. The Common Pheasant, though naturalized with us, would soon become extinct were it not for large domains highly preserved, for as they are great rambles where they are molested, their appearance on less preserved property would be fatal. Nor would even this partial preservation secure a continuance of the breed, were not thousands bred annually in confinement, and liberated to replenish the declining wild stock. There appears to be something more congenial to the habits of the Pheasant in the south-eastern parts of the kingdom than in any other; the slaughter which the public

prints occasionally announce, on the estates of Mr. Coke of Norfolk, and some others, exceeds everything of the kind. But as a proof that the soil or climate, or both, with other concomitant circumstances, are congenial to the nature of this bird, Mr. Herbert, of St. Andrew's Hall, assures us that five years ago there was not a Pheasant on his estate, and that now he has at least three hundred brace in the small covers round his house, the produce of a hundred and twenty eggs, bought in London four years since; that last sporting season he killed from his stock sixty-five brace of cocks, and this season he had already killed that number, and intended to kill as many more, having the day before (2nd January, 1812), with four guns, killed twenty-two brace. But with all possible attention to this noble and beautiful species of the feathered tenants of the woods, few counties can boast of plenty; and the difficulty of rearing the young in confinement, in some situations, is so great that the increase of the stock is scarcely a tenth part of the eggs that are laid. In the early period of life the infant Pheasants are delicate in confinement, for want of that food with which Nature has so amply supplied their table in the wilderness: yet a large portion, with care, pass this delicate age, but have still to contend with that period of life when their nestling feathers are to be superseded by adult plumage. This is the time that many droop for want of strength to support so considerable an exhaustion of animal secretion, to the furtherance of that great design. But of all the maladies under which this species, as well as some others of a similar nature, suffer, there is none so horribly destructive as the oscitans, or the distemper usually called the gapes. To many who have led a country life the disease is well known to depopulate the poultry-yard; whole broods of chickens are seized with it, and frequently not a single one is saved. We have been assured by Lord Carnarvon that in his Pheasantry at Pixton, in Somersetshire, not above ten young ones are brought to maturity out of a hundred eggs, and that the greater number die about the age when the distinction of sexual plumage begins to be visible: at that age his Lordship has generally found the gaping distemper to rage most violently. Mr. Herbert assures us that this distemper is very destructive to young Pheasants and common poultry in Norfolk, which is there called gapes or chuck, and he thinks particularly so to young Turkeys. The different effects which this distemper appears to produce in different situations are certainly remarkable, for though we

are scarcely able to rear chickens or Pheasants in some parts of Devonshire, Turkeys rarely fail, although equally infected. These with us never arrive at the critical stage of the disease, that of gaping or difficulty of respiration; and which we attribute to the superior size of the trachea in these birds at the time they are affected. We conclude, therefore, that the young broods of Turkeys are more early attacked in Norfolk than in Devonshire, since we have neither lost a single young one ourselves, nor can we find that any have been known to die of it in this part of the kingdom. Mr. Herbert further says that he suffers much more in his poultry-yard than in his Pheasantry, but that he greatly attributes his success in rearing Pheasants to the celebrity of his keeper, who, being aware that the disease was occasioned by worms, treated it as is usual with other animals having a vermicular complaint. How far the nosological knowledge of this æsculapian keeper, or even his physiological enquiries, may have directed his prescription, we shall not here discuss, but we cannot suppose that a pellet or two of rue, mixed with butter, with which the Pheasants are crammed, can produce that beneficial effect he seems to ascribe to it. Those who know but little of anatomy are aware that what passes down the œsophagus, or gullet, can have no direct communication with the trachea or windpipe; and therefore the rue, which might be administered as a remedy for worms in the stomach or intestines, cannot reach the seat of the disorder in a direct manner, and that its nature must be completely altered, by the subtle parts of it only having been taken up by the absorbents, and conveyed to these vermes through the circuitous means of the circulation of the blood. We must, therefore, attribute the great success of this person to a meritorious attention to the young Pheasants, in keeping them clean, and by administering plenty and variety of food, especially such as in their wild state would be their infant aliment. Perhaps too the distemper in that situation may not commence so early; for in that the life of the affected greatly depends. Rapid growth, which can only be insured by warmth and plenty of nourishing food, will save many, for it is by increasing the size of the trachea that they are prevented from suffocation. The merit, however, of our friend's keeper, in the rearing young feathered game, is deserving of record, since in the last season, out of one hundred and five Pheasants that were hatched, ninety-four went off to the covers full-grown, one was killed by accident, and eight only died of the distemper. Of Partridges he reared one

hundred and sixteen out of one hundred and twenty-nine, having lost only thirteen by the gapes. In the preceding season he only lost two Pheasants out of sixty-six that were hatched; and he thinks he would engage to rear, including accidents of all sorts, ninety out of every hundred. With all the merit that is due to Mr. Herbert's keeper, it must be observed that much is to be attributed to the locality of situation; experience has clearly demonstrated that at the short distance of a hundred yards, or perhaps less, from where the distemper fatally rages, a cottager, who continually breeds chickens, never discovered that his were ever affected, and scarcely fails in rearing the whole of every brood. It may not be thought foreign to our enquiries to remark in this place, that we suspect chickens which are hatched, and for a time are kept within the influence of a cottage fire, are continually inhaling a preventive to the vermicular distemper. The smoke of wood or peat is saturated with alkali, whose caustic quality either prevents the propagation, or destroys the worm in its infancy. It is most probably to this quality that the fumes of tobacco have been found infallible in the oscitans, as will be more particularly noticed hereafter; and we really suspect that most vegetable smoke will be found to be beneficial. Few persons have been exposed to the smoke of wood in combustion that have not had their eyes sensibly affected by its pungency, and which, applied to the tender surface of the worm in its passage through the trachea by respiration, is doubtless the secret by which these vermes are destroyed in their infancy amongst the cottagers. It should, however, be remarked, that as this destructive disease is occasioned by a worm of the genus *Fasciola*, which by some means is propagated in the trachea or windpipe, all situations do not equally produce the annual mortality in the infantine race of some of the Gallinaceous tribe. We have been told that the disorder is not so deadly in Norfolk amongst the young domestic Pheasants as in some other parts, which is verified by Mr. Herbert's account, and it is reasonable to suppose that the malignancy of the distemper is variable even in contiguous places. We have been assured that a person in Devonshire could never rear any chickens upon one farm that laid high, and yet at no great distance, in a low situation, a chick is rarely lost. This, however, is not generally the case; for instance, the Pheasantry at Lord Carnarvon's is in a valley surrounded by hills. In the neighbourhood of Kingsbridge we have observed whole broods affected in all situations, but none

in which the vermicular distemper is more constant than our own, which is a remarkable dry spot upon an eminence. Under such circumstances it is more probable that soil, not situation, may more or less produce this disease, and possibly some species of vegetable may be common in some soils, that may be an antidote. The oscitans or gapes is not, as we formerly suspected, confined to the western parts of England, for we are assured from good authority that it is partially known in almost all the southern and south-eastern counties; but there appear intermediate local situations in which it has not been noticed. Until we endeavoured to investigate the nature of this distemper, the cause was unknown to us, yet it seems some of the good housewives had discovered that the chickens which died of the gapes had worms in the throat, and had administered urine and rue as a remedy, and some have declared with effect. We do not, however, intend to enter into a full detail of our experiments, in order to discover a remedy for the disorder, but only relate those which appear to be most efficacious. With respect to the vermis, which is the cause of the disease, a description of it is useless in this place, since it has been published in the *Memoirs of the Wernerian Natural History Society*, accompanied by a figure, and is considered a new species of *Fasciola*. It cannot fail to be highly interesting to the community at large to be informed of any remedy for so fatal a disease, and thereby rescue from premature death a large portion of those useful animals, the domestic poultry. Garlic and the whole tribe of *Allium* appear to have been administered with some advantage as a vermifuge in this case, but is by no means to be depended on as certain in its operations in the different advanced stages of the disease. It may be administered in two ways, but the most effectual is a strong infusion, which should be their only drink; at the same time chives or young onions chopped small, and mixed with meal, may be administered once or twice a day as their food. It should, however, be recollected that it is in the early stage of the distemper that benefit is to be expected, before the violent irritation of the vermes has caused inflammation; and if, in such a situation where the distemper is prevalent, this course of medicine was administered, at a week or a fortnight old, as a preventative, it might be beneficial. The situation in which these *Fasciolæ* are lodged renders it impossible to administer anything direct, for any remedy applied to the interior of the trachea would be worse than the disease: whatever therefore is

adopted to dislodge these worms must be effected either by fumigation, absorption, through the skin contiguous to the part affected, or through the circulation. Having observed how powerfully garlic is absorbed and communicated to the whole frame of a human being, by only applying it to the soles of the feet (the breath in particular becoming most offensive under its influence, where thus used for the whoopingcough), we considered that this powerful herb might be noxious to these worms, who live by sucking the secretion of the mucous membrane of the trachea, and consequently compel them to quit their hold, and allow the chickens in their fits of coughing to discharge them. That benefit has been derived from this medicine is without doubt, and we cannot assign any other means of its action. In the advanced state of the disorder nothing is so effectual as fumigation, the inhaling of the steam of medicated liquors, or the smoke of some narcotic herb, are the only methods of applying any remedy directly to the part affected; and of these tobacco stands foremost as the readiest, from being so generally in use, and so easily applied in the form of fumigation; and we are happy to say that if it is properly administered it is an infallible remedy. In order to administer this fumigation in sufficient quantity, there is some care required that the chickens (which must be confined in a close vessel) are not suffocated. We have repeated this operation with the utmost success by confining the diseased chickens in a box, with a door on one side about half the height of the box, with its hinges so placed as to open downwards. By this means the interior can be examined from time to time, in order to observe the density of the smoke and the state of the chickens. To a person in the habit of smoking tobacco there is no difficulty of lighting a pipe, and by introducing the bowl through an aperture the smoke may be blown in till it appears considerably dense, which must be examined every two or three minutes. When any of the chickens become stupefied by the narcotic quality of the fumes of the tobacco, the operation of blowing the pipe should cease; and as fresh air will rush in when the door is opened, there will be no danger of suffocation. If, however, any should appear to be more exhausted than the rest, or than is requisite, they should be taken out, and they will soon recover when removed from the smoke. We have found that the longer the chickens are confined in the smoke the better, but that a certain degree of density is required to destroy the worms by its caustic quality. As dense a smoke,

therefore, as the chickens can continue to exist in is best, and the criterion is stupefaction and the loss of the use of their legs: when that effect appears, no more smoke should be introduced. As soon, however, as the chickens recover the use of their legs, they may be suffered to remain in the fumigating box for two or three hours; but remembering that the inhaling of a large quantity of smoke in half an hour will be more effectual than a whole day confined in a small quantity. We have been assured by a very respectable gentleman, farmer in the north of Devon that calves are subject to similar distemper, and that he had found the fumes of tobacco infallible. Mr. Barret, of Teignmouth, informs us that the oscitans is so prevalent amongst the chickens in that neighbourhood, that more than one-third of a brood usually die; but that he found the greatest success from fumigating with tobacco. This gentleman says that he puts the whole brood (as soon as any symptoms appear) under a close vessel, and then introduces the bowl of a tobacco-pipe filled with the herb, which is blown through till the pipe is burnt out; that the chickens after a little time appear to be dead, but by leaving them in the smoke they revive; and that he never had occasion to fumigate more than three times, and in no instance lost a single chick either in or after the operation. However this gentleman's experiment may have corroborated our own with respect to the fumigation of tobacco being an infallible cure for the vermicular disorder, there certainly requires some care in the operation being performed in a close vessel. It cannot be intended to convey an idea that any vessel air-tight should be used, and consequently the danger of suffocation is more or less, according to the size of the vessel, the density of the smoke, and the means by which fresh air can enter. Experience has convinced us that some caution is requisite, as by a continuance of dense fumes, after great debility had been excited in the chickens, we have produced irrecoverable suffocation in a box where the seams were by no means air-tight. It may be acceptable to some of our readers to remark, that if a metallic tube, of about an inch diameter and two inches long, be made to fit into a hole on the side of the fumigating box, and a smaller tube that fits the nose of a pair of bellows be fitted into the larger tube, the fumes may be more conveniently blown into the box. But as the tobacco cannot be brought into combustion without drawing the air through it, as it must be lighted at the top, a small piece of slow match should be placed in the centre of the pipe, and the tobacco pressed in on

every side. The slow match may be prepared of that soft and slightly twisted cord with which sugar-loaves are usually bound; this soaked in a weak solution of nitre, in the proportion of a dram and a half to half a pint of water, then gently squeezed and hung to dry, will be fit for use. This is easily lighted, and, continuing to burn, communicates combustion to the tobacco from the top to the bottom of the tube, and greatly facilitates the operation of fumigation. The powerful effect of the tobacco fumes is communicated through the lungs of birds into every part, and no culinary preparation can render the flesh of a chicken palatable that has been killed under the operation of fumigating with it. In no stage of the complaint has the fumigation failed, and we recommend its application three times in three successive days, and when the crow is empty, and not after feeding. We shall now quit the subject, with a pleasing reflection that what has been said may be the means of preserving from a premature and useless death an animal so essential to the comforts of mankind as our domestic fowl. To those, however, who may not have noticed the symptoms of this deadly complaint it may not be improper to remark, that as soon as chickens are observed to cough, or, as it is commonly called, sneeze, no time should be lost; for in a few days after a difficulty of breathing comes on, known by their necks being stretched out and the mouth opened, then called the gapes: after which a week or ten days puts an end to their existence in a fit of suffocation; the trachea being filled with the *Fasciolæ*, totally obstructs the passage to the lungs, and consequently respiration ceases. Probably this disorder is confined to the Gallinaceous tribe, for though the common domestic Fowl, the Turkey, the Pheasant, and the Partridge, in confinement, are equally liable to the vermicular distemper, neither the domestic Duck nor yet the Pigeon have been known to be affected, though living together and partaking of the same food. We have opened the trachea of a great many chickens that have died by suffocation, and have found these vermes alive long after the chick has been cold, and holding so firmly by one of their arms (for they have two, with a sucker or mouth on each) that they were with difficulty separated without breaking. As a concluding remark, it may not be improper to add, that when we assert that the distemper to which all the species of the Gallinaceous tribe before mentioned are subject, it is from ocular demonstration, and we can speak positively as to the vermes in all being of the same species. In addition to the urinal medicine, the

rue and the garlic, Lord Carnarvon thinks that senna has been administered with some beneficial effect. But we must not omit to mention a recipe which Sir William Elford assures us the superintendent of his poultry-yard has used with advantage. This is the application of the essence of ambergris to the nostrils by means of a feather. We do not, however, attach more expectation of benefit in this than in a long list of other nostrums; especially as we can positively assert that it has been tried on Pheasants repeatedly, without the smallest effect, the birds dying under its administration. From our own experience, and from all the information we can collect, fumigation with tobacco is, at present, the only certain remedy discovered; and which we most earnestly recommend to those interested in breeding of poultry or Pheasants.

APPENDIX. — It has been previously remarked that the female of this species occasionally assumes the plumage of the other sex, as well in the wild state as in confinement, and that after such a change it becomes barren. Additional proof of this curious circumstance has been communicated to us by Mr. Foljambe, of Osberton, in Nottinghamshire, to whom we are obliged for a fine specimen of a male-plumed female, killed in December, which he received from the Duke of Newcastle, and sent to us for dissection. This bird has very much the appearance of a male, except that the purple-blue tips to the feathers on the breast are much smaller, and the feathers on the back are destitute of the buff or cream-coloured margins. It has no apparent auricular tuft of feathers on each side the head, nor spur on the legs, and the space round the eye is covered with feathers. In size it is rather superior to the female Pheasant in the usual plumage, and its tail is longer, the two middle feathers rather exceeding eighteen inches. It weighed two pounds and a half, and measured two feet nine inches in length. This bird was dissected, and the parts of generation carefully examined. On the left side of the rectum the uterus was observable as usual, and was easily traced to communicate with the ovaries, or usual receptacle of the ova, by what is considered to be the oviduct. There was not the smallest appearance of ova, although the uterus was very evident, but in a contracted state. The site of the ovaries was examined with a lens, without discovering any embryo ova; but what appears most extraordinary is, that the communication between the vagina and the uterus was interrupted; a collapsion had taken place, and the membrane at that part was considerably thickened. From

these appearances it would be reasonable to conclude this bird had never laid eggs; but as we are unacquainted with the origin of this extraordinary change in plumage, we dare not venture to hazard an opinion as to what would be the appearance of a bird, under similar circumstances of plumage, that had been known to have been prolific. We may, however, be assured, that whatever is the cause of sterility, to that also must be attributed the change of plumage, as inseparable consequences. We have noticed in a hybrid female Duck, between the common species and the Muscovy, all the obstructions to propagation, extremely similar to what is here related, which accounts for the want of inclination to breed.

Pheasant, Ring, or Ring-necked. — *Phasianus torquatus*, *Gmel. Syst.* ii. p. 742. *Phasianus colchicus*, *Ind. Orn.* p. 629, 4, β . Ring Pheasant, *Lath. Syn.* iv. p. 715; *Ib. Sup.* p. 208. *Ost. Menag.* p. 57, 58 (M. F.) — This seems to be a mere variety of the common species, differing only in having a white ring round the neck; and the plumage in general thought to be more brilliant, and the markings more distinct. It is said to have been first introduced by the late Duke of Northumberland, and was called the Barbary Pheasant. His Grace bred and turned out many at his seat at Alnwick in Northumberland. Lord Carnarvon also turned out several at his seat at Highclere in Berkshire; at both which places we have seen them, and the mixed produce between that and the Common Pheasant, in which the ring on the neck is very indistinct; sometimes only a few white feathers are to be found. Supposed to be hardier and easier reared in confinement than the other. It is said to be found in some parts of China, and in Tartary. The eggs no ways differ from the common sort, which are of a light brown colour.

Pheasant, Sea.—See Duck, Pintail.

Pianet.—See Magpie; Oystercatcher.

Picarani.—See Avoset.

Pick-a-Tree.—See Woodpecker, Green.

Picket.—See Tern, Common.

Pickmire.—See Gull, Blackheaded.

Picktarne, or Pictarny.—See Tern, Common.

Pie.—See Oystercatcher.

Piet.—See Ouzel, Water.

[Pigeon, Passenger or Migratory. — *Yarrell*, ii. 314. *Columba migratoria*, Migratory Pigeon, *Wilson, Amer. Ornith.* ii. 292 of *Jameson's Edition*. — "The Passenger Pigeon is sixteen inches long and twenty-four inches in extent; bill black; nostril covered by a high rounding protuberance; eye brilliant fiery orange; orbit, or space surrounding it, purplish flesh-coloured skin; head, upper part of the neck, and chin a fine slate-blue, lightest on the chin; throat, breast, and sides, as far as the thighs, a reddish hazel; lower part of the neck, and sides, of the same resplendent changeable gold, green, and purplish crimson, the latter most predominant; the ground colour slate; the plumage of this part is of a peculiar structure, ragged at the ends; belly and vent white; lower part of the breast fading into a pale vinaceous red; thighs the same; legs and feet lake, seamed with white; back, rump, and tail-coverts dark slate, spotted on the shoulders with a few scattered marks of black; the scapulars tinged with brown; greater coverts light slate; primaries and secondaries dull black, the former tipped and edged with brownish white; tail long and greatly cuneiform, all the feathers tapering towards the point, the two middle ones plain deep black; the other five on each side hoary white, lightest near the tips, deepening into bluish near the bases, where each is crossed on the inner vane with a broad spot of black, and nearer the root with another of ferruginous; primaries edged with white; bastard wing black. The female is about half an inch shorter, and an inch less in extent; breast cinereous-brown; upper part of the neck inclining to ash; the spot of changeable gold, green, and carmine much less, and not so brilliant; tail-coverts brownish slate; naked orbits slate-coloured; in all other respects like the male in colour, but less vivid, and more tinged with brown; the eye not so brilliant an orange. In both the tail has only twelve feathers." — *Wilson*, ii. 303. Dr. Fleming, in his 'History of British Animals,' says that a specimen of the Passenger Pigeon was shot at Monymead, in Fifeshire, on the 31st of December, 1825; and Mr. Yarrell records, vol. ii. p. 317, that a second specimen was killed in July, 1844, between Royston and Chishill, in Hertfordshire. Although this bird has occurred in Europe, it must be considered as purely North American, and its visits to the old world as merely accidental.]

Pigeon, Rock. } See Dove, Stock.
Pigeon, Stock. }

Pigeon, Wood.—See Dove, Ring.

[Pigmy Curlew.—See Curlew, Pigmy.]

[Pine Grosbeak. } See Grosbeak, Pine.
[Pine Bullfinch. }

Pink.—See Finch, Chaf.

[Pinkfooted Goose. — See Goose, Pink-footed.]

Pinnock.—See Titmouse, Blue.

[Pintail.—See Duck, Pintail.]

[Pipit Lark.—See Lark, Pipit.]

[Pipit, Meadow. — See Lark, Field; and Lark, Pipit.]

[Pipit, Richard's.—See Lark, Richard's.]

[Pipit, Rock.—See Lark, Rock.]

[Pipit, Shore.—See Lark, Shore.]

[Pipit, Tree.—See Lark, Field.]

Pirenet.—See Shieldrake.

Plover.—A genus of birds, the characters of which are: Bill strait, not longer in general than the head. Nostrils linear. Toes three, all placed forwards.

Plover, Alexandrine.—See Plover, Ring.

Plover, Bastard.—See Lapwing.

Plover, Creamcoloured.—[Creamcoloured Courser, *Yarrell*, ii. 460.] *Charadrius gallicus*, *Gmel. Syst.* ii. p. 692. *Cursorius europæus*, *Ind. Orn.* ii. p. 751, 1. *Le Courte-vite*, *Buf.* viii. p. 128. Cream-coloured Plover, *Lath. Syn.* v. p. 217, 25; *Ib. Sup.* p. 254, t. 116; *Lewin, Br. Birds*, v. t. 187; *Walc. Syn.* ii. t. 164.—Length of this species ten inches. Bill black, three-quarters of an inch long, slender, and bent at the tip. Plumage in general cream-colour, palest beneath; behind the eye a patch of black; through them a pale streak passing back to the hind-head, and dividing the black; quills black; tail cream-colour, marked with black near the tip; legs yellowish. This appears to be a rare bird. One was killed in France, as mentioned by Buffon; another was killed near St. Alban's in Kent, at the seat of William Hammond, Esq., who presented it to Dr. Latham, in whose instructive museum we saw it, and who has given a figure of it in the Supplement to his 'Synopsis.' In this specimen the markings about the head do not appear to be so conspicuous. It is said to be a bold bird, and to run with

great swiftness; but its habits seem to be much in obscurity. The shape of the bill in this species seems to divide it from the Plovers, although it has no back-toe like that genus. Dr. Latham in his 'Synopsis' made it a Plover, but in his 'Index Ornithologicus' has removed it, and calls it a *Cursorius*. See *Cursorius Europæus*. [This bird is called *Cursorius isabellinus* by Fleming, Selby, Jenyns, Gould and Temminck; *Cursorius europæus* by Yarrell. Six specimens have been obtained in this country, besides that mentioned by Col. Montagu: Dr. Fleming mentions one killed in North Wales in 1793: in Atkinson's 'Compendium' there is a notice of one killed near Wetherby in April, 1816: a third is recorded in the 'Zoological Journal,' p. 492, as having been shot in Leicestershire on the 15th of October, 1827: a fourth was killed on East Down, Salisbury Plain, by Mr. Langton, on the 2nd of October, 1855, as recorded in the 'Zoologist' for that year, at p. 4913: a fifth was killed so near London as Hackney Marshes on the 19th of October, 1858, by Mr. George Beresford, as recorded in the 'Zoologist' for that year, at p. 6309: and two others were seen by Mr. G. F. Mathew on Brauntton Burrows, in Devonshire, in April, 1860, as recorded in the 'Zoologist' for that year, at p. 6980. The occurrence of these birds in April and October shows that they were in their vernal and autumnal migration.]

Plover, Golden.—[Yarrell, ii. 476; Hewitson, lxxvi. 291.] *Charadrius pluvialis*, *Lin. Syst.* i. p. 254, 7; *Gmel. Syst.* ii. p. 688; *Ind. Orn.* ii. p. 740, 1; *Bris.* v. p. 43, 1, t. 4, f. 1; *Ib.* 8vo, ii. p. 222; *Rural Sports*, ii. t. p. 456; *Bewick, Br. Birds*, i. t. p. 340. *Pluvialis viridis*, *Raii Syn.* p. 111, A. 2,—190, 9; *Will.* p. 229, t. 57. *Pluvialis aurea minor*, *Bris.* v. p. 47, 2; *Ib.* 8vo, ii. p. 223. Le Pluvier doré, *Buf.* viii. p. 81. Golden or Green Plover, *Br. Zool.* ii. No. 208, t. 72; *Ib.* fol. 128; *Arct. Zool.* ii. No. 399; *Will. Angl.* p. 308; *Albin.* i. t. 75; *Lath. Syn.* v. p. 193, 1; *Sup.* p. 252; *Lewin, Br. Birds*, iii. t. 181; *Walc. Syn.* ii. t. 158; *Don. Br. Birds*, ii. t. 45; *Pult. Cat. Dorset.* p. 16. Provincial: Grey Plover; Whistling Plover.—Weight of this species between seven and eight ounces; length ten inches and a half. Bill one inch, dusky; irides hazel. The general plumage above is dusky, spotted with greenish yellow, brighter on the back and scapulars, palest on the wing-coverts; sides of the head and neck, and sides of the body, lighter; middle of the belly and vent white; quills dusky, slightly margined at the tips with grey; tail dusky, spotted with yellow and dull white, somewhat in form of bars; legs black. A

variety is said to possess a small claw behind in lieu of a back-toe. In the breeding season both sexes appear black on the lower part of the breast; these feathers begin to show themselves in March, and are perfected in May, at which time the female begins to lay. It is a common bird, found in most parts of the known world. With us it chiefly inhabits open ground, such as heaths, moors, and downs; in severe weather the sea-coast; but repairs to the more uncultivated wastes of the northern mountains to breed. We have seen them in various parts of Scotland at that season on swampy ground upon the higher hills, and even on the lower lands covered with heath, amongst which they lay their eggs, four in number, about the size and shape of that of the Lapwing's; colour cinereous-olive, blotched with dusky. The young run as soon as they are excluded from the egg, and follow the old ones to the moist places in search of worms. At first they are covered with down of a dusky colour, and are incapable of flying for a considerable time. The parent birds are very tenacious of their young; become very bold at this time; will light just before a dog, and run on the ground to entice him from their nest.

SUPPLEMENT.—This species begins to change its plumage early in the year; a specimen shot on the 10th of March, in Devonshire, had the whole under parts mixed black and white from the chin to the vent; the black is least predominant across the upper part of the breast, the most on the belly and sides. By some called Yellow Plover.

Plover, Great.—See Bustard, Thick-kneed.

Plover, Greater.—See Greenshank.

Plover, Green.—See Lapwing.

Plover, Grey.—See Sandpiper, Grey; and Plover, Golden. [Grey Plover, Yarrell, ii. 511.] Grey Sandpiper.—*Tringa squatarola*, *Lin. Syst.* i. p. 252, 23; *Gmel. Syst.* ii. p. 682; *Ind. Orn.* ii. p. 729, 11. *Pluvialis cinerea*, *Raii Syn.* p. 111, A. 3; *Will.* p. 229, t. 57. *Vanellus griseus*, *Bris.* v. p. 100, 2, t. 9, f. 1; *Ib.* 8vo, ii. p. 237. *Vanneau pluvier*, *Buf.* viii. p. 68. *Tringa helvetica*, *Lin. Syst.* i. p. 250? *Gmel. Syst.* i. p. 676; *Ind. Orn.* ii. p. 728? *Phil. Trans.* lxii. p. 412? *Vanneau de Suisse*, *Buf.* viii. p. 60; *Pla. Ent.* 853? *Vanellus helveticus*, *Bris.* v. p. 106, t. 10, p. i.; *Id.* 8vo, ii. p. 239? Swiss Sandpiper, *Arct. Zool.* ii. No. 396? *Lath. Syn.* v. p. 167; *Id. Sup.* p. 241? Grey Plover, *Will. Angl.* p. 309, t.

57; *Albin*, i. t. 76. Grey Sandpiper, *Br. Zool.* ii. No. 191; *Ib.* fol. 122; *Arct. Zool.* ii. No. 393; *Lath. Syn.* v. p. 168, 11; *Sup.* p. 248; *Lewin, Br. Birds*, v. t. 169; *Walc. Syn.* ii. t. 146; *Pult. Cat. Dorset*. p. 15.— This species rather exceeds the Golden Plover in size; the weight about seven ounces; length twelve inches. Bill black, one inch and a quarter in length; irides dusky. The upper part of the head, the neck, back, scapulars, and wing-coverts dusky; the feathers more or less margined and tipped with ash-colour, least so on the head and neck; and on the coverts the grey predominates, and is almost of a white; the cheeks and throat white, with a few dusky lines; belly and under tail-coverts white; quill-feathers black; the inner webs more or less white, as well as the shafts; from the fifth some white begins to appear on the outer web down the shaft, which increases in the next, and from the seventh to the tenth the whole of the outer web is white, except at the point; the tail is white, elegantly barred with black; on the middle feathers are six or seven; the inner webs of the lateral ones barred only near the end; the outermost has only one faint bar at the tip; legs dusky; back-toe extremely small; the claw almost adhering to the leg. The under scapulars, or those long feathers underneath the wing at the base, in the several specimens we have examined, were black; and the rump and upper tail-coverts white, barred with black. A variety is said to have the forehead, throat, and rump white; and the upper tail-coverts white, edged with grey and pale yellow. The Grey Sandpiper does not appear to be a plentiful species in England. We have bought it in the market at Bristol, and have received it from our friend Mr. Boys of Sandwich, killed on that coast. It is not found here in the summer months, and of course retires northward to breed; frequents the sea-shores only, and seldom more than six or seven are seen in a flock. Said to be found in Siberia and Carolina in large flocks.

SUPPLEMENT. — This appears to be another of the genus, whose change of plumage at different seasons has occasioned two distinct species to be formed from it: the *Tringa squatarola* is the winter plumage of the Grey Sandpiper, and *Tringa helvetica* we have very little doubt is the same bird in its breeding plumage. It should be recollected that the Golden Plover produces a clear exemplification by a similar change, the under parts becoming more or less black in the spring. By comparing, therefore, the descriptions of different authors, we find so little difference between those two birds, except in the black

feathers beneath, that we think very little doubt remains on the subject: and what may be urged as the strongest evidence in support of such an opinion is the permanent black under scapulars, and minute back-toe, which are similar in both: the latter a most singular character. With us the variety denominated the Swiss Sandpiper may never have occurred, for the Grey Sandpiper is rather a rare species, and as it leaves us early in the spring to breed in the more northern regions, it does not probably indicate the change in plumage previous to its departure. Possibly it may breed in the alpine parts of Switzerland, and thus may have been noticed in its breeding plumage. We shall now transcribe the very judicious remarks made by Dr. Latham in his first Supplement to the 'General Synopsis,' in order that the British Ornithologist may identify the bird, should such occur to him. Of the Swiss Sandpiper the Doctor says: — "One of these from Hudson's Bay, given to me as the female of this species, had the upper parts brown, mottled with dusky white, not unlike the male, but less bright: sides of the head and fore part of the neck white, sparingly marked with brown spots: belly white, marked with longish streaks of black; the ends of the feathers being black for some length; the quills, rump, and tail as in the male: in both, the sides of the body have several black feathers, above two inches in length, arising at the junction of the wing (the under scapulars): in both, the bill and legs are black, and a spur serves instead of a hind toe. In short, this reputed female is so like the Grey Sandpiper that, the belly excepted, which in the English one is not marked with black, one must suppose them to be mere varieties of each other." Of the Grey Sandpiper the Doctor says: — "In the roof of the mouth of this bird is a double row of spinous appendages, pointing inwards: tongue the length of the bill: under the wing the same long black feathers, eight or nine in number, as observed above of the Swiss Sandpiper: and no back-toe, only a spur, such as in the Petrel." With such information, and with the knowledge that the Golden Plover does at times assume the black plumage beneath, we are at a loss to guess why our friend should have hesitated in bringing these birds together in his 'Index;' for in our opinion there can scarcely be the shadow of a doubt. [It has been thought best, in this as in a few other instances, to bring a species forward, rather than adopt Montagu's arrangement; the name "Grey Sandpiper" having become obsolete, and that of "Grey Plover" being universally used.]

Plover, Kentish.—[Yarrell, ii. 498; Hewitson, lxxvii. 298.] SUPPLEMENT.—Lath. *Syn. Sup.* ii. p. 317; Lewin, *Br. Birds*, t. 185. Charadrius Cantianus, *Index Orn. Sup.* p. 66.—In the former part of this work we made mention of this bird under the head of Ringed Plover, of which we suspected it might be a variety; and we are by no means at present convinced of the contrary, for in fact the description given of it differs so little from some of the immatured Ringed Plovers, except in the colour of the crown of the head, that we are bound to express our doubts. As, however, we have such excellent authority as that of Dr. Latham for continuing it as a distinct species, we shall take the liberty of copying his description:—"Size of the Ringed Plover: length six inches and a half; breadth fifteen inches: weight an ounce and a half: the bill is black: top of the head ferruginous-brown, bounded on the fore part with black; but the forehead is white, and passes over the eye and a little beyond it: from the bill through the eye a black streak, broadening behind the eye and reaching over the ear: all beneath, from the chin to the vent, white, passing round the neck as a collar: on each side the breast, next to the shoulder of the wing, is a black patch: back and wings pale brown: quills dusky; the shaft of the outer one the whole of the length, and the middle of the next, white: the greater coverts for the most part tipped with white: tail rounded in shape, not unlike the quills: the three outer feathers white, except a dusky spot on the inner web of the outmost but two; the others have the bases very pale half-way, but the two middle ones are of one colour." We shall here take the liberty to remark, that at this moment we have two immatured Ringed Plovers before us, exactly corresponding in markings with the above, except in the crown of the head being brown, dashed with rufous; and the tertials of the wings are slightly tipped with white, that when the wings are closed look like the greater coverts, and might in a stuffed bird be readily mistaken. By a comparison also with the variety of the Ringed Plover called the Alexandrine Plover, the difference is so trifling, except in the crown of the head inclining more to ferruginous-brown, that they appear to be varieties slightly removed from each other. "I received the above" (says Doctor Latham) "from Mr. Boys, of Sandwich, 23rd of May, 1787, being shot in that neighbourhood; and in the month of April, 1791, two others; the weight of these was about twenty grains more than the former: the bill and legs were black: in one of them the whole nape was of a fine pale reddish

bay, the other pale brown, inclining to bay towards the nape: the three outer tail-feathers white, but the inner of these inclining to dusky on the inner web; the next very pale brown or brownish white, with a dusky tip; the four middle ones brown, with the ends dusky, approaching to black: in other things they were like the first described; but in one of them the black patch at the bend of the wing was much larger, and approached on each side towards the breast." In the description of these last it is admitted that one of them was only pale brown on the head, inclining to bay on the nape; and also that the black patch at the bend of the wing was larger, and almost met on the breast. Here then we appear to have almost a direct intermediate stage between the Ringed Plover of the first year, called the Alexandrine Plover, and the adult Ringed Plover. Doctor Latham remarks that the Kentish Plover cannot belong to the Ringed Plover in any stage, as the bill and legs will testify, "for in the last (says the Doctor) both of them incline more or less to yellow or orange, even whilst very young, and in the adult are ever of a fine orange." We do agree with our worthy friend, that in the adults the Ringed Plovers have the base of their bills and legs more or less yellow; but before that period the bill has rarely any yellow, and the legs are variable from dusky to pale yellowish brown, according to age and their approach towards maturity; as represented in the Alexandrine Plover, which, as we before stated, is without doubt the Ringed species in the adolescent state. See Plover, Ringed. [This apparently distinct species has been repeatedly obtained on the coast of Norfolk, Kent, Sussex, Dorset and Cornwall: it is abundant on the coast of Holland according to Temminck, and is found in Egypt, Nubia and Tartary, according to Selby.]

[Plover, Little Ringed.—Yarrell, ii. 503; Hewitson, lxxvii, 299. Charadrius minor, *Jenyns, Brit. Vert.* 179; *Temm. Man. d'Ornith.* ii. 542.—"In the adult bird the beak is black; the irides brown; the forehead white, with a black patch above it extending to the eye on each side; top of the head and the occiput ash-brown; lore and ear-coverts black; nape of the neck white; back, scapulars, wing-coverts, tertials, rump, and upper tail-coverts ash-brown; primary and secondary wing-feathers dusky brown; these and the greater wing-coverts edged with white; the first primary quill-feather only with a broad white shaft; tail-feathers ash-brown at the base, darker towards the end; the five outer tail-feathers on each side white at the end, this

colour increasing in extent on each lateral feather, the outer one on each side having only a dusky spot on the inner web, but this appears to be constant at all ages; chin and throat white, this colour extending from the latter round the nape of the neck; below this and above the breast is a collar of black; the breast itself, the belly, vent, and under tail-coverts pure white; legs and toes flesh-colour tinged with yellow; the claws black. Adult specimens generally measure six inches and one-quarter. From the carpal joint to the end of the wing four inches and three-eighths; the first quill-feather but very little longer than the second, and the longest in the wing. Adult females have the white and black frontal bands narrower than the males, according to M. Temminck, and they are also less perfectly defined. Young birds of the year want all the decided black markings which distinguish old birds, and the ash-brown feathers of the back and wing-coverts have buff-coloured margins."—*Yarrell*, ii. 505. We are indebted to Mr. Doubleday, one of the most accomplished ornithologists this country has ever produced, for distinguishing this as a species new to Britain: his specimen was obtained at Shoreham, in Sussex: two others exist in the Norwich Museum, but the locality where obtained is not positively known. In the 'Zoologist' for 1850 Mr. Garth, of Knaresborough, records, at p. 2953, the occurrence of a specimen near Whixley, in Yorkshire, on the 30th of July of that year. In the volume for 1851 Mr. Ellman records, at p. 3279, that he obtained a specimen at Shoreham, in Sussex, in October of that year. In the volume for 1855 Mr. G. Grantham, of Hove, near Brighton, records, at p. 4762, that, in company with his brother, he succeeded in obtaining several specimens during the February of that year. In the volume for 1863 that indefatigable and most accurate ornithologist, Mr. Rodd, records, at p. 8847, the capture of an example in the Scilly Islands, by his nephew, in October of that year. The following observation respecting this specimen is interesting:—"I saw a small bird sitting on the mud by the Abbey (Trescoe) Pond. It rose, and its note was a single sharp whistle, not like that of the common Ringed Plover and of shorter duration. Its flight was remarkably Stint-like, which bird it also resembled in its tameness. On approaching it I saw it resembled a Ringed Plover, and, like that bird, it jerked up its head, turned or cocked its eye towards the ground, and hastily swallowed some small insect: we got a telescope and watched its actions for some time." The last, and by far the most

complete, notice of this rare species is in the volume for 1864, at p. 9283, and is from the pen of Mr. Harting: the following is an extract:—"On the 30th of August last I was strolling round the Kingsbury Reservoir, with my gun, on the look-out for Ringed Plovers, Dunlin, and other waders that usually visit us at this time of year, when I observed a small bird feeding on the shore, within a few yards of a Green Sandpiper. The latter was very wild, and rose out of shot; but the former remained feeding, and allowed me to approach within fifty yards. I at first mistook it for a young Ringed Plover (*Charadrius hiaticula*), never dreaming of *Charadrius minor*. As soon as it rose my finger was on the trigger; but hearing the bird's note, which was not at all like that of the Ringed Plover, but rather like that of the Common Sandpiper, I was induced to wait and mark the bird down, in order to observe it more carefully. As it flew away I remarked no white line across the wings, and this strengthened my belief that it was not the common Ringed Plover. Watching it until it again alighted, about a hundred yards distant, I crawled along on hands and knees, and obtained a good view of the bird as it ran along the edge of the water, occasionally stopping to pick up some food. In its flight and note it appeared rather to resemble the Sandpiper's, but its actions when on the ground were much like those of the Ringed Plover. It did not associate, however, with the last-named species, although there was a little flock of them also at the Reservoir. After watching it for some time, I put it up again and shot it. On picking it up there could be no doubt of the species—a veritable Little Ringed Plover, although evidently a young bird. More slender in form than the common Ringed Plover, the legs are lighter in colour, and the bill almost black. I say 'almost' black, because in the living bird the base of the under mandible is decidedly tinged with yellow, which fades, however, and becomes black after the bird has been dead a few hours. Many authors say 'the bill is wholly black,' but they probably described from specimens which had been some time preserved, and consequently had lost colour; and on this account no doubt they have also overlooked a peculiarity which at once attracted my attention: the eye, which is full and dark, almost black, is surrounded by a circle of a beautiful bright yellow, and looks as if it were set in gold, but this colour entirely disappears soon after death. At the time it reminded me a good deal of the eye of the Norfolk Plover on a small scale. I have now had an opportunity, for the first time, of ascertaining that the Little Ringed

Plover differs also considerably from the common Ringed Plover in many other respects, as follows:—The shaft of the first quill-feather only, in the wing, is white; and the white spots, which are always present on the webs of the wing-feathers in the common species, and which give the appearance of a white bar across the wing in flight, are in the Little Ringed Plover absent, and in lieu thereof the tips only of the wing-feathers are margined with dull white. In the last-named species, also, there is a dusky spot on the inner web of the outer tail-feather on each side, which feather in the common Ringed Plover is always pure white. The number of tail-feathers, however, is the same. Before skinning my specimen I took it to Mr. Gould, who carefully ascertained the exact measurements and weight, which are as follows:—Weight $1\frac{1}{4}$ oz. 65 grs.; total length $6\frac{1}{2}$ inches; tail $2\frac{1}{2}$ inches; extent of wings 13 inches; length of wing from carpal joint to end of first quill-feather $4\frac{1}{2}$ inches; tarsus 1 inch. If one may draw conclusions from a single specimen, the food of the two species would appear to be very similar; for I found the stomach of *C. hiaticula* contained the remains of worms, beetles, and numerous small pebbles; while that of *C. minor* was filled with small beetles and a single caddis-worm, but contained no sand or pebbles of any sort.”]

Plover, Longlegged.—[Blackwinged Stilt, *Yarrell*, ii. 676; *Hewitson*, xcii. 341.] *Charadrius himantopus*, *Lin. Syst.* i. p. 255, 11; *Gmel. Syst.* ii. p. 690; *Ind. Orn.* ii. p. 741, 3; *Shaw, Zool. Lect.* i. t. 80; *Nat. Miscel.* t. 195. *Himantopus*, *Raii Syn.* p. 106, 9,—190, 7; *Ib.* 193, 1, t. 1, f. 3; *Will.* p. 219, t. 54; *Bris.* v. p. 33, 1, t. 3, f. 1; *Ib.* 8vo, ii. p. 220, 1. *L'Echasse*, *Buf.* viii. p. 114, t. 8. Long-legged Plover, *Br. Zool.* ii. No. 209; *Ib.* fol. 128, Addenda; *Arct. Zool.* ii. No. 405; *White, Hist. Selb.* t. p. 258; *Lath. Syn.* v. p. 195, 3; *Ib. Sup.* p. 252; *Lewin, Br. Birds.* iii. t. 182; *Walc. Syn.* ii. t. 159; *Don. Br. Birds.* iii. t. 55. Provincial: Longlegs.—This extraordinary species is certainly the longest-legged bird, in proportion to its bulk, hitherto known. Length, from the apex of the bill to the end of the tail, thirteen inches; from that to the end of the toes five inches more. Bill two inches and a half long, slender, and black; irides red. Forehead, round the eyes, and rump white; crown of the head, back, and wings glossy black; tail the same, inclining to grey; outer feathers white; neck and under parts white; the hind part of the neck marked with dusky streaks; in some these streaks are wanting, the effect probably of maturity; the

thigh is bare of feathers three inches and a half from the knee; legs four inches and a half long, red; the outer and middle toes connected by a membrane at the base. Six of this species were shot out of seven in a flock, in the month of April, at the verge of a lake not very far distant from Farnham in Surrey. One of them was preserved by the late Rev. Mr. White of Selborne, and is now in the possession of Mr. White in Fleet-street, where we saw it. This bird is wholly white, except the wings and back as far as the rump, which is black. Of this bird there is a good figure in White's 'Natural History of Selborne,' who says it weighed, when drawn and stuffed with pepper, four ounces and a quarter. This is a rare bird in England; but Dr. Latham informs us it is sufficiently plentiful in the East and West Indies; in Egypt, on the shores of the Caspian Sea; and in the warmer parts of America. Specimens received from the first two places had the crown and all the hind part of the neck black. The above author gives another variety in his Supplement.

SUPPLEMENT.—A bird of this rare species was shot in Anglesea in the year 1793, an account of which is related in the 'Naturalist's Miscellany,' as received from Mr. Davies of Aber. Is sometimes called Longshanks. [Mr. Yarrell enumerates nineteen instances of this bird being killed in the British Islands, and several others are recorded in the 'Zoologist;' its range in Great Britain is very extensive, and it seems that the dates, spring, summer and winter, do not indicate any migratory movement. The Rev. Richard Lubbock, as quoted by Mr. Yarrell, has some interesting observations on its manners. "When shot," says Mr. Lubbock, "it was standing in a pool of water mid-leg deep, apparently snapping at insects in the air as they buzzed around it." Mr. Knox has some observations to the same purport in an early number of the 'Ibis.']

Plover, Norfolk.—See Bustard, Thick-kneed.

Plover, Ringed.—[*Yarrell*, ii. 494; *Hewitson*, lxxvii. 296.] *Charadrius Hiaticula*, *Lin. Syst.* i. p. 253, 1; *Gmel. Syst.* ii. p. 683; *Raii Syn.* p. 112, A. 6,—190, 13; *Will.* p. 230, t. 57; *Ind. Orn.* ii. p. 743, 8. *Charadrius Alexandrinus*, *Ind. Orn.* ii. p. 744; *Muller, Zool. Dan. Prod.* No. 210; *Brun. Orn.* p. 77. *Pluvialis torquata minor*, *Bris.* v. p. 63, 8, t. 5, f. 2; *Ib.* 8vo, i. p. 227. Petit Pluvier à collier, *Buf.* viii. p. 90, t. 6. Sea Lark, *Albin*, i. t. 80; *Will. Angl.* p. 310, t. 57. Alexandrine Plover, *Lath. Syn.* v. p. 203; *Id. Sup.* ii. p. 315. Ringed Plover, *Br. Zool.* ii. No. 211; *Ib.*

fol. 129, t. Addenda; *Arct. Zool.* ii. No. 401; *Lath. Syn.* v. p. 201, 8; *Lewin, Br. Birds*, v. t. 184; *Walc. Syn.* ii. t. 161; *Don. Br. Birds*, i. t. 18; *Pult. Cat. Dorset.* p. 16; *Lin. Trans.* vii. p. 281; *Bewick, Br. Birds*, i. t. p. 345. Provincial: Dulwilly; Ring Dottrell; Sand Lark.—This species weighs about two ounces; length between seven and eight inches. Bill half an inch long, the base half orange, the other black; irides hazel. At the base of the upper mandible the feathers are black, which passes in a broad streak under the eye, taking in the coverts of the ears; forehead white; behind which, on the top of the head, is a black band from eye to eye; over the eye a streak of white passing backwards; chin and throat white, continuing in a circle round the neck; beneath this, on the lower part of the neck, is a broad black band encircling that part; the back of the head and upper parts of the body and wing-coverts pale brown; under parts white; quills dusky, with some white at their base; shafts partly white; tail consists of twelve feathers; the two middle brown, dusky towards the tips; the three next black towards the end; in the next is only a brown band on the inner web; the outer one quite white; the whole tipped the same: legs orange; claws black. When flying this bird shows a white bar on the wing, by reason of the base of some of the quills and tips of some of the greater coverts being of that colour. The Ring Plover is a plentiful species in most parts of the known world. In England every part of the coast is enlivened with their shrill note. It has been said to leave us in the autumn; but this is certainly not the case, as we have frequently procured them throughout the severest winters in Devonshire, Cornwall, and other places; but at this time they quit the open shores, and seek shelter in creeks and inlets. Early in May they pair, and we have found their eggs as early as the 20th of that month. It makes no nest, but lays four eggs in a small cavity in the sand, just above high-water mark. These are of a cinereous-brown, marked all over with small black and ash-coloured spots; weight three drams. It is remarkable that these, as well as most if not all species of birds that lay invariably four eggs only on the ground, place them so as to occupy the least possible space; that is, with their small ends touching each other as a centre. It is greatly attached to its young; will use various deceptions to save them from men or dogs; sometimes will flutter along the ground as if crippled, and if pursued will fly to a little distance, distend all its feathers, and seem to tumble head over heels repeatedly, till it has enticed its enemy to

a distance from its young, and then it flies off. In the autumn they become gregarious, and continue in small flocks all winter, mixing sometimes with Purrs and Dunlins. We have frequently observed a variety of this bird without any black about the head and breast, and the bill and legs dusky; others seem inclined to those markings, and a tinge of orange on the bill and legs. From these gradations it should appear such are birds of the first year not maturely feathered; and are not unfrequently shot in company with the others. We suspect the *Alexandrinus* of *Linnaeus* to be this bird in one of its changes. *Lewin* has figured a bird under the title of Kentish Plover, vol. v. t. 185, which he considers as a distinct species. This, however, is much to be doubted, as the principal difference from the young of this species appears to be in the colour on the back of the head, which he describes to be of a clay-colour, though in his figure it is of an orange-red.

SUPPLEMENT.—As we have not the least doubt that the bird usually described as a distinct species, under the title of *Charadrius Alexandrinus*, is no other than the Ringed Plover in its adolescent state, we have connected their synonyms. But as we cannot speak with the same degree of confidence with respect to *Charadrius Cantianus*, we have for the present assigned it a separate place. Soon after the publication of the second Supplement to the 'General Synopsis of Birds,' we had occasion to deliver a paper on several subjects of Natural History to the Linnean Society, and took that opportunity to express an opinion upon the birds in question: and as nothing since that period has occurred to induce a different opinion, we cannot give our sentiments in this place better than by transcribing those published in vol. vii. of the 'Transactions' of that Society:—"In the 'Ornithological Dictionary' it will be seen that some doubts are entertained whether the Alexandrine Plover (*Charadrius Alexandrinus* of *Linnaeus*) and the Kentish Plover of *Lewin* are not really varieties of the Ringed Plover: such doubts cannot but exist with those who have had the same opportunity of examining the number of specimens we have at all times of the year; and we confess that additional and more recent observations have so strengthened our former conjectures as to leave the mind with scarcely the shadow of a doubt that they are actually one and the same species. When the size and weight, the manners and habits of similar birds are consulted, and found to be the same; when the plumage of such is so nearly alike, except in a few markings, which are variable by age and season;

when gradations are to be traced from the markings of one to those of the other; and when such birds always congregate together; we must be naturally led to conjecture that naturalists who have not had the same opportunities of attending them in their native haunts, and have only examined a few individuals, perhaps in their extreme dissimilitude of plumage, might, without committing their scientific knowledge, describe them as distinct species. It must, however, be acknowledged that the actual criterion is the tracing of such doubtful subjects through their several changes from the nestling to the adult: such has been our usual plan where opportunity permitted. On the present occasion, were it not for the strong chestnut-colour the Kentish Plover is said to possess on the crown of the head, as described by Lewin, and since by Doctor Latham, in his second Supplement to the 'General Synopsis,' we should not have hesitated in pronouncing these three birds to be only one species; for the marks of distinction on which so much stress is laid by some persons will by no means hold good, not only with respect to this, but also to many other species of birds, as we can prove from ocular demonstration. There is indeed nothing more vague and indeterminate than the colour of the legs and bill; a circumstance that has already led to much confusion, and of which we beg leave to put the young and inexperienced Ornithologist upon his guard. It would be endless to adduce instances of these uncertain marks, more or less changing by age and season, so well known to those who search for truth amongst Nature's stores: the examples of the Black-headed and Herring Gulls, hereafter mentioned in this paper, are sufficient to show the care requisite in admitting the colour of those parts as the only specific distinction. The colour therefore of the head alone, in what is described as the Kentish Plover, is the only circumstance that could stagger our opinion; and we must still conjecture that the bird figured by Lewin is only an accidental variety; for it is admitted in the second Supplement to the 'General Synopsis' (the author of which sent the description to Lewin) that this part of the bird has its gradations. In the first described specimen the top of the head is ferruginous-brown; and with respect to the two other specimens, killed in the month of April, it is stated that 'in one of them the whole nape was of a fine pale reddish bay, the other pale brown, inclining to bay towards the nape.' We shall now take leave of these birds for the present, by remarking that we have repeatedly taken the young of the Ringed Plover

before it could fly, and, we believe, in all the usual intermediate changes of plumage in every month in the year; and we do assert that in its infant state the legs and bill are not yellow, though paler than they are after it has attained the power of flying, when they become of a dusky brown, and continue that colour for a considerable time, changing by degrees to a yellow-brown, and lastly to an orange-yellow; but this last change is never effected till the plumage is nearly complete, and is usually the last mark of perfection. At this time (January) we have before us fresh specimens of this species, with all the marks of adults, except that the bill and legs do not possess the full yellow; at the same time we have others agreeing with the Alexandrine and Kentish Plovers, but with the crown of the head pale brown, some more or less tinged with rufous; and the white which passes over the eye from the forehead not quite running into the ring of that colour round the neck, but in some so near it as not to admit of a specific mark of distinction; the bill and legs dusky." We had in June, 1811, a Ringed Plover alive, that was taken in the month of December preceding, at which time it had as nearly all the characters of the Alexandrine Plover as may be expected in a subject liable to variation. The bill was dusky and the legs brown: the head and breast destitute of the black bands; and except that the white which passed from the forehead over the eye did not quite join the white ring round the neck, there was no difference whatever between this bird and the description given of the Alexandrine Plover. In the month of March the feathers which constitute the black band behind the white one on the forehead, and the dark feathers on the middle of the breast, which unite the brown on the sides and form a band on that part, began to appear. Before the middle of April my Alexandrine Plover (as I suspected) was in the complete plumage of the Ringed Plover; the bill was, as usual, yellow, except at the point: but the legs were still brown, with scarcely a tinge of yellow. From the deep colour of the black on the head and breast, there is reason to suppose this bird was a male. Whether this species, after having arrived at maturity, makes any autumnal change, we have not yet been able to determine; but probably it is only the young birds, which are not maturely feathered till the following spring, that have been described as distinct species. This little bird continued in high health till it was killed by a cat, having been generally fed upon worms, in order to produce the full and proper plumage expected by its most natural food; but it had occasionally

eaten flesh minced small. We need not add anything to the above observations, but that Doctor Latham makes the weight of the Kentish Plover not much more than an ounce and a half, and the length six inches and a half. This is certainly less than the usual weight and measurement of the Ringed Plover, which weighs from two to two ounces and a half, and is generally more than seven inches long. The name of Ring Dottrel has been applied to this bird in some parts, as well as that of Stone Plover, which last has also been given to the Thick-kneed Bustard. We took an egg from the nest of this bird, and, after carrying it a great many miles, were surprised to find the young one in it alive, and actually chirping at the end of three days, notwithstanding it had been deprived of its accustomed warmth. This is a proof that eggs, or rather the embryo young, are not easily destroyed by moderate cold, comparatively speaking, as relative to the temperature of a breeding bird, at a certain period of incubation. A small crack in the shell had given the young the means of respiration, and consequently of uttering sound. The Ringed Plover is entirely a shore bird, residing there the whole year, and picking up its sustenance from the rejectamenta of the sea. It is probable those of the northern parts of Great Britain go southward after the breeding season. Mr. Bewick remarks that these birds are common in all the northern countries; and that they migrate into Britain in the spring, and depart in autumn. From the northern parts of England they probably migrate, but in the southern parts many are observed throughout the year. This species has been observed in New South Wales; and it is remarkable that, except the Snow Bunting, this is the only bird which Linnæus observed upon the snow-capped mountains of Iceland; probably accidental.

Plover, Stone. — See Bustard, Thick-kneed; and Plover, Ring.

Plover, Whistling. } See Plover, Golden.
Plover, Yellow. }

Pochard. — [Yarrell, iii. 334; Hewitson, cxvii. 423.] *Anas ferina*, *Lin. Syst.* i. p. 203, 31; *Gmel. Syst.* i. p. 530; *Ind. Orn.* ii. p. 862, 77; *Lath. Syn. Sup.* ii. p. 354; *Lin. Trans.* iv. p. 116, t. 14, f. 5, 6 (trachea); *Bewick, Br. Birds*, ii. t. p. 356. *Anas fera fusca*, *Raii Syn.* p. 143, A. 10; *Will.* p. 288, t. 72; *Ib.* p. 282, 12, Fem. ? *Penelope*, *Bris.* vi. p. 384, 19, t. 35, f. 1; *Ib.* 8vo, ii. p. 462. *Millouin, Buf.* ix. p. 216. Poker, Pochard, Red-headed Widgeon, *Br. Zool.* ii. No. 284; *Ib.* fol. 156, t. Q. 5;

Arct. Zool. ii. No. 491; *Will. Angl.* p. 367, t. 72; *Albin*, ii. t. 98; *Lath. Syn.* vi. p. 523, t. 68; *Lewin, Br. Birds*, vii. t. 253; *Pult. Cat. Dorset.* p. 20. Provincial: Vared-headed Widgeon; Attile Duck; Red-headed Poker; Great-headed Widgeon; Blue Poker; Dun-cur. — A species of Duck about the size of a Widgeon, but not so slender and elegantly formed. Weight about twenty-eight ounces; length nineteen inches. Bill broad, blue, tip black; irides in some orange, others hazel; head and neck deep chesnut; lower part of the neck, breast, and upper part of the back black, with small undulated lines of grey; back and scapulars cinereous and dusky, disposed in small undulated lines; smaller wing-coverts darker; greater coverts and secondary quill-feathers blue-grey, primary quills dusky; rump and under tail-coverts black; under part of the body dusky white, marked with numerous small dusky lines, darkest at the vent; the tail consists of fourteen feathers, dusky, dashed with ash-colour; legs lead-colour; feet the same, very broad. The female differs in having the head and neck ferruginous-brown; breast and belly dusky white, clouded with brown; under tail-coverts dusky and white; in other respects like the male, but the markings less distinct. This species is frequently caught in our decoys in winter, but is not known to breed with us. It is commonly called Dunbird, or Red-headed Widgeon. The male possesses a labyrinth, or enlargement of the trachea, near the junction with the lungs. This is well figured by Dr. Latham in the fourth volume of the 'Linnæan Transactions,' amongst many others. This singular formation is peculiar to the male only of several species of the Duck tribe: what the use of it can be has not yet been discovered.

SUPPLEMENT. — This species, though sometimes taken in the decoy pools in the usual manner, are by no means welcome visitors; for by their continual diving they disturb the rest of the fowls on the water, and prevent their being enticed into the tunnels: and we are assured that they are not to be decoyed with the other Ducks. Pochards, like other wild fowl, were taken in much greater abundance formerly, and in a very different manner. In a common decoy pool there are three or four arms, or narrow cuts, leading from the pool: these are usually at opposite angles, and decrease towards their extremity: over the further end of these sticks are bent and covered with netting, which terminates with a net laid on the ground. If into either of these tunnels the birds are decoyed (by tame Ducks constantly fed in those places), they are unable to return, the decoy man, who

is hid behind reed fences, shows himself at the mouth of the tunnel, and by that means the wild birds, after trying to escape by flying up, being stopped by the net above, push up the tunnel, creep into the hooped net on the ground, and are caught. It sometimes happens that the Ducks on a decoy are lazy, and will not follow the tame ones; in this case recourse is had to a singular stratagem. A dog having been taught to run forwards and backwards through some small holes left for that purpose at the bottom of the reed-screens, frequently induces the fowls to approach; but it is sometimes requisite to tie something red round the dog's neck, in order to stimulate the curiosity of the fowls. In the whole of this business the decoy man must carry on his operations to leeward, lest the fowls smell him, which would instantly rise the pool. The method formerly practised for taking the Pochard (as we have been informed from good authority) was something similar to that of taking Woodcocks. Poles were erected at the avenues to the decoy, and after a great number of these birds had collected for some time on the pool (to which wild fowl resort only by day, and go to the neighbouring fens to feed by night), a net was at a given time erected by pulleys to these poles, beneath which a deep pit had previously been dug: and as these birds, like the Woodcocks, go to feed just as it is dark, and are said always to rise against the wind, a whole flock was taken together in this manner; for when once they strike against the net they never attempt to return, but flutter down the net until they are received into the pit, from whence they cannot rise, and thus we are told twenty dozen have been taken at one catch. The tracheal labyrinth belonging to the male of this species is (as Dr. Latham observes) something like that of the Scaup, and though it is quite impossible to give an adequate idea of it by description, the comparative description given in the second Supplement to the 'General Synopsis' may be useful:—"The trachea is shorter, but otherwise like that of the Scaup, and of nearly the same diameter throughout. The drum-like labyrinth is more round on the upper side, but crossed with a small bony partition, as in that bird. The bony box of which the other portion consists is scarcely elevated on this side, and on the other much less so than in the Scaup; it likewise forms an obtuse angle with the rest of the trachea, but in the Scaup it does not deviate from a continuation of a straight line, though forming a considerable enlargement." Where any doubts exist we recommend a consultation of the figures

of this and other trachea given in the fourth vol. of the 'Linnean Transactions.' It has been said that this species will not live in confinement; on the contrary, no bird appears sooner reconciled to the menagerie. One now in our possession, that was badly wounded with a broken wing, took to feeding on corn immediately, and is now, after three years' confinement, very tame and in high health.

[Pochard, Paget's. — *Fuligula ferinoides*, Fisher, Zool. 1778. American Scaup (*Fuligula mariloides*), Yarrell, iii. 349.—"The specimen of this bird, which I have mentioned to be in the possession of Mr. H. Doubleday, is supposed to be in the adult dress, and has the bill black at the point and at the base, the remaining portion pale blue; the irides yellowish white; the head and upper part of the neck of a rich and very deep chesnut, finely glossed with purple; the lower part of the neck and breast black; in the younger birds the neck almost wants the purple gloss, and is of a lighter colour, the breast being also at first not much darker than the neck; the back and wing-coverts are minutely freckled with grayish white on a black ground; the sides and flanks, both under and below the wing, are in the immature bird like the back, but in the adult are lighter, the freckling being produced, as in the back of the Common Pochard, by lines of black on a white ground; the back and wing-coverts are also darker in the immature than in the adult bird, and are tinged with yellowish brown; wing-coverts very dark brown, slightly powdered with grayish white; the primaries light brown, broadly edged with dark brown, except the first, which has the whole of the outer and great part of the inner web dark brown; all the visible part of the secondaries white, slightly powdered with gray, and forming a white bar across the wing; about a quarter of an inch near the ends of these feathers is black, and the tips are white in the immature bird, but in the adult the white is hardly visible; at both ages the uppermost feathers of the speculum are of a more uniform gray than the lower, and more or less edged with black; the rump and upper tail-coverts black, this colour being spread over a much greater extent in the adult than in the immature bird; on the chin is a small triangular spot of yellowish white; the lower part of the breast and belly, in the immature specimen, yellowish brown mixed with light gray, and slightly freckled with black; the yellow colour giving place to the gray, and the part becoming darker as the bird attains maturity; the feathers about the vent are in the immature birds

white at the sides, and freckled with dark gray in the centre, the youngest bird also exhibiting in this part a good deal of yellowish brown; in the adult entirely of dark gray; the legs and toes dark bluish gray, the webs and claws black." — *W. R. Fisher, in Zoologist for 1847*, p. 1779. The first specimen is recorded by Mr. Fisher in the 'Zoologist' for 1845, at p. 1137; it was shot on Rolleston Broad, in Norfolk: the second was observed in one of the London markets by Mr. Bartlett (see *Zool.* for 1847, p. 1779); and a third, in the possession of Mr. Doubleday, was also obtained in a London market, as recorded at the same date and page: this last is figured by Mr. Yarrell as the American Scaup. We are so familiar with the occurrence of hybrids in the Duck tribe, that this must not be received as a species until more specimens have occurred, and more information has been obtained respecting its history.]

Poker.—**SUPPLEMENT.**—A common name in Lincolnshire for many species of the Duck tribe: the Pochard is called Blue Poker and Red-headed Poker; the Wigeon is termed Wigeon Poker; the Tufted Duck, Black Poker; and another species we could not ascertain is called Red-eyed Poker, which we suspect is also the Pochard, the only species of British Duck we believe that has a red eye.

[**Polish Swan.**—Mr. Yarrell describes a species under this name. See Swan, Polish.]

[**Pomarine Gull.** } See Skua, Pomarine.
[**Pomarine Skua.** }

Pope.—See Puffin; and Finch, Bul.

Poppinjay.—See Woodpecker, Green.

Port Egmont Hen.—See Gull, Skua.

Pratincole.—**SUPPLEMENT.**—A genus of birds, the characters of which are: Bill short, strong, convex above, and hooked at the point: gape wide: nostrils near the base of the bill linear, oblique: toes long, slender, connected at the base by a membrane: tail much forked, consisting of twelve feathers: wings long and pointed, the exterior feather the longest.

Pratincole, Austrian.—[*Yarrell*, ii. 470; *Hewitson*, lxxv. 290.] **SUPPLEMENT.**—*Hirundo Pratincola*, *Lin. Syst.* i. p. 345; *Gmel. Syst.* i. p. 695. *Glariola*, *Bris.* v. p. 141, t. 12, f. i.; *Id.* 8vo, ii. p. 248. *Glariola austriaca*, *Ind. Orn.* ii. p. 753. *Hirundo marina*, *Rail Syn.* p. 72; *Will.* p.

156; *Id. Angl.* p. 214. *La Perdrix de Mer*, *Buf.* vii. p. 544; *Pl. Enl.* 882. Austrian Pratincole, *Lath. Syn.* v. p. 222, t. 85; *Lin. Trans.* ix. p. 198. — A bird of this species, very much resembling the Coromandel variety, described by Dr. Latham, was shot near Liverpool, on the 18th of May, 1804, as we have been assured by Mr. Bullock, to whom the bird was brought before it was cold, which specimen is now in the collection of Lord Stanley. It was shot in the act of taking beetles on wing, the remains of which were found in its stomach. Was thought to be a male. Lord Stanley favoured us with an excellent drawing of this bird, from which we took a description. But having been since favoured with a specimen from Mr. Vaughan, that exactly corresponds with the bird in question, some of the deficiencies incidental to drawings have been supplied, and a more perfect description taken from this specimen. The length is about ten inches. Bill black, short, convex or arched, the upper mandible pointed, slightly hooked and longest; under mandible at the base, and corners of the mouth, coral-red: irides said to be reddish. The colour of the plumage on the upper parts of the bird is brown; the crown of the head, and the neck above, are tinged with rufous; the back and scapulars slightly dashed with greenish bronze: the throat is yellowish buff: from the lower part of the eye originates a black line, which passes round below the throat, and encircles that part: across the lower neck and upper breast the feathers are rufous-brown: the lower breast buff, like the throat: the belly, sides of the rump, and coverts of the tail, both above and below, are white: the wings are very long, and formed like those of a Swallow, being extremely narrow, and having the first feather the longest; the prime quills are dusky brown; the secondaries are paler, slightly tipped with white; the tertials and coverts like the scapulars: along the edge of the wing, close to the alulae spuriae, is whitish: the under coverts of the wings are partly bright ferruginous and partly black, the middle series being of the former colour: the long feathers on the sides of the body, close to the junction of the wings, called the under scapulars, are also of the same ferruginous-colour: the tail, like the Common Swallow, is greatly forked, the feathers more or less white at the base, with their ends dusky brown, but the last does not occupy above one-third of their length, except in the middle ones; the outer feather is very slender, and nearly an inch longer than the second; the others decrease in length proportionably, till the whole length of the four middle feathers

is not above half so long as the outer: legs and toes rufous-brown; claws dusky black, not much hooked, and the middle claw long, imperfectly pectinated on the inside, and truncated. The bird from which this description is taken (being exactly like that in the museum of Lord Stanley, as we before stated) came from Senegal. There appears to be several varieties of this species, occasioned most likely by age. Dr. Latham specifies four varieties, under the titles of Collared, Maldivian, Coromandel, and Madras, indicative of the countries they have been found to inhabit: and if these are really the same it is a very widely extended species. Probably the Senegalensis is another variety, or rather the young of the *Austriaca* before it puts forth its adult plumage, being of a general brown colour: and we are the more inclined to believe this, since the Coromandel variety of the Austrian Pratincole has been identified at Senegal. If this should really be the case, there is but one other species of the genus, the Spotted Pratincole (*Glariola naevia*). We are informed this species inhabits Germany, particularly the borders of the Rhine, near Strasburgh, and is sometimes seen in France, especially Lorraine; but is most plentiful in the deserts towards the Caspian Sea, frequenting the dry plains in great flocks. Is also common throughout the whole desert of Independent Tartary, as far as the rivers Kamyschlossca and Irtish, but no further in Siberia; and in general is not observed beyond 53 degrees to the northward. It will be observed that Linnæus placed this bird with his *Hirundines*, to which, in some particulars, it has considerable affinity, though its bill and legs certainly constitute characters sufficiently distinct to remove it from thence: but why it has been taken from the land division, and placed amongst the water birds, we are unable to discover. Its habits, as well as the shape of its wings and tail, greatly resemble those of the Swallow: like that tribe, it frequently resorts to rivers and other waters, and, like the Sand Martin, makes a nest in the holes of sandy banks, and lays six or seven eggs. Similar to the Swallow tribe, it is continually on wing, and seems to take its food always in that manner, but instead of soft insects suited to their tender bills, the Pratincole, whose bill is strong, wages war against the Coleopterous tribe, perhaps *Dytiscus*, and other aquatic insects. Its legs indeed are rather long, and bare a little above the knee, a circumstance that seems to have induced an opinion that it may occasionally wade into the water, like the Sandpipers, which, in the legs and toes, it much resembles: but we do not

find any mention made of such a habit. Besides it is unlikely that it should entirely leave the neighbourhood of water, and spread over the sandy deserts of Tartary, and other such arid parts, if it was semi-aquatic. To this part, therefore, of its structure we must assign the cause of the removal from the Order *Passeres* to that of *Grallæ*. It is true the titles of *Hirundo marina* and *Perdrix de Mer* should imply an aquatic habit, but further we are not informed. There can be no doubt that, formed as this species is for long and rapid flights, it is migratory, shifting its quarters with the season, and that those which go so far north as 53 degrees return southward after the breeding season. Since the above was written, we have been favoured with the examination of the only specimen ever taken in England, from Lord Stanley, and found it to exactly correspond with that from which our description is taken.

APPENDIX. — It will have been observed in the preceding pages, that this bird was first introduced into the British catalogue by Mr. Bullock, from a solitary instance of its having been shot near Liverpool. We have now to record that the same gentleman met with the Austrian Pratincole in the summer of 1812, in Unst, the most northern of the Shetland Isles, an account of which will appear in Vol. x. of the 'Transactions of the Linnean Society.' [Since Col. Montagu wrote the above, these birds have repeatedly been shot. Mr. Yarrell mentions the occurrence of no less than five other specimens in England: a pair of these were killed on the Breydon Wall, near Yarmouth, in May, 1827; one at Branston Hall, near Lincoln, on the 15th of August, 1827; one in Willbraham Fen, Cambridgeshire, in May, 1835; one on the shore of the harbour of Blakeney, in Norfolk, in May, 1840. In the 'Zoologist' for 1848 Sir W. Milner records, at p. 2023, that a specimen was killed on Staxten Wold, five miles from Scarborough, in May, 1844. In the volume for 1850 Mr. Duff mentions, at p. 2771, that a specimen was killed at Bedlington, in Northumberland, in February, 1850. In the volume for 1852 the Hon. T. L. Powys relates, at p. 3710, that his friend Mr. Buller saw two Pratincoles on the Warren, a large sand-bank at the mouth of the river Exe, South Devon: they appeared very tame, occasionally alighting on the sand, on which their movements very much resemble those of the Ring Plover: their manner of flight was very much like that of the Swallow. And lastly, in the volume for 1853 the Rev. A. C. Smith records, at p. 3843, that Mr. Hussey shot a Pratincole near Tilshead, on Salisbury Plain, in the

middle of November, 1852; it was close to a sheepfold where sheep were feeding. A specimen of the Pratincole was kept alive for some months in the Zoological Gardens, and became very tame; Mr. Yarrell noticed a habit it had of throwing back its head, and looking upwards towards the sky.]

Ptarmigan.—[Yarrell, ii. 372; Hewitson, lxx. 280.] *Tetrao Lagopus*, *Lin. Syst.* i. p. 274, 4; *Gmel. Syst.* ii. p. 749; *Raii Syn.* p. 55, 5; *Will.* p. 127, t. 32; *Ind. Orn.* ii. p. 639, 9; *Bris.* i. p. 216, 12; *Ib.* 8vo, i. p. 60. *Lagopede*, *Buf.* ii. p. 264, t. 9. White Game, *Will. Angl.* p. 176, t. 32. Ptarmigan, *Br. Zool.* i. No. 95, t. 43; *Ib.* fol. 86, t. M. 4, 5; *Arct. Zool.* ii. p. 315, D.; *Lath. Syn.* iv. p. 741, 10; *Lewin, Br. Birds*, iv. t. 134; *Walc. Syn.* ii. t. 182; *Don. Br. Birds*, i. t. 12.—This species of Grouse weighs about twenty ounces; length fifteen inches. Bill black; irides hazel. The summer plumage is a mixture of light brown and ash-colour, marked with minute bars and small dusky spots; the head and neck with broad bars of black, white, and rust-colour; belly white; wings white, with black shafts to the greater quills. Some are more rufous on the head, supposed to be the male sex. In the month of September it begins to change its plumage, and about the middle of October it is of a pure white all over, except the shafts of the wings and the tail, which last consists of sixteen feathers; the two middle ones white, the rest black, with a little white on the tips of the second feathers from the middle. In the male also there are black feathers covering the nostrils, and from thence to the eyes. This is taken from the Ptarmigan of the Scottish highlands; but in those received from Norway all the black feathers of the tail were tipped with white, largely so in the middle feathers, but gradually decreasing till almost lost on the exterior ones. When the tail is closed the black is completely concealed by the coverts, which are white, and reach to the end. It is a very local species with us, confined to the loftiest mountains of the north. Some few are yet found to the south of the Tweed, but it is more plentiful on some of the highlands of Scotland, from which it rarely or never descends, even in the severest season, when nothing but snow is to be seen. It makes no nest, but deposits ten or twelve eggs on the bare ground, amongst the rocks. These are of a dirty white, spotted and blotched with rufous-brown, something larger than those of the Partridge. It is by no means a shy bird, but will suffer the sportsman to approach very near. The herdsmen frequently knock them down with sticks. In winter

they assemble together in flocks. They are called Birch Partridges in Nova Scotia; with us White Game, or White Partridge. We are inclined to believe the White Partridge of Mr. Edwards is a mere variety of this bird, contrary to the opinion of that great naturalist Mr. Pennant, who says he has received both from Norway. But with the most diligent inquiry we cannot find more than one species known in that country, where they are called Rype, but pronounced Reuper; and in the many we have seen no specific distinction could be discovered.

SUPPLEMENT.—We are informed by Lord Stanley that this species of Grouse has bred in confinement in Ireland, as he has been assured by the person who saw both the parents, and their young while they were small. His Lordship thinks these were in the possession of Lord Shannon.

Puckeridge.—See Goatsucker.

Puffin.—[Yarrell, iii. 472; Hewitson, cxxvii. 466.] *Alca arctica*, *Lin. Syst.* i. p. 211, 4; *Gmel. Syst.* ii. p. 549; *Ind. Orn.* ii. p. 792, 3. *Anas arctica*, *Raii Syn.* p. 120, A. 5; *Will.* p. 244, t. 65. *Fratercula*, *Bris.* vi. p. 81, 1, t. 6, f. 2; *Ib.* 8vo, ii. p. 380. *Le Macareux*, *Buf.* ix. p. 358, t. 26. Puffin, *Br. Zool.* ii. No. 232; *Ib.* fol. 135, t. H.; *Arct. Zool.* ii. No. 427; *Will. Angl.* p. 325; *Albin*, ii. t. 78, 79; *Edw.* t. 358, f. 1; *Lath. Syn.* v. p. 314, 3; *Lewin, Br. Birds*, vi. t. 225; *Don. Br. Birds*, i. t. 8; *Walc. Syn.* i. t. 87; *Pult. Cat. Dorset.* p. 17.—The weight of this species of Auk is between twelve and thirteen ounces; length exceeds twelve inches. The bill is of a very singular form; it is about an inch and a half deep at the base, much compressed sideways, and arched, but ends in a point, where the upper mandible is a little hooked; at the base of this mandible is an elevated rim, full of small punctures of a light colour; next to which is a space of a bluish grey, at the bottom of which the nostrils are lodged at the edge, which is a long narrow slit; from thence it is orange-coloured with four oblique furrows; the under mandible corresponds in colour, but has only three furrows; irides hazel, in some greyish; orbits red; above the eye is a triangular callous protuberance, beneath an oblong one; the top of the head and whole upper parts are black, passing round the neck in a collar; the sides of the head and all the under parts are pure white; the chin in some is grey, in others white, and the cheeks are grey; quills dusky; tail short, and consists of sixteen feathers; legs and feet orange; claws black, the inner one much hooked. It is remarked

that the bill of this bird varies much according to age; at first it has no furrows, and is of a dusky colour, the yellow colour and furrows increasing with age. These birds appear on many parts of our rocky coast about the middle of April, and begin to breed about the middle of May. On the stupendous cliffs of Dover, and other such places, they deposit their single egg in the holes and crevices; in other places they burrow like rabbits, if the soil is light; but more frequently take possession of rabbit-burrows, and lay their egg many feet under ground. This is the case on Priestholm Isle, off the coast of Anglesea, and other small islands off St. David's, where the soil is sandy. On St. Margaret's Island, off that place, we have seen the fishermen draw them out of their holes in a singular manner: by introducing the hand it is seized by the Puffin, who suffers itself to be drawn out, as it will not quit its hold. In other places they are caught with ferrets, and the young are taken and pickled. About the latter end of August they retire from our coast, and are all completely migrated by the beginning of September, together with the Razorbill and Guillemot. The egg is white, about the size of a Hen's. At Dover this, as well as the Razorbill, is indiscriminately called Willock; it is also variously called Coulterneb, Lunda Bouger, Mullet, Gulderhead, Bottlenose, Pope, Marrot, and Sea Parrot. The principal food of these birds is small fish, particularly sprats, with which they feed their young. It is not known to what part they go when they retire from us; but they have been found in abundance in various parts of the northern as well as southern hemisphere.

SUPPLEMENT.—It is an unusual circumstance for this species to remain on any part of our coast in winter, but in the most temperate part, the south of Devonshire, it occasionally occurs at that season. A specimen brought to us on the 27th of February, 1811, had the feathers between the bill and eye dusky, extending also round the eye: the cheeks and chin grey: the bill and legs not so orange as in summer. The egg of this bird is sometimes obscurely speckled with cinereous. Few birds have acquired so many provincial names as this: for besides those before mentioned, it is in the Orkney and Shetland Islands called Tommy, Tomnorry, or Taminorie; and, in the south of Scotland, Bass-cock, Ailsa-cock, Tomnoddy, Cock-andy, and Bowger.

Puffinet.—See Guillemot, Black.

Puffin, Manx.—See Shearwater.

Puit.—See Gull, Black-headed.

Purre.—*Tringa cinclus*, *Lin. Syst. i. p. 251, 18*; *Gmel. Syst. ii. p. 680*; *Raii Syn. p. 100, A. 13—190, 11*; *Ind. Orn. ii. p. 735, 35*; *Bris. v. p. 211, 10, t. 19, f. 1*; *Ib. 8vo, ii. p. 267*. *L'Alouette de Mer, Buf. vii. p. 548*. *Sanderling, Albin, iii. t. 88*. *Purre, or Stint, Br. Zool. ii. No. 206, t. 71*; *Ib. fol. 126*; *Arct. Zool. ii. No. 390*; *Will. p. 226*; *Ib. Angl. p. 305*; *Lath. Syn. v. p. 182, 30*; *Don. Br. Birds, t. 32*; *Pult. Cat. Dorset. p. 15*; *Lewin, Br. Birds, v. t. 174*; *Walc. Syn. ii. t. 150*. *Tringa ruficollis, Gmel. Syst. ii. p. 680?*; *Ind. Orn. ii. p. 736, 36?* **Red-necked Sandpiper**, *Lath. Syn. v. p. 183, 31?* **Provincial: Ox-bird; Ox-eye; Least Snipe; Wagtail.**—This species of Sandpiper is near eight inches in length; weight about an ounce and three-quarters. Bill black, one inch and a quarter long; irides dark. The head and hind part of the neck pale ash-coloured brown, streaked with dusky, with a whitish line between the bill and eye; back and wing-coverts more brown, dashed with ash-colour; greater coverts darker, tipped with white; fore part of the neck white, mixed with brown; breast and belly white; quills dusky, with more or less white at the base; the shafts of some and the secondaries tipped with white, and edged with cinereous; the tail consists of twelve feathers; the two middle ones rather longest, dusky, edged with ash-colour; the rest brownish ash-colour, edged with a lighter shade; legs dusky. In some birds the head is without dusky streaks; others streaked on the back, and rufous-brown on the rump, mixed with dusky. Dr. Latham has given another variety, somewhat different in the markings, and less in size, measuring only six inches and three-quarters in length. The Purre is found on all our coasts during winter, but seems most partial to the flat sandy shores and inlets, where large flocks are seen in company with Sanderlings. It is suspected some few remain with us all the year, and of course breed here; but we do not remember to have seen any after the month of May till the middle of August. In the very extensive sandy flats on the coast of Caermarthenshire we have seen thousands of these mixed with Sanderlings during the winter; but they all depart in April, at which time the Dunlin appears there for a short time. These three species are indiscriminately called Sanderlings. [This is certainly the Dunlin in winter plumage. See Dunlin, where references are given to figures of the bird and egg.]

Puttock.—See Kite; and Buzzard, Common.

Q.

Quail.—[Yarrell, ii. 413; Hewitson, lxxii. 284.] Tetrao Coturnix, *Lin. Syst.* i. p. 278, 20; *Gmel. Syst.* ii. p. 765; *Raii Syn.* p. 58, A. 6; *Will.* p. 121, t. 29; *Bris.* i. p. 247, 14; *Ib.* 8vo, i. p. 69. *Perdix Coturnix*, *Ind. Orn.* ii. p. 651, 28; *Lath. Syn. Sup.* ii. p. 280; *Bewick, Br. Birds*, i. t. p. 320. La Caille, *Buf.* ii. p. 449, t. 16. Quail, *Br. Zool.* i. No. 97; *Ib.* fol. 87, t. M. 6; *Arct. Zool.* ii. p. 320, B.; *Albin*, i. t. 30; *Will. Angl.* p. 169; *Lath. Syn.* iv. p. 779, 24; *Sup.* p. 222; *Lewin, Br. Birds*, iv. t. 138; *Walc. Syn.* ii. t. 185; *Pult. Cat. Dorset.* p. 7. — This species of Partridge is about seven inches and a half in length. Bill dusky; irides hazel; in old male birds yellow. The crown of the head is black, transversely marked with rufous-brown; down the middle is a yellowish white line; above the eye, passing backwards, is another line of the same colour; on the chin and throat is a black mark which turns upwards to the ears; the rest of those parts are white; the hind part of the neck, back, scapulars, and tail-coverts are rufous-brown; the middle of each feather streaked with yellowish white, surrounded more or less with black; sides the same, but have not so much of the white streaks; breast light ferruginous-brown; shafts white; belly paler; wing-coverts pale rufous-brown, streaked like the back, but more minutely; quills dusky, the outer webs more or less mottled with yellowish white; tail dusky, tipped with white, and consists of twelve short feathers hid by the coverts. The female differs in having no black chin or throat, but only a dusky mark from the ears passing downwards; the breast is also spotted with dusky, and the coverts of the wings crossed with yellowish white bars; in other respects the sexes are alike. The legs of both are of a light yellowish brown. The Quail is found in all parts of the old world, but not in America. It is a bold bird, and is frequently used in China for fighting, as we do our Game Cocks. In the flight season, when these birds migrate to and from the north, they are found in prodigious quantities in all the islands of the Archipelago, which contains no less than forty-five principal ones. It is said an hundred thousand have been taken in one day on the west coast of the kingdom of Naples. A small portion only extend their flight to this country. With us they appear the beginning of May in our cultivated champagne counties, but in much less quantity

than formerly. On their first arrival the males are continually making a whistling note, three times successively repeated; which being imitated by a whistle or quail-call, they are easily enticed into a net: but in this way rarely any but males are taken. Great numbers were annually sent to London from France alive before the Revolution. They grow fat in confinement, where they seem to lose much of their pugnacious disposition. Like the Partridge it makes little or no nest; but the female deposits eight or ten eggs on the bare ground, of a yellowish colour, blotched or spotted with dusky, but subject to great variety as to the ground colour and disposition of the spots. Green wheat is the principal place of their resort with us, where they breed; and in the stubble of that grain the sportsman most commonly finds them. In October they leave us, and return south, leaving some few (probably of a later brood) behind to brave the severity of our winter. Several instances of their having been killed in that season have come to our knowledge.

SUPPLEMENT.—Dr. Latham remarks that he has known two instances where twenty eggs have been found in the nest of a Quail. This prolificacy is the occasion of the immense flocks that are annually noticed on their passage, spring and autumn, in various parts of the south of Europe, especially in the Crimea, and borders of the Black Sea. In the island of Stefano they arrive in great flights in the month of May, from the coast of Africa. If full credit is to be given to Baron de Tott, these birds migrate by night; a circumstance apparently extremely unnatural, because none of those birds whose natural habits oblige them to feed by day, and roost or repose by night, can see distinctly after the dusk of the evening, and are so foolishly blind, and so extremely fearful of flying, that nothing but alarm can force them to take wing. Thus it is asserted that these birds, during the fine weather, are dispersed over the Crimea, but assemble at the approach of autumn to cross the Black Sea, over to the southern coast, whence they pursue their course into warmer regions: the order of this migration is said to be invariable. Towards the end of August the Quails, in a body, choose one of those serene days, when the wind, blowing from the north at sun-set, promises them a fine night; they then repair to the strand, take their departure at

six or seven in the evening, and have finished a journey of fifty leagues by day-break. Nets are spread on the opposite shore, and the bird-catchers, waiting for their arrival, take them in great abundance. Such an account has all the appearance of theory, not only from the preconcerted plan of migration, and the unnatural time of flight, but also the time stated for the performance of so short a journey for an aerial animal endowed with such powers of rapid transportation. Instead of the distance of 150 miles requiring the whole of an equinoctial night (twelve hours), such a journey would with ease be performed in less than two hours. It is only nocturnal feeders that fly by night, as we have before noticed; and these are either of the aquatic kind, or soft and long-billed birds (nocturnal birds of prey excepted), who feel out their food, and are capable of finding it by other means than that of sight: whereas granivorous birds cannot feed even by moonlight, and actually require daylight for all their operations; and sleep by night. In respect therefore to the migrative part of the above account, it is unnatural and inconsistent with daily observations; but that vast numbers of Quails visit and re-visit the borders of the Black Sea twice in the year cannot be doubted. M. Galt, in his 'Voyages and Travels,' speaks of the migration of Quails from the Continent of Europe, in Sept., to Sicily. "Being fatigued by their flight," says our author, "are easily shot on their arrival. The pleasure which the Palermians take in this sport is incredible. Crowds of all ages and degrees assemble on the shore, and the number of sportsmen is prodigious." The number in boats is described to be greater than those on land, and all impatiently watching night and day the expected arrival of the Quails. "Enviably is the lot," says this writer, "of the idle apprentice, who, with a borrowed old musket or pistol, no matter how unsafe, has gained possession of the farthest accessible rock, where there is but room for himself and his dog, which he has fed with bread only all the year round for these delightful days, and which sits in as happy expectation as himself for the arrival of the Quails." The Quail remains all the year in Portugal, and we are assured by an excellent sportsman, Captain Latham, that he thinks they are more plentiful in that country in winter than in summer. That the migration of these birds was well known in the early part of the Christian era, is evinced by several passages in the sacred writings. In the passage of the Israelites out of Egypt we find, in the xvi. chap. of Exodus, the following, "And it came to pass, that at even the Quails came

up, and covered the camp." Again, in the xi. chap. of Numbers, "And there went forth a wind from the Lord, and brought Quails from the sea, and let them fall by the camp, as it were a day's journey on this side, and as it were a day's journey on the other side round about the camp, and as it were two cubits high upon the face of the earth. And the people stood up all that day, and all that night, and all the next day, and they gathered the Quails: he that gathered least gathered ten homers: and they spread them all abroad for themselves round about the camp."

[Quail, American.—Virginian Colin, *Yarrell*, ii. 404. *Perdix borealis*, *Temm. Man. d'Ornith.* iv. 335. — "The adult male has the beak almost black; the irides hazel; upper part of the head dark chestnut-brown; these feathers occasionally elevated, forming a crest; from the forehead to the eye, and from thence over and behind the ear-coverts, a band of pure white; below this a band of dark chestnut-brown and black, which reaches the sides of the neck, where the brown feathers are white in the middle; the upper part of the back and the wing-coverts reddish brown; lower part of the back, rump, and upper tail-coverts a mottled greyish brown, with a few spots of dark brown; wing-primaries greyish brown; the scapulars and tertials very dark brown, with buff-coloured margins; tail-feathers bluish grey; chin and throat white, with a gorget of black below; breast and belly buffy white, with transverse bars of black; sides, flanks, and under tail-coverts varied with reddish brown and buffy white; legs and claws reddish brown. The whole length is rather more than nine inches. From the carpal joint to the end of the wing four inches and a half: the wing in form rounded; the first and eighth feathers of the same length; the second equal to the sixth, but not so long as the third, fourth, or fifth, which are nearly equal in length to each other, but the fourth rather the longest in the wing. The female is rather smaller than the male; the band before and behind the eye is less conspicuous; the light-coloured edges of the scapulars and tertials are more white than buff-coloured; the chin and throat are pale buff-colour; the breast is nearly white, with much less of the reddish brown colour on the upper part, the sides, or the flanks. Very young birds, Mr. Audubon says, have the beak brownish yellow; irides light hazel; the general colour of the upper parts light yellowish brown, patched with grey; sides of the head dusky."—*Yarrell*, ii. 411. Col. Montagu incidentally mentions this American bird as having occurred in

Britain (see Grosbeak, Whitewinged, p. 137), but he seems only to allude to the occurrence for the purpose of condemning the introduction of such stragglers into our lists on grounds so untenable: he truly describes them as "turned out in some parts of the British Empire with a view to establish the breed." The practice continues up to the present time: the birds are continually "turned out," and, being of a very tame and trusting nature, rarely escape many days unmolested: they are destroyed, and their destruction chronicled in our periodicals every year.]

[Quail, Andalusian. — Andalusian Hemipode, *Yarrell*, ii. 421. Hemipodius tachydromus (Andalusian Turnix), *Gould*, *Birds of Europe*, iv. Pl. 264. Turnix tachydrome, *Temm. Man. d'Ornith.* ii. 494, and Turnix a croissans, ii. 495; Turnix tachydrome, iv. 340. HEMIPODIUS, characters of the genus: "Beak moderate, slender, very compressed. Culmen elevated and curved towards the point. Nostrils lateral, linear, longitudinally cleft, partly closed by a membrane. Tarsus rather long. Toes three before, entirely divided; no posterior toe. Tail composed of weak yielding feathers clustered together, and concealed by the feathers of the back. Wings moderate, the first quill-feather the longest." — *Gould*. Mr. Goatley, of Chipping Norton, was the first to mention the occurrence of this bird in Britain, in the 'Annals and Magazine of Natural History' for 1845, and reprinted at p. 872 of the 'Zoologist' for the same year. Mr. Goatley says: — "I have recently received a bird which appears to me to be new to this country; it is a Quail having no back toe. * * * The bird was shot by the gamekeeper on the Cornwall estate, in this county (Oxfordshire), about three miles from hence, and has been kindly presented to me. It was found in a field of barley. * * * It was shot on the 29th of October, since which time another has been killed near the same spot, by the same person, but its head was shot off, and otherwise so mutilated as to be unfit for preservation; this might probably complete the pair, mine being a male bird; it had in its gizzard two or three husks of barley, several small seeds similar to charlock, some particles of gravel, and was very fat." Subsequently Mr. Goatley most kindly sent me the bird itself, accompanied by a photograph, and I had the pleasure of showing both to all our London ornithologists, and of publishing the subjoined particulars in the 'Zoologist,' at p. 989 of the same volume: — "In compliance with Mr. Goatley's request, I have drawn up such a description of the specimen as I trust will serve to

distinguish the present from any other species inhabiting Britain. I felt very reluctant to undertake the task, fearing my inability to describe it with sufficient accuracy: and I must beg that professed ornithologists will make every allowance for one whose attention has been principally occupied with other branches of Natural History. I may also observe that the particulars of admeasurement, &c., prior to stuffing, have been kindly supplied by Mr. Goatley; and also that the bird differs most materially from the previously published description (*Zool.* 872) compiled from Temminck and Gould, and especially from the beautiful figures of H. tachydromus in the 'Birds of Europe;' indeed the differences are so great as to induce a doubt as to the identity of the species. A much greater resemblance is observable between the specimen before me and one from India, preserved in the collection of the British Museum, under the name of Turnix maculosa, and of which the following synonyms appear in the list of Gallinæ in the British Museum, p. 41: — 'The Crescent Quail. Turnix maculosa, *Steph.* Hemipodius maculosus, *Temm. Pig. et Gall.* iii. 6, 31. T. maculatus, *Viell. Gall. Ois.* t. 217.' The beak has the upper mandible brown, inclining to lead-colour; the lower mandible is of the same colour at the tip, but nearly yellow towards the base; the gape in the living bird is yellow. The slender elongate form of the beak is totally different from that of the Common Quail. The irides are pale yellow; the forehead and crown of the head are dark brown, each feather having a slender pale margin; the feathers on the back of the neck are spotted with dark brown, pale testaceous, and bright rust-colour; those on the back and rump are ferruginous-brown, with irregular transverse bands of dark brown or black, and a broad irregular band of pale testaceous; those covering the wings have the same colours, but the black bands in each are consolidated into one conspicuous blackish patch; the throat is pale ferruginous, each feather being tipped with dark brown; there is a broad central line down the breast of the same colour, but on each side of this line the feathers are testaceous, each having a transverse black patch; the lower breast and belly are testaceous, and the feathers about the vent of nearly the same colour, but rather brighter; the wing-feathers are dusky brown, with pale mottled margins: the legs and feet of the living bird were pale yellow. The total length of the bird, when laid on its back before skinning, was six and a half inches: the expansion of the wings from tip to tip twelve inches; the length of each wing, from the flexure

to the end, three and a half inches. The beak from the tip to the gape, six-tenths of an inch; from the tip to the commencement of feathers on the forehead four-tenths of an inch. Length of the tarsus one inch; of the inner toe five-tenths of an inch; of the middle toe eight-tenths;

of the outer toe five and a half tenths."—*Newman in Zool.* 989. A third specimen has been reported from Yorkshire, shot during 1865, but of this I have not been able to obtain satisfactory particulars.]

Queest.—See Dove, Ring.

R.

Rafter.—See Flycatcher, Spotted.

Rail. — A genus of birds, the characters of which are: Bill slender, a little compressed, and slightly incurvated. Nostrils small. Tongue rough at the end. Body much compressed. Tail very short.

Rail, or Water Rail.—[*Yarrell*, iii. 125; *Hewitson*, cv. 373.] *Rallus aquaticus*, *Lin. Syst.* i. p. 262, 2; *Gmel. Syst.* ii. p. 712; *Raili Syn.* p. 113, A. 2; *Ib.* 190, 12; *Will.* p. 234, t. 56; *Ind. Orn.* ii. p. 755, 1; *Bris.* v. p. 151, 1, t. 12, f. 2; *Ib.* 8vo, ii. p. 251. *Gallina serica* *Gesneri*, *Raili Syn.* p. 114, 4? *Will.* p. 235. *Le Rale d'eau*, *Buf.* viii. p. 154, t. 13. Velvet Runner, *Will. Angl.* p. 313? Water Rail, *Bilcock*, *Brook Ouzel*, *Br. Zool.* ii. No. 214, t. 75; *Ib.* fol. 130, t. E. E.; *Will. Angl.* p. 314; *Albin*, i. t. 77; *Lath. Syn.* v. p. 227, 1; *Lewin*, *Br. Birds*, v. t. 189; *Walc. Syn.* ii. t. 171; *Pult. Cat. Dorset.* p. 15; *Don. Br. Birds*, v. t. 104; *Bewick*, *Br. Birds*, ii. t. p. 13. Provincial: Runner; Grey-skit; Skiddy-cock; Oar-cock.—The length of this bird is about twelve inches; weight four ounces and a half. Bill an inch and three-quarters long, of a dusky colour, reddish at the base of the upper and greater part of the lower mandible; irides red. The whole upper part of the plumage is of an olive-brown, the middle of each feather black; beneath, from chin to vent, deep ash-colour, mixed with brown on the lower belly and vent; on the sides, about the thighs, there are several transverse bars of black and white; quills dusky; tail short and black, covered by the feathers above; under tail-coverts white; legs reddish brown; toes long and slender, divided to their origin. In some there are a few feathers at the elbow of the wing on the coverts that are barred black and white, and the tail-feathers margined with brown; the middle ones wholly olivaceous-brown. Others have the feathers on the fore part of the neck margined with white. But this last variety, as mentioned by other authors, we believe is more rare. The only difference between the sexes is, the bill of the male being longer and more red. The Rail is by no means a plentiful species, but is sometimes found through-

out most parts of England in low situations, about water-courses and rivulets, where it seeks shelter amongst sedge-rushes and reeds, and is seldom put to flight except pressed by dogs, rather depending on its legs for safety. It swims, and even dives well occasionally; but it delights more in wet ground, and shallow water it can wade through without swimming. Its principal food is worms, slugs, and insects. When roused it flies only a small distance, and that in a heavy and awkward manner, with its legs hanging down. It runs nimbly, and frequently flirts up its tail. The nest is rarely found; it is made of sedge and coarse grass, amongst the thickest aquatic plants; frequently in willow-beds. In such a situation we found one with six eggs of a spotless white, and very smooth, rather larger than that of a Blackbird; the shape a short oval, with both ends nearly alike. This bird continues with us all the year, and by many is erroneously believed to be the Land Rail metamorphosed; which they say takes place in the autumn, not knowing perhaps that bird leaves this country at that season. The very great difference in the bills might have taught them otherwise, without minute investigation; for that part can never change its form by season or climate. It is found in most parts of Europe; is sometimes very fat, and as well flavoured as a Land Rail. [In my little book intituled 'Birdsnesting,' Mr. Bond expresses an opinion that Col. Montagu was in error as to the description of the egg: he says, "I have seen scores of eggs, not a pure white one among them, always creamy white, with more or less small reddish dots and spots."]

SUPPLEMENT. — We have been favoured with the following account from Mr. Holdsworth, which was given to him by a naval officer, and which appears to favour the opinion that the Water Rail is migratory in some parts of the world, if not in England. This officer (Mr. Clark) states that one of these birds was taken on board his Majesty's ship 'Merlin,' on her return from Newfoundland, after flying about the ship for three days; the nearest land at the time was the Western Islands, distant

about one hundred and forty leagues; and the ship had then been ten days at sea. This gentleman further remarks that he was surprised to find the bird in good condition. It ate small bits of mutton readily, and in a week would take food from the hand. It was kept alive for some time after their arrival at Portsmouth, but being neglected in the absence of Mr. Clark, it died: This gentleman speaks with confidence as to the bird being the Water Rail, as he had shot them frequently both in England and in Portugal, and says it is commonly called Skiddy-cock in Devonshire. Neither the season of the year nor the state of the wind or weather is mentioned, but it is well known our ships return from the Newfoundland station in the autumn. Although this account seems to imply that the bird was on the wing for three days and nights, it must not be supposed that it was actually flying all that time; but that it rested on some part of the ship at night, and by that means was seen again in the morning. It has been remarked to us that the Rail is vastly more abundant in the marshes of Devonshire in the autumn than at any other time. It should, however, be recollected that at that season they are in their most multiplied state, so soon after the breeding season, and more particularly noticed by sportsmen at that time, when in pursuit of Snipes. Similar observations have been made in other parts of England, but which may be attributed to the same causes. On the European continent it has been esteemed a migratory species, retiring from the northern to the more southern parts in the autumn. Buffon says they pass Malta in the spring and autumn; and that a flight of them were seen at the distance of fifty leagues from the coast of Portugal in the month of April; some of which were so fatigued as to suffer themselves to be taken with the hand.

Rail, Land.—See Gallinule Crake.

Rail, Lesser Spotted Water.	} See Gallinule, Spotted.
Rail, Spotted.	

Rain-Fowl.—See Woodpecker, Green.

Ratch, Rotch, or Rotchie. — See Auk, Little.

Raven.—[Yarrell, ii. 65; Hewitson, lvii. 220.] *Corvus Corax*, *Lin. Syst.* i. p. 155, 2; *Gmel. Syst.* i. p. 364; *Ind. Orn.* i. p. 150, 1; *Lath. Syn. Sup.* ii. p. 106; *Bewick, Br. Birds*, i. t. p. 68; *Shaw, Zool.* vii. p. 341. *Corvus*, *Raii Syn.* p. 39, A. 1; *Will.* p. 82, t. 8; *Bris.* ii. p. 8, 1; *Ib.* 8vo, i. p.

156. *Corbeau*, *Buf.* iii. p. 13, t. 2. *Raven*, *Br. Zool.* i. p. 218, 74; *Ib.* fol. p. 75; *Arct. Zool.* ii. No. 134; *Albin*, ii. t. 20; *Lewin*, *Br. Birds*, i. t. 33; *Lath. Syn.* i. p. 367, 1; *Sup.* p. 74; *Walc. Syn.* i. t. 32; *Pult. Cat. Dorset.* p. 4. *Corvus australis*, *Gmel. Syst.* i. p. 365? *Ind. Orn.* i. p. 151, 2? South-Sea Raven, *Lath. Syn.* i. p. 369, 2?—This is the largest species of the Crow genus: there is no difference in the plumage of the sexes. The male weighs about two pounds seven ounces; the female four or five ounces more; length near two feet. The bill is black, strong, and thick, two inches and three-quarters in length; nostrils covered with bristles which reach more than half-way down the bill; irides dusky. The whole plumage is black, the upper parts glossed with blue; the under dull and dusky; tail consists of twelve feathers, somewhat rounded; about the throat the feathers are long, loose, and sharp-pointed. The Raven is a very hardy, crafty, and wary bird; is found in all climates. The *Corvus australis* of Gmelin, which Captain Cook found in the Friendly Isles in the South Seas, is probably no other than a variety of this bird. It is a voracious species, and seems to possess much of the habits of the Vulture. Like that tribe it is patient in hunger, scents carrion afar off, in plenty gluts itself, retires to a small distance to digest, and then returns again. In this respect it is useful by devouring putrid matter, which would be highly obnoxious. On this account it would be treated with veneration, if its appetite was thus confined; but as it destroys young lambs and sickly sheep, which it makes a prey of by first picking out their eyes, the husbandman holds it in detestation. Young Chickens and Ducks are no less respected by this carnivorous bird. It is easily domesticated, and is very mischievous; will catch up anything glittering, and hide it. We have been assured, by a gentleman of veracity, that his butler having missed a great many silver spoons and other articles, without being able to detect the thief for some time, at last observed a tame Raven with one in his mouth, and watched him to his hiding-place, where he found more than a dozen. The Raven generally makes choice of the largest trees to build in. The nest is formed of sticks, and lined with wool, hair, and various other substances: it is commonly placed in the fork of the larger branches. It lays five or six eggs of a bluish green colour, blotched, and spotted with brown and ash-colour, somewhat larger than those of a Crow; their weight from six to seven drams. Many breed on our rocky coasts, where they choose the most inaccessible places for

nidification. At this time they are excessively bold, and will not even suffer the Falcon to approach their nest unpunished. The male and female pair for life, and drive their young from their haunt as soon as able to provide for themselves. It is sometimes found quite white, or pied.

SUPPLEMENT. — In the second Supplement to the 'General Synopsis' the Grand Corbeau of Levaillant, and the Corvus Clericus of M. Sparrman, are said to be only varieties of the Common Raven. We cannot, however, perfectly reconcile the latter to be so, whatever the former may be; especially as it cannot be an accidental variety, since they appear in small flocks about Rosetta in February, where they mix with the flocks of Crows about inhabited places. The habits appear different, independent of the chin being invariably white. The Raven is the earliest breeder amongst the British birds, frequently beginning a nest before the middle of February. Between this bird and its egg there is a greater disproportion than in any species we have noticed, taking nearly fifty eggs to make the weight of the bird. It is no uncommon circumstance for these birds to make their nest contiguous to a Rookery, and by their continual depredations on the nests of that republic, completely to drive them away. Several such instances have occurred to our knowledge, where the Ravens were observed to rob the Rooks' nests of their callow brood, for the purpose of feeding their own young: and it has been long before the colony recovered its usual population. The trachea of the Raven has a singular structure at the lower part. It is represented in the fourth vol. of the 'Berlin Transactions' by Dr. Bloch.

[Razorbill. — See Auk, Blackbilled; and Auk, Razorbilled.]

[Redbacked Shrike. — See Shrike, Redback.]

[Redbilled Heron. — See Egret.]

Redbreast. — [Yarrell, i. 257; Hewitson, xxviii. 98] *Motacilla rubecula*, *Lin. Syst.* i. p. 337, 45; *Gmel. Syst.* ii. p. 993; *Raii Syn.* p. 78, A. 3; *Will.* p. 160, t. 39; *Ind. Orn.* ii. p. 520, 42; *Bris.* iii. p. 418, 21; *Ib.* 8vo, i. p. 427. Rouge-gorge, *Buf.* v. p. 196, t. 11. Redbreast, *Br. Zool.* No. 147; *Ib.* fol. 100, t. S. 2; *Arct. Zool.* ii. p. 417, D.; *Albin.* i. t. 51; *Ib. Song Birds*, t. p. 55; *Will. Angl.* p. 219, t. 39; *Hayes, Br. Birds*, t. 40; *Lath. Syn.* iv. p. 442, 38; *Lewin, Br. Birds*, iii. t. 107; *Walc. Syn.* ii. t. 238; *Don. Br. Birds*, v. t. 123; *Pult. Cat. Dorset.* p. 9. — This well-known species of Warbler needs little description. The

upper parts are of a yellowish brown, tinged with ash-colour; forehead, and from chin to breast, of a deep rufous-orange; belly and vent whitish. The plumage of both sexes is alike. The nestling-feathers of young birds are spotted; and they do not possess the red on the breast for two or three months after they leave the nest. It is said to be a migrative species, but from no other reason than their more frequent and numerous appearance about our habitations in the winter, when the woods and fields are destitute of insects; it is then they ask the protection of man, and are so tame as to enter doors and windows, and pick up the crumbs fallen from the table: here they too frequently fall a sacrifice to the watchful cat. It sings throughout the winter, except in severe weather. About the beginning of April it prepares a nest in some mossy bank or outbuilding, composed of dead leaves, green moss, and stalks of plants, lined with hair, and lays from five to seven whitish eggs, spotted with rust-colour and cinereous; their weight about twenty-six grains. It is a constant inhabitant of the greater part of the European continent. About Bornholm it is called Tommi-liden; in Norway, Peter Ronsmad; in Germany, Thomas Gierdet; with us, Robin Redbreast and Ruddock.

SUPPLEMENT. — "The Redbreast," says Mr. Fleming, in a letter to the author, "is only occasionally observed in Zetland after gales of wind." Whether in the spring or autumn, or at what season, is not mentioned; but most probably in the autumn, when those which breed in the more northern parts of the European continent may be shifting their quarters, and by accident driven from Norway.

[Redbreasted Goosander.} See Merganser,
[Redbreasted Merganser.} Redbreasted.]

[Redbreasted Goose. — See Goose, Redbreasted.]

[Redbreasted Shoveller. — See Shoveler.]

[Redbreasted Snipe. — See Godwit, Common.]

[Redcrested Duck. } See Duck,
[Redcrested Pochard. } Redcrested
[Redcrested Whistling Duck. } Whistling.

[Redfooted Falcon. — See Falcon, Redfooted.]

Red-Game. — See Grouse, Red.

[Redheaded Pochard. — See Pochard.]

Red-Hoop. — See Finch, Bul.

[Redlegged Crow.—See Crow, Redlegged.]

[Redlegged Gull, of Bewick. — See Gull, Blackheaded.]

[Redlegged Partridge. — See Partridge, Guernsey.]

Red-Legs.—See Gull, Red-legged; [and Sandpiper, Purple.]

[Rednecked Grebe. — See Grebe, Red-necked.]

[Rednecked Lobefoot. } See Phalarope,
[Rednecked Phalarope. } Red.]

[Redpole, Common.—See Redpole, Lesser.]

Redpole, Greater. — *Fringilla cannabina*, *Lin. Syst.* i. p. 322, 28; *Gmel. Syst.* ii. p. 916; *Ind. Orn.* i. p. 458, 82. *Linaria rubra* major, *Bris.* iii. p. 135, 30; *Ib.* 8vo, i. p. 343; *Raii Syn.* p. 91, A. 2; *Will.* p. 191, t. 46. La grande Linotte des vignes, *Buf.* iv. p. 58. Greater Red-headed Linnet, or Redpole, *Br. Zool.* i. No. 132, t. 54; *Ib.* fol. 110; *Arct. Zool.* ii. No. 261; *Will. Angl.* p. 260; *Albin*, iii. t. 72, 73; *Ib. Song Birds*, t. p. 60; *Lewin, Br. Birds*, ii. t. 84; *Lath. Syn.* iii. p. 304; *Ib. Sup.* p. 167; *Walc. Syn.* ii. t. 222; *Pult. Cat. Dorset.* p. 12. — This species of Finch is subject to much variety with respect to the red markings which, at certain ages and seasons, are found upon the head and breast, which has occasioned it to be multiplied into two distinct species by various ornithologists; all of whom seem to agree that the general colour of both are alike, but that the Redpole has none of that colour upon the breast. It is probable, however, that the full plumage of this bird does not take place till the second or third year, for we have seen them in all gradations in the breeding season; some of which had scarcely any tinge on the head or breast, and yet by dissection have proved males. The young, for some time after they leave their nest, resemble the female, and, if taken into confinement in that state, rarely, if ever, throw out the red spots, or become so rufous upon the back; and even those which are taken in full maturity most frequently lose all the red feathers in the first moulting, which never return. In these different stages they are commonly known by the name of Brown Linnet, and Red Linnet. The male in full plumage has the bill bluish; irides hazel. The head light brown; the feathers on the crown darkest in their middle; sides of the neck inclining to ash-colour; the forehead rosy red; the back, scapulars, and coverts of the wings fine deep rufous-

brown, lightest on the rump, and palest on the margin of each feather; the breast is brown, with more or less spots like that on the head; belly light rufous-brown; vent almost white; quill-feathers dusky black, with more or less white on the exterior and inner webs, which forms a conspicuous bar of that colour on the wing; the tail is forked, the feathers, like those of the quills, black, margined with white, which colour predominates on the inner webs; coverts of the tail black, edged with grey; legs brown. The weight of the male about five drams, that of the other sex rather less. The plumage of the female is more dusky brown; the coverts of the wings rufous-brown; sides of the throat plain dirty white, the middle part streaked; breast and sides pale brown, with dusky streaks; quills and tail like the other sex, but the former not so deeply margined with white, and of course no perceptible bar on the wing. These birds fly in flocks during winter, at which time the males have little or none of the red markings which in the return of spring they put forth. Furzy commons seem to be their chief resort in the breeding season, in which they well conceal their nests; sometimes a quickset-hedge or a gooseberry-bush answers this purpose. The nest is composed of moss and bents interwoven with wool, and lined with wool and hair. The eggs are four or five in number, of a bluish white, with more or less purplish specks and short lines; their weight from twenty-four to thirty grains. In the month of April they repair in numbers to the above-mentioned places to breed. The first broods are hatched in May, but if the nest is destroyed will make others as late as the month of August. The Redpole sings very prettily from the time it resorts to the place of nidification till its young are hatched. At this season we have caught a great many of both sexes on their nests, and have found the males with little tinge of red on the breast only; and from that every intermediate stage to the full red on the breast and head. The quotations of authors who describe the immature bird of this species will be found under the head of Linnet, Brown. [This bird is now almost invariably called the Common Linnet. See Linnet, Brown.]

Redpole, Lesser. — [*Yarrell*, i. 589; *Hewitson*, li. 201.] *Fringilla linaria*, *Lin. Syst.* i. p. 322, 29; *Gmel. Syst.* i. p. 917; *Ind. Orn.* i. p. 458, 83. *Linaria rubra* minor, *Raii Syn.* p. 91, A. 3; *Will.* p. 191, t. 46; *Bris.* iii. p. 138, 31; *Ib.* 8vo, i. p. 344. Le Sizerin petite Linotte des vignes, *Buf.* iv. p. 216. Lesser Red-headed Linnet, or Redpole, *Br. Zool.* No. 132, t. 54; *Ib.* fol. 111;

Arct. Zool. ii. No. 262; *Will. Angl.* p. 260, t. 46; *Albin.* iii. t. 75; *Lewin, Br. Birds.* ii. t. 85; *Lath. Syn.* iii. p. 305, 75; *Sup.* p. 167; *Walc. Syn.* ii. t. 223; *Don. Br. Birds.* v. t. 114; *Pult. Cat. Dorset.* p. 12. —A species of Finch much inferior in size to the last; weight about two drams and a half; length five inches. The bill is of a light colour, inclining to dull yellow; irides hazel. The forehead is of a purplish red; the feathers of all the other parts above are dusky, margined with rufous-brown; chin black; throat and breast pink; sides streaked with dusky; belly white; quills and tail dusky, edged with pale brown; in some the rump is tinged with pink; legs dusky. The female differs in being somewhat lighter above, and in the colour on the head, which is not so bright, sometimes yellowish. This sex has the black spot on the chin, but none of the pink on the breast and throat. Young birds are destitute of the pink feathers; and indeed the males are subject to as much variety as the Greater Redpole, and sometimes have no red at all on the breast. This bird is not uncommon in the southern counties of England during the winter months; at this season is gregarious; and numbers frequently taken about London and other parts by bird-catchers: it is there called Stone Redpole. It is said to breed in the northern parts of the kingdom. A nest and eggs received from our friend Dr. Latham came from Yorkshire. It was made of bents and a little moss put together with the down of the willow, and warmly lined with the same down. The egg is, as well as the nest, smaller than that of the preceding species, of a light bluish green, thickly sprinkled with reddish spots, most so at the larger end. Mr. Pennant says he found the nest of this bird on an alder-stump near a brook, which differed from the one described above in being lined with hair: it had four eggs like those before mentioned. That author adds, "The bird was so tenacious of her nest as to suffer us to take her off with our hand; and we found after we had released her she would not forsake it." But he is silent with respect to what part of this country he found the nest. As yet we have never seen this species south in the incubating season; in the autumn it is frequently seen about alder-trees picking the seeds out of the cones.

[Redpole, Mealy.—*Yarrell*, i. 583; *Hewitson*, li.* 202*. *Fringilla borealis* (Grosbec boreal), *Temm. Man. d'Ornith.* iii. 264, and iv. 644. *Linaria borealis*, *Macgillivray, Br. Birds.* i. 388. *Linaria canescens* (Mealy Redpole), *Gould, Eyton*, and

Yarrell.—The name has been changed from *borealis* to *canescens* without sufficient reason, seeing that Temminck, in his Appendix to Part iii., refers to Gould's description and plate of the Mealy Redpole as identical with his previously described *Fringilla borealis*, adding that Gould's is "une bonne" figure: he also cites *Yarrell's Linota canescens* as synonymous: *Macgillivray*, whose alteration of names is generally fantastic and arbitrary, seems on this occasion to have adopted the rule of priority, and is therefore quoted. — "The beak is much larger than that of the Common Redpole, but of the same form, and yellowish brown, the under mandible being the lightest in colour; the irides dusky brown; in winter the feathers of the forehead dark red; back of the head, neck, upper part of the back, and the smaller wing-coverts a mixture of dark and light brown, the middle of each feather being the darkest part; the smaller wing-coverts tipped with dull white, forming a short bar; the greater wing-coverts uniform dark brown, with broader ends of dull white, forming a conspicuous bar; quill-feathers greyish brown; the primaries with narrow, and the tertials with broader, outer edges, of dull white; lower part of the back, the rump, and upper tail-coverts mealy, or greyish white, with a few dark brown streaks; tail-feathers greyish brown, with light brown edges, the two in the middle short; the form of the tail deeply forked; the chin almost black; the cheeks, ear-coverts, neck, breast, belly, and under tail-coverts pale brownish white, streaked with darker brown, except on the middle of the breast and belly, which are plain; the dark streaks are largest on the flanks; the legs, toes and claws dark brown." — *Yarrell*, i. 587. This little bird is so closely allied to the Lesser Redpole that many authors consider them identical: nevertheless, seeing that such ornithologists as Temminck and Gould, and I may add also Mr. Doubleday, consider them distinct, it cannot with propriety be omitted as a species. It is difficult, if not impossible, to give any localities for a bird thus circumstanced.]

Redpole, Stone.—See Redpole, Lesser.

[Red Sandpiper.—See Knot.]

Redshank, [Common. — *Yarrell*, ii. 628; *Hewitson*, lxxxix. 329.] *Scolopax calidris*, *Lin. Syst.* i. p. 245, 11; *Gmel. Syst.* ii. p. 664; *Ind. Orn.* ii. p. 722, 25; *Bewick, Br. Birds.* ii. t. p. 91. *Scolopax Totanus*, *Bris.* v. p. 188, 3, t. 17, f. 1; *Ib.* 8vo, ii. p. 261; *Raii Syn.* p. 107, A. 1; *Will.* p. 221. *Chevalier aux pieds rouges*, *Buf.* vii. p. 513, t.

28. Redshank, or Pool Snipe, *Br. Zool.* ii. No. 184, t. 65; *Ib.* fol. 124; *Arct. Zool.* ii. No. 377; *Will. Angl.* p. 299; *Albin*, iii. t. 87; *Lath. Syn.* v. p. 150, 20; *Ib. Sup.* p. 245; *Lewin, Br. Birds*, iv. t. 165; *Walc. Syn.* ii. t. 143; *Pult. Cat. Dorset.* p. 14; *Don. Br. Birds*, v. t. 112. Provincial: Sandcock. — This species of Snipe weighs about five ounces; the length twelve inches. The bill is near two inches long, red at the base, dusky at the point; irides hazel. The head and hind part of the neck cinereous-brown, with obscure dusky streaks; back and scapulars dusky, spotted with grey; quills dusky; the secondaries tipped with white; wing-coverts ash-colour, mixed with brown, and marked with spots of white; the lower part of the back and rump white, marked with small dusky specks; over the eye is a whitish streak; chin and fore part of the neck streaked with dusky; lower breast and belly white; the tail and its coverts are transversely barred with black, small and numerous; legs long, of an orange-colour. In some the rump is of a pure white. This is not an uncommon bird upon many of our shores in winter; many breed in our marshes, on the verge of large pools, and in extensive swampy places. It lays four eggs of an olivaceous-brown, spotted and blotched with black, most numerous at the larger end; in shape and appearance much like that of the Lapwing, but rather smaller. We have seen these birds on Romney Marsh in the breeding season; and when disturbed from their nest they fly round like the Lapwing. The young are only obscurely marked with white spots.

SUPPLEMENT. — This species is amongst the few that now continue to be indigenous, and to breed in our fens. In some part of the fens of Lincolnshire it is tolerable plentiful in the summer months, particularly about Spalding. It makes a slight nest with coarse grass, upon a tump in the moister parts or moist boggy places, and begins to lay early in May. When disturbed is extremely clamorous, flying round the intruder, and making an incessant shrill piping note. Like other species of a similar nature, we observed that the number of eggs in each nest is invariably four, and those constantly placed with their smaller ends in the centre. The eggs weigh from five drams forty grains to six drams. The length of the bird is rarely so much as twelve inches, but usually about eleven and a quarter. The Redshank, although so similar in its habits to the Ruff, will not fatten, nor live long in confinement, as we are assured by the fen-fowlers. There is a very considerable difference between the old birds in the height of their plumage in the spring,

and the young shot in the autumn, or early part of the winter: the latter is described in the former part of this work. The maturely feathered birds are darker on the upper parts, at least the streaks are darker, and are wholly destitute of the grey or pale spots of any kind: the neck is more streaked, and of a darker colour: the under parts, including the breast, are much spotted, especially along the sides of the body. The female is rather the least, measuring about eleven inches. The variety in plumage, to which many of the Snipe and Sandpiper classes are subject from age or season, has and will continue to perplex the Ornithologist, especially where he is not able to trace them through the various changes.

Redshank, Cambridge.—See Godwit, Cambridge.

[Redshank Sandpiper.—See Redshank.]

Redshank, Spotted.—See Snipe, Spotted.

Redstart. — [Yarrell, i. 269; Hewitson, xxix. 104.] *Motacilla Phœnicurus*, *Lin. Syst.* i. p. 335, 34; *Gmel. Syst.* ii. p. 987. *Sylvia Phœnicurus*, *Ind. Orn.* ii. p. 511, 15; *Bewick, Br. Birds*, i. t. p. 216. *Ruticilla*, *Raii Syn.* p. 78, A. 5; *Will.* p. 159, t. 39; *Bris.* iii. p. 403, 15; *Ib.* 8vo, i. p. 422. *Rossignol de muraille*, *Buf.* v. p. 170, t. 6, f. 2. *Redstart*, *Br. Zool.* i. No. 146; *Ib.* fol. 99, t. S. f. 6, 7; *Arct. Zool.* ii. p. 416, B.; *Will. Angl.* p. 218; *Albin*, i. t. 50; *Ib. Song Birds*, t. p. 62; *Hayes, Br. Birds*, t. 40; *Lath. Syn.* iv. p. 421, 11; *Lewin, Br. Birds*, iii. t. 108; *Walc. Syn.* ii. t. 233; *Pult. Cat. Dorset.* p. 8; *Don. Br. Birds*, iv. t. 82. Provincial: Redtail; Brantail. — This species of Warbler weighs about three drams and three-quarters; length five inches and a half. Bill black; irides hazel. Forehead white; the crown of the head, hind part of the neck, and back deep bluish grey; cheeks and throat black; breast, sides, and rump rusty red; tail red, except the two middle feathers, which, as well as the wings, are brown; legs black. The Redstart comes to us early in April, and leaves us the latter end of September. It is not uncommon in many parts of England; makes its nest in a hole of a wall or of a tree, which is composed of moss, and lined with hair and feathers; lays five or six eggs of a fine blue colour, rather less than those of the Hedge Sparrow, and of a lighter shade. The young are at first speckled all over, not very unlike the young of the Redbreast. The female is of a light brown, with a dash of grey on the head and back; the chin whitish; breast and sides inclining

to rufous; rump and tail like the male, but less bright. It is remarkable that many of the Warblers who migrate from the south to breed in our climate confine themselves to intermediate situations, like the Nightingale, which has never been found further north than Yorkshire, nor further west than Somersetshire; so the Redstart is rarely found in Cornwall, nor perhaps not frequently west of Exeter in Devonshire. Its song is soft and short, and when perched frequently vibrates its tail in a quick and singular manner.

SUPPLEMENT. — The Redstart is a local species of Warbler, resorting to warm villages, and disposed to reside near the habitations of man: it will even make its nest amongst the buildings of a town. We have long noticed it as far west as nearly the whole extent of Devonshire, in the low and sheltered situations between Exeter and Plymouth; but in the southern hundreds of that county, which extend into a sort of promontory to the British Channel, it is of rare occurrence, the nature of the country not being congenial to its habits. The same has been observed in Cornwall; for we are assured by Mr. Stackhouse that only two instances had occurred to him in a considerable number of years: both these were males, and were taken alive.

[Redstart, Black. — *Yarrell*, i. 274; *Hewitson*, xxix. 105. *Sylvia Tithys*, *Temm. Man. d'Ornith.* i. 218. *Phoenicurus Tithys*, *Selby, Brit. Ornith.* i. 193. — MALE: "Base of the bill, region of the eyes, sides of the neck, throat and breast black, the feathers of the latter being margined with grey. Middle of the abdomen greyish white. Flanks and sides blackish grey. Head, nape of the neck, back and wing-coverts bluish grey. Quills blackish grey. Secondaries and tertiaries margined with greyish white. Upper and under tail-coverts brownish orange. Tail having the two middle feathers dark brown edged with orange; the rest bright brownish orange-red. Legs black. FEMALE: The whole of the body is of an uniform yellowish grey colour; the quills and secondaries being of a darker shade, margined with pale yellowish brown. Under tail-coverts pale orange; tail similar to that of the male bird, but scarcely so bright in tint." — *Selby*, i. 194. This little bird is a late addition to the British list, but it seems rather to have been overlooked than absent. The first record of its occurrence is by Mr. Gould in 1829, and another was obtained about the same time, both near London: in 1830 one was killed at Bristol, and another at Brighton; in 1833 one was shot, in January, in Devonshire; and another, in December, 1835, at Bristol: all these are mentioned by Mr.

Yarrell, but Mr. Thompson, in his 'Natural History,' pp. 171—72, notices no less than sixteen obtained in Ireland, most of them in winter. In 1843 the 'Zoologist' was established, and no sooner did this vehicle for the preservation of Natural-History facts exist than the records of the occurrence of the Black Redstart became numerous, authentic and precise: most of them fully bear out Mr. Thompson's observation that these birds most commonly occur with us in the winter, and, it may be added, almost entirely on our southern coast: it is an inhabitant of Southern Europe.]

Redtail.—See Redstart.

[Redthroated Diver.—See Diver, Redthroated.]

Redwing. — [*Yarrell*, i. 217; *Hewitson*, xxiv. 87.] *Turdus iliacus*, *Lin. Syst.* i. p. 229, 3; *Gmel. Syst.* ii. p. 808; *Raii Syn.* p. 64, A. 4; *Will.* p. 139; *Ind. Orn.* i. p. 329, 7; *Bris.* ii. p. 208, 3, t. 20, f. 1; *Ib.* 8vo, i. p. 216. *Le Mauvis, Buf.* iii. p. 309. Redwing, Swinepipe, or Wind Thrush, *Br. Zool.* No. 108; *Ib.* fol. 91, t. P. f. 2; *Arct. Zool.* ii. 342, D.; *Albin*, i. t. 35; *Lewin, Br. Birds*, ii. t. 59; *Lath. Syn.* iii. p. 22, 7; *Walc. Syn.* ii. t. 199; *Pult. Cat. Dorset.* p. 10.—This species of Thrush is in weight near two ounces and a half; length eight inches and a half; irides dusky. Bill dusky, yellowish at the base of the upper mandible. The whole upper parts are brown, lighter on the edges of the quill-feathers and coverts; over the eye is a whitish streak; breast and sides marked with dusky lines; body under the wings, and under wing-coverts, reddish orange; the middle of the belly white; legs pale brown. This bird much resembles the Throstle, or Common Thrush, but is rather less; and in that bird the spots on the breast are more distinct, the colour under the wings not so deep, and it wants the white over the eye. The Redwing is a migrative species, coming to us in great flocks about the latter end of September, frequently in company with Fieldfares. It is found in greatest abundance where whitethorn abounds, on the berries of which it feeds. When the weather is severe their flight is continued south. In the hard winter of 1799 vast abundance resorted to the west of England, where a sudden fall of snow, unusually deep in that part, cut them off from all supply of food; and being too weak to attempt a passage over sea to a warmer climate, thousands of these, and their companions the Fieldfares, were starved to death. It is said to breed in Norway and Sweden,

and in that season to sing not inferior to our Thrush; makes a nest in some low bush in the maple forests of the latter country; and lays six blue-green eggs, spotted with black. One in my collection of a cream-coloured brown, with all the markings of a pale colour; bill and legs almost white.

[Redwinged Blackbird. } See Starling,
[Redwinged Maize-bird. } Redwinged.]
[Redwinged Starling. }

Reed Fauvette.—See Warbler, Sedge.

[Reed Sparrow.—See Bunting, Reed.]

[Reed Warbler. } See Wren, Reed.]
[Reed Wren. }

Reeve.—See Ruff.

[Regulus, Dalmatian.—See Wren, Dalmatian.]

[Regulus, Firecrested. — See Wren, Firecrested.]

[Regulus, Goldencrested. — See Wren, Goldencrested.]

Richel-Bird.—See Tern, Lesser.

[Ring Dove.—See Dove, Ring.]

Ringtail.—See Hen Harrier.

Rippock or Rittock.—See Tern, Common.

Robin.—See Redbreast.

[Rochie.—See Auk, Little.]

Rocker.—See Dove, Rock.

[Rock Ouzel.—See Ouzel, Ring.]

Rodge. — See Gadwall; and Merganser, Redbreasted.

Roller.—A genus of birds, the characters of which are: Bill strait, bending towards the tip, edges cultrated. Nostrils narrow and naked. Legs for the most part short. Toes, three before and one behind, divided to their origin.

Roller, Garrulous. — [Yarrell, ii. 216; Hewitson, lxiv. 253.] *Coracias garrula*, *Lin. Syst.* i. p. 159, 1; *Gmel. Syst.* i. p. 378; *Ind. Orn.* i. p. 168, 1. *Galgulus*, *Bris.* ii. p. 64, 1, t. 5, f. 2; *Ib.* 8vo, i. p. 173. *Cornix cœrulea* Gesneri, *Raii Syn.* p. 42; *Will.* p. 85. *Pica marina*, *Raii Syn.* p. 41; *Will.* p. 89. *Garrulus argentoratensis*,

Raii Syn. p. 41, 3; *Will.* p. 89, t. 20. *Rollier, Buf.* iii. p. 135, t. 70. *Roller, Br. Zool. App.* t. 2; *Arct. Zool.* ii. p. 235, G.; *Will. Angl.* p. 131, t. 20; *Edw.* t. 109; *Lewin, Br. Birds.* ii. t. 42; *Lath. Syn.* i. p. 406, 1; *Sup.* p. 85; *Walc. Syn.* i. t. 41; *Don. Br. Birds.* t. 33. — This is the only species that has ever been met with in England, and that rarely, probably an accidental wanderer from Germany, where they are not uncommon. It is described by Mr. Pennant to be the size of a Jay; length twelve inches and a half. Bill black, strait, hooked at the point; base beset with bristles, but do not cover the nostrils; space about the eyes somewhat bare. The head, neck, breast, and belly are of a light bluish green; back and scapulars reddish brown; coverts on the ridge of the wing rich blue; beneath them pale green; upper part and tips of the quills dusky; the lower parts of a fine deep blue; rump of this last colour; tail forked, of a light blue; the outer feather striped with black above, and beneath with deep blue, as is the case with such part of the quill-feathers as are black above; the other tail-feathers are dull green; legs short, and of a dirty yellow. There are very few instances of this bird being found in England, one of which was killed in Cornwall. It is said to be plentiful in Germany, Sicily, and Malta, where they are sold in the markets and poulterers' shops; found also in Sweden and Denmark. It haunts woods in the breeding season, and makes a nest in a hole in the ground; at other times they congregate with Rooks and other birds in tilled ground in search of food. It is remarkably clamorous. [Mr. Yarrell enumerates a dozen specimens that have occurred in England and Scotland, at very wide intervals as regards dates and locality; Orkney, Perthshire, Northumberland, Durham, Yorkshire, Suffolk, Norfolk and Cambridgeshire, are the counties especially mentioned. Mr. Thompson mentions three instances in which the Roller has been mentioned as having visited Ireland, but adds that neither of these has come under the notice of any naturalist. More satisfactory evidence of the Roller's occurrence in Great Britain will be found in the 'Zoologist,' as specified below. In the volume for 1844 Mr. Holme records, at p. 794, that a female Roller was shot between the Land's End and St. Sevan's, on the 8th of October, 1844, during a severe gale; its stomach was filled with the remains of the common dung beetle (*Geotrupes stercorarius*). In the volume for 1848 Mr. Rudd states, at p. 1968, that a pair were seen at Shelton Castle, near Redcar, and one of them obtained: this proved to be a female having eggs in the ovary:

in the same volume the Rev. J. Smith mentions, at p. 2302, two specimens obtained in Scotland; of one, killed near the Loch of Strathbeg, the date has not been preserved; the other was shot in the woods of Boyndie, near Banff, on the 25th of September, 1848. In the volume for 1849 Mr. William May records, at p. 2497, that a male was shot on the 29th of May, 1848, near Nutley, on the borders of Ashdown Forest, in Sussex; the stomach contained a cockchaffer and the remains of other beetles. In the volume for 1853 Mr. Rodd mentions, at p. 4123, that a female was obtained at St. Just, near the Land's End, in October of that year. In the volume for 1855 Mr. Stevenson informs us, at p. 4808, that an adult female was obtained, on the 28th of May of that year, at Honiton, near Somerleyton, in Norfolk. In the volume for 1858 Mr. Mather says, at p. 5976, that a young bird was killed on the 1st of February of that year, while sitting on some palings in front of his house near Holywell, in Flintshire. In the volume for 1859 Mr. Edward mentions, at p. 6672, a specimen killed on the hills of Boyndie, near Banff, but gives no date. In the volume for 1861 Mr. Rogers, of the Isle of Wight, states, at p. 7646, that a female, with well-developed eggs in the ovary, was killed in the Land's End district in June of that year. And finally, in the volume for 1863 Mr. Fenwick Hele states, at p. 8721, that a Roller was killed near Aldeburgh, in Suffolk, on the 23rd of June, 1863. This is an African bird, but also an annual visitant of Europe.]

Rook. — [Yarrell, ii. 95; Hewitson, lix. 226.] *Corvus frugilegus*, *Lin. Syst.* i. p. 156, 4; *Gmel. Syst.* i. p. 366; *Ind. Orn.* i. p. 152, 5; *Lath. Syn. Sup.* ii. p. 109; *Bewick, Br. Birds*, i. t. p. 74; *Shaw, Zool.* vii. p. 347. *Cornix nigra frugilega*, *Raii Syn.* p. 83, A. 3; *Will.* p. 84, t. 18. *Cornix frugilega*, *Bris.* ii. p. 16, 3; *Ib.* 8vo, i. p. 158. *Le Freux, ou la Frayonne*, *Buf.* iii. p. 55. *Rook*, *Br. Zool.* ii. No. 76; *Ib.* fol. p. 76; *Arct. Zool.* ii. p. 250, A.; *Albin*, ii. t. 22; *Will. Angl.* p. 123; *Lewin, Br. Birds*, i. t. 35; *Lath. Syn.* i. p. 372, 4; *Ib. Sup.* p. 76; *Walc. Syn.* i. t. 34; *Pult. Cat. Dorset.* p. 4. — This well-known species of Crow is about the size of the Common or Carrion Crow, and of the same black colour; the upper parts, like that bird, glossed with purple. The only mark of distinction in mature birds is, that this is bare of feathers about the base of the bill, which is whitish and scurfy. But as this is acquired by the habits of this species thrusting its bill into the ground after worms and various insects; so the young of these two birds are not to be discriminated except by their

note; that of the Rook is not so deep and hoarse as the Crow. In their habits there is an essential difference: this is content with feeding on the insect tribe, particularly what is commonly called the grub-worm, which is the larva of the chaffer. But in rendering the husbandman this piece of service it pays itself by taking some of his corn also. It is gregarious at all seasons, resorting constantly to the same trees every spring to breed, where their nests may be seen crowded one over another upon the upper branches. It lays four or five eggs, much like those of the Crow, of a greenish colour, spotted and blotched with dusky. After their young have taken wing, they all forsake their nest-trees, but return to them again in October to roost; but as winter comes on they seek the more sheltered places at night, some neighbouring wood; but generally assemble first in the usual place, and then fly off together. The Rook is partial to cultivated parts, as well as to the habitation of man. It has been said the bill of the Rook is less arched than that of the Crow, and that the tail-feathers are more rounded; but these have never appeared to us materially distinct.

SUPPLEMENT. — The Rook does not appear to have found its way to the island of Guernsey, although we have noticed Crows and Magpies not unfrequent. In so numerous a species it is not surprising that varieties should frequently occur with some white feathers, and occasionally wholly white. If Levaillant is correct as to the species, it is a curious circumstance that this bird, at the Cape of Good Hope, should not have the nostrils bare of feathers, as is usual in Europe: an evident proof that they have no occasion, in that climate, to search underground for their sustenance. The Rook does not deposit the food intended for its young in its craw, and disgorge like the Pigeon or Dove tribe, but is furnished with a small pouch at the root of the tongue, from whence the male ejects the contents of its magazine to feed the female during the incubating season; and both to feed their young. At this season the pouch may be easily observed distended with food, as they come from the field to their nest. "In the year 1783 (says Mr. Bewick) a pair of Rooks, after an unsuccessful attempt to establish themselves in a Rookery, at no great distance from the Exchange, in Newcastle, 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 wind. They returned and built their nest every year on the same place, till 1793, soon after which the spire was taken down." This circumstance has by some mistake been ascribed to the Crow as well as the Rook, as we have noticed in another place. The fact is that both species are frequently called Crows, and thus confounded. It is, however, most likely to have been the Rook; however, be this as it may, we are told that a small copper-plate was engraved, with a representation of the circumstance of the size of a watch-paper; and that as many of them were sold as produced to the engraver the sum of ten pounds.

[Roseate Tern.—See Tern, Roseate.]

[Rosecoloured Ouzel. }
[Rosecoloured Pastor. } See Ouzel,
[Rosecoloured Starling. } Rosecoloured.]

[Ross's Rosy Gull.—See Gull, Ross's Rosy.]

[Rotche. }
[Rotche, Common. } See Auk, Little.]

[Roughlegged Buzzard.—See Buzzard, Roughlegged.]

Routhercock.—See Goose, Bernacle.

[Royston Crow.—See Crow, Hooded.]

Ruddock.—See Redbreast.

[Ruddy Goose. } See Shieldrake,
[Ruddy Shieldrake. } Ruddy.]

Ruff. — [Yarrell, ii. 692; Hewitson, xcv. 345.] *Tringa pugnax*, *Lin. Syst.* i. p. 147, 1; *Gmel. Syst.* ii. p. 669; *Ind. Orn.* ii. p. 725, 1; *Raii Syn.* p. 107, A. 3; *Will.* p. 224, t. 56; *Bris.* v. p. 240, 18, t. 22, f. 1, 2; *Ib.* 8vo, ii. p. 273; *Bewick, Br. Birds*, ii. t. p. 95. Combattant, ou Paon de Mer, *Buf.* vii. p. 521, t. 29, 30. Ruff and Reeve, *Br. Zool.* ii. No. 192, t. 69; *Ib.* fol. 123, t. E.; *Arct. Zool.* ii. p. 479, A.; *Will. Angl.* p. 302, t. 56; *Albin*, i. t. 72, 73; *Lath. Syn.* v. p. 159, 1; *Lewin, Br. Birds*, v. t. 106; *Walc. Syn.* ii. t. 144; *Don. Br. Birds*, t. 19. Yellow-legged Sandpiper, *Orn. Dict. App.* *Tringa Grenovicensis*, *Ind. Orn.* ii. p. 731. Greenwich Sandpiper, *Lath. Syn. Sup.* p. 249. *Tringa Equestris*, *Ind. Orn.* ii. p. 730? Equestrian Sandpiper, *Lath. Syn. Sup.* ii. p. 311? Le Chevalier Commun, *Buf.* vii. p. 511; *Pla. Enl.* 844? *Tringa Gambetta*, *Ind. Orn.* ii. p. 728? Gambet Sandpiper, *Br. Zool.* ii. No. 198, t. 70? Ruff, *Rural Sports*, ii. t. p. 458. — This

singular species of Sandpiper is in length about one foot. Bill yellowish, in some black; irides hazel. The face is covered with yellow pimples; on the back part of the neck the feathers are very long, and stand out on each side in a remarkable manner. The colour of this, as well as of other parts, vary so much that scarce two birds are alike; in general the ruff is barred with black; in others white, or plain brown; the upper parts in general are brown, more or less barred with undulated lines of black; lower belly, vent, and upper tail-coverts white; the breast most times partakes of the same colour as the ruff; quills dusky; the four middle tail-feathers are barred with black, the rest plain cinereous-brown; legs yellow. This is the summer dress, for the ruff is thrown out in the spring as well as the carunculated appearance on the face, both of which are lost in the autumn. In young birds of the first year these are wanting, at which time they are called Stags; and, as Mr. Pennant observes, might be mistaken for a different species. But that author remarks that the coverts of the wings, which are brown inclining to ash-colour, and colour of the tail, are invariable marks of distinction. The female, or Reeve, is less than the male: the upper parts are brown; the middle of each feather dusky; the edges pale; the greater quills dusky; secondaries barred rufous-brown and black; belly, vent, and upper tail-coverts white; tail dusky; legs yellowish. This species is very local with us; it seems to be confined to the fens of Lincolnshire, Cambridgeshire, the East Riding of Yorkshire, and the Isle of Ely. On these marshy situations they arrive early in spring, where they breed, and depart the latter end of September. The males appear first, and resort to one particular spot, which is trod bare by their traversing. On these spots, well known by the fowler, great numbers are taken, chiefly males, which are fattened for the table. On the appearance of a female the other sex begin fighting, at which time a net, which was previously laid, is drawn over them, and many are taken at one haul. The Reeve lays four white eggs, marked with large ferruginous spots, which are deposited in a tuft of grass.

SUPPLEMENT. — The very great diversity in the plumage of the Ruff, as well in the winter as in the summer, has occasioned its being multiplied into so many species, that it will be long before the whole of the synonyms can be collected. In this place we have only referred to four species, two of which we are perfectly clear about, namely, the Yellow-legged Sandpiper and the Greenwich Sandpiper: of the other

two we cannot speak positively, but have scarcely a doubt but they are of this species. Of the two first we can speak to fact, not only because we have had Ruffs alive in the plumage exactly similar after the ruff has been cast, but that the original Greenwich Sandpiper, from which the description was taken, is now in our possession. So much have these birds puzzled the scientific naturalist, that it is utterly impossible to say how far it has been multiplied into distinct species. Many we have received for nondescript Sandpipers; in particular one from Sandwich, in Kent, and another lately, which was shot near Exeter, destitute of the usual character, the long feathers denominated the ruff. It should be remarked that these long feathers are of short duration, and that before the Ruffs depart from us in the autumn they are completely destitute of such a character, both old and young; and yet retain such a variety and dissimilitude of plumage, that where the more prominent characters are not known confusion ensues, and as many new species will in time be made as the unlimited dissimilarity of plumage will admit. To obviate therefore as much as possible this difficulty, we shall point out some marks of distinction, which long observation on the changes of these birds in confinement enables us to do; and we presume to assert that by such experience we have no difficulty in discriminating this species at any season. The first object to be considered is the length, which is between twelve and thirteen inches to the end of the tail; and, in the plumage, the tail and its coverts, and the smaller coverts of the wings, are to be particularly attended to. In the former the two middle feathers are usually barred like their coverts, the rest pale cinereous-brown, darkest near their points; the side coverts, as well as the under coverts of the tail, are invariably white. In younger birds there is sometimes not above one bar on the middle feathers of the tail, and the colour of the rest is more brown, dashed with ash-colour. Neither the colour of the bill nor the legs is to be depended upon; the former is of all shades, from dusky to a pale dull yellow, and black at the point; and the latter is sometimes of a dingy green. Others have their legs flesh-colour, or pale dull yellow. The colour of the bill and legs depends entirely on the plumage; those with dark feathers predominating have the darkest bill and legs, and *vice versa*. The shape of the bill is a much better mark of distinction, the point being a trifle compressed and spreading. An attention to these characters will be the means of discrimination at those seasons

when the character that gave rise to the name is not apparent. The pimples on the face of the Ruff are only observable in the breeding season, and not then do the younger males, which are destitute of the ruff, possess such a mark; nor do those in confinement ever lose the feathers on the face, which in the wild state fall off, and are supplied by a papillous skin on the front half of the head in some old birds; but the ruff and auricles are annually produced in as high perfection as on those birds in a state of nature. From this circumstance it is evident that the bare papillous head is only attendant on ventry. Without doubt this species leaves this country in the autumn, with a few exceptions, one of which occurred on the 27th of December, 1808: it was shot near Slapton, on the south coast of Devon, and presented to us by Mr. Holdsworth. Between this specimen and that which has been described for the Greenwich Sandpiper there is only a trifling difference. The author of 'Rural Sports' remarks that "If observers had not assured us that these birds came from the north, we might draw the opposite inference, that they arrive from the south: it may therefore be premised (adds this author) that it is the case with these as with the Woodcocks, which are said to come from the east, and return to the west or south, but which in some countries only descend from the mountains to the plains, and again return to the heights. It is even probable (continues this writer) that the Ruffs remain in the same country, only shifting to different parts of it as the season changes, or perhaps may pass unobserved, intermixed with the dusky Sandpipers, or the Horsemen, to which they have great analogy, after moulting in June." There requires no more argument in support of an opinion that these birds come from the south to visit us and other northern latitudes in the breeding season, and return again south to winter, than that, from whatever quarter the Woodcocks come in their annual migration, by the same route do they return, and not in an opposite direction. There can be no doubt that all migrative birds who come to us in the breeding season come from more northern latitudes; those migrating species which are found to inhabit this island and similar latitudes in winter, retire more north to perform the great dictates of Nature. We may be assured the Ruff is no more to be met with in such latitudes as England, during the winter months, than the Woodcock is in the summer; for we must conclude such a phenomenon as an accidental appearance of either, out of their respective seasons, to be occasioned by defect, or

indisposition in the usual migrative months. Latitudinal influence is the sole cause of such periodical flights, not longitudinal; no birds bend their course east or west, however they may veer a little by instinct to avoid difficulties, or may be driven by tempests out of their natural course. The Ruff visits much higher latitudes on the Continent, in the nidificating season, than any part of England: it breeds in the swamps of Lapland and Siberia, but perhaps does not find its way so far westward as Iceland; nor have we heard of it so far in that direction as our neighbouring and sister kingdom, Ireland. At present the few, comparatively speaking, that visit Great Britain, confine themselves in the breeding season to the eastern parts; where the only extensive fens remain that are congenial to their habits: we are, however, assured, on the authority of a very old sportsman, that they were not uncommon in the fens about Bridgewater, in Somersetshire, before they were drained and enclosed. In a tour through Lincolnshire we took every means in our power to become intimately acquainted with all the history of this singular species that could be obtained. We found that they were become much more scarce than they were before a large tract of the fens was drained and enclosed, and will, as agriculture increases, be entirely driven from the island. A few Ruffs are still found about Crowland, but the north fen near Spalding, and the east and west fens between Boston and Spilsby, are the only parts that appear to produce them with certainty, but by no means plentiful. The trade of catching Ruffs is confined to a very few persons, which at present scarcely repays their trouble and expense of nets. These people live in obscure places on the verge of the fens, and are found out with difficulty, for few, if any, birds are ever bought, but by those who make a trade of fattening them for the table; and they sedulously conceal the abode of the fowlers; so much that by no art could we obtain from any of them where they resided; and in order to deceive us, after evading our entreaties, gave us instructions that led us quite a contrary direction. The reason of all this was obvious, for after much labour and search, in the most obscure places (for neither the inkeepers nor other inhabitants of the towns could give any information, and many did not know such a bird was peculiar to their fens), we found out a very civil and intelligent fowler, who resided close to Spalding, at Fen-gate, by name William Burton (we feel pleasure in recording his name, not only from his obliging nature, but for the use of others in similar pursuits), and strange to say,

that although this man had constantly sold Ruffs to Mr. Towns, a noted feeder, hereafter more particularly noticed, as also to another feeder at Cowbit, by the name of Weeks, neither of those persons could be induced to inform us even of the name of this fowler. The reason, however, was evident, and justly remarked by Burton, for he had obtained no more than ten shillings per dozen, whereas Weeks demanded thirty shillings for the like number he had the same day bought of Burton. The season was far advanced, and we were obliged to buy some at that price of Weeks, for Burton could not then catch us as many as were required. At this time we were shown into a room where there were about seven dozen males and a dozen females, and of the former there were not two alike. This intrusion to choose our birds drove them from their stands, and, compelling some to trespass on the premises of others, produced many battles. By this feeder we learned that two guineas a dozen was now the price for fattened Ruffs; and he never remembered the price under thirty shillings, when fit for table. Mr. Towns, the noted feeder at Spalding, assured us his family had been a hundred years in the trade; boasted that they had served George II. and many noble families in the kingdom. He undertook, at the desire of the late Marquis of Townsend (when that nobleman was Lord Lieutenant of Ireland), to take some Ruffs to that country, and actually set off with twenty-seven dozen from Lincolnshire, left seven dozen at the Duke of Devonshire's, at Chatsworth, continued his route across the kingdom to Holyhead, and delivered seventeen dozen alive in Dublin, having lost only three dozen in so long a journey, confined and greatly crowded as they were in baskets, which were carried upon two horses. Nothing can more strongly evince the hardy constitution of these birds than the performance of such a journey so soon after capture, and necessarily fed with a food wholly new to them: and yet a certain degree of care and attention is requisite to preserve, and more especially to fatten them; for out of the seventeen dozen delivered at the castle of Dublin, not more than two dozen were served up to table, doubtless entirely owing to a want of knowledge or attention of the feeder under whose care they had been placed. Few Ruffs, comparatively speaking, are now taken in the spring, as the old birds frequently pine, and will not readily fatten. The principal time is in September, when the young birds are fled; these are infinitely more delicate for the table, more readily submit to confinement, and are

less inclined to fight. If this plan was generally enforced by the proprietors of fen-land, or made a bye-law amongst themselves, the breed would not be so reduced; but there are still some fowlers who make two seasons, and thus by catching the old birds in the spring, especially the females, verify the fable of the Goose and the Golden Eggs; the destruction of every female in the breeding season is the probable loss of four young. The manner of taking these birds is somewhat different in the two seasons; in the spring the Ruffs "hill," as it is termed, that is, they assemble upon a rising spot of ground, contiguous to where the Reeves propose to deposit their eggs; there they take their stand, at a small distance from each other, and contend for the females, the nature of polygamous birds. This hill, or place of resort for love and battle, is sought by the fowler, who, from habit, discovers it by the birds having trodden the turf somewhat bare, though not in a circle as usually described. When a hill has been discovered, the fowler repairs to the spot before the break of day, spreads his net, places his decoy-birds, and takes his stand at the distance of about 140 yards or more, according to the shyness of the birds. The net is what is termed a single clap-net, about 17 feet in length, and 6 wide, with a pole at each end; this, by means of uprights fixed in the ground, and each furnished with a pulley, is easily pulled over the birds within reach, and rarely fails taking all within its grasp; but in order to give the pull the greatest velocity, the net is (if circumstances will permit) placed so as to fold over with the wind: however, there are some fowlers who prefer pulling it against the wind for Plovers. As the Ruffs feed chiefly by night, they repair to their frequented hill at the dawn of day, nearly all at the same time, and the fowler makes his first pull according to circumstances, takes out his birds, and prepares for the stragglers who traverse the fens, and who have no adopted hill; these are caught singly, being enticed by the stuffed birds. Burton, who was before mentioned, never used anything but stuffed skins, executed in a very rude manner; but some fowlers keep the first Ruffs they catch for decoy-birds; these have a string of about two feet long tied above the knee, and fastened down to the ground. The stuffed skins are sometimes so managed as to be moveable by means of a long string, so that a jerk represents a jump (a motion very common amongst Ruffs, who, at the sight of a wanderer flying by, will leap or flirt a yard off the ground), by that means inducing those on wing to come and alight by him. The

stuffed birds are prepared by filling the skin with a wisp of straw tied together, the legs having been first cut off, and the skin afterwards sewed along the breast and belly, but with no great attention to cover the straw beneath: into this straw a stick is thrust, to fix it into the ground, and a peg is also thrust through the top of the head, and down the neck into the stuffing or straw body, and the wings are closed by the same process. Rough as this preparation is, and as unlike a living bird as skin and feathers can be made, it answers all the purpose. When the Reeves begin to lay, both those and the Ruffs are least shy, and so easily caught that a fowler assured us he could with certainty take every bird on the fen in the season. The females continue this boldness, and their temerity increases as they become broody; on the contrary, we found the males at that time could not be approached within the distance of musket shot, and consequently far beyond the reach of small shot. We were astonished to observe the property that these fowlers have acquired of distinguishing so small an object as a Ruff at such an immense distance, which, amongst a number of tufts or tumps, could not by us be distinguished from one of those inequalities; but their eyes had been in long practice of looking for the one object. The autumnal catching is usually about Michaelmas, at which time few old males are taken, from which an opinion has been formed that they migrate before the females and young. It is, however, more probable that the few which are left after the spring fowling, like other polygamous birds, keep in parties separate from the female and her brood till the return of spring. That some old Ruffs are occasionally taken in the autumnal fowling, we have the assertion of experienced fowlers, but we must admit that others declare none are taken at this season. It must, however, be recollected that in the autumn the characteristic long feathers have been discharged, and consequently young and old males have equally their plain dress: but the person who assured us that old male birds were sometimes taken at that season declared it was easy to distinguish them from the young of that summer. It does not appear to be the opinion of fowlers that the males are more than one season arriving at maturity, because the Ruffs taken in the spring, destitute of the characteristic long feathers which constitute their principal distinction, are comparatively few to those possessing the ruff: the opinion, therefore, that those ruffless males are birds of a very late brood of the preceding season, is a reasonable conjecture. The long feathers on the neck and

sides of the head in the male, that constitute the ruff and auricles, are of short duration, for they are scarcely completed in the month of May, and begin to fall the latter end of June. The change of these singular parts is accompanied by a complete change of plumage; the stronger colours, such as purple, chesnut, and some others, vanish at the same time, so that in their winter dress they become more generally alike from being less varied in plumage; but we observed that those who had the ruff more or less white, retained that colour about the neck after the summer or autumnal moulting was effected. The females, or Reeves, begin laying their eggs the first or second week in May; and we have found their nest with young as early as the 3rd of June. By this time the males cease to "hill." The nest is usually formed upon a tump in the most swampy places, surrounded by coarse grass, of which it is also also formed. The eggs are (as usual with its congeners) four in number; these are so nearly similar in colour to those of the Snipe and Redshank, both of which breed in the same wet places, and make similar nests, that some experience is required to discriminate them: they are, however, superior in size to the former, and are known from the latter by the ground being of a greenish hue instead of rufous-white; but individuals assimilate so nearly to each other as not to be distinguished, especially as the dusky and brown spots and blotches are similar. The weight of the eggs is from five drams twenty grains to five drams fifty grains. The weight of the Ruffs in the spring, when first taken, is from five ounces three-quarters to six ounces and a quarter: the weight of the Reeves about four ounces. The length of an old Ruff is sometimes as much as thirteen inches and a half: young males about twelve inches. The female measures about ten inches. It is a remarkable character of these birds that they feed most greedily the moment they are taken: a basin of bread and milk or boiled wheat, placed before them, is instantly contended for, and so pugnacious is their disposition that they would starve in the midst of plenty, if several dishes of food were not placed amongst them, at a distance from each other. We took the trouble of carrying several of these birds with us from Lincolnshire into Devonshire, in hopes of keeping them for several years, in spite of the opinion of Mr. Towns that they could not be kept alive through the winter. These beautiful little partners in our carriage were taken out of their basket twice a day, and put into a corner of the room wherever we stopped for refreshment, and with a few chairs,

and a piece of canvass hung over them reaching the ground, they were perfectly contented, and appeared as happy as fighting and eating could make them: and in such a situation they passed each night on the journey. The last of these birds lived in confinement four years, and several for two and three years, which gave us an opportunity to observe more minutely their manners and change of plumage: and we noticed that their annual changes never varied; every spring produced the same coloured ruff and other feathers; but the tubercles on the face never appeared in confinement. A young male that was taken destitute of a ruff in the breeding season, whose plumage was mostly cinereous, except about the neck and head, put on the ruff in confinement the next spring for the first time, which was large, and the feathers were a mixture of white and chesnut; the scapulars and breast also marked with chesnut: and in the succeeding autumnal moulting he re-assumed his former cinereous plumage. On the 17th of May, 1806, a Ruff was shot at the mouth of the Avon, on the coast of South Devon; this had a white ruff quite perfect, but no warty appearance about the face; another proof that, like the swelling in the neck of the stag, these tubercles are the consequence of either sexual desire or actual connexion. We had occasion to remark, that although the pugnacious disposition of the Ruff never entirely ceased in confinement, yet it increased with the growth of the long neck-feathers in the spring, when the least movement of either from their usual stand provoked a battle. At other times they would occasionally sleep close to each other, with their heads turned over the wing, and one leg tucked up: but a mess of bread and milk instantly roused the latent spirit for battle; and one bird was so much wounded in the throat in one of these feuds that he died. Their actions in fighting are very similar to those of the Game Cock: the head is lowered, and the bill held in a horizontal direction; the ruff, and indeed every feather, more or less distended, the former sweeping the ground as a shield to defend the more tender parts; the auricles erected, and the tail partly spread; upon the whole assuming a most ferocious aspect. When either could obtain a firm hold with the bill, a leap succeeded, accompanied with a stroke of the wing; but they rarely injured each other. In confinement they paid no attention to the Reeves, except to drive them from their food; and never attempted to dispute with any other species, but would feed out of the same dish with Land Rails, and other birds confined with them, in perfect amity.

[Rufous Sedge Warbler.—See Warbler, Rufous Sedge.]

Runner.—See Rail, Water.

S.

[Sabine's Gull.—See Gull, Sabine's.]

[Sabine's Snipe.—See Snipe, Sabine's.]

[Saint Cuthbert's Duck.—See Duck, Eider or Edder.]

Sand-cock.—See Redshank.

Sanderling.—[Yarrell, ii. 506.] *Charadrius calidris*, *Lin. Syst.* i. p. 255, 9; *Gmel. Syst.* ii. p. 689; *Ind. Orn.* ii. p. 741, 4; *Lin. Trans.* viii. p. 268; *Lath. Syn. Sup.* ii. p. 315; *Bewick, Br. Birds*, ii. t. p. 1. *Tringa arenaria*, *Lin. Syst.* i. p. 251, 16; *Raii Syn.* p. 109, A. 11; *Will.* p. 125; *Gmel. Syst.* ii. p. 680. *Calidris grisea minor*, *Bris.* v. p. 236, 17, t. 20, f. 2; *Ib.* 8vo, ii. p. 272. *Le Sanderling*, *Buf.* vii. p. 532. *Charadrius rubidus*, *Ind. Orn.* ii. p. 740; *Gmel. Syst.* p. 688. Ruddy Plover, *Arct. Zool.* ii. No. 404; *Lath. Syn.* v. p. 195. Sanderling, or Curwillet, *Br. Zool.* ii. No. 212, t. 73; *Ib.* fol. 129; *Arct. Zool.* ii. No. 403; *Will. Angl.* p. 303; *Albin*, ii. t. 74; *Lewin, Br. Birds*, v. t. 183; *Lath. Syn.* v. p. 197; *Sup.* p. 253; *Walc. Syn.* ii. t. 160; *Pult. Cat. Dorset.* p. 16. — A small species of Plover; weight about two ounces; length eight inches. Bill black, one inch in length; irides dusky. Fore part of the head and sides beneath the eyes, as well as the whole under parts from chin to vent, white; crown of the head, back of the neck, and scapulars grey, with slight dusky streaks down the shafts of each feather; wing-coverts the same colour, but nearly plain; greater quills dusky; secondaries grey, tipped with white; tail grey, the exterior feathers lightest; legs black. This is the general winter plumage. Other specimens in my collection, which were killed on the coast of Cornwall in the latter end of July and in August; one has the head, neck, and sides of the breast streaked with black, and tinged with ferruginous; back and scapulars marked with large spots of black, and some of the feathers edged with light ferruginous. In another the head and neck are dark ash-colour; back and scapulars grey, distinctly and prettily marked with large angular spots of black. These seem to be young birds of that season in their gradation of plumage. In some the wing-coverts are dark brown; others ash-colour, with more or less dusky streaks; and all the inner webs of the quills, and part of

the outer webs of the secondaries, white; and the middle feathers of the tail dusky. Whether this bird breeds with us is not yet thoroughly known. We have seen them on many parts of the coast in the month of April, and in July, but never in the intermediate months. Mr. Boys, of Sandwich, informs us he thinks they breed on that coast, as well as the Purre; and we received several eggs from that gentleman found on that sandy shore, which are unknown to us, and may possibly belong to one of these two birds. They are not much unlike that of the Black Tern, but smaller. The Sanderling is found on many of our shores, where it flocks together with the Purres, but is not so plentiful a species; and both are indiscriminately called Oxbirds by some persons. This is also called Curwillet and Towwilly.

SUPPLEMENT.—Said to be found in New South Wales, and there called by the natives Waddergal. Mr. Simmonds (in the 'Transactions of the Linnean Society') remarks that he observed this species on the 2nd of June at the Mull of Cantire.

APPENDIX.—As we extend our researches into Natural History, Nature is found to gradually unfold her secrets to us. It is not enough that we sit down quietly, and invoke her to invert the *cornucopia* over our heads, or take for facts all that have been handed down to us. It is by our own perseverance and industry that light is extracted from darkness, and the ways of Nature become developed. Our more recent knowledge of Ornithology evinces the necessity of tracing each species to its retreat in the different seasons, and there examine the changes that have taken place since it departed from our own country. It is not sufficient that we identify the species when we see it return to our climate, and when the usual annual mutation in plumage has been performed; we must go farther: every month produces an alteration in some species, and a single new feather will frequently lead to discovery. It will be seen that the Sanderling has already been described as subject to very material changes, but no one suspected that the plumage of the young, and perhaps of the adult in the breeding season, corresponded so nearly with what has been described as a distinct species under the title of *Charadrius rubidus*, that there can be scarcely any doubt of their being the same. The bird we are about to describe

was shot by Mr. Bullock the latter end of June, 1812, in the most northern part of Scotland. The length is eight inches: the whole upper part of the bird is ruddy or rufous, in some parts bright ferruginous, spotted with black. But to be more particular, the bill and legs are as usual in the Sanderling: the head and neck, taking in the cheeks and throat, are rufous, with very minute black streaks: the back and scapulars rufous or ferruginous, with large black spots, the black occupying the middle of each feather, the margins rufous; on the scapulars the spots are largest; in some the black is divided by a ferruginous bar, so as to form two spots, but not observable unless the impending feather is lifted up; these are also tipped with white: the rump is like the back: the lower breast and from thence to the tail is white: the prime quills are dusky, the secondaries the same, more or less white towards the base: the lesser coverts dusky brown, the largest series more or less tipped with white: the middle feathers of the tail dusky, with rufous margins; the rest cinereous on the outer web, whitish on the inner, all becoming gradually paler as they recede from the centre, the outer ones being almost white. As this variety of *Charadrius calidris* has no intermediate feathers in its plumage that indicate a changing state, we have every reason to believe it to be actually the usual dress in which the species appear in the breeding season, and that no Sanderling will be found in any part of the world in that season with the fine cinereous-grey back and scapulars which adorn the adult during the winter months. It would indeed be scarcely credited that two birds so extremely dissimilar could belong to the same species, had not experience taught us that many such examples are within recollection. But what supersedes all, even the most reasonable, speculations founded on precedent, is ocular demonstration. We have now before us four Sanderlings in different states of plumage, known to have been shot at different seasons. The rufous specimen or summer plumage, the grey or winter dress, and the two other intermediate stages that fairly connect them; one shot early, the other later, in the autumn. This is a forcible exemplification of the changes incidental to some species, in a bird well known, and should instruct the naturalist to thoroughly scrutinize those tribes of birds whose plumage is so extremely transient, and instead of straining to make new species from a trifling variation of feather, endeavour to trace all the gradations incidental to season and age. The Ruddy Plover was first described by Mr. Pennant, in his

'Arctic Zoology,' as an inhabitant of Hudson's Bay, and was communicated to him by Mr. Hutchins. The Sanderling does not appear to be known in northern Europe, for the reason that it is never seen there in the dress usually described by naturalists.

[Sand Lark.—A name commonly applied indifferently to the Ringed Plover and Common Sandpiper.]

[Sand Martin.—See Martin, Sand.]

Sandpiper.—A genus of birds of the order Grallæ, the characters of which are: Bill strait, slender, not exceeding an inch and a half in length. Nostrils small. Tongue slender. Toes divided, or very slightly connected at the base by a small membrane; hind toe small. There is a very great degree of connection between this genus and that of the Snipe and Plover. In the former the length of the bill in that genus, and in the latter the want of a back toe, are the only characteristic marks of distinction; and these in some species run so nearly into one another as scarcely to be divided. In the young of the Redshank the bill scarcely exceeds an inch and a half long; and in the Grey Sandpiper [Grey Plover] there is no back toe, but only a sort of spur, very small.

Sandpiper, Aberdeen.—See Sandpiper, Red; [and Knot.]

Sandpiper, Ashcoloured.—*Tringa cinerea*, *Gmel. Syst.* ii. p. 673; *Ind. Orn.* ii. p. 733, 25; *Br. Zool.* ii. No. 194; *Ib.* fol. 124, t. E. f. 1; *Arct. Zool.* ii. No. 236; *Lath. Syn.* v. p. 177, 22; *Lewin, Br. Birds*, v. t. 171; *Walc. Syn.* ii. t. 147.—The length of this species is about ten inches; weight from four ounces and a quarter to five and three-quarters. The bill rather exceeds an inch and a quarter in length, swells a little towards the point, strait and black; irides dusky. The top of the head, back of the neck, back, and scapulars ash-coloured; the first a little spotted or streaked with dusky; the feathers of the two latter bordered with dirty white, and the shafts dusky; rump and upper tail-coverts white, with undulated bars of black; the three first quill-feathers dusky, the outer webs of the other primaries more or less edged with white; secondaries dark ash-colour, bordered with white; the shafts of all white; greater wing-coverts dusky, more or less margined with white; lesser coverts ash-colour, with white margins; the throat, lower part of the breast, and belly white; fore part of the neck,

upper breast, and sides streaked and waved with dusky; under tail-coverts white, with a few spots; tail ash-colour, edged with white, and shafts white; legs dusky; toes bordered with a narrow finely-scalloped membrane. We have seen these birds in prodigious flocks on the south coast of Wales; and Mr. Pennant observes the same on the shores of Flintshire in the winter. They depart from us the latter end of March or beginning of April. Like the most of this tribe, it is subject to much variety. A specimen we received from Penzance in Cornwall, the 19th of August, had all the feathers of the back, scapulars, and wing-coverts marked with semicircular black and whitish lines: this we take to be a young bird of that season. We have long entertained doubts respecting the distinction between this and the Knot. The plumage of that bird, as described by some authors, scarcely differs from this in the several varieties of its change. Mr. Pennant, however, remarks that the Knot, as a special mark of distinction, has its toes divided to the very bottom; but in this also there is scarcely any appearance of a membrane that connects the toes together. Notwithstanding these doubts in our own mind, we have given the Knot, as described by others, a distinct place in this work. On the coast of Caermarthenshire this is known by the name of Howster. Is supposed to breed in Denmark. It also inhabits America; continues the whole summer at Hudson's Bay, where it breeds, and is called *Sasqua pisqua nishish*.

SUPPLEMENT. — We have noticed, under the article Knot, that these two birds are of the same species, and that the Ash-coloured Sandpiper (described in the former part of this work) is the same bird in its mature plumage, and what has generally been considered as the Knot. We have therefore to express a wish that the name of Knot should be retained, and that of Ash-coloured Sandpiper be expunged as a distinct species, by connecting its synonyms with those of the former, being in fact only that species in its young or autumnal plumage; known by the semicircular black and whitish lines on the back, scapulars, and coverts of the wings.

[Sandpiper, Bartram's. — *Yarrell*, ii. 632. *Totanus Bartramia*, *Wilson, Amer. Ornith.* iii. 86, of *Jameson's Edition*. *Chevalier a longue queue*, *Temm. Man. d'Ornith.* ii. 650, iv. 415. — "This species is twelve inches long, and twenty-one in extent; the bill is an inch and a half long, slightly bent downwards, and wrinkled at the base, the upper mandible black on its ridge, the lower, as well as the edge of the upper, of

a fine yellow; front stripe over the eye, neck, and breast pale ferruginous, marked with small streaks of black, which on the lower part of the breast assume the form of arrow-heads; crown black, the plumage slightly skirted with whitish; chin, orbit of the eye, whole belly, and vent pure white; hind head, and neck above, ferruginous, minutely streaked with black; back and scapulars black, the former slightly skirted with ferruginous, the latter with white; tertials black bordered with white; primaries plain black; shaft of the exterior quill snowy, its inner vane elegantly pectinated with white; secondaries pale brown, spotted on their outer vanes with black and tipped with white; greater coverts dusky, edged with pale ferruginous and spotted with black; lesser coverts pale ferruginous, each feather broadly bordered with white, within which is a concentric semicircle of black; rump and tail-coverts deep brown-black, slightly bordered with white; tail tapering, of a pale brown orange-colour, beautifully spotted with black, the middle feathers centred with dusky; legs yellow, tinged with green; the outer toe joined to the middle by a membrane; lining of the wings elegantly barred with black and white; iris of the eye dark or blue-black; eye very large. The male and female are nearly alike." — *Wilson*, iii. 87. The first recorded British specimen of this American bird was killed in Warwickshire, and is now in the collection of Lord Willoughby de Broke; the second appeared in the 'Illustrated London News' on the 20th of January, 1855: it was shot on the 12th of December, 1854, in a ploughed field between Cambridge and Newmarket: the particulars were communicated by the Rev. Frederick Tearle, of Trinity Hall, Cambridge. In the 'Zoologist for 1852' Mr. Reid records, at p. 3330, the occurrence of a Sandpiper, shot near Warwick, on the 31st of October, 1851: he gives a minute description of the bird; and Mr. More, at p. 4254 of the volume for 1854, expresses an opinion that this can be no other than Bartram's Sandpiper. In the volume for 1864 Mr. John Dutton publishes, at p. 9118, the following note: — "I purchased, at a sale of birds belonging to the late Mr. Wille, of Lewes, on Monday, April 18, a beautiful specimen of Bartram's Sandpiper, shot at Newhaven some time between 1836 and 1840. * * * Mr. Wille was exceedingly particular about the authenticity of his birds." Nevertheless it seems desirable to state that the claim of this bird to a place in the British list seems extremely slender.]

Sandpiper, Black. — *Tringa Lincolnensis*, *Ind. Orn.* ii. p. 734, 27. Black Sandpiper,

Br. Zool. ii. No. 197; *Lath. Syn. Sup.* p. 251.—This species was shot in Lincolnshire, and communicated to the world by Mr. Pennant, whose description we take the liberty to copy. "It was the size of a Thrush; the nostrils black; the irides yellow; the beak short, blunt at the point, and dusky; the head small, and flattened at 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 appear 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." It is not impossible this may be the young or variety of the Purple Sandpiper of this work, the bill not having obtained the reddish colour at the base, and the upper parts of the plumage not the full dark colours. The tail, however, is essentially different, and the bill appears to be shorter.

SUPPLEMENT.—We cannot avoid suspecting that this is really an immated Purple Sandpiper.

[Sandpiper, Broadbilled.—*Yarrell*, iii. 65. *Tringa platyrhynchus* (Broadbilled Sandpiper), *Gould, Birds of Europe*. *Becasseau platyrynque*, *Temm. Man. d'Ornith.* ii. 616, iv. 403.—"The adult bird, in the breeding season, has the beak, which is one inch and one-sixteenth in length, dark brown at the point, inclining to reddish brown at the base; irides brown; from the base of the beak to the eye a dark brown streak; over that and the eye a white streak, with a brown central longitudinal line; top of the head brownish black, slightly varied with greyish white, and tinged with ferruginous; inter-scapulars nearly black, with rufous edges; scapulars, wing-coverts, lower part of the back, and the tertials black, the feathers having broad margins of buffy white or rufous; the primary and secondary quill-feathers black; the shafts white; upper tail-coverts black, with rufous edges; the two middle tail-feathers nearly black, longer than the others, pointed and margined with rufous; the others ash-grey, margined with buff-colour; chin nearly white, with minute dark specks; sides and front of the neck, and the upper part of the breast greyish white, varied with black spots and tinged with buffy red; belly, vent, and under tail-coverts white;

legs, toes, and claws greenish black. The whole length of the adult birds is six inches and three-eighths; wing from the carpal joint to the end of the first, which is the longest feather, three inches and seven-eighths; length of the tarsus five-eighths. The young bird so closely resembles the parent in its plumage at this season, that it is unnecessary to describe it."—*Yarrell*, iii. 68. Mr. Hoy has recorded, in the tenth volume of Loudon's 'Magazine of Natural History,' the occurrence of a specimen of this bird at Breydon Broad, in Norfolk, on the 25th of May, 1836; and Mr. Thompson, in the second volume of his 'Natural History of Ireland,' mentions, at p. 282, the occurrence of a second specimen on the oozy banks of Belfast Bay. In the 'Zoologist' for 1846 Mr. Borrer records, at p. 1394, that a specimen was killed on the beach at Shoreham, in Sussex, at the latter end of October, 1845: in the volume for 1856 Mr. Stevenson records, at p. 5160, that a specimen was killed at Yarmouth, in Norfolk, in the May of that year.]

Sandpiper, Brown.—*Tringa fusca*, *Ind. Orn.* ii. p. 733, 26; *Br. Zool.* ii. No. 195; *Lath. Syn. Sup.* p. 250.—This species Mr. Pennant observes to be in the collection of Mr. Tunstall. Its size was that of a Jack Snipe. The bill black; the head, upper parts 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. To this description the same author adds that it was bought in the London market. We are in some doubts with respect to this bird being a distinct species, especially as we know the Sandpiper class varies so much in plumage in the young and adult states. A young specimen of the Dunlin now before us, which was killed in July on the coast of Cornwall, exactly corresponds with the above, except that the head and back of the neck are of a ferruginous-brown.

SUPPLEMENT.—A variety of the Little Sandpiper, which corresponds so nearly with the description of the Brown Sandpiper, having come into our possession, induces us to suspect that the *Tringa fusca* is only an immated specimen of *Tringa pusilla*. See Sandpiper, Little. [Probably identical with the Dunlin, which see.]

[Sandpiper, Buffbreasted.—*Yarrell*, iii. 60. *Tringa rufescens* (Buffbreasted Sandpiper), *Yarrell, Trans. Lin. Soc.* xvi. 109, pl. xi. *Becasseau rousset*, *Temm. Man. d'Ornith.* iv. 408.—"Chin, throat, front of the neck and breast pale ochreous, inclining to

sienna-yellow. Sides of the neck and nape spotted with brown. Abdomen, flanks, and under tail-coverts white dashed with yellow. Front part of the under surface of the wings rufous-brown, the other part spotted; under coverts white. Shafts of the primary quills on their under surface pearl-white; outer web dusky; the inner one pale hair-brown, plain on the part next to the shaft, but having its other half elegantly mottled with dark specks. Secondary quills mottled at their base, and ending in distinct sabre-shaped points, presenting a regular series of lines, formed by alternating shades of white, black and dusky bands, well-defined, and exhibiting a beautifully variegated appearance peculiar to the species. Back blackish brown, with the margins of the feathers paler. Scapulars and tertials blackish brown, margined with pale reddish brown. Tail-coverts brown, with paler edges. Tail cuneiform, the centre feathers black, those on each side hair-brown, enclosed by a zone of black, and edged with white. Bill black. Legs brown [or rather dull clay-yellow], and bare for above half an inch about the tarsal joint."—*Selby*, ii. 144. We are indebted to the late Mr. Yarrell for making known, as above cited, the occurrence of this interesting species, in September, 1826, in the parish of Melbourne, in Cambridgeshire. "A few years after," says Mr. Yarrell, "Mr. Sims obtained a second specimen from Sherringham, on the coast of Norfolk; a third was killed at Formby, on the banks of the river Alt, thirteen miles north of Liverpool, in May, 1829." (*Yarrell's Brit. Birds*. iii. 61). A fourth was killed at Yarmouth, in 1839 or 1840. (*Id.*) In the 'Zoologist' for 1843 Mr. W. R. Fisher records, at p. 363, the occurrence of a specimen of this bird, on the 20th of September of that year, on the mudflats at Breydon. In the volume for 1846 Mr. Rodd records, at p. 1500, the occurrence of a specimen between Penzance and Marazion, on the 3rd of September of that year, and calls attention to the beautiful markings on the under surface of the wings, which constitute the best specific character of the species. In the volume for 1857 Mr. Nicholls records, at p. 5791, that a female specimen was obtained in September of that year; Mr. Nicholls writes from Kingsbridge, in Devonshire. In the volume for 1860 Mr. Rodd records, at p. 7236, that a specimen was obtained by Mr. Vingoe, on the 8th of September of that year, on some high ground near a pool of water, whence it appears that the species does not confine itself to tidal estuaries, but affects moorland marshes.]

Sandpiper, Common.— [*Yarrell*, ii. 654; *Hewitson*, xc. 333.] *Tringa hypoleucos*, *Lin. Syst.* i. p. 250, 14; *Gmel. Syst.* ii. p. 678; *Ind. Orn.* ii. p. 734, 28. *Tringa minor*, *Raii Syn.* p. 108, A. 6; *Will.* p. 223, t. 55. *Guinetta*, *Bris.* v. p. 183, 2, t. 16, f. 2; *Ib.* 8vo, ii. p. 260. *La Guignette*, *Buf.* vii. p. 540. Common Sandpiper, *Br. Zool.* ii. No. 204, t. 17; *Ib.* fol. 125; *Arct. Zool.* ii. No. 388, 23; *Will. Angl.* p. 301, t. 55; *Lath. Syn.* v. p. 178, 23; *Lewin, Br. Birds*, v. t. 172; *Walc. Syn.* ii. t. 148; *Pult. Cat. Dorset.* p. 15.— The weight of this species is about two ounces; length seven inches and a half; irides dusky. The bill is brown, an inch and a quarter long, and slender. The head, back of the neck, and whole upper parts, as well as the sides of the breast, light brown, of a glossy greenish hue on the back and scapulars, streaked down the shaft of each feather with a narrow dusky line; the wing-coverts with minute undulated lines; the cheeks and throat of a light colour; over the eye a whitish streak; breast and belly white; thighs brown; quills brown, a white spot on their inner webs, except the first; the four middle feathers of the tail like the back, with fine transverse lines of dusky, outer one white, with brown bars, the intermediate ones either tipped or spotted white on their margins; legs brown. The Common Sandpiper visits this country in the spring, and chiefly frequents our lakes and rivers, on the borders of which it makes a nest composed of moss and dry leaves, which is most commonly placed in a hole in the bank. It lays four or five eggs of a dirty white, marked with dusky and cinereous spots, most at the larger end. When disturbed it makes a piping noise as it flies; and when running on the ground the tail is constantly in motion. Great numbers breed on the banks of the lakes in Scotland. In the autumn these birds are very much infested with the *Hippobosca hirundinis*. It is probable many of the Sandpipers are capable of swimming, if by accident they wade out of their depth. Having shot and winged one of this species as it was flying across a piece of water, it fell, and floated towards the verge; and as we reached to take it up, the bird instantly dived, and we never saw it again rise to the surface; possibly it got entangled in the weeds, and was drowned. Other species we have known, when wounded and fallen into the water, make way on the surface with their legs, and do not drown like land-birds in general. It is known in some places by the name of Summer Snipe. Is found in most parts of Europe, even as far north as Siberia.

[Sandpiper, Curlew.—See Curlew, Pigmy.]

[Sandpiper, Dunlin.—One of Pennant's names for the Dunlin, which see.]

Sandpiper, Dusky.—APPENDIX.—*Tringa Calidris*, *Lin. Syst.* p. 252; *Gmel.* p. 681; *Ind. Orn.* ii. p. 732. Dusky Sandpiper, *Lath. Syn.* v. p. 174.—Mr. Bullock assures us that he met with a bird in the Orkneys which he considers as the Dusky Sandpiper, of which a description will appear in vol. x. of the 'Transactions of the Linnean Society.' We have not seen the bird in question, but as we have long suspected that *Tringa calidris* and *Islandica* are trifling varieties of the same species, it is proper that we remark in this place that Mr. Foljambe presented us with a Sandpiper which he assures us is exactly similar to Mr. Bullock's bird. That this is the *Calidris* of Linnæus, and the Dusky Sandpiper of the 'General Synopsis,' we have not the smallest doubt; and also a variety of the *Islandica* of the Swedish naturalist, and the Red Sandpiper of Dr. Latham, we most firmly believe. It will be recollected that another variety was originally given in the 'British Zoology' for a distinct species, under the title of Aberdeen Sandpiper. In fact we understand, from those who have had an opportunity of examining several of these birds shot out of the same flock, that there is a considerable variation in plumage about the neck, back, breast, and belly; but that the wings, the tail, and its upper coverts are similar in all. Some have described the Red Sandpiper to have the fore part of the neck and breast mixed with cinereous and rust-colour, obscurely spotted with black; while others, and amongst them Linnæus, say the under parts are rufo-ferruginous. The Dusky Sandpiper is generally described to have the under parts of the body chesnut. Now, when all the other parts of plumage so nearly correspond, as well as the size of the bird, and length of bill, who will draw the shade of difference between rufo-ferruginous and castaneous, or, as some might call it, bay or bright ferruginous? The fact appears to be that when the under parts of the body are more or less mixed with white or cinereous, such may be considered as not arrived at maturity; and that the full chesnut or ferruginous-colour from the chin to the vent is the adult plumage. From what has been said it will be inferred that we think the synonyms of the Linnæan *Tringa Calidris* and *Islandica* should be assimilated. The size and form of the bird received from Mr. Foljambe are very like the Knot; the bill, in shape and length, is similar; and the legs and toes are exactly of the same size.

It is amongst the few of the genus whose bill is thick, and a little dilated at the end: its length is about an inch and a quarter to the feathers on the forehead; the crown, back part of the head, and hind neck pale ferruginous, with dusky streaks; sides of the head, except the coverts of the ears, and the whole under part, from chin to vent, chesnut, with a few white feathers on the middle of the belly: behind the vent, and under tail-coverts, white, with a few dusky spots and a few ferruginous feathers; the upper part of the back and scapulars elegantly marked in spots and bars of bright ferruginous and black, the former being the margin to the feathers, and some have a slight edging of white: the lower part of the back concealed by the scapulars; the rump and upper tail-coverts are greyish white, with small undulating bars of black: the tail-feathers are wholly cinereous, slightly margined and tipped with white, the six middle ones darkest, becoming dusky at the end. A specimen of the Red Sandpiper, with which we have at this moment been favoured by Lord Stanley, for examination, is in a state of changing its plumage; in which we perceive so much of the Knot (*Tringa Canutus*) that we really begin to suspect the Dusky and Red Sandpipers will be found to be only that bird more or less in its summer plumage. We have before noticed similar instances in the Pigmy Sandpiper, Sanderling, and some others, that in the breeding season have much of a ferruginous colour, which wholly vanishes in the winter. The shape of this bird, the size and formation of all its parts, are exactly similar to those of the Knot. The plumage above is a mixture of black and cinereous, with spots of white, and a few of pale ferruginous on the margins of some of the feathers; but these are interspersed with many plain cinereous feathers, like those on that part of the Knot: the head is cinereous, streaked with dusky, exactly like that bird in its first feathers, when it has been called the Ash-coloured Sandpiper: the back of the neck almost wholly cinereous: the fore part of the neck pale ferruginous, intermixed with white feathers, streaked with dusky, as in the Knot: the breast and belly pale ferruginous: the sides under the wings, the coverts of the tail, the quills, and their greater coverts, like the matured Knot: the tail-feathers exactly resemble those of the young Knot, being cinereous, the middle ones slightly bordered dusky, with an edging of white. It is only by the examination of numerous specimens, collected at different seasons of the year, that we can expect a perfect arrangement of species in birds so changeable in plumage. The pale rufous or

ferruginous of the under parts of this specimen, and the little appearance of that colour on the upper parts, indicate youth, and we have little doubt but that it is actually the young Knot in the early part of the autumn, or latter end of the summer of the second year, having partly attained its mature summer plumage, and for the first time is throwing out the plain cinereous feathers on the back, scapulars, and wings, as the mature winter plumage of the Knot. With so many specimens under critical examination, suspicions had arisen, before we were favoured with that from Lord Stanley, which has scarcely left a doubt that the Knot is no other than the Red Sandpiper in its winter dress.

Sandpiper, Equestrian.—SUPPLEMENT.—*Tringa equestris*.—We have long considered the *Tringa equestris* as only a variety of *Tringa pugnax*, and we are the more confirmed in this opinion by the description of a recent specimen from Sandwich, in Kent, where, in 1802, five are said to have been shot. The description given by Dr. Latham, in his Supplement to the 'General Synopsis,' is as follows:—"Length twelve inches: bill dusky: legs pale grey: the body above rufous-grey, clouded with brown: sides of the head, fore part of the neck, and breast white, clouded with pale brown; on the sides of the head are minute specks of the same: chin, belly, thighs, vent, and rump white; the two middle tail-feathers rufous-brown, with black bands; the others plain pale rufous-brown." Those who will take the trouble to compare this description with our distinguishing characters of the Ruff, when destitute of the long neck-feathers, will, we have little doubt, join us in placing the synonyms of the Equestrian Sandpiper with those of the Ruff. See that bird.

[Sandpiper, Freckled, of 'Arctic Zoology,' &c., is the Knot in its change from the winter to the summer plumage.]

[Sandpiper, Gambet, of Latham, is the Redshank; but the Gambet Sandpiper of Pennant and Montagu is a young Ruff.]

Sandpiper, Green.—[Yarrell, ii. 642; Hewitson, xc.* 334*.] *Tringa Ochropus*, *Lin. Syst.* i. p. 250, 13; *Gmel. Syst.* ii. p. 676; *Ind. Orn.* ii. p. 729, 12; *Lath. Syn. Sup.* ii. p. 311; *Bewick, Br. Birds*, ii. t. p. 100. *Tringa littorea*, *Lin. Syst.* i. p. 251; *Gmel. Syst.* i. p. 677; *Ind. Orn.* ii. p. 731. *Tringa Aldrov. Raii Syn.* p. 108, A. 7, 8; *Will.* p. 222, 223, t. 55; *Ib. Angl.* p. 300, 301, t. 55; *Bris.* v. p. 177, 1, t. 16, f. 1; *Ib.* 8vo, ii. p. 259. *Becasseau, ou Cul-blanc*, *Buf.* vii. p. 534. *Green Sandpiper*, *Br.*

Zool. i. No. 201; *Ib.* fol. 125, t. F. 2, f. 3; *Arct. Zool.* ii. No. 389; *Lath. Syn.* v. p. 170, 12; *Lewin, Br. Birds*, v. t. 170; *Pult. Cat. Dorset.* p. 15. *Wood Sandpiper*, *Lin. Trans.* i. p. 130, t. 2. *Shore Sandpiper*, *Arct. Zool.* ii. p. 481, F.; *Lath. Syn.* v. p. 171.—This elegant species weighs about three ounces and a quarter; length full ten inches. The bill is an inch and a half in length, very slender, and dusky; irides hazel. Head, neck, and breast are marked with numerous streaks of dusky and ash-colour, largest on the latter; over the eye a whitish streak; back, scapulars, and wing-coverts brown, glossed with green; the two first marked with roundish small white spots; lower part of the breast, belly, upper tail-coverts, and chin white; the feathers under the wings dusky, with small bars of white shaped like the letter V; quills dusky; tail white; the two middle feathers marked with four dusky bars; the two next on each side with three, the fourth with two, and the two outer with one bar; legs dusky green; toes united at the base by a small membrane. The Green Sandpiper is by no means plentiful in England; it mostly frequents pools and small shallow streams; is a solitary bird; comes to us about the middle of September, and continues as late as the end of April, when it departs northward to breed. Is sometimes seen in pairs before it leaves us. Is said to be found in Siberia and Iceland, and also in America. When disturbed it makes a very shrill whistling note as it flies. We have seen this bird as early as the 2nd of August. [There is no well-authenticated instance of the Green Sandpiper having been found in America.]

SUPPLEMENT.—Doctor Latham, in his last work above referred to, has brought the *Tringa Ochropus* and *glariola* together as one species. It is true all the accounts of the Wood Sandpiper are so imperfect, that at best it must be a matter of opinion whether the original bird described first by Linnæus was a distinct species, or only a variety of the Green Sandpiper. With a bird before us essentially differing from the *Ochropus*, and equally answering the Linnæan specific characters, we are induced to consider it as the true *glareola*, especially as it could not find a place so appropriate; and therefore, with a full allowance of credit to the Linnæan species, rather than make an additional one in a class already too much multiplied, and extremely intricate, we gave it in the former part of this work. At the time our friend published his last Supplement he had not seen our description of what we take to be the Wood Sandpiper, nor have we seen anything to induce us to change our opinion. Thus, at least, our Green

and Wood Sandpipers, being perfectly distinct species, are submitted as such to the critical Ornithologist. Like most of this tribe, the markings in the old and in the young birds are very different in the Green Sandpiper; the former has been described in the original work; the following is that of a specimen shot on the 17th of August. This has the coverts of the wings and tertials spotted, as well as the back and scapulars; those on the tertials are along the margins only, and the spots are not white but pale brown: the neck is less streaked than in adults: the tail also differs in having the outer feather quite white; the second with a very small spot on the outer web; the third with two small spots on the outer and one on the inner web: the rest more or less barred, increasing to the middle ones, which have four broad bars of black. The under scapulars have the same V-like markings as in the adult. The general colour of the bird above is a dusky brown, glossed with green: from the upper mandible is a dusky streak to the eye; above which is one of white, that partly passes over the eye; and the eye-lids are also white: the legs and feet like the adult; the outer toe is equally united to the middle one at the base by a membrane. This last is the *Tringa littorea* of Linnæus, which Dr. Latham had judiciously given in his former works as a variety of *Ochropus*, and we cannot conceive why he changed that opinion in his 'Index Ornithologicus.'

Sandpiper, Greenwich.—*Tringa Grenovicensis*, *Ind. Orn.* ii. p. 731, 16. Green-winged Sandpiper, *Lath. Syn.* p. 249, 38; *Lewin, Br. Birds*, v. t. 180; *Walc. Syn.* ii. t. 154.—This bird was killed at Greenwich, and is now in the collection of Dr. Latham, who has given it to the world as a new species: his description therefore we take the liberty of borrowing. It is the size of the Redshank; weight near 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 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 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 the end with pale ferruginous; legs dusky olive-green, bare an inch above the knee; the outer and middle toe connected at the base.

SUPPLEMENT.—The bird from which the original description was taken, and entitled as above, is now before us, and we have no hesitation in pronouncing it to be a variety of the Ruff (*Tringa pugnax*) in its winter plumage. See Ruff.

[Sandpiper, Grey.—See Plover, Grey.]

[Sandpiper, Grisled, of Latham, is the Knot in winter plumage.]

Sandpiper, Hebridal.—Mr. Pennant has described a bird in the 'British Zoology' under this title. Dr. Latham, in his 'Synopsis,' has considered it as only a variety of the Turnstone, with whom we do not hesitate to accord in opinion. See Turnstone.

Sandpiper, Little.—[Little Stint, *Yarrell*, iii. 70.] *Tringa pusilla*, *Lin. Syst.* i. p. 252, 20; *Gmel. Syst.* ii. p. 681; *Ind. Orn.* ii. p. 737, 38. *Cinclus dominicensis* minor, *Bris.* v. p. 222, 13, t. 25, f. 2; *Ib.* 8vo, ii. p. 269. Little Sandpiper, *Br. Zool.* ii. No. 207; *Gen. Birds*, p. 65, t. 12; *Arct. Zool.* ii. No. 397; *Lath. Syn.* v. p. 184, 32; *Lewin, Br. Birds*, v. t. 175. Little Stint or Least Snipe, *Bewick, Br. Birds*, ii. t. p. 122. Brown Sandpiper, *Br. Zool.* ii. No. 195?—This is about the size of a Hedge Sparrow; the length between five and six inches. Bill brown, with the tip black; the head and all the upper parts brown, edged with black and pale rufous-brown; greater coverts and quills dusky, tipped with white; breast and belly white; tail dusky; legs black. Mr. Pennant is the only person who has mentioned this species to be found in England, one having been killed near Cambridge in September. Said to be found in northern Europe and in America, as well as St. Domingo. **Appendix.**—A female of this species, lately killed on the south coast of Devonshire, differs somewhat from that described in the 'British Zoology;' and as it is an extremely rare bird in England we judge it proper to give a description of it in this place. Weight six drams; length six inches. Bill dusky, three-quarters of an inch long, very slender, a little bending downward, and rather larger near the point than in the middle; irides dusky. The

forehead, crown of the head, back of the neck, back and scapulars dark cinereous, dusky down the shafts, except on the neck, which is rather lighter coloured than the rest; from the bill to the eye a dusky brown streak; above that an obscure dirty white one; chin and throat white; fore part of the neck and upper breast pale cinereous-brown; lower breast, belly, vent, and under tail-coverts pure white; primaries, secondaries, and the greater coverts immediately impending them dusky, very slightly tipped with white, most so on the coverts, and the primaries margined with white on the outer webs, except the two first; the shaft of the first quill is white, the others dusky brown; spurious wing, and smaller coverts near it, dusky; those along the ridge of the wing dusky and cinereous; the rest of the coverts and tertials cinereous, like the back, a few of the former edged with pale rufous-brown; the rump and upper tail-coverts dusky, the feathers slightly tipped with cinereous; the tail is cuneiform, composed of twelve feathers; the six middle ones are cinereous, the two middlemost inclining to dusky; the three outer feathers on each side pure white; legs light olive-brown, three-quarters of an inch long; claws black; outer toe very slightly connected at the base by a membrane to the middle one. This bird was shot for a Jack Snipe on a salt marsh not very remote from the sea, in the month of November.

SUPPLEMENT.—We cannot help suspecting that this has met with the same fate as most of its congeners, by being multiplied into at least two species, since in some of its changes in plumage it so nearly accords with the Brown Sandpiper of Mr. Pennant, as may fairly warrant a supposition that they are of the same species, as a recent specimen now before us will go near to prove. The length and weight nearly the same as that described in the Appendix to the 'Ornithological Dictionary.' Bill and irides the same: the forehead and cheeks round the eyes very pale, nearly white: throat and all beneath white, except across the breast, where it is mixed with light brown; the crown of the head, back, scapulars, and coverts of the wings dusky black, more or less margined with pale rufous, but in some of the scapulars the margins are nearly white. These margined feathers give the bird a spotted appearance. The back of the neck brown, mixed with cinereous: quills like those of the other: the middle feathers of the tail are like the tertials, dusky, bordered with ferruginous; the others cinereous, palest on the margins; legs dusky. This is without doubt the *Tringa pusilla* in its nestling feathers, or plumage prior to its first

moulting. Six of these birds were observed by Mr. Anstice in Sept. 1805, at the mouth of the Bry, near Bridgewater, four of which he shot, but was unable to obtain more than one (on account of the softness of the mud), and that has been kindly added to our collection. The other two were afterwards seen, but could not be procured. The specimen here described very nearly corresponds with that given by Mr. Bewick, except that in his bird the tail is said to be dusky; but as each feather is not defined, perhaps the middle feathers only were dusky, appearing of that colour when closed. Mr. Pennant's bird seems to have been of the same colour as ours, but, by the description, differently disposed on each feather, viz., brown edged with black, and pale rufous. Mr. Bewick's bird is marked above black, with white on the exterior, and rust-colour on the interior webs of each feather. All these little variations may easily be conceived, knowing that season and age have great influence on the plumage of some birds; and a little allowance may be admitted for the different manners in which different authors are observed to describe the same thing, as well as the very vague definition of colours. In most young birds that differ at first from their parents, we perceive they are more or less spotted or mottled; and amongst the Sandpipers this is the common primary appearance. The young of the Dunlin, the Purre, the Knot, the Green Sandpiper, and others, are more spotted than the adults; thus the perfect state of the Little Sandpiper is, we perceive, of a plain cinereous-brown colour, with only dusky shafts, as described in the Appendix to the former part of this work. [Col. Montagu's supplementary remarks appear to refer to a bird now considered distinct, and described as such by Selby, Gould, Temminck and Yarrell. It is known as Temminck's Stint. See Sandpiper, Temminck's.]

Sandpiper, Longlegged. — APPENDIX. — *Tringa gallatoris*. *Tringa glareola*, Lin. ? Wood Sandpiper, *Orn. Dict.* — Since the former part of this work passed through the press, we have noticed that the Editor of the late edition of Pennant's 'British Zoology,' in conformity to the opinion of Doctor Latham, has considered *Tringa Ochropus* and *glareola* of Linnæus, as varieties of the same species; and he might also have added the littorea of the same author, which is undoubtedly the young of the Green Sandpiper. If these three birds really constitute but one species, and we presume it is out of the power of human abilities to prove they do not, from the laconic description the great Swedish

naturalist has left us a guide, then the Wood Sandpiper of the 'Ornithological Dictionary' should receive another name, being as distinct from any variety of the Green Sandpiper as the Common Snipe is from the Jack Snipe. In order therefore to prevent our Wood Sandpiper from being referred to in future for a variety of the Green Sandpiper in any of its mutations, we request that name may be erased, and substituted by the above, with only a doubtful reference to the glareola of Linnæus, a bird which will now remain for ever a matter of individual opinion. For description and further particulars we refer to the 'Ornithological Dictionary' and to this Supplement, under the titles of Sandpiper, Wood and Green. We have lately been informed by Mr. Foljambe that the Long-legged Sandpiper is in his collection, a specimen having been sent to him from the coast of Yorkshire, in the month of January of the present year. Another bird of this species was shot at Woolwich, on the 16th of August, 1812, and is in the possession of Mr. Weighton, of London. The only difference we perceive between this specimen and that in our collection is that the sides of the breast are rather more brown, obscurely spotted with sullied white: the tail is exactly similar in the markings, but the two outer feathers are of the same length, and not so long as the third or fourth; we may therefore conclude that what we before remarked in our specimen, of the first feather being longer than the two succeeding, proves that part to have been newly moulted. In this specimen there is more than a usual gradation in length between the two first and the third, and consequently we may now fairly conclude that both had cast the tail-feathers in the autumn in which they were shot, and consequently are old birds, as young never moult those feathers in the autumn of the first year. We take this opportunity of acknowledging Mr. Weighton's favour in sending us a specimen of this and the Pigmy Sandpiper, in a very interesting change of plumage, for examination.

[Sandpiper, Pectoral. — Yarrell, iii. 82; the figure drawn from an American specimen lent to Mr. Yarrell by M. Audubon. *Tringa pectoralis*, Bonap.; Gould, *Birds of Europe*. Becasseau pectoral, Temm. *Man. d'Ornith.* iv. 397. — "The beak is dark brown at the point, orange-brown at the base; irides dark brown; feathers of the top of the head dusky brown, with darker central streaks, and tipped with rufous; the back of the neck, the wing-coverts, the back, and the tertials dark brown, with lighter coloured margins; primaries dusky

black, the shaft of the first white; secondaries dusky black, each with a narrow edge of white; rump, the upper tail-coverts, and the two middle tail-feathers, which are the longest, black; the rest of the tail-feathers ash-brown, tipped with yellowish white; chin white; the cheeks, sides and front of the neck, and the upper part of the breast greyish white, tinged with brown and streaked with dusky black in the line of the shaft of each feather; lower part of the breast, belly and under tail-coverts white; legs and toes yellowish brown; claws black. The whole length is eight inches and three-quarters; the wing from the carpal joint to the end of the first quill-feather, which is the longest, five inches and three-eighths." — Yarrell, iii. 85. The first recorded instance of the occurrence of this North-American bird is in Yarrell's 'History of British Birds;' the specimen was killed on the borders of Breydon Broad, near Yarmouth, in Norfolk, on the 17th of October, 1830. Another was killed in October, 1841, near Hartlepool. In the 'Zoologist' for 1843 Mr. Rodd records, at p. 141, the occurrence of a specimen on the beach at Annet, one of the Scilly Islands: it was shot on the 27th of May, 1840: Mr. Rodd, with his customary precision, gives many details of colour and measurement, leaving no doubt as to the species. In the volume for 1853 Mr. Gurney records, at p. 4124, the occurrence of a specimen near Yarmouth on the 30th of September, 1853. In the volume for 1855 Mr. Bold records, at p. 4808, the occurrence of a specimen on the Northumbrian coast on the 27th of June, 1855.]

[Sandpiper, Phayrelarn, of Montagu, in the 'Transactions of the Linnean Society,' iv. 40, Pl. ii., is without doubt the Purple Sandpiper.]

Sandpiper, Pigmy. — APPENDIX.—*Tringa pygmaea*. Pigmy Curlew, *Lath. Syn.* v. p. 127—10.—The following is a description of what we conceive to be a variety of that species which has hitherto been recorded as the Pigmy Curlew. Length nine inches: bill an inch and a half long, dusky black, slender, rather compressed at the point, and slightly arcuated: the upper mandible a trifle longer than the under: irides dusky. The feathers on the upper part of the head, and the hinder part and sides of the neck, are streaked with brown and grey, the former predominating: a whitish streak runs from the upper mandible over the eye; beneath that a brown one to the eye: the lower part of the neck behind, the back, and scapulars pale ferruginous and black, those of the last in broad bars or spots: the rump and upper tail-coverts white,

barred with dusky black: the coverts of the wings uniform brown, darkest along the shafts: the quills are dusky, their shafts partly white: the tertials are plain like the coverts: the edge of the wing below the alula spuria is minutely speckled with brown and white: the chin and throat white, with a few scattered pale ferruginous feathers: fore part of the neck whitish, streaked with brown, interspersed with ferruginous feathers: the breast and belly as far as the legs ferruginous, each feather prettily marked with a slender, undulated, transverse line of dusky near the end; behind the legs the feathers are white, many having a brown bar running into an angle on the shaft: the under tail-coverts pure white: the tail is even at the end, the feathers plain cinereous, with white shafts: the legs an inch and a quarter in length to the knee, which, with the bare space above the knee, of nearly half an inch, dusky black: toes and claws of the same colour, the latter almost straight. This very interesting bird was shot at Holyavon, on the 26th of August, 1812, by Mr. Lenard, and was sent to Mr. Weighton, who, at the request of Mr. Foljambe, was good enough to send it to us for examination, as it appeared to be an undescribed species of *Tringa*. The first appearance of this bird impressed upon our mind all the characters of what has been called the Pigmy Curlew, and upon a comparison with that species in our museum, we have no doubt of its being the same, notwithstanding the ferruginous plumage it has acquired. This specimen is highly interesting, because it appears to be an adult in moult, obtained at that season of the year when a part of its summer plumage was yet retained, and consequently we have an opportunity of forming a pretty correct idea of its colour during the breeding season. It will be observed that we have in the preceding pages remarked that the Pigmy Curlew in our collection is evidently young, by the white margins on the feathers upon the back, scapulars, and coverts of the wings. Another specimen (recently killed, and communicated to us by Mr. Foljambe, in whose collection it is) appears to differ but little from ours, except in a few slight particulars, but it is worth describing, as by knowing the time of the year this was shot we are enabled to communicate the appearance of the bird in its first autumnal plumage, for such we believe it to be. "This bird," says Mr. Foljambe in a letter to the author, "was shot in Kent, on the 1st of October, 1812. The length is nine inches: the bill one inch and a half long, black and incurvated: the crown and forehead dusky, with a slight mixture of cinereous: over the eye a whitish line: cheeks and back of

the neck cinereous, with faint dusky streaks: the feathers of the back and scapulars olive-brown, mixed with dusky, and faintly margined with very pale yellow: the coverts of the wings dusky, with broader margins of the same yellow: quills black: chin and throat white: breast pale cream-colour: belly, sides, vent, rump, and tail-coverts white: the feathers of the tail pale cinereous-brown, with the shafts and the extremities margined with white. Legs dusky black. In this specimen we also find the same indication of immaturity, the pale margins to the feathers, as in that in our collection. In the adult no such appears, and we have no doubt but that in the height of the breeding season the throat and fore part of the neck, as well as the breast and belly, are ferruginous, because we observe many feathers of that colour still retained in the old bird, which in another month would have been thrown off. The upper tail-coverts being barred, we could not have suspected, but whether this is a permanent character in adults, or, like the ferruginous plumage, is changeable with the season, we have yet to learn. It will be recollected that the description originally given of this species, in the 'General Synopsis,' was taken from that recorded to have been killed in Holland, in which the head, back, and coverts of the wings are mixed with brown, ferruginous, and white. In the specimen shot at Sandwich, described by Mr. Boys, and now in our collection, there is no ferruginous on those parts, although the head and neck are rufous-brown. Here then we have three gradations. The Holland specimen had moulted more of its ferruginous feathers than the one above described; and the Sandwich bird is evidently in its infant plumage. The natural history of this rare species is but little known, for, like most of its congeners, it only occasionally visits us, and retires to a less inhabited part of the northern world to breed. It is only by slow degrees that we are enabled to ascertain the highest state of perfection in plumage of such migrants. From this circumstance, and from consulting the general plumage alone, without regarding the more prominent characters, species are greatly multiplied beyond their natural limits. We cannot therefore too frequently repeat that many birds are so metamorphosed in their breeding plumage, that they are not to be recognised, in all the changes incident to season, by plumage alone, without minute investigation. It should also be remembered that spotted plumage, especially where the margins and tips of the feathers are pale, and marked with lines and spots, are suspicious characters of immaturity.

It is a great object to obtain these migrative species as early as they appear on our shores in the autumn, and as late in the spring as possible before they retire to their breeding places. By this means only can we procure them in moult, and detect their approaching changes: the appearance of a few feathers different from what we find in their winter dress leads to extensive knowledge. It is highly essential that when such birds are captured the dates should be registered as well as the sex. Just as this sheet was going to the press, we had an opportunity of examining a specimen of the Pigmy Sandpiper, in nearly its highest state of summer plumage. It will now be seen that our conjecture, with regard to the colour of this bird in the breeding season, has been completely verified. In this specimen the whole upper parts are more or less ferruginous, mixed with black; the forehead and chin are grey; the crown of the head dusky black, mixed with grey; the back of the head is slightly hoary, or powdered with grey, these slender feathers having their tips of that colour; the hinder part of the neck and upper part of the back ferruginous, with streaks of black: the lower back and scapulars deeper ferruginous, some of the feathers having sagittate spots of black in the middle, others barred with black; and some are black, deeply scalloped with ferruginous; the rump is brown: the fore part of the neck and throat bright ferruginous, powdered with grey, like the back of the head; breast and belly ferruginous, the latter becoming paler in the middle, the feathers being tipped with white, and some have a small transverse dusky bar; the upper and under coverts of the tail and sides of the vent rufous-white, with a few black bars; the lesser coverts of the wings are brown, those near the tertials with rufous margins; the greater coverts immediately impeding the primary and secondary quills are tipped with white; quills dusky, the shafts partly white, and the secondaries becoming whitish towards the base: the tertials margined with ferruginous: the tail, as well as the bill and legs, like the last described. We consider ourselves extremely fortunate in having been able to trace this obscure species through all its variation in plumage, from the first or infant state to that of the adult in its perfect summer dress; a circumstance that could not be effected but by foreign communications, for the Pigmy Sandpiper does not breed in any part of these realms. To Mr. Bullock, proprietor of the London Museum (a gentleman of indefatigable assiduity in collecting subjects in Natural History from all parts of the world), we are indebted

for enabling us to describe the summer plumage of this species, which we identified amongst some skins sent to us for examination. It appears that this specimen came from Hudson's Bay, and consequently we obtain the knowledge that it is an American as well as an European bird. Knowing how much this class of birds has been injudiciously multiplied, we are surprised that none of the varieties of this bird should have been recorded as distinct species, for at present we are not able to affix to them any synonyms; a circumstance that should indicate the scarcity of the species, or at least its rarity in the more habitable parts of the world. A material point is, however, now acquired with respect to the natural history of this bird, as we may be certain that it breeds in the neighbourhood of Hudson's Bay, and consequently we have a clue to the attainment of all that belongs to its history. So great a dissimilarity between the young and the adult, in its breeding plumage, would scarcely have induced a belief that they were actually the same species, had it not been for the gradual change perceived in those specimens killed at different seasons. It is remarkable that rufous and ferruginous appear to be either a character of maturity or incidental to the season of love, in this and one or two nearly allied genera, and we should not be in the least surprised, after what we have already discovered, if some other species, which are only known to us in their winter dress, should hereafter be found to be equally dissimilar in their summer plumage as this and several others described. It should be recollected by the scientific ornithologist that the Ruff has been multiplied into, perhaps, ten different species. The Purre is lost in the summer, by being converted into the Dunlin; the Sanderling is probably changed into the Ruddy Plover at the same season, and the Grey Sandpiper becomes obscured in the plumage of the Swiss Sandpiper. These and many other similar changes, mentioned in the course of this work, will evince the caution required in the discrimination of birds by plumage alone. [This appears to be the Pigmy Sandpiper of Bewick's second Supplement, and the Pigmy Curlew of this work. See Curlew, Pigmy, p. 48.]

Sandpiper, Purple. — [Yarrell, iii. 93; Hewitson, ciii. 366.] *Tringa nigricans*, *Lin. Trans.* iv. p. 40, t. 2. Purple Sandpiper, *Walc. Syn.* ii. t. 155. Sea Sandpiper, *Lin. Trans.* iv. p. 22, t. 1? *Tringa Maritima*, *Gmel. Syst.* ii. p. 678, 36? Selinger Sandpiper, *Lath. Syn.* v. p. 173, 15?; *Ind. Orn.* ii. p. 731, 18? *Arct. Zool.* ii. p. 480, C.; *Lath. Syn. Sup.* ii. p. 312.

Tringa Striata, *Gmel. Syst. i.* p. 672; *Ind. Orn. ii.* p. 733. *Totanus Striatus*, *Bris. v.* p. 196, 5; *Id. 8vo*, 11, p. 263. Le Chevalier rayé, *Buf. vii.* p. 516. Striated Sandpiper, *Arct. Zool.* 11, No. 383; *Lath. Syn. v.* p. 176.—This species rather exceeds the Purre in size; the length eight inches and a half. The bill is slender, an inch and a quarter long, tapering towards the point, a very little curved, and of a dull red colour, except at the apex and sides, which are dusky; irides hazel. The head and neck dusky black; eyelids whitish; the throat white; back and scapulars black, glossed with purple and edged with ash-colour; the wing-coverts black, tipped with white; the larger ones above the primaries deeply so; quills black, slightly edged with white on the exterior webs, except three of the secondaries, which are almost wholly white; these, with the white-tipped coverts, form a slight oblique bar on the wing when extended; the shafts white; breast and all beneath white, prettily spotted with black, except the middle of the belly and vent; the rump, coverts of the tail, and four middle tail-feathers black, glossed like the back; the other tail-feathers light cinereous; in all twelve; the legs and toes dull red; claws black and blunt; toes nearly divided to their origin; middle toe an inch long. This bird was killed at Lougharne, on the coast of Caermarthenshire, in January, in company with the Purre; two others were shot there the same winter, and were called by the fishermen Redlegs; but these did not come under our inspection. The one from which the above description is taken is now in my collection. I have since been favoured with the skin of one from Mr. Boys of Sandwich, which was killed on that coast in the winter of 1799. It corresponded exactly with the above, except that the bill was rather longer and strait, and the breast more dusky.

SUPPLEMENT.—When the above synonyms have been added to those already given with the Purple Sandpiper, in the former part of this work [these synonyms are incorporated above], it will clearly evince the necessity of more than ordinary attention in the discrimination of the species of this genus. Here are four supposed species brought into one, and if the Black Sandpiper of the 'British Zoology' was added as a trifling variety, we suspect we should not be far from correct. In the latter end of November, 1807, Mr. Anstice favoured us with two specimens of the Purple Sandpiper, that were shot in Somersetshire, and bought in the market of Bridgewater. These, upon dissection, proved to be of different sexes: the male is the least, weighing only two ounces one

dram; the female two ounces and a half. the male is rather darker in colour, but in no other respect differing from the other sex; nor are they materially different from the one originally described. In both these specimens the upper part of the breast is dusky grey; the sides of the breast near the shoulder black: the legs dull orange: the upper part of the bill towards the base orange, paler at the base of the under mandible. In the gizzards of these birds were fragments of small *Cancris*, *Onisci* and shells, with several perfect fry of *Turbo littoreus*. [The Purple Sandpiper has greenish gray legs, not "dull red," as described above.]

[Sandpiper, Purre.—See Dunlin.]

[Sandpiper, Quebec, of Latham, is the Purple Sandpiper.]

Sandpiper, Red.—*Tringa islandica*, *Lin. Syst. i.* Addend.; *Gmel. Syst. ii.* p. 682, 24; *Ind. Orn. ii.* p. 737, 39. *Scolopax subarquata*, *Gmel. Syst. ii.* p. 658, 25? Red Sandpiper, *Br. Zool. ii.* No. 202, t. 72; *Arct. Zool. ii.* No. 393; *Lath. Syn. v.* p. 186, 34. Aberdeen Sandpiper, *Br. Zool. ii.* No. 203. Red Sandpiper, *Lewin, Br. Birds*, v. t. 177; *Pult. Cat. Dorset.* p. 15.—This species is from eight to ten inches in length. The bill is brown, one inch and a half long, and a little bent downwards; head, hind 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 feathers of the tail dusky, the others cinereous; legs long and black. That given by Linnaeus is on the upper parts like the Woodcock; the under parts rufo-ferruginous; rump whitish, undulated with black; the shafts of the quills and tail-feathers white. Dr. Latham, in his 'Synopsis,' has made the Aberdeen Sandpiper of the 'British Zoology,' a variety only of this bird, and probably with great truth, as it differs only in the breast being of a reddish brown mixed with dusky, and the belly and vent white. We cannot too often repeat the caution necessary in identifying the various species of this genus, especially those which rarely visit us, when we know they are so subject to vary their plumage by age or season; and it is more than probable they are multiplied already beyond their real extent. The Red Sandpiper, it is said, has appeared in great flocks on the coast of Essex; found also on the coasts of New York, Labrador, and Nootka Sound; Iceland, and about the Caspian Sea.

APPENDIX.—For further remarks on this species see Sandpiper, Dusky, of this Appendix. [The Red Sandpiper of Latham, Lewin and Montagu appears to be the Knot of both sexes in summer plumage; while the Dusky Sandpiper of Latham and Montagu is the same bird in the change from the winter to the summer plumage.]

[Sandpiper, Redbacked, as figured by Wilson, is the *Tringa alpina*, var. *Americana*, of recent authors, in summer plumage.]

Sandpiper, Redlegged. — SUPPLEMENT.—*Bewick, Br. Birds*, ii. t. p. 113. — Mr. Bewick, in his ingenious work on British birds, has figured and described a species of Sandpiper with which we are at present unacquainted; but we cannot agree with him that it is *Tringa erythropus*, from which it differs so essentially in colour, in size, and particularly in the tail, and consequently ought not to bear the above title of Red-legged Sandpiper, the English name adopted in the 'General Synopsis' for the *erythropus*. For the present, however, until the bird is better known, we suffer it to remain with this title, as we are unable to do more than transcribe what the author has said of it. "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 mixture of pale brown, grey, and ash, with a few indistinct dusky spots; the fore part and the breast are white, clouded with 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 (barred): the ridges of the wings are 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, 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. The tail-feathers are lightish brown, except the two middle ones, which are barred with 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 Linnaeus, called here the Redshank or Poolsnipe. 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. It is somewhat singular that a bird apparently common, and indigenous to the fens, should so long have escaped notice, or at least discrimination, for it must undoubtedly have been confounded with the Redshank: indeed in many respects it seems to resemble the immature bird of that species, but differs essentially in the feathers of the tail. We are not informed of the weight of the Red-legged Sandpiper, but the measurement is less than a full-grown Redshank by an inch or rather more. [This is the Ruff before it has acquired the long feathers on the neck.]

Sandpiper, Rednecked. — We conceive this bird to be the young of the Purre not arrived at the full plumage, or perhaps the Dunlin in the same state; both of which we have frequently seen with the head and neck of a ferruginous-colour, soon after their arrival in the month of August. The description given in Latham's 'Synopsis,' vol. v. p. 183, is as follows:—Size of the Purre. The bill is shorter than the head; the crown and hind part of the neck striated ferruginous and black; fore part of the neck as far as the breast deep ferruginous; the rest not unlike the Purre; legs black. See Purre. [The Purre and Dunlin are the winter and summer plumage of the same bird: this is the young.]

[Sandpiper, Redshank, of Selby, &c., is the Redshank of this work.]

[Sandpiper, Rock. — One of Pennant's names for the Purple Sandpiper, which see.]

Sandpiper, Scallop-toed.—See Phalarope.

[Sandpiper, Schinz's. — Yarrell, iii. 79, the figure drawn from an American skin which Mr. Yarrell received from Mr. Audubon. The following is Mr. Yarrell's description of this specimen:—"The beak is straight and nearly black; the irides brown; the top of the head and back of the neck ash-brown, streaked with dusky; scapulars and feathers of the back ash-brown, some assuming a deep black colour in the centre, and becoming rufous on the edges; wing-coverts ash-brown, edged with greyish white; primaries dusky black, with white shafts; secondaries dusky brown, with minute tips of white; tertials dusky brown, margined with ash-grey; upper tail-coverts white; two middle tail-feathers pointed, longer than the others, and dark brown; the rest ash-brown; chin white; cheeks, sides of the neck, and upper part of the breast greyish white, speckled with dusky; axillary plume white; belly and under tail-coverts also white; legs, toes and claws almost black, tinged with green."—Yarrell, iii. 81. Three questions arise on reading this description and examining the figure—First, Is it a species distinct from the American form of Purre or Dunlin? Secondly, Has it occurred in Britain or Europe? And thirdly, Is there any distinction between this American bird and the European bird which has been called *Tringa Schinzii* by Brehm? In reference to the first of these questions, the bird is apparently distinct, and is named *Tringa Bonapartii* by American ornithologists. Secondly, as to its occurrence in Britain, Mr. Eyton, in his 'Fauna of Shropshire,' says that a specimen was killed near Stoke Heath; and Mr. Gould, to whom this specimen was lent, says:—"We have compared the individual with others killed in America, between which we could discover no difference; its shorter bill and white rump will at all times serve to distinguish it from the other European members of the group." M. Temminck also, referring to Gould, gives the *Tringa Schinzii* of Bonaparte as a European species on the authority of this figure. Hence it appears one British-killed example exists which Eyton, Gould, Temminck and Yarrell regard as distinct from *Tringa variabilis*. Thirdly, the *Tringa Schinzii* of Brehm and Naumann is, according to Temminck, a very different bird, and nothing more than a variety of the Dunlin. Temminck observes:—"Although the race mentioned below so closely resembles the Dunlin as

to be readily mistaken for that species, it differs nevertheless in its smaller size and in the slightly different coloration of the plumage. We cannot however adopt the views of Brehm and Naumann, who make of this bird a distinct species under the name of *Tringa Schinzii*: it is no more than one of those *sub-species* into which Brehm delights to divide many of our normal species." This "race," according to Temminck, visits in great number the island of Rugen and the western coasts of Schleswig and Holstein. In the 'Zoologist' for 1854 Mr. Rodd records, at p. 4512, that a Mr. Jenkinson writes him word that a specimen of *Tringa Schinzii* was shot during the first week of October, 1854, at St. Mary's, in Scilly, but he neither states whether the American *Schinzii* of Bonaparte or the European *Schinzii* of Brehm is the bird intended, nor whether Mr. Jenkinson is an ornithologist whose decision on so critical a point is deserving of confidence. A third example of *Schinzii*, so-called, exists in the Museum at Belfast, but its history is unknown: and a fourth is recorded in the 'Zoologist' for 1859, by Mr. Robert Kent, of St. Leonard's-at-Sea, as having been killed by himself on the 8th of October, 1857, when wading in a flooded meadow about two hundred yards from the sea, and directly opposite the village of Bexhill, in Sussex (see Zool. 6537). This specimen is in the collection of Mr. Gurney, of Catton Hall.]

Sandpiper, Sea.—We find this species in Latham's 'Synopsis' under the title of Selninger Sandpiper, where it is described thus:—Size of a Starling. Upper parts varied with grey and black; middle of the back tinged with violet; fore part of the neck dusky; under parts of the body white; tail dusky; the four outer feathers shortest, and edged with white; legs yellow. In Mr. Markwick's Catalogue of Birds of Sussex, given in the 'Linnæan Transactions,' we find the following description:—Length, from the tip of the bill to the end of the tail, eight inches and a half; breadth, from tip to tip of the wings when extended, fifteen inches and a half. Bill an inch and a quarter long, yellow from the base half-way, and the tips black; weight two ounces and a half. The head, neck, shoulders, and back are of a dark dusky ash-colour, with the edges of each feather on the back somewhat lighter; prime quill-feathers of the wings dusky, their shafts white, particularly the first; the secondary quills are lighter, with white tips, and the hindmost are almost white, having only one dusky spot. The tail is short, and consists of twelve feathers, of

which the four middlemost are of a dark dusky colour, and the four on each side gradually shorter, and of a pale ash-colour, edged with white. The under side of the neck and breast dusky, with the feathers on the breast fringed with white. The chin, lower part of the breast, belly, thighs, and vent white, except a few dusky spots on the sides, thighs, and vent. The legs and feet are yellow, naked above the knees, and the toes entirely divided, without the least connecting membrane between any of them. The claws are blackish. This gentleman adds that a small flock, consisting of ten or twelve, was seen on the coast near Bexhill on the 8th of December, two of which came under his inspection: Upon comparison of the above description with that of our Purple Sandpiper, which has been also given in the same volume of the 'Linnæan Transactions,' we can have but very little doubt but these two are one and the same species, allowing for the pencil of the different draftsmen, and the different manner in which naturalists are found to describe the plumage of birds. Whoever will be at the pains to compare the several descriptions together will find the leading characters agree, particularly the white feathers of the secondary quills and the tail; and much allowance is to be made for the variation in the colour of the bill and legs, which in twenty-four hours after death change materially, especially from an orange-yellow to a dull red or rufous-brown. We think it proper to pen these doubts, although we have given each a distinct place in this work. For the synonyms, see Purple Sandpiper.

Sandpiper, Selninger.—See Sandpiper, Purple. [Both Pennant and Bewick give this as a name for the Purple Sandpiper.]

Sandpiper, Shore.—See Sandpiper, Green.

[Sandpiper, Southern, of Latham, is the Knot in the change from the winter to the summer plumage.]

Sandpiper, Spotted.—[Yarrell, ii. 660; Hewitson, xc. 335.] *Tringa macularia*, Lin. Syst. i. p. 249, 7; Gmel. Syst. ii. p. 672; Ind. Orn. ii. p. 734, 29; Bewick, Br. Birds, ii. t. p. 111. *Turdus aquaticus*, Bris. v. p. 255, 20; Ib. 8vo, ii. p. 275. La Grive d'eau, Buf. viii. p. 140. Spotted *Tringa*, Edw. t. 277, f. 2. Spotted Sandpiper, Br. Zool. ii. No. 196; Ib. fol. 124; Arct. Zool. ii. No. 385; Lath. Syn. v. p. 179, 24; Lewin, Br. Birds, v. t. 173; Walc. Syn. ii. t. 149.—This is about the size of a Thrush; length eight inches. Bill dusky, reddish at the base; the upper part of the bird is

spots on the head, of a longish form; these increase on the neck to the back, where they are much larger; the rump plain; the shoulders and wings marked with the same colour, but the spots are transverse; the under side of the body is white, marked with dusky spots; the two middle tail-feathers greenish brown, the others white, crossed with dusky lines; legs dull flesh-colour. The female has none of the spots underneath, except on the throat. In the 'British Zoology' it is said that the spots on the upper parts are of a triangular form and black. This species does not appear to be noticed in this country since the time of Edwards; that which he took his description from was shot in Essex. Said to inhabit North America, and to breed in Pennsylvania and Hudson's Bay.

SUPPLEMENT.—This is amongst the few British Sandpipers we have not been fortunate enough to have met with: but as Mr. Bewick has given the figure of one that was shot in the month of August, on the moors near Bellingham, in Northumberland, the description of which is more full than what appears in the former part of this work, we shall take the liberty to transcribe it. Length eight inches. "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." [In the 'Zoologist' for 1848 Mr. Higgins relates, at p. 2147, that he saw a specimen of the Spotted Sandpiper on the beach at Bridlington Quay, in Yorkshire, on the 2nd of March, 1848: it was excessively tame, and allowed him to approach within fifteen yards. In the volume for 1849 Sir William Milner records, at p. 2455, that a beautiful adult female was shot just to the north of the pier at Whitby, on the 29th of March, 1849. Mr. Higgins mentions a similar occurrence at p. 2456, but whether both records refer to one specimen or not seems uncertain: in the same volume, at p. 2499, Mr. Duff records that a specimen was shot

early in April, 1849, on the margin of the river Wear, a little to the west of Bishop's Auckland. The claim of this species to a place in the British list is very slender. The Spotted Sandpiper of Bewick seems to be the Common Sandpiper of this work.]

Sandpiper, Striated. — See Sandpiper, Purple.

Sandpiper, Swiss. — See Sandpiper, Grey. — APPENDIX. — *Tringa Helvetica*. — It will be observed that in the preceding pages we have not scrupled to bring the Swiss and the Grey Sandpipers together, as one and the same species, for which our reasons have been sufficiently detailed. We had indeed almost despaired of detecting the *Tringa squatarola* in this country so late in the season as to have allowed it to assume that plumage in which it was, by Linnæus, and by all succeeding writers since the time of that great physiologist, considered as a distinct species, and described under the title of *Tringa Helvetica*. By some unusual cause, however, several of this species were detained so long upon our shores in the spring of the year 1812, that no less than six or seven were bought in the London market on the 12th of May, just as they had arrived out of Norfolk. Several of these birds came under the inspection of Mr. Foljambe, who has kindly informed us they were greatly dissimilar in plumage, by possessing more or less black. Of one which was the blackest, and which proved to be a male, Mr. Foljambe had a drawing made, by that eminent artist Mr. Edwards, with which we were favoured, together with a full and correct description. It should appear (as was natural to suppose in birds subject to change their plumage with the season) that either all these birds had not arrived at perfection in their summer dress, or that age or sex occasioned such variation. For the benefit of the British Ornithologist, we transcribe the more essential part of Mr. Foljambe's accurate description of a male specimen, apparently in its full courting attire. The length about eleven inches and a half: irides hazel: the bill nine-eighths of an inch long, and of a black colour: forehead white: crown and back of the head dirty white, confusedly spotted with black; over the eye a white line extending to the back of the neck, which last is of a greyish mixed colour: at the base of the bill, for an extremely narrow space, is black, which, running backwards, encompasses the eyes; the back and scapulars spotted with black and cream-colour, the margins of the feathers being of the latter colour: the wing-coverts similarly marked with black and

white, but the white is more predominant: spurious wing black: greater quills deep dusky: lesser quills the same, slightly margined with cream-colour: rump and upper tail-coverts edged like the last: the tail white, with several transverse bars of dusky: the lower part of the cheeks, throat, sides of the neck, breast, and belly, as far as the thighs, black; but at the sides of the neck the black and white feathers are irregularly blended: the thighs, vent, and under tail-coverts white: the legs, toes, and claws as usual in the Grey Sandpiper. It is by no means singular that this species of *Tringa* should partly change its plumage in the spring and autumn; the same is observable in the Turnstone, in one state of which that bird has been described as a distinct species, under the title of Hebridal Sandpiper. The Dunlin changes, in the spring, from pure white beneath to more or less black. The Dotterel and Ring Plover have also a partial change, becoming blacker in the spring: numerous other instances might be mentioned. [This is the Grey Plover in summer plumage. See Plover, Grey.]

[Sandpiper, Temminck's. — Temminck's Stint, *Yarrell*, iii. 74; *Hewitson*, ci. 362. *Tringa Temminckii*, "*Leisler, Nachr. zu Bechst. Naturg. Deut. Heft. i. 65*;" *Temm. Man. d'Ornith.* ii. 622; *Selby, Illus. Brit. Ornith.* ii. 144; *Gould, Birds of Europe*. Little Sandpiper (*Tringa pusilla*), *Montagu, Supp. to Ornith. Dic.*, as reprinted at p. 286, which description it was thought best to leave in its legitimate place, although ornithologists are agreed that the present species is intended by Montagu. — ADULT: "Forehead white, speckled with pale hair-brown. Between the bill and eyes is a dusky streak, and over the eyes an indistinct whitish line. Chin and throat white, with a few minute brown specks. Crown, nape of the neck, and breast ash-grey, spotted with hair-brown and tinged with wood-brown. Back, scapulars, and wing-coverts hair-brown tinged with olive, several black feathers with reddish margins being interspersed, indicating the commencement of the vernal change. Quills deep hair-brown, glossed with olive-green. Tail cuneiform; the middle feathers deep hair-brown, and the outer ones on each side white. Belly, vent, and under tail-coverts white. Legs greenish grey, with the tarsus about five-eighths of an inch long. Bill nearly the same length, black. In the perfect nuptial dress, the whole of the feathers of the upper parts are black in the centre, deeply margined with reddish brown, and the middle tail-feathers also become edged with reddish white. Young: In this state of feather the fore-

head, throat, belly, vent, and under tail-coverts are white. Over the eyes is a streak of white, with specks of ash-grey. The nape, sides of the neck, and breast are ash-grey, tinged with pale wood-brown. Back, scapulars, and wing-coverts hair-brown, each feather being edged with a double zone of dark hair-brown and white, similar to the immature Knot. Quills and middle tail-feathers edged with white. Legs and bill paler than in the adult bird." —*Selby*, ii. 146. This reputed species is not nearly so abundant as its near ally, the Little Stint, and it is difficult, if not impossible, to assign the exact localities to each, since, in the first place, many authors, of whom the very cautious Montagu is one, believe them identical; while others, as the equally cautious Selby, believe them distinct. Records by collectors just commencing the study can therefore scarcely be depended on, however confidently they may be worded. That enterprising and indefatigable ornithologist, Mr. Wolley, found this bird breeding in Norway: he says, "One nest which I found was a short stone's throw from a cottage which children were playing about in all directions; another was only a pace or two from a spring from which women drew water every day, and passers-by often stopped to drink. The nest is very simple; a few short bits of hay in a little saucer-shaped hollow, placed amongst thin grass or sedge, generally not far from the water's edge, but sometimes in the middle of meadows."]

Sandpiper, Wood. — [*Yarrell*, ii. 648; *Hewitson*, xc. 330.] *Tringa Glareola*, *Lin. Syst.* i. p. 250, 13, β .; *Faun. Suec.* No. 184; *Gmel. Syst.* i. p. 677; *Ind. Orn.* ii. p. 730, No. 13. **Wood Sandpiper**, *Arct. Zool.* ii. p. 482, G.; *Lath. Syn.* v. p. 172, 13. — This species is about the size of a Jack Snipe, but of a more slender form. Length, from the apex of the bill to the end of the tail, nine inches; to the end of the toes eleven inches and a half; weight two ounces and a quarter; bill not quite an inch and a quarter long, the base half dusky green, the other black, slender, a trifle bending downward at the point, upper mandible rather the longest, tapering to a blunt point; irides dusky. From the bill to the eye a dusky streak, above which, on each side, is white passing over the eye; the middle of the forehead and crown dusky black, streaked with dirty white; coverts of the ears dusky; chin and throat white; neck dusky, closely and finely streaked with dirty white, which gives it a cinereous hue, fore part lightest; breast, belly, sides, vent, and under tail-coverts spotless white; the feathers on the back

dusky black, with a purplish gloss, marked with a dull yellowish spot on each side the webs near the tip; scapulars the same, with several spots on the margins; the coverts and tertials of the wings the same, but without the purplish gloss, and the spots inclining more to white on the coverts; the smaller coverts on the ridge of the wing plain dusky black; primary and secondary quills, and first row of greater coverts immediately impending them, black, slightly tipped with white, except three or four of the first feathers; the shaft of the first quill is white; upper part of the rump black, with a few fine streaks of white; lower rump and upper tail-coverts white, those next the tail spotted with black; the tail consists of twelve feathers, the middlemost rather the longest; these are barred with black and white alternately, a little oblique; on the outer webs are eight black bars, on the inner webs six; the next feather has six bars on the outer and four on the inner web; the third has five and three bars in the same manner; the fourth feather has five and one; the fifth and outer feathers are only spotted on the margin of the outer web, with one spot on the inner web of the former; the latter is plain white on the interior web; the black bars on the middle feathers do not exactly correspond, those on the inner webs rise higher at the shaft, and often run into the superior bar on the outer web; the legs are of an olive-green, long and slender, measuring three inches from the knee to the end of the middle toe, and bare of feathers one inch above the knee; the outer toe connected by a membrane as far as the first joint. There is little doubt but this is the *Tringa Glareola* of Linnæus. It cannot be confounded with the *Tringa Ochropus*, or Green Sandpiper, by those who have had an opportunity of comparing them. It differs materially from that bird by the superior length of the legs; the plumage too is very different when compared; nor has it any of those singular white marks under the wings, as in the Green Sandpiper, representing the letter V. The tail also in that bird is nearly even at the tip, and is only partly barred; whereas this is barred quite to the base, is rather cuneiform, and the feathers more pointed than in that bird. In the specimen now before us, shot on the coast of South Devon early in the month of August, the outer feather of the tail on each side is longer than the two succeeding ones, and equal in length to the fourth, from which they gradually increase in length to the middle ones, which exceed the outer by a quarter of an inch. Whether this singular form of the tail is to be depended on as permanent,

future experience must determine, as at this season, when birds are moulting, such a circumstance cannot be fully relied on, being well known that birds always lose the corresponding feathers of the tail and wings nearly at the same time. Mr. Markwick, in the first volume of the 'Linnaean Transactions,' has given a figure of the Green Sandpiper (*Tringa Ochropus* of Linnaeus), which he considered as the Glareola, or Wood Sandpiper. That gentleman, however, in the second volume of the same work, acknowledges the possibility of his bird being the Green Sandpiper, but suspects the Wood Sandpiper to be a mere variety of that bird. This bird, however, is perfectly distinct from that or any other species that has come within our knowledge, should it not prove to be the Glareola. The few authors who have described this species are silent with respect to the length of the legs, which in the bird here given are singularly long in proportion to the body, and by far superior in length to any species of Sandpiper of equal size we are acquainted with. This circumstance, however, may have been overlooked in a skin or ill-preserved specimen. In the markings our bird seems to correspond with that little the few authors state who have described the Glareola, except that they all make the back to be brown; but as we are aware of the difficulty in conveying the idea of colour by description, and the near approach of some kinds of brown to dusky, allowance may be made. The sex and season of the year in which a bird is killed must also be considered. This was a male. The Wood Sandpiper is said to inhabit the moist woods of Sweden.

SUPPLEMENT.—It will be observed under the article of Sandpiper, Green, that we remark the very great difficulty under which Ornithologists labour with respect to identifying some of the Linnaean species: and that notwithstanding such good authority as that of Dr. Latham for connecting the Linnaean *Tringa glareola* and *Tringa Ochropus*, we are inclined to consider that species which we described in the former part of this work to be the true glareola (being equally probable), especially as we cannot assign it any other place. See Sandpiper, Green, and Wood.

Sandpiper, Yellowlegged.—*Appendix.*—*Tringa Flavipes.*—This species is about the size of the Grey Sandpiper; length eleven inches and a half. Bill one inch and a half long, black half way from the end, base yellow; irides light yellow. Head and neck cinereous, streaked with dusky; the upper parts of the body cinereous-brown, the middle of each feather dusky; wing-coverts the same; beneath the

spurious wing a small patch of white; primary quill-feathers dusky, the first with a white shaft; secondaries white half way from their tips; the under parts white; rump the same; the tail and its upper coverts cinereous-brown; under tail-coverts speckled with dusky; legs orange-yellow. This bird was bought in the market at Bath in the winter, a drawing of which was taken by Mr. Robins of that place, painter of Natural History, from whom we obtained the description, with a drawing. It appears to be a nondescript species, or at least is essentially different from any one of the genus hitherto described. [This appears to be the young of the Ruff.]

[**Sandpiper, Yellowshanked.**—*Yarrell*, ii. 637. *Scolopax flavipes* (Yellow-shanks Snipe), *Wilson, Amer. Ornith.* iii. 83, *Jamison's Edition*. *Totanus flavipes*, *Rich. & Swains. Faun. Bor.-Amer.* 390; *Yarrell*, l. c.—"Length of the Yellow-shanks ten inches; extent twenty; bill slender, straight, an inch and a half in length, and black; line over the eye, chin, belly, and vent white; breast and throat gray; general colour of the plumage above dusky brown-olive, inclining to ash, thickly marked with small triangular spots of dull white; tail-coverts white; tail also white, handsomely barred with dark olive; wings plain dusky, the secondaries edged, and all the coverts edged and tipped, with white; shafts black; eye also black; legs and naked thighs long and yellow; outer toe united to the middle one by a slight membrane; claws a horn-colour. The female can hardly be distinguished from the male."—*Wilson*, iii. 83. This American bird is introduced by Mr. Yarrell on the faith of a man whose name is not given, but who is said to have shot a single specimen at Misson, near Bawtry; it was sold to a bird-stuffer, the late Hugh Reid, of Doncaster, and by him to Sir William Milner. It has little claim to a place in the British list.]

[**Sandwich Tern.**—See Tern, Sandwich.]

[**Savi's Warbler.**—See Warbler, Savi's.]

[**Sawbill.**—A provincial name for the Red-breasted Merganser.]

Scale-Drake.—See Shieldrake.

[**Scallop-toe and Scallop-toed Sandpiper.**—These names are applied indifferently to the two species of *Phalarope*, which see.]

[**Scarfe.**—See Shag.]

[**Scaup.**—See Duck, Scaup.]

[Scaup, American. — See Pochard, Paget's.]

Scaurie or Scorey. — See Gull, Herring; and Tarrock.

[Schinz's Sandpiper. — See Sandpiper, Schinz's.]

[Sclavonian Grebe. — See Grebe, Sclavonian.]

Scobby. — See Finch, Chaf.

Scolder. — See Oyster-catcher.

Scooper.
[Scooping Avocet.] } See Avocet.

[Scops Eared Owl. — See Owl, Little Horned.]

Scoter, [Common. — Yarrell, iii. 319; Hewitson, cxvi. 421.] *Anas nigra*, Lin. Syst. i. p. 196, 7; Gmel. Syst. ii. p. 508; Ind. Orn. ii. p. 848, 43; Bris. vi. p. 420, 28, t. 38, f. 2; Ib. 8vo, ii. p. 471; Bewick, Br. Birds, t. p. 325. *Anas niger minor*, Raii Syn. p. 141, A. 5; Will. p. 280, t. 74. La Macreuse, Buf. ix. p. 234, t. 16. Scoter, or Black Diver, Br. Zool. ii. No. 273; Ib. fol. 253; Arct. Zool. ii. No. 484; Sup. p. 76; Will. Angl. p. 366, t. 74; Lath. Syn. vi. p. 480, 36; Lewin, Br. Birds, vii. t. 249; Walc. Syn. i. t. 59. White-throated Duck, Br. Zool. t. 98; Will. Orn. p. 367. Provincial: Black Duck. — This species of Duck weighs about three pounds; length twenty-one inches. The base of the bill is furnished with a knob, which, with the bill, is black, divided down the middle with a line of orange, which spreads over half the bill after quitting the knob, but does not reach the tip by half an inch; darkest on the knob; irides dusky; eyelids yellow. The plumage is wholly black, glossy about the head and neck; the legs and feet dusky; the tail is cuneiform, and consists of sixteen pointed feathers; feet long and broad. It is said the knob is in some of a red colour, in others green. The female has no knob at the base of the bill; the plumage more dull, with sometimes a mixture of grey on the chin and breast; both sexes want the nail at the end of the bill, usual in this genus. These birds are great divers, and mostly reside at sea distant from the shore; but are only seen with us in the winter season, at which time they are plentiful on some parts of the coast of France, where they are taken by nets as they are diving after shell-fish, which seems to be their principal food. We received two taken by accident in the same manner off the coast of South Wales.

Is never observed to visit our rivers or fresh-water lakes. It is found in great plenty in most of the northern parts of the world, and particularly in the great lakes and rivers of Siberia, where it probably breeds. The male of this species has nothing remarkable in the trachea or wind-pipe.

SUPPLEMENT. — The bill of the Scoter is remarkably compressed, and is destitute of that part, usual to most of the genus, termed the nail. The branchi or divarications of the trachea, in the male, are larger in diameter than any part of the windpipe; these suddenly decrease from a shoulder near their union with the lungs, and their interior sides are more membranaceous, which, contracting, forms a longitudinal sulcus in each. A female now before us weighed thirty-three ounces; length nineteen inches. Bill wholly black, and destitute of the knob, but along each side of the upper mandible is a slightly crenated groove, as in the male. The crown of the head and whole upper parts of the body, including the wings and tail, are dusky brown, with an olivaceous tinge in some particular points of view: the chin, cheeks, throat, and sides of the upper part of the neck, sullied white, freckled with brown; the large bed of white is divided by a brown list, running down the back of the neck: the scapulars are slightly tipped with cinereous: the whole under parts are mottled with dirty white and brown, the points of the feathers being of the former colour: the tail in shape like that of the male: the fore part of the legs and the toes dull olivaceous-yellow; the hind part and webs dusky. Upon dissection there was no enlargement of the branchi in this sex. The gizzard was remarkably large, muscular, and strong, for the purpose of triturating the stronger shells, the animals of which are its principal food; in this we observed many large fragments of that species of thick Testacea called *Macra solida*. In Willughby a variety of the female is described, which had the neck and head, on both sides, as far as the eyes, white. Another variety of this sex is figured in the 'British Zoology,' plate 98, which is intitled the White-throated Duck, but has no corresponding description. These birds might be caught with as much ease, and perhaps in as great abundance, on some parts of the British coast, as they are said to be in France, where, as Buffon informs us, they are attracted by a small bivalve shell-fish, called *Vaimeaux*, which abound on the northern coast of that country. In a religious point of view these birds are not esteemed flesh, but fish, and consequently are in great request to vary the repast on

a fast-day in a Roman Catholic country. Such a stimulus would soon supply our markets with them, but being equally rejected by the poor as well as the rich, on account of their fishy flavour, which in France stamps their value, no arts are in practice with us to capture them: some, however, are accidentally taken in the fishermens' nets. Mr. Anstice informs us that the Scoter is occasionally taken in the river Bry or Brue (which runs through Bridgewater, in Somersetshire, and disembogues in the Bristol Channel) in winter; but much more commonly in the moulting season, having cast so many feathers of their wings as to render them incapable of flight; in this state they frequently get within the nets in shallow water, are surrounded at the ebbing tides, and cannot escape. The loss of so many quill-feathers as to render the wings incapable of performing that office Nature intended, is wholly confined to aquatic birds; and of some of those we have most extraordinary accounts. It is said that vast numbers of Geese, and even of the Hooping Swans, are taken in Iceland and other northern parts (owing to this defect), by the natives, in the month of August: but we may rather conclude that most of these are young birds, not yet capable of flying, for it is well known that the common domestic Geese and Ducks never throw out their quill-feathers till they are full-grown.

Scoter, Double. } See Duck, Velvet.
[Scoter, Velvet.]

[Scoter, Surf. — Yarrell, iii. 324. *Anas perspicillata* (Linn.), *Wilson, Amer. Ornith.* iii. 215, *Jameson's Edition*; *Temm. Man. d'Ornith.* ii. 853. *Oidemia perspicillata*, *Selby, Brit. Ornith.* ii. 335; *Yarrell, Br. Birds*, iii. 324. — "Bill, from the angle of the forehead to the tip, only one inch and a half long; and from the posterior part of the lateral tubercles two inches and three-quarters in length. The front part of the bill orpiment-orange; the lateral swollen part having a large patch of black, in front of which is another of a pearl-grey colour. The lamellæ of the bill coarse and widely set. Irides cream-white. The whole of the plumage glossy ink-black, with the exception of an angular patch of white upon the forehead, and another on the back part of the neck. Legs and toes reddish orange. The female is of a sooty brown, lightest about the neck and belly. The prominences on the bill are small, and of a dusky colour." — *Selby*, ii. 336. Dr. Fleming and Sir William Jardine mention the occurrence of this American Duck in Orkney and Shetland. Mr. Gould, in his 'Birds of

Europe,' says that a specimen has been killed in the Firth of Forth. Mr. Yarrell mentions, on the authority of Dr. J. A. Smith, that a specimen has been killed in Musselburgh Bay; and Mr. Bartlett records, in the 'Naturalist,' iii. 420, that he received a recently shot specimen to stuff. In the 'Zoologist' for 1848 Mr. Dunn records, at p. 2067, that he saw, on three following days, a fine male of this species in Rona's Voe, Shetland, but failed to get a shot at it. In the volume for 1854 Mr. Thompson records, at p. 4255, that a female was killed in December, 1853, between Weymouth and Purton Coastguard Station. In the volume for 1860 Mr. Alwin Bell relates, at p. 7274, that he shot, on the rocks at Gristhorp, near Scarborough, a mature specimen of this Duck, on the 25th of October, 1860. In the volume for 1865 Mr. Rodd has, at p. 9794, the following interesting note on the same species: — "A bird of this species, in a very beautiful state of plumage, was captured, a few days since, by a boy at Scilly, in a disabled state, and it has been sent over to-day, in the flesh, for preservation by Mr. Vingoe, who brought it, very civilly, for my inspection immediately on its arrival. I had an opportunity, therefore, of examining it carefully before it was skinned, and before the brilliant hues of its curiously constructed bill had apparently in the least faded. The body was much emaciated, and how the poor bird got down to Scilly is a mystery: from the intense black of its plumage, its strongly developed tubercular enlargements on each side of the posterior part of the upper mandibles, the clearly definite division of white between these and the brilliant Seville-orange coloured anterior portion of the upper mandible, ending in a pearl-gray nail, I should think that it is a very adult bird; the legs are bright red, with the interdigital membranes black." This is a common North-American species, and has but a slender claim to admission into the British list.]

Scout. — See Guillemot, Foolish; and Auk, Razorbilled:

Scoutinallen, or Scoutinaulan. — See Gull, Arctic.

Scraber. — See Guillemot, Black.

Scraye. — See Tern, Common.

Screamer. — See Swift.

Screech. — See Thrush, Missel.

Screech Martin. — See Swift.

[Screech Owl.—See Owl, White.]

Sea Crow.—See Auk, Razorbill.

Sea Dotterel.—See Turnstone.

[Sea Eagle.—See Eagle, Cinereous.]

Sea Hen.—See Guillemot, Foolish.

Sea Mall. }
Sea Mew. } See Gull, Common.

Sea Parrot.—See Puffin.

[Sea Pheasant.—See Duck, Pintail.]

Sea-Pie [Piet or Piot.] — See Oystercatcher.

[Sea Swallow.—See Tern, Common.]

[Sea Titling, of Fleming, is the Rock Pipit of Yarrell. See Lark, Rock.]

Sea Turtle.—See Guillemot, Black.

Sedge-Bird. }
[Sedge Warbler.] } See Warbler, Sedge.

[Selninger's Sandpiper. — See Sandpiper, Purple.]

Serula.—See Merganser, Red.

Shag. — [Yarrell, iii. 490; Hewitson, cxxx. 473.] *Pelecanus Graculus*, Lin. *Syst.* i. p. 217, 4; *Gmel. Syst.* ii. p. 574; *Ind. Orn.* ii. p. 887, 15; *Bewick, Br. Birds*, ii. t. p. 390. *Corvus aquaticus minor*, *Raii Syn.* p. 123, A. 4; *Will.* p. 249, t. 63. *Phalacrocorax*, *Bris.* vi. p. 516, 2; *Ib.* 8vo, ii. p. 496. Petit Cormoran, ou Nigaud, *Buf.* viii. p. 319. Shag, or Crane, *Will. Angl. p.* 330, t. 63; *Lath. Syn.* vi. p. 598, 14; *Lewin, Br. Birds*, vii. t. 264; *Walc. Syn.* i. t. 93; *Pult. Cat. Dorset.* p. 21. Provincial: Skart; Scarfe; Green Corvorant. — This species of Pelican is in weight about four pounds; length twenty-nine inches; breadth three feet ten inches. The bill dusky, near four inches long; sides of the mouth and chin bare yellow skin, minutely speckled with black on the latter. The whole bird appears, at a little distance, to be black, but on nearer inspection the head and neck, upper breast and rump, are found to be glossed with green; the feathers are somewhat pointed on the upper part of the back, scapulars, and wing-coverts, and beautifully glossed with purple, violet, and green, each feather regularly bordered with velvet-black; the under parts of the body less glossed with green; legs dusky black; middle claw serrated; the feathers next to

the bare skin on the chin are usually white. The female weighs about three pounds and a quarter; length twenty-seven inches. The feathers on the upper parts are not so dark and glossed with the colours of the male; but the margin of the feathers on the scapulars and coverts are black; the under parts are dusky and grey mixed; the legs and toes of a dusky colour, lightest on the fore part; the irides of both sexes green, and the tail is composed of twelve stiff feathers, dusky, dashed with cinereous. The above description is taken from the birds shot from their nest; but we have seen many others of a lighter colour, both above and below; and in some the belly is of a dirty white, mixed with brownish ash-colour; all of which had twelve feathers in the tail, and their weight did not exceed four pounds two ounces, which is the material distinction between this and the Corvorant, which weighs six or seven pounds, and the tail invariably composed of fourteen feathers. The habits of these two species somewhat differ. This is never known to visit our fresh-water rivers, which the Corvorant frequently will, and in some places make their nest in trees, on which they often perch by the sides of rivers. The Shag keeps wholly to the salt water, and breeds on our rocky coasts, where it makes a nest of sticks and sea-weed, and lays two or three white eggs of a long oval; their weight about an ounce and three-quarters. We have counted no less than thirty Shags' nests on a small rock a little detached from the shore, from which place we took some eggs and young birds. These birds, by reason of their weight in proportion to their feathers, swim deep in the water, showing only their head, neck, and back; are expert divers, and devour a prodigious quantity of fish. Linnaeus seems to suspect this bird may prove to be the young of the Corvorant; but the reverse is now proved beyond doubt. Mr. Pennant mentions what we consider as a variety with a crest on the back of the head two inches long; in every other respect it exactly corresponds with the above description of the male bird.

SUPPLEMENT. — We have been assured that the Shag was shot as far inland as Newbury, in Berkshire; a very rare occurrence for it to desert salt water, but probably enticed so far by that noble river the Thames, into which the Kennet flows.

Shag, Crested. — *Pelecanus cristatus*, *Gmel. Syst.* ii. p. 575, 21; *Ind. Orn.* ii. p. 888, 16; *Fauna Groenl.* No. 58; *Brun.* No. 123. *Procellaria cristatus*, *Mull. Zool. Dan. Prodr.* No. 150. Shag, *Br. Zool.* ii. No. 292, t. 102; *Ib.* fol. 159. Crested Corvorant, *Arct. Zool.* p. 583, A. Crested Shag,

Lath. Syn. vi. p. 600, 15. — This corresponds in every respect with the Common Shag, except that it has the feathers on the back of the head elongated into a sort of pendant crest. We are inclined to believe it only a variety occasioned by age, although Mr. Pennant and Dr. Latham, as well as some other authors, make it a distinct species.

SUPPLEMENT. — It is not surprising that two birds so similar in plumage and general appearance, as well as in habits, as the Shag and the Corvorant, should be frequently confounded. This we find to have been sometimes the case in their plain or uncrested state: so also these birds have been occasionally confounded in their crested state; but in the crested varieties there are stronger marks of distinction about the head than in their common plumage, and the usual characters equally obvious, viz., the superior size, as well as the greater number of feathers in the tail of the Corvorant. The Crested Shag seems to have been considered as distinct by some of the northern naturalists. Muller and Fabricius have described it, and Mr. Pennant first introduced it into the catalogue of British birds. Fabricius has considered this bird, when destitute of the crest, as the young of the Corvorant. That the Corvorant and the Shag are distinct species no one will at present deny; and that the Crested Corvorant is only an accidental variety of the Common (Pelecanus carbo), we have given abundant proof in the account of that bird. With this knowledge, therefore, that the Common Corvorant occasionally varies its plumage in more than that of throwing out a crest, there is good reason for concluding that the Shag is equally subject to a similar variation. In the London Museum there are two Crested Shags, said to be the two sexes: an engraving of one was sent to us by Mr. Bullock, on which is the following note, "Killed by me on the Bass Island, 9th of May, 1807, a female and breeding at the time." This bird is in every respect like the Common Shag, but that the feathers on the back of the head are a little loose, elongated, and pendant; and on the crown is a tuft of erect feathers. It has no white about the face, nor on the thigh, as in the crested variety of the Corvorant; nor fourteen feathers in the tail, the leading character of that bird in every variety. Under all these circumstances, whatever may be the existing cause of such an occasional luxuriance of growth in the feathers of the head, not a doubt exists of the Crested and Common Shag being of the same species, and should have the whole of their synonyms united. It should seem the Shag is subject to vary

in the form of its occasional crest, for we are told by some that the crest is constituted by a long tuft of dusky feathers on each side the head, reaching beyond the crown. [The Crested Shag is the Common Shag in nuptial plumage: both this and the Common Corvorant have crests at that season.]

Shearwater, [Manx. — *Yarrell*, iii. 654; *Hewitson*, cxliv. 514.] *Procellaria Puffinus*, *Lin. Syst.* i. p. 213, 6; *Gmel. Syst.* ii. p. 566; *Ind. Orn.* ii. p. 824, 11; *Bris.* vi. p. 131, 1; *Ib.* 8vo, ii. p. 395. *Puffinus Anglorum*, *Raii Syn.* p. 134, A. 4; *Will.* p. 252. *Avis Deomedia*, Shearwater, *Raii Syn.* p. 133, 1, & A. 2; *Will.* p. 251; *Ib. Angl.* p. 332, 334. *Le Puffin*, *Buf.* ix. p. 321. *Manx Puffin*, *Edw.* t. 379; *Will. Angl.* p. 333. Shearwater Petrel, *Br. Zool.* ii. No. 258; *Ib.* fol. 146, t. M.; *Arct. Zool.* ii. No. 462; *Lath. Syn.* vi. p. 406, 11; *Sup.* p. 269; *Lewin, Br. Birds*, vi. t. 218; *Walc. Syn.* i. t. 90; *Pult. Cat. Dorset.* p. 19. — This species of Petrel weighs seventeen ounces; length fifteen inches. The bill is an inch and three-quarters long, yellow, tipped with black. The head and whole upper side of the body, wings, tail, and thighs black; the under parts, from chin to vent, white; the legs are weak and compressed; whitish before, and dusky behind. This bird does not make its appearance often in the south, but is found in the Orkney Isles and in the Calf of Man in the breeding season, where they take possession of rabbit-burrows or other holes, and lay one white egg, blunt at each end. The young are fit to take in August, when great numbers are killed and barrelled with salt, which the inhabitants boil and eat with potatoes. Are said to make their appearance first in February, but not to settle at the breeding place till April, and depart by the beginning of September. Are called in the Isle of Man, Manks Puffin; in the Orkneys, Lyre.

SUPPLEMENT. — We are assured by Mr. Fleming that this species appears in Zetland only in winter; and that in addition to the Zetlandic name of Lyre, Lyar or Lyrie, it has acquired the Norwegian names of Skrabe or Skraap.

[Shearwater, Cinereous, of Selby, Jenyns, Eyton and Gould, is the adult of the Greater Shearwater.]

[Shearwater, Dusky, of Eyton and Jenyns, is the young of the Greater Shearwater.]

[Shearwater, Greater. — *Yarrell*, iii. 647. *Puffinus major*, *Temm. Man. d'Ornith.* iv. 507, and *Yarrell*, l. c. *Puffinus cinereus*,

Selby, Brit. Ornith. ii. 528; *Gould, Birds of Europe*, Pt. 19. *Procellaria fuliginosus*, *Jenyns, Brit. Vert.* p. 285, and *Puffinus fuliginosus*, *Eyton, Rarer Br. Birds*, p. 49, are the same bird in a somewhat different state of plumage, probably the young bird.—"Bill, from the forehead to the tip, one inch and three-quarters long, slightly recurved, with the dertrum arched and strongly hooked; nasal tubes obliquely truncated and open in front. Tip of the lower mandible bent down, and following the curve of the upper one. Head, back part of the neck, and the upper plumage blackish brown, with the margins and tips of the feathers of the scapulars lighter. Throat, lower part of the neck, and the whole of the under plumage deep ash-grey, with a tinge of broccoli-brown. Quills and tail brownish black. Legs having the outer part of the tarsus deep grey; the inner part and webs yellowish. Tarsus two inches and one-eighth long. Middle and outer toes two inches and a half in length." *Selby*. ii. 529. Mr. Selby received a specimen of this bird from the coast of Northumberland; Mr. Yarrell two others from Cornwall, and the late Mr. Strickland two others from the mouth of the Tees, as recorded by Mr. Gould in his 'Birds of Europe.' The late Mr. Mitchell, as recorded by Mr. Yarrell, says, "The adult bird pretty regularly every autumn on the Cornish coast, though not in equal numbers." Mr. Thompson, in his 'Natural History of Ireland,' mentions two specimens communicated to him by the late Robert Davis, of Clonmel, a most accomplished and observant naturalist, to whom we are indebted for the discovery of the Spotted Eagle and many other rarities. In the 'Zoologist' for 1848 Sir William Milner records, at p. 2027, that a specimen was taken alive in a fisherman's net at Robin Hood's Bay: the date of the occurrence is not mentioned. In the volume for 1851 Mr. E. L. King records, at p. 3234, the capture of a specimen of this bird at Lynn, in Norfolk; it was asleep on the water in the lower part of the river Ouse: it was taken home alive, and fed on raw beef and sprats, which it devoured greedily; it generally slept during the day, but was lively and active at night: Mr. King's account and description of this bird is perhaps the best we have.]

[*Shearwater*, Manx, of *Selby*, *Jenyns*, *Gould* and *Yarrell*, is the *Shearwater* of this work.]

[*Shearwater* Petrel, of *Hewitson*, &c., is the *Shearwater* of this work.]

[*Shelder*.—See *Oystercatcher*.]

Shell, or *Sheld-Apple*.—See *Crossbill*.

Shelly, or *Shell-Apple*.—See *Finch*, *Chaf*.

Shieldrake.—[*Yarrell*, iii. 240; *Hewitson*, cxii. 397.] *Anas Tadorna*, *Lin. Syst.* i. p. 195, 4; *Gmel. Syst.* ii. p. 506; *Ind. Orn.* ii. p. 854, 56; *Raii Syn.* p. 140, A. 1; *Will.* p. 278, t. 70, 71; *Bris.* vi. p. 344, 9, t. 33, f. 2; *Ib.* 8vo, ii. p. 477; *Lath. Syn. Sup.* ii. p. 353; *Lin. Trans.* iv. p. 117, t. 15, f. 8, 9 (trachea); *Bewick, Br. Birds*, ii. t. p. 341. *Tadorna*, *Buf.* ix. p. 205, t. 14. *Shieldrake*, *Br. Zool.* ii. No. 278; *Ib.* fol. 154, t. Q.; *Arct. Zool.* ii. p. 972, D.; *Will. Angl.* p. 363, t. 70, 71; *Albin*, i. t. 94; *Hayes, Br. Birds*, t. 28; *Lath. Syn.* vi. p. 504, 51; *Sup.* p. 275; *Don. Br. Birds*, t. 71; *Ost. Men.* t. 51; *Lewin, Br. Birds*, vii. t. 248; *Walc. Syn.* i. t. 57; *Pult. Cat. Dorset.* p. 20. Provincial: *Bargander*; *St. George's Duck*; *Burrow Duck*; *Pirennet*; *Sly-goose*; *Sheldrake*, *Skeldrake* or *Scale-drake*; *Skeel-goose*, or *Skeel-duck*; *Skeeling-goose*.—This elegant species of Duck weighs about two pounds and a half, or rather more; length two feet three inches. The bill is red, and turns upwards, furnished with a small knob at the base; the nail at the tip black; irides dusky. The head and part of the neck greenish black; the rest of the neck, back, rump, and upper tail-coverts white; on the breast is a broad band of a bay-colour, growing narrower as it passes backwards under the wings, and encloses the lower part of the neck behind; through the middle of this band on the breast runs a black list, which spreads very broad at and near the vent; the scapulars black; coverts of the wings white, except some of the outer ones, which are black; the greater quills black; the four next the body bay on their exterior webs; the ten next glossy green, tinged with copper, forming a speculum on the wing; the under coverts of the tail ferruginous; tail consists of fourteen white feathers, tipped with black; legs reddish flesh-colour. Both sexes are nearly alike. The *Shieldrake* is not uncommon on many parts of our coast, and remains with us all the year. The female makes choice of a rabbit-burrow to deposit her eggs in, which are numerous, sometimes as many as sixteen, and which she covers with down from her own body. The nest is generally near the water where she leads her young soon after they are hatched. It is rarely met with remote from salt water; but if the eggs are taken and hatched under a hen, the young become tame, and may be kept in ponds; but it rarely breeds in confinement. A nobleman informed me he had one instance only in several years, although they had the range of a very extensive canal. The

female brought out nine young ones. The eggs are white, about the size of those of a Common Duck. It is very tenacious of its young, and is said will carry them from place to place in its bill; and indeed it is probable when the young are hatched high above the water the parent birds must carry them down. Their principal food is sea-weed, small shell-fish, and marine insects.

SUPPLEMENT.—This is one of the very few species of Duck that can be strictly called indigenous to these realms; many breed in various parts of the United Kingdoms; but it is probable more are observed in the winter, when those of Iceland and other northern parts can no longer find sustenance in the bogs and estuaries of those boreal climates. It is found in almost the whole of Europe, and some parts of Asia, contiguous to the coast, for it rarely quits its marine station by choice; so seldom indeed is it observed on fresh water that it has been doubted if it could long exist without the marine element. From our own experience, however, these birds appear to enjoy perfect health in confinement, provided they are allowed communication with a pond; and they feed on grain as readily as the Common Duck, and equally partake of any aquatic plants. The trachea of the male is furnished with a singular labyrinth, consisting of two roundish bladders of a most delicate texture, one of which is larger than the other; both are uneven on the surface, and of so tender a fabric as scarcely to bear the pressure of the finger without indenting or breaking. In a very young subject, before the black round the bill appeared, we observed the labyrinth was very small and membranaceous, but, to a person conversant in these matters, might have been a sufficient guide to the species. The young of this species, previously to their first moult, are materially different from the parent birds. The bill and legs are flesh-colour: the crown of the head and back of the neck dusky brown: the forehead and cheeks as far as the eyes, the under part of the neck, and whole under parts of the body white: the quills are black, tipped with white, except two or three of the first: the speculum, and bay feathers of the wings next to the body, like the adult, but the former tipped with white: the coverts white, tipped dusky, giving them a mottled appearance: the tail-feathers are also more or less mottled at their ends. The difference in the appearance of the young birds may have occasioned them to be mistaken for a distinct species, but an attention to the speculum and bay tertials will be an unerring guide. It is somewhat singular

that the front of the head should be white, when the rest of the head and back of the neck are of a dark colour; and when in the first change, the whole of these parts become green-black; it is the white feathers round the bill and face that are first displaced by the black in the autumn of the first year. A young domesticated male, at two years' old, had the fore part of the neck and breast elegantly mottled with castanea and white. These birds seem to pair, and continue so throughout the year, in their native haunts, and we have observed the same, particularly in confinement: the female drives and scolds other males that attempt to pay court to her. In the courting season, which commences very early, the males erect their heads, and partly the feathers on the back of the head, and utter a singular shrill note, attended with a toss of the head. The males do not appear to attach themselves to the females till the second year; and their puberty is strongly characterized by a very considerable enlargement of the knob at the base of the bill, which in the courting season not only increases at all periods of life afterwards, but also becomes of a fine coral-red. The defect of breeding appears to be with the female (for we believe it rarely happens in a confined state); she is constantly coy, although so strongly urged by the other sex, who it seems has every inclination; and this appears the more likely, since we are assured the Shieldrake has been known to breed with the Common Duck in Lord Stanley's menagerie.

[Shieldrake, Ruddy. — *Yarrell*, iii. 235; *Hewitson*, cxii. 399. *Anas rutila*, *Temm. Man. d'Ornith.* ii. 832, and iv. 531; *Bewick, Br. Birds*, ii. 330. *Tadorna rutila* (Ruddy or Casarka Shieldrake), *Selby, Brit. Ornith.* ii. 293; *Yarrell*, l. c. — "Forehead, cheeks, and chin pale ochreous-yellow. Region of the eyes, crown of the head, and nape of the neck greyish white. Neck, as far as the collar, ochreous-yellow, tinged with orange. Collar about half an inch in width, black, glossed with green. Breast, mantle, scapulars, and under parts of the body gallstone-yellow, tipped with orange, being deepest upon the breast. The feathers upon the upper parts of the body have their margins paler, and the ends of the long tertials pass into sienna-yellow. Lesser and middle wing-coverts white; secondary quills green, glossed with purple, and forming a large speculum; greater quills black. Lower part of the back, upper tail-coverts, and tail black, glossed with green. Bill, legs, and feet black. The female has not the black collar; her colours are not so bright, and the

feathers upon the back are finely speckled with grey."—*Selby*, ii. 295. This is the *Anas Casarka* of Linneus, and it is far from evident on what principle the name has been changed to "*rutila*." It is also the Ferruginous Duck of Bewick's '*British Birds*,' in the edition of 1826, p. 313; it does not appear in the earlier edition. The first recorded British-killed specimen of this bird was shot at Bryanstone, near Blandford, in 1776. Mr. Selby mentions a second in his collection, killed in the South of England; and Mr. Yarrell notices a third, killed at Iken, near Orford, on the coast of Suffolk, in 1834. In the '*Zoologist*' for 1847, at p. 1877, is a reprinted note, by the late Mr. Thompson, recording the occurrence of this bird in Ireland: it was shot by John Moreton, of Wicklow, on the 7th of July, 1847, on the Murragh of Wicklow, an extensive sandy tract bordering on the sea near the town of Wicklow.]

Shieldrake, Swallow-tailed.—See Duck, Long-tailed.

Shilfa.—See Finch, Chaf.

Shore-Bird.—See Martin, Sand.

[Shore Lark.—See Lark, Shore.]

[Shore Pipit.—See Lark, Rock.]

[Shorteared Owl. } See Owl, Shorteared,
[Shorthorned Owl.]

[Short-toed Lark.—See Lark, Short-toed.]

Shoveler, or Blue-winged Shoveler.—[*Yarrell*, iii. 247; *Hewitson*, cxii. 400.] *Anas clypeata*, *Lin. Syst.* i. p. 200, 19; *Gmel. Syst.* ii. p. 518; *Ind. Orn.* ii. p. 856, 60; *Bris.* vi. p. 329, 6, t. 32, f. 1; *Ib.* 8vo, ii. p. 450; *Lath. Syn. Sup.* ii. p. 353; *Lin. Trans.* iv. p. 109, t. 13, f. 4-5 (trachea); *Bewick, Br. Birds*, ii. t. p. 345. *Anas Platyrhynchus*, *Raii*, p. 144, 13 (fem.); *Will.* p. 283, xv.; *Ib.* 284, xvi. (fem.) *Anas Platyrhynchus atera*, *Raii*, p. 143, A. 9 (mas.); *Will.* p. 283 (mas.) *Anas muscaria*, *Lin. Syst.* i. p. 200, B.; *Raii Syn.* p. 146; *Will.* p. 287. *Anas clypeata ventre candido*, *Bris.* vi. p. 337, A.; *Id.* 8vo, ii. p. 451. *Tempatlahoac*, *Raii Syn.* p. 176; *Will.* p. 299; *Id. Angl.* p. 387; *Lath. Syn.* vi. p. 511, A. B. *Anas rubens*, *Gmel. Syst.* i. p. 519; *Ind. Orn.* ii. p. 857. *Souchet*, *Buf.* ix. p. 191. Shoveler, *Br. Zool.* No. 280; *Ib.* fol. 155, t. Q. 4; *Arct. Zool.* ii. No. 485; *Will. Angl.* p. 370, 15 (mas.), 371, 16, 17 (fem.); *Albin*, i. t. 97, 98; *Hayes, Br. Birds*, t. 27 (mas.); *Lath. Syn.* vi. p. 509, 55; *Ost. Men.* p. 52, t. (mas.); *Lewin, Br. Birds*, vii. t.

252; *Walc. Syn.* i. t. 67; *Pult. Cat. Dorset.* p. 21. Redbreasted Shoveler, *Br. Zool.* ii. No. 281; *Lath. Syn.* vi. p. 512. Barbary Shoveler, *Shaw's Trav.* p. 254? Provincial: Blue-winged Shoveler.—A species of Duck; length twenty-one inches; weight twenty-two ounces. The bill is black, near three inches in length, spreading near the end to a great breadth; the edges much pectinated; irides yellow. The head and upper part of the neck glossy green, changeable to blue or violet; the lower part of the neck, breast, and scapulars white, the two first sometimes spotted; back brown; belly chesnut; vent black; the wing-coverts pale blue; the greater brown, tipped with white; the greater quills are brown; the secondaries are of a glossy green on the outer webs; the tail consists of fourteen dusky feathers edged with white, the outer ones wholly white; legs orange-red. The female a good deal resembles the Common Duck. In the wing the markings are like the male, except in the first year, but not so bright. Both sexes are apt to vary much in colour. The male of this species has a labyrinth or enlargement of the windpipe. The Shoveler is sometimes met with in England, but by no means common. It is said some remain in France during the breeding season; that they make a nest of rushes, in which they lay ten or twelve rufous-coloured eggs. Is found in Germany, Russia, and America.

SUPPLEMENT.—The labyrinth of the trachea belonging to the Blue-winged Shoveler is a very small, roundish, bony arch, well explained in the '*Linnean Transactions*' referred to. The very great difference in the size and weight, as well as in the plumage of this species, have long made us suspect that one of the changes incident to it might turn out to be the Red-breasted Shoveler. Our great attention to the change of plumage in all the Duck tribe we have been able to procure alive has been the means of much knowledge on this important subject, not a little aided by strict attention to dead specimens killed in different seasons of the year. From all these observations collectively, we have no doubt remaining but that the Red-breasted Shoveler is no other than this bird in one of its accustomed changes, either intermediate between the young and the adult, or the annual change of the adult, similar to what we have related of the Pintail: but before we proceed to describe the bird in this probable annual change, we shall describe one or two, somewhat varying from what was given in the former part of this work. A male and female, taken together in a decoy in Lincolnshire, about the middle of April, were sent to us by Mr. Wright

of Wainfleet. These appeared so much smaller than any before examined, that for some time we could hardly persuade ourselves they were not a distinct species. The male was fat, and yet weighed only seventeen ounces: the female was rather poor, and weighed no more than ten ounces and a half, which is less than that of a Teal. There was nothing material, however, in the plumage to favour an opinion that these could be distinct from the Common Shoveler, and the trachea of the male at once evinced them to be such. In the male the head, neck, breast, and belly the same as formerly described: the back is dusky black, reaching up to the green on the neck in a peak; these feathers are slightly edged with cinereous: the rump, upper tail-coverts, and from the vent to the tail, black, glossed with green; those that cover the sides of the tail fine deep green: the lesser wing-coverts and scapulars the same as before described: as also the quill-feathers, but tinged with blue on the outer webs of the primaries: the tertials next to the body are very broad at the base, and gradually narrow to a pointed tip; these are of a glossy purple-black, with a white stripe in two of them along the shaft, for one-third of their length from the tip: one or two of the longest scapular-feathers that fall over these are similar: on each side of the base of the tail is a large patch of white: the tail consists of fourteen feathers, the middle ones dusky black, with white margins, but the two centre have the margins minutely speckled; the rest are dusky brown, with broader margins of dirty white: bill, irides, and legs like the former. The female had the irides dull yellow; the upper mandible dusky, with the edge red-orange; the under mandible red-orange, except towards the tip. The plumage in general rufous-brown and black, the former occupying the margins of the feathers, gives a mottled appearance: the head and neck are streaked with black: the breast, sides of the body, and back deeply margined with rufous-brown: on the belly the spots of dusky are very faint: the smaller coverts of the wings blue like the male, but less brilliant; and the other parts of the wings nearly correspond with those of the other sex, the speculum and tertials excepted, the first of which is tipped with white; the last are plain brown: the tail dusky, with rufous borders, becoming paler on the outer feathers: the scapulars and rump like the back: the vent and tail-coverts like the adjoining parts: legs dull orange. Another male, rather larger, had the back and scapulars mottled dusky and white. The *Anas muscaria* of Linné differs from the original, only in having

the belly white, and breast rufous. The Tempatlahoac of Ray appears to be another variety from Mexico; the principal difference in this is the upper parts of the body being mottled with semicircles of brown and white. We shall now proceed to the description of what we consider a variety of the Blue-winged Shoveler, which has been so long established as a distinct species, under the title of Red-breasted Shoveler. It will be recollected that this bird originated from Mr. Pennant, who says it is sometimes taken in the decoys of Lincolnshire. Most collectors have searched in vain for the Red-breasted variety, but we believe not from its peculiar scarcity, but because it is only to be obtained at a certain period of the year, and that when neither the gun is in use, nor the decoys in general open. The bird hereafter described was shot on a fresh-water lake on the south coast of Devon, Aug. 5th, 1807. The weight twenty-one ounces: length nineteen inches and a half. The bill and irides like the other: the crown of the head and nape dusky, the feathers a trifle elongated behind: the cheeks, throat, and upper part of the neck pale brown, with a slight rufous tinge, and speckled with dusky: the chin with larger spots of green-black: the back and scapulars dusky, the former margined with rufous-brown, the latter with rufous-white, and glossed with purple: the rump dusky, glossed with green and purple: the coverts of the wings blue, the larger series tipped with white: the speculum purplish green, variable in different lights: some of the tertials purple-black, with a white streak down the shafts, resembling the wing of the original bird, except in the primary quills being rufous-brown, with dusky tips: the upper part of the neck before, the breast, sides, and belly to the vent ferruginous, spotted with dusky black: behind the vent, the sides of the rump, and under tail-coverts pale rufous-brown and white, spotted as the last: the middle tail-feathers dusky; the others are mutilated, but by their stumps appear to have been brownish white: the legs like the original. Upon dissection the sexual organs were not discernible; but an attention to the trachea made the sex evident, and also proved most incontrovertibly, by the exact similitude of the labyrinth to the Blue-winged Shoveler, that it is identically the same in one of the mutations of plumage to which many of the tribe are known to be subject. Having most clearly demonstrated that these birds are of one species, in which we have evinced the very essential advantage of attending to the trachea, it may be proper to remark that this specimen is evidently not a young bird, that

is, not of the same year it was taken, for it was in moult; many of the wing and tail-feathers are in the state of recent change, and the new ones appear as usual brighter, and the darker ones not so brown: the only part that indicates the usual green head is the chin, where there are several spots of that colour. From the circumstance of this bird being alone before the breeding season was scarcely terminated, or at least before the young of the Duck tribe are usually capable of flying, we are induced to believe the Shoveler may not pair the first year; and the inconspicuous state of the sexual organs seems to confirm it. At any rate we may fairly conclude that what has been termed the Red-breasted Shoveler is the intermediate plumage incidental to the species between the spring and autumn, as we have shown with respect to that of the male Pintail Duck, to which we refer for further particulars concerning this curious and unexpected annual change. This circumstance must be admitted to be a discovery of considerable importance to the science, and advantage to the Ornithologist, whose vision is as it were extended beyond the appearance of the object before him. Experimental physiology, like experimental philosophy, is the test of truth, the basis of incontrovertible facts, on which we may safely reason, and build our hypothesis without danger of the edifice falling. Age may and will occasion some difference in these intermediate annual changes; thus we find a specimen, in the collection of Lord Stanley, much more rufous on the breast. The *Anas muscaria*, which is described as *pectore rufescente*, is a bird of this species in the intermediate change: but the *Anas clypeata ventre candido* of Brisson, should seem to be only an accidental variety. Although we have already dwelt long upon this species, yet we cannot omit anything that may serve to elucidate the subject. It has been said that the female of the Red-breasted Shoveler has all the colours fainter, and the speculum of the wings blue. On the 24th of November, 1809, we were favoured with a Shoveler by Mr. Holdsworth, which weighed twenty ounces and a half, and measured in length twenty inches. From the superior size of this bird, which seemed to be at variance with the plumage, we suspected it to be a male of the first feather; but upon dissection the ovaries were evident, and the trachea destitute of labyrinth. This bird, then, we may conclude is that which has been assigned to the Red-breasted Shoveler as the other sex; and indeed the ferruginous appearance of its plumage beneath might fairly have induced those who wanted to find a female

for that bird to couple them together. The bill of this specimen is olivaceous-green above; the edges and under mandible orange: irides dull yellow. The head and upper part of the neck brown, minutely spotted with black: the chin and throat plain pale brown; the lower part of the neck before, the sides of the breast, and sides of the body under the wings pale rufous-brown, spotted with black, the spots becoming larger on the under parts; in fact each feather is dusky black, margined with rufous-brown: the middle of the lower breast and the belly appear to be entirely pale rufous, the feathers being so deeply margined as not to expose their dusky part; about the vent and the under tail-coverts like the sides of the body; the back and scapulars are dusky, slightly margined with pale rufous, inclining to white on the hindmost scapulars: the rump dusky black with small obsolete spots: coverts of the tail partly barred, and margined with pale ferruginous and dusky black: the wings like those of the other female, except that one or two of the tertials are white at the tip; and it is remarkable that the secondaries which constitute the speculum should in the females be tipped white, and not in the males; tail consists of fourteen cinereous-brown feathers, margined with rufous, except the two middle ones, which are dusky brown. It is singular that this female should weigh nearly double that before described, and larger by several ounces than the male in full plumage, previously mentioned. This, however, only exemplifies the very great difference in the size, as well as in the plumage of individuals of this species. It is evident this female is not in her first plumage, and consequently not a bird of that year in which she was killed, for there are some of the old feathers not cast, in particular the fourth feather of the tail on each side, which are easily ascertained to be old feathers by their dingy colour and ragged tips; these old feathers are not in other respects different from their outer neighbours, except in not being half so deeply margined. From the superior weight it should appear that this is an old and fully matured female, and that the smaller one, with all the feathers more deeply margined, is a young bird; and this is consonant with experience, that young birds in general have their plumage more maculated. It has been said that the Shoveler will not live in confinement; it is true the curious pectinated structure of the bill indicates an insectivorous food, but we doubt not that, by degrees, it might be induced to adopt a substitute, as Ruffs, Godwits, Woodcocks, and Curlews are well satisfied

with bread and milk. It has been supposed that Shovelers breed at present in our fens, but all our enquiries on that subject in Lincolnshire went to negative the opinion.

Shoveler, Blue-winged.—See Shoveler.

Shoveler, Redbreasted.—*Anas rubens*, *Gmel. Syst.* ii. p. 519, 82; *Ind. Orn.* ii. p. 857, 62. Red-breasted Shoveler, *Br. Zool.* ii. No. 281; *Lath. Syn.* vi. p. 512, 57; *Pult. Cat. Dorset.* p. 21.—This species of Duck is about the size of the last. The bill is also like that bird, but the colour is of a brownish yellow; irides yellow. Breast and throat of a reddish brown; back brown, palest towards the sides; the tips and pinions of the wings grey; quills brown; the rest of a greyish brown; the speculum or spot in the wing purple, edged with white; vent brown, with darker spots; tail short and white; legs short and slender; feet small, and of a reddish brown-colour. The colours of the female are more faint, and the speculum of the wings blue. This bird is said to be sometimes taken in the decoys in Lincolnshire; but we believe it to be a rare species in England. [Identical with the Shoveler.]

Shreitch.—See Thrush, Missel.

Shrike.—A genus of birds, the characters of which are: Bill strait at the base, the end hooked, and furnished with a notch near the tip of the upper mandible. The base not furnished with a cere, but with bristles on the sides of the mouth. Tongue jagged at the end. Toes, the outer one connected to the middle one as far as the first joint. — The Butcher-bird, or Shrike genus, seems to have puzzled many of the best naturalists in respect to the place these birds should hold in the system of Ornithology; and the great Linnæus had changed his opinion more than once, and at last left it in the Accipitrine order. Mr. Pennant, in his last edition of 'British Zoology,' brought these birds into the order of Pies; and Dr. Latham has judiciously followed the example in his 'General Synopsis.'

[**Shrike, Ashcoloured.**—See Shrike, Cinereous.]

Shrike, Cinereous.—[*Yarrell*, i. 165; *Hewitson*, xx. 69.] *Lanius excubitor*, *Lin. Syst.* i. p. 135, 11; *Gmel. Syst.* i. p. 300; *Ind. Orn.* i. p. 67, 6; *Bewick, Br. Birds*, 1, t. p. 60; *Shaw, Zool.* vii. p. 282, t. 37. *Lanius*, seu *Collurio cinereus major*, *Raii Syn.* p. 18, A. 3; *Will.* p. 53. t. 10; *Bris.* ii. p.

141, 1; *Ib.* 8vo, p. 197. *La Pie-griesche grise*, *Buf.* i. p. 296, t. 20. Greater Butcher-bird, *Will. Angl.* p. 87; *Albin*, ii. t. 13. Great Cinereous Shrike, *Br. Zool.* No. 71, t. 33; *Ib.* fol. p. 73, t. C.; *Arct. Zool.* ii. No. 127; *Lewin, Br. Birds*, i. t. 30; *Lath. Syn.* i. p. 160, 4; *Walc. Syn.* i. t. 29; *Pult. Cat. Dorset.* p. 4; *Don. Br. Birds*, iv. t. 87. Provincial: Mattages; Wierangle; Murdering-bird; Skreek, or Skrike; Night-jar; Mountain Magpie; French-pie; Murdering-pie; White-whisky-John. — The weight of this species rather exceeds two ounces; length ten inches; breadth fourteen. The bill is black, strong, and much hooked at the end; irides dusky; the mouth beset with strong bristles. [From the base of the upper mandible through the eye a black stripe; the plumage of the whole upper part is pale ash-colour, except the scapulars, which are white; the coverts of the wings black; quill-feathers black, with a white bar across their middle, and many of them tipped with white; the under parts, from chin to vent, white; the tail consists of twelve feathers of unequal length, which gives it a cuneiform shape; the two middle ones are black, the next slightly tipped with white, on the rest the white gradually increases obliquely to the outer feather, which is only black at the base; legs black. The female differs chiefly in the under parts, which are of a dirty white, marked with numerous semicircular brown lines. A variety is spoken of which has the lesser wing-coverts and scapulars somewhat of a rufous-brown. The Great Cinereous Shrike, or Butcher-bird, is rather a scarce bird in England. It is said to breed in some of our mountainous situations, coming in May, and departing in September. However this may be in general, the only two which came under our inspection were both males; one was killed on the 15th, and the other on the 22nd of November, in Wiltshire. In the stomach of one of these birds was a Shrew (*Sorex araneus*, *Lin. Syst.*) It is said to make a nest of heath and moss, lined with wool and gossamer, and to lay six eggs of a dull olive-green, spotted with black at the larger end. This bird is sometimes trained for catching small birds in Russia. Is said to kill rats and mice, and valued in some countries for that property. When it has killed its prey it does not tear it like the Hawk, but fixes it to a thorn for the purpose of pulling it to pieces. Is said to imitate the notes of some other birds by way of decoying them to their destruction.

SUPPLEMENT.—Although this species is said to breed in France and other parts of the European continent, and occasionally visits us, we never could ascertain that it bred in England. In the latter end of

February, 1807, we received a male from a friend near the coast of Lincolnshire: this, and two or three others of the same sex, obtained also in the winter months, indicate that it only accidentally comes to us in its autumnal migration from the north of Europe to a more southern climate: and that by some adverse winds, or other occult causes, they are sometimes forced to vary their longitudinal course, and are driven on the eastern parts of Great Britain. Mr. Pennant says the female has a brown bar beyond each eye.

[Shrike, Great Grey. — See Shrike, Cinereous.]

Shrike, Redback.—[Yarrell, i. 171; Hewitson, xx. 70.] *Lanius Collurio*, *Lin. Syst.* i. p. 136, 12; *Gmel. Syst.* i. p. 300; *Ind. Orn.* i. p. 69, 11; *Briss.* ii. p. 151, 4; *Ib.* 8vo, p. 202; *Lath. Syn. Sup.* ii. p. 69; *Shaw, Zool.* vii. p. 315; *Orn. Danmo.* 1, t. 2; *Bewick, Br. Birds*, 1, t. p. 62; *Levaill. Ois.* ii. p. 50, p. t. 69; *Sonnini Trav.* iii. p. 319. *Lanius minor rufus*, *Raii Syn.* p. 18, A. 4; *Will.* p. 54. *Merulae congener alia*, *Raii Syn.* p. 67, 13? *Will.* p. 144, 3. *L'Ecorcheur*, *Buf.* i. p. 304, t. 21. Lesser Butcherbird, or Flusher, *Will. Angl.* p. 88, 2, 89, 3; *Albin*, ii. t. 14. Red-backed Shrike, *Br. Zool.* i. No. 72; *Ib.* fol. p. 74, t. C. 1; *Arct. Zool.* ii. No. 131; *Lewin, Br. Birds*, i. t. 30; *Lath. Syn.* i. p. 167, 25; *Sup.* p. 52; *Walc. Syn.* i. t. 30; *Pult. Cat. Dorset.* p. 4. — This species weighs eight drams; length seven inches. Bill black, like the preceding; irides hazel. The upper part of the head and neck, and the rump, are of a fine light grey; the forehead is black, which extends in a streak through the eyes; the back, scapulars, and coverts of the wings ferruginous; quills brown, slightly edged on the outer webs lighter; from the throat downwards of a blossom-colour, palest about the vent; the tail is composed of twelve feathers, longest in the middle; these are more or less white at the base, black towards the end, and slightly tipped with white, except those in the middle, which are wholly black, and the shafts are black throughout; the legs are black. The female weighs two drams more. The whole upper parts are of a ferruginous-brown; the back of the neck dashed with grey; the base of the upper mandible whitish; beneath the eye a brown streak; breast and sides dirty white, marked with numerous semicircular dusky lines; middle of the belly and vent white; the quills and tail-feathers brown; the outer web of the exterior feather of the latter white. The Red-back Shrike, or Butcher-bird, visits us in May, and departs in September; chiefly haunts

inclosed moist situations, and makes its nest in some thick hedge, composed of moss and fibrous roots put together with wool, and lined with hair. It lays five or six eggs of a bluish-coloured white, with cinereous-brown spots, most at the larger end; sometimes the eggs are white, with dusky spots; their weight from forty to fifty grains. When it has young, and you approach the nest, the birds are clamorous, making a chattering noise. Its principal food is insects, with which it feeds the young, particularly the chaffer, or dor-beetle. These it transfixes on a thorn, tears off the body, leaving the elytra, wings, and head behind. The male has also a chirping note, not very unlike the House Sparrow; and we have heard it make a sort of a song. It appears to be a local species; is not uncommon in the north of Wiltshire, and part of Gloucestershire and Somersetshire, particularly about Bristol, where we have taken its young, and kept them for some time. These lived in amity for about two months, when violent battles ensued, and two out of four were killed. The other two were chained in the manner Goldfinches frequently are; they were extremely docile, would come to the call for the sake of a fly, of which they were extremely fond; when raw meat was given them, would endeavour to fasten it to some part of their open cage in order to tear it; would eat mice and small birds cut in pieces, feather, fur, and bones, disgorging the refuse like the Hawk tribe. One was killed by swallowing too large a quantity of mouse-fur, which it could not eject, and was strangled; the other became so fat that it expired in a fit in the hand while it was feeding on insects. The young resemble the female till the following spring. Is found in Russia and France, and in Italy is common.

SUPPLEMENT. — The Redbacked Shrike is said to be common in Egypt, where it is called Dagnousse, and are caught in large numbers in nets, and sold alive, the law forbidding them to be eaten, as well as others, till they have been bled; and as these birds severely bite the fingers when handled, the bird-catchers tie their mandibles together with one of their feathers. Is not uncommon at the Cape of Good Hope and in other parts of Africa. We have not heard of its being seen in the more northern parts of England, but from the authority of Mr. Dickenson it inhabits Shropshire about Tichfield and Walsal. It has been noticed throughout the whole longitudinal extent of Devonshire, and from thence eastward to the opposite coast of the kingdom; but we are not sure it has been observed far in Cornwall; nor have we ever seen it in the southern

promontory of Devon, though we have heard of one being killed in that part.

[Shrike, Wood. — *Yarrell*, i. 177; *Hewitson*, xx. 72.] Wood-chat. — *Lanius rutilus*, *Ind. Orn.* i. p. 70, 12. *Lanius Collurio*, *Gmel. Syst.* i. p. 301, 12, γ . *Lanius minor cinerascens*, *Raii Syn.* p. 19, A. 6; *Will.* p. 54, t. 10, f. 2? *Lanius femina*, *Will.* p. 54, III. *Lanius rufus*, *Bris.* ii. p. 147, 3; *Ib.* 8vo, i. p. 199. Pie-griesche rousse, *Buf.* i. p. 301. Another sort of Butcher-bird, *Will. Angl.* p. 89, 4. Wood-chat, *Br. Zool.* i. No. 73; *Ib.* fol. 74, t. C. 1; *Albin*, ii. t. 16; *Lewin*, *Br. Birds*, i. t. 32; *Lath. Syn.* p. 169, 17; *Walc. Br. Birds*, i. t. 31; *Pitt. Cat. Dorset.* p. 4; *Don. Br. Birds*, iv. t. 84. — This species of Shrike is said to be about the size of the Red-backed Shrike, or Butcher-bird; but as it has never come under our inspection, we must borrow the description of other ornithologists. The bill is horn-colour; the feathers round the base whitish; head and hind part of the neck bright bay; from the base of the bill over the forehead, and through the eyes passing downwards on each side the neck, is a streak of black; back dusky; upper tail-coverts grey; wing-coverts dusky; quills black, near the bottom of which a white spot; throat, breast, and belly yellowish white; the tail is black, the margins and tips whitish, except the two middle ones; legs black. *Latham* says the scapulars are white. The female is reddish on the upper parts of the body, the under parts dirty white; everywhere transversely striated with brown. The above is nearly the description of Mr. Pennant and Dr. Latham, and which appears to be borrowed from earlier authors, as neither of them seems to have seen the bird. By the last-mentioned author two varieties are given: one with the upper parts of the body rufous, under parts white; wings wholly brown, with a small spot of white at the base of the quills: the other differs only in having the head black, and the tail rather longer. We cannot help entertaining some doubts whether this may not hereafter prove to be no other than a variety of the Red-backed Shrike, or the young male in some of the intermediate stages between the nestling and adult plumage, which with us rarely if ever appear, as those birds leave us in autumn before they are maturely feathered. If the black streak through the eye, and the grey on the rump, should first appear, it would only want the white scapulars to make it the Woodchat; and that mark all authors have not described. *Gmelin* has given it as a mere variety of that bird.

Shrike, Wood. — SUPPLEMENT. — *Lanius*

ruficollis. — Wood-Chat, *Orn. Dict.*; *Lath. Syn. Sup.* ii. p. 70; *Shaw, Zool.* vii. p. 316. La Pie-griesche rousse, *Levaill. Ois.* ii. p. 46, Pl. 63. — It will be observed that in the former part of this work we had expressed some doubts about the distinction of this species from that of the Red-backed Shrike. In this we were not singular, but rather formed an opinion upon that of other respectable authors, after consulting the description and habitat as related by them; for it is esteemed so rare in England, that we question if there is at present a specimen in existence that was killed in the island. Even on the continent its rare occurrence has occasioned discrepancy of opinion. Doctor Latham, in his second Supplement, acknowledges never to have seen but one specimen, and that in the Leverian Museum; so that if, with the extensive researches of the Doctor, and with the immense variety of species from all parts of the globe that have passed through his hands in critical examination, we find only one solitary instance of his identifying the bird in question, it is scarcely to be wondered that suspicions were created. On the authority, however, of M. Levaillant, the Woodchat, not materially differing from the European species, is not uncommon at the Cape of Good Hope, especially the interior parts of it; and is also met with at Senegal. A specimen of the Woodchat lately come into our possession is about seven inches and a half in length: the bill is dusky horn-colour: the forehead and sides of the head, taking in the eyes, and coverts of the ears, passing a little behind on the sides of the neck, black: the crown, back of the head, and hind neck bright bay: upper part of the back and wing-coverts dusky: scapulars white: rump dusky grey: upper tail-coverts grey: quills black, with white at their base, forming a conspicuous bar on the wings, but partly hid by the tertials when closed: all the under parts from chin to tail sullied white, except a patch of chesnut on the lower belly: the outer feather of the tail is more than half white from the base, and margined with the same, leaving a long black spot on the outer web near the end; in the other lateral feathers the white decreases gradually at the base, till lost in the four middle feathers, which are wholly black; but in several of the outer feathers there is a small spot of white on the inner web at the very tip: legs dusky black. From a minute examination of this specimen, we can no longer doubt that the Woodchat is perfectly distinct from the Red-backed Shrike. In the make of the two species, the cuneiform shape of the tail, form of the bill, and size (but this is rather larger),

there is great similitude; at the same time there are characters which must form specific distinction. When critically examined it is observable that the markings are different in form as well as colour, but the dusky colour of the upper parts of the body, the black legs, and above all the white scapulars, cannot, in any stage or variety, belong to the Red-backed species; and it is very improbable that the bay head should be given in a state of adolescence, to be discharged again in maturity. It must be well known to those who have penetrated deeply into the mysteries of Nature, that there are certain colours that, under certain circumstances, denote maturity; that pure white, full black, and the more gaudy tints, are usually marks of maturity. Thus we cannot suppose that at any age or season the Red-backed Shrike would become black on the back, with white scapulars, or possess a bay crown or black legs, except by accident, a mere *lusus nature*; and that cannot now be suspected. Besides, if we attend to the plumage of the Red-backed species, which constantly breed with us in considerable numbers, we find that all the young, when they leave us in the month of September, very much resemble the adult female; and the whole return to us again in about six months, in their full sexual plumage; a proof that the young arrive at maturity the first year, and propagate the ensuing spring. With this certainty it would be most inconsistent with all the known laws of Nature, and with the experience of every naturalist, to suppose that the young Red-backed Shrike changed its plumage to that of the Wood Shrike, and again to that of the adult Red-backed species, and this in the course of the few months they are absent in a more southern climate, and out of the breeding season. It is well known that all young birds, without exception, at first mostly resemble the parent female, and by degrees those of the male sex become more masculine in plumage; but the intermediate state partakes more or less of both; and in no instance is so totally unlike either as the bird in question. If, on the other hand, the old birds of the Red-backed species were capable of such a change, that which characterizes the Wood Shrike would undoubtedly be their court-ing garment; those colours which we noticed before, as marks of maturity, would have been assumed when the exhilarating passion of love and soft desire fired their little breasts; it is then, and then alone, that every feather has its gaudiest tint. With all these reflections, founded on the known laws of Nature, evinced by daily experience, we can have no more doubt of the identity of these two Shrikes as

distinct species, than we have that they are different from the Cinereous Shrike; for there is not a greater difference between them than between the Red-backed and the Wood Shrike. It must also be recollected that the Red-backed species has frequently been kept in confinement, and no such change has ever been noticed: those we had caged unfortunately died before the return of the breeding season, but the appearance of some new feathers indicated the regular change to the adult plumage by the usual course. [No doubt whatever exists, at the present day, either on the question whether the Wood-chat is a distinct species, or whether it has occurred in Britain. Mr. Yarrell mentions eleven instances of its having been shot here, and as many additional ones are recorded in the 'Zoologist.' Indeed the paucity of records is due rather to the want of observation than from its actual rarity. In this country, as well as on the Continent, it is a regular migrant, passing northwards and southwards with the Red-backed Shrike. It is abundant in the Netherlands, and breeds there, building a nest composed of sticks, wool and white lichens, and lined with fine grass, in the fork of some projecting branch, and laying four or five eggs, in some of which the ground colour is pale blue, in others dirty white, surrounded near the larger end with a zone of rust-coloured spots; in others the markings are of a paler colour, and more dispersed over the egg. These observations on the nidification of the Wood-chat were made by the late Mr. Hoy, a most excellent observer, and one who has scarcely left his equal: they are cited both by Mr. Yarrell and Mr. Hewitson. In the original edition of Montagu this Shrike having been described under different names in the "Dictionary" and "Supplement," it has been thought best to print the two descriptions in juxtaposition, by bringing forward that of the Wood-chat, and placing it with its congeners, the Redback and Cinereous Shrikes.]

[Shrike Woodchat.—See Shrike, Wood.]

Shrite.—See Thrush, Missel.

Silk-tail.—See Chatterer.

Siskin [or Aberdavine.—Yarrell, i. 571; Hewitson, l. 198.] SUPPLEMENT.—*Fringilla Spinus*, *Lin. Syst.* 1, p. 322; *Gmel. Syst.* 1, p. 914; *Ind. Orn.* i. p. 452; *Sep. Vog.* t. p. 135. *Ligurinus*, *Raii Syn.* p. 9, A. 5; *Will.* p. 192, t. 46; *Briss.* iii. p. 65, 4; *Id.* 8vo, i. p. 325. *Le Tarin*, *Buf.* iv. p. 221; *Pl. Enl.* 485, f. 3. Siskin or Aberdavine, *Br. Zool.* No. 129, t. 53; *Id.*

fol. 100, t. v.; *Arct. Zool.* ii. No. 243; *Id.* p. 383, l.; *Albin*, iii. t. 76; *Id. Song Birds*, t. p. 83; *Lewin, Br. Birds*, ii. t. 82; *Lath. Syn.* iii. p. 289; *Id. Sup.* p. 166; *Bewick, Br. Birds*, i. t. p. 171; *Harm. Rural.* p. 26. — The unaccountable omission of this species of Finch in the original part of this work was not discovered until the whole was printed. The Aberdavine, or Siskin, is in size between that of the Greater and Lesser Redpoles: length four inches and a half. Bill whitish, with the tip black: irides dusky: top of the head black; hind head and all the upper parts of the body yellowish green, mostly yellow on the rump, the feathers streaked down the shaft with dusky: sides of the head, chin, throat, and breast greenish yellow, without spots: middle of the belly whitish; sides tinged with yellow, and marked with large dusky streaks: under tail-coverts the same: lesser wing-coverts like the back; the series immediately impending the greater coverts mostly yellow; the greater coverts black, tipped with yellow; these form two yellow bands across the wing, divided by one of black: quills dusky, the primaries slightly edged with greenish yellow on the outer web, and at the base of the inner; the rest of the quills edged with the same, on their outer webs only, near the ends; the base of each feather, for nearly one-half, pale yellow; the tail is considerably forked, the two middle feathers dusky; the rest yellow half-way from the base, the ends dusky, slightly edged with yellow on the outer webs: legs pale. The female differs from the other sex in having the crown of the head dusky and grey mixed, and the plumage in general much less vivid. Young males, in their adolescent state, have the black feathers on the head margined with brown, and the colours, though brighter than the female, are not so vivid as in the adult. This species is sometimes observed in England in the winter, in company with the Lesser Redpole, picking out the seeds from the cones of the alder trees. It does not, we believe, breed with us, but leaves this country on the approach of spring: Mr. Bolton, however, in his '*Harmonia Ruralis*,' asserts that it breeds in Westmoreland. Willughby says it visits Sussex about the time of barley-sowing, and is there called the Barley-bird. It is, however, more an accidental than a constant migrant to this country, or at least it is by no means common, but extremely local; a natural conclusion, when only one instance has occurred to us of meeting with the Siskin at large, and that was a solitary female in the month of January: and in only two instances have we been favoured with it from our numerous friends. It is

occasionally taken by the bird-catchers in the neighbourhood of London, where it is known by the name of Aberdavine; and though its song is below mediocrity, sells for a tolerable good price to bird-fanciers, who sometimes pair it with a Canary bird, with which it is said to breed freely. The Siskin is found in many parts of Europe: in Germany they are said to do great injury to the hop-gardens by picking out the seeds. In the western and southern parts of Russia are plentiful, but are not met with towards the Uralian chain, nor in Siberia. In the month of December, 1805, a small flock of these birds were observed busy in extracting the seeds from the alder trees, in the south of Devon, several of which were shot. The weather was severe, and a heavy fall of snow succeeded. Sepp has delineated the nest, placed in a fork of a tree, built with dry bents, mixed with leaves, and amply lined with feathers. The eggs, three in number, of a dull white. Some varieties of this species are described, but whether all such really belong to it may be questioned hereafter; one is said to inhabit Silicia, and another South America. The irregular migration of this bird has been noticed on the Continent: Buffon speaks of immense flights once in the course of three or four years. Are said to breed in the forests bordering on the Danube, but conceal their nest with such art as to render it extremely difficult to be found. Mr. Bewick remarks that one which was taken on the banks of the Tyne, and kept some years in a cage, had a sweet and pleasing song; that it imitated the notes of other birds, and was familiar, docile, and cheerful.

Skart.—See Shag and Corvorant.

Skeel Goose, Skeel Duck, or Skeeling.—See Shieldrake.

Skelderdrake.—See Oyster-catcher.

Skeldrake.—See Shieldrake [and Oyster-catcher.]

Skelly.—See Finch, Chaf.

Skitty.—See Gallinule, Spotted.

[**Skiddy-cock.**—See Rail, Water.]

Skrabe.—See Shearwater.

Skrike, or Skreek.—See Shrike, Cinereous.

Skua.—See Gull, Skua.

[**Skua, Arctic.**—See Skua, Buffon's.]

[Skua, Buffon's.—*Yarrell*, iii. 635; *Hewitson*, exliiii. 508. *Lestris parasiticus*, *Temm. Man. d'Ornith.* ii. 501. Arctic Skua, *Jenyns, Brit. Vert.* p. 283. Arctic Jager, *Eyton, Rarer Br. Birds.* Parasitic Gull, *Gould, Birds of Europe* (*Jenyns, Eyton* and *Gould* adopt the specific name *parasiticus*). *Lestris Buffonii*, *Yarrell*, iii. 635. — "In the adult bird the base of the bill, including the cere, is dark greenish brown, the horny, curved point black; irides brown; all the upper part of the head black; sides and back of the head white, tinged with straw-yellow; back, tertials, wing, and tail-coverts brownish grey; primaries and tail-feathers almost black; chin, throat, and upper part of belly white; lower part of the belly, the vent and under tail-coverts light brownish grey; legs, toes, and their membranes black; the tarsi still bearing some traces of their previous yellow colour. The whole length of the specimen described, from the point of the beak to the end of the tail-feather next the central pair, is thirteen inches and a half, the central feathers extending nine inches beyond; the wing, from the anterior bend to the end of the longest quill-feather, twelve inches; the tarsus one inch and a half; the middle toe and the claw rather shorter, or one inch and three-eighths." — *Yarrell*, iii. 637. In the 'Zoologist' for 1848 Mr. Newton records, at p. 2149, the occurrence of this Skua at Holkham, in Norfolk; the specimen was found dead. In the volume for 1849 the late Mr. Wolley mentions, at p. 2392, that a specimen was shot at St. Neots, in Huntingdonshire; it was observed sitting in an arable field, and appeared very tame: in the same volume, at p. 2592, Mr. Higgins informs us that a specimen was taken alive by some fishermen at Redcar, on the 20th of June, 1849.]

[Skua, Common. } See Gull, Skua.]
[Skua Gull. }

[Skua, Pomarine.—*Yarrell*, iii. 625. *Cataractes pomarinus*, *Selby, Brit. Ornith.* ii. 517. *Lestris pomarinus*, *Temm. Man. d'Ornith.* ii. 793; *Jenyns, Brit. Vert.* p. 281; *Gould, Birds of Europe.* *Lestris striatus*, *Eyton, Rarer Brit. Birds*, p. 53. — "ADULT: Bill, from the forehead to the tip, one inch and three-eighths long; the soft corneous part greenish grey, the tip black. Irides dark brown. Face, crown of the head, occiput, back, scapulars, wings, and tail deep blackish brown, with a slight tinge of grey. Sides and nape of the neck clothed with long subulated feathers of a glistening sienna-yellow. Throat, fore part of the neck, belly and abdomen white. Breast having a collar or gorget

of greyish or broccoli-brown spots. Flanks and lower tail-coverts dashed with greyish brown. The two middle tail-feathers elongated, but preserving their breadth throughout. Shafts of the quills and tail-feathers white. Legs and toes black; the hind toe very short, and armed with a stout nail." — *Selby*, ii. 518. The earliest notice of this as a British species is supposed to be in the sale Catalogue of Bullock's Museum, in 1819, where one specimen is mentioned as "an undescribed Gull, much allied to the Arctic, but greatly superior in size, killed at Brighton;" another as having been killed at Dover; and a third near Liverpool: as soon as attention had been called to the specific differences between this and the Common Skua (*Lestris catarractes*), instances of its occurrence on every part of our coast were recorded. See the various Indices of the 'Zoologist.')

[Skua, Richardson's.—See Gull, Arctic.]

[Skylark.—See Lark, Sky.]

Smew.—[*Yarrell*, iii. 381.] *Mergus albellus*, *Lin. Syst.* i. p. 209, 5; *Gmel. Syst.* ii. p. 547; *Ind. Orn.* ii. p. 831, 6; *Bris.* vi. p. 245, 3, t. 24, f. 1; *Ib.* 8vo, ii. p. 425. *Mergus albellus* and *minutus*, *M. and F. Lin. Syst.*; *Lath. Syn. Sup.* ii. p. 338; *Lin. Trans.* iv. p. 234, t. 16, f. 3, 4 (trachea). *Mergus major cirrhatus*, *Raii Syn.* p. 135, A. 3; *Will.* p. 254, t. 64. *Mergus Rheni*, *Raii Syn.* p. 135, 5; *Will.* p. 255. *Petit Harle huppé*, *La Piette, Buf. Ois.* viii. p. 275, t. 24; *Pl. Enl.* 449. Smew, or White Nun, *Albin*, i. t. 89; *Br. Zool.* ii. No. 262; *Ib.* fol. 148, t. N. 17; *Lath. Syn.* vi. p. 428, 5; *Ib. Sup.* p. 271; *Lewin, Br. Birds*, vi. t. 234; *Pult. Cat. Dorset.* p. 19; *Walc. Syn.* i. t. 82. Smew, *Bewick*, ii. t. p. 264. Red-headed Smew, *Bewick*, ii. p. 266 (female). Lough-diver, *Bewick*, ii. p. 268 male immatured). — This species of Merganser rather exceeds the Teal in size: length about seventeen inches; weight twenty-four ounces. Bill near two inches long, and black. The head, neck, and whole under parts of the body pure white; on each side the head an oval black spot, glossed with green; the feathers on the back of the head are long, forming a pendant crest, black underneath; on each side the lower part of the neck is a curved black streak, pointing forwards; the inner scapulars black; coverts on the sides of the wings and greater quills are black; the middle coverts white; the lesser quills, and the coverts immediately above them, black, tipped with white; tail cinereous; legs bluish grey. The female weighs fifteen ounces; length sixteen inches. The

bill is lead-colour; head ferruginous, slightly crested; the cheek, chin, throat, and all beneath, white; the breast clouded with grey; on the side of the head the same oval spot as in the male; back dusky, dashed with cinereous; wings like the male; legs dusky, in some inclining to ash-colour. The markings of this sex, as well as its size, corresponds so nearly to that of the Minute Merganser, that we have long been inclined to believe that bird to be no other than this species, the young males not attaining their full size and plumage for several years, but greatly resembling that of the female. Dr. Latham seems to have decided this matter without doubt, which we have mentioned under the head of Merganser, Minute, to which we refer our readers. We have, notwithstanding this good authority, been inclined to keep them separate in this work, giving to each the various synonyms of different authors who have considered them as distinct species. The labyrinth of this bird may be seen in the fourth volume of the 'Linnean Transactions.' These birds frequent fresh waters as well as the sea in winter, but are not known to breed with us. It mostly inhabits the northern lakes, and is driven to the south only by severe weather.

SUPPLEMENT. — The fact having been established beyond contradiction, that the Minute Merganser and the Smew are of the same species, but of different sexes, we request that the synonyms of these birds, given in the former part of this work, may be connected and added to the above. Dr. Latham had long ago ascertained that the young males continued in the plumage of the females for some time (at least two years), by dissecting many, the trachea of the supposed male Minute Merganser was found to be exactly similar to that of the Smew, except that the labyrinthic parts were less ossified. If anything was wanting to confirm this decision, founded upon the clearest evidence, we could bear testimony of the fact from ocular demonstration, having at this time before us a specimen of a young male in the very act of changing from the plumage of the female, or *Mergus minutus*, to that of the male, *Mergus albellus*. This bird and an old or matured Smew were sent to us the latter end of September, by Mr. Holdsworth, which gave an opportunity of comparing the trachea, and which completely verified the account given by Dr. Latham: indeed in this young specimen the labyrinth was fully ossified. This young male has a few feathers of the adult plumage put forth about the breast and neck, especially the black feathers tipped with white, denoting the approach of those

bands so conspicuously beautiful in the adult. The feathers on the crown are more rufous, and the crest longer than in the female, and the patch on the wing is not pure white, but mottled with brown. The secondary quills and their greater coverts are black, slightly tipped with white, making two slender white lines across that part of the wings. Both these birds had the usual number of tail-feathers (sixteen), and their legs and toes equally of a blue-grey colour, with dusky webs. The old bird weighed twenty-four ounces, and measured eighteen inches; the young one sixteen ounces, and seventeen inches in length. For a figure of the trachea we refer to the 'Linnean Transactions' above quoted, which will convey a much better idea of its structure than any words can express; however, in conformity to our plan of general information, we shall transcribe the description of it from Dr. Latham's account, as being perfectly correct, and corresponding with those in our possession. "The trachea or windpipe of this species (says the Doctor) is smallest near the upper part, but enlarges as it approaches towards the middle, from whence to the bottom it continues nearly of equal dimensions, the texture consisting of completely bony rings, with scarcely any cartilage intervening; at the bottom is a bony cavity as in the others, smaller in proportion, and differing in shape, the greater expanse being from side to side, whereas in the other it is almost upwards and downwards; on one side is a round hole, covered by a drum-like membrane, and on the opposite an oval smooth hollow bone uniting with it: from the bottom arise the branchial tubes." This is by far the most plentiful species of Merganser that frequents our coasts and fresh waters in the winter; but we believe has never been known to breed in this country. It is naturally shy, and readily takes wing, being as expert in air as it is in water, where, indeed, if it is surprised, it is with difficulty shot, by reason of its incessant diving. At the time of writing this account there are two White Wigeons (as the full-plumed males are sometimes called by the natives) on a piece of fresh water not very distant from us, but too wary to be shot. The females and young birds are called, in the southern part of Devonshire, Vare Wigeon, from a supposed similitude about the head to a Weesel, which is denominated Vare. Possibly this is the bird which in some parts has been called Smee. In the account given by Mr. Bewick of a tunnel for catching wild fowl, we find the following note, which appears to have been collected from a person of the name of Bonfellow, of

Stockton, in Norfolk:—"Duck and Mallard are taken from August to June, Teal and Wigeon from October to March; Becks, Smee, Golden-eyes, Arps, Cricks, and Pin-tails or Sea-pheasants, in March and April. Poker Ducks are seldom taken on account of their diving and getting back in the pipe."

Smew, Minute.—See Merganser, Minute.

Smew, Redheaded.—See Smew.

[Snake-Bird.—See Wryneck.]

Snipe.—A genus of birds, the characters of which are: Bill more than one inch and a half, slender, strait, weak. Nostrils linear, lodged in a furrow. Tongue slender, pointed. Toes divided to their origin, or slightly connected; back-toe small.

Snipe, Brown.—[Yarrell, iii. 46]. *Scolopax grisea*, Gmel. *Syst.* i. p. 658; *Ind. Orn.* ii. p. 724, 33. Brown Snipe, *Arct. Zool.* ii. No. 369; *Lath. Syn.* v. p. 154, 28. —The weight of this species is three ounces and a quarter; length, from the apex of the bill to the end of the tail, eleven inches; to the end of the middle toe thirteen inches and a half. Bill two inches and a half long, rather inclining downwards at the point, not so slender as that of the Common Snipe, and spreads a little broad and compressed near the end, of a dusky colour, lightest at the base; upper mandible rather the longest, serrated within along the middle of the roof; both mandibles punctured or rough near the tip; irides dusky. From the bill to the eye a dusky stroke, above that, passing over the eye, a white one; cheeks and throat white, with a few brown streaks on the former; upper and under eyelids white; the crown of the head and neck cinereous-brown, lightest on the fore part of the latter, and on the former the feathers are dusky in the middle; back and scapulars dark brown, margined with cinereous and rufous-brown; greater quills dusky, the interior ones, and the largest coverts immediately impending them, slightly tipped with white; shaft of the first quill white, the second grey; the smaller coverts above and just below the bastard wing dusky and white; the rest of the coverts cinereous-brown, darkest in the middle of each feather; the secondary quills dusky brown, tipped and margined with white; tertials cinereous-brown, darkest towards the end, and pale at the edges; upper breast like the fore part of the neck, darker down the shafts; lower breast and belly white; under wing-coverts and under scapulars white, prettily marked with

angular dusky streaks; thighs faintly spotted the same; lower part of the back under the scapulars white; rump and upper tail-coverts elegantly barred with black and white, those on the former in form of subulated black spots; under tail-coverts reach nearly to the end of the tail, which, with the sides of the vent, are rufous-white, barred with dusky; the same markings, but fainter, extend along the sides under the wing; the tail consists of twelve somewhat pointed feathers, all thickly barred with black and white on both webs, the black bars much the broadest; the two middle feathers rather the longest, a little tinged with ferruginous at the tip; legs yellow olivaceous-green. The bird here described is a male, and was shot in the beginning of October on the coast of Devonshire. It seems to vary so little in the essential characters from the Brown Snipe described by Mr. Pennant and Dr. Latham, that we cannot hesitate to pronounce it a variety of that bird. It has not to our knowledge been noticed before as a British species, and has only been found in America on the coast of New York. This specimen was rather poor, which accounts for its inferior weight, for in appearance it is rather larger than the Common Snipe, and stands higher upon its legs. It was single, and very tame, suffering the person who killed it to approach very near. [Since Colonel Montagu's time several specimens of the Brown Snipe have occurred to naturalists. Mr. Yarrell mentions no less than five—one killed in Devonshire; one near Carlisle, in 1835; one near Yarmouth, in 1836; and two in Norfolk, in 1840. In the 'Zoologist' for 1857 Mr. Nicholls mentions, at p. 5791, the occurrence of a specimen near Kingsbridge, in Devonshire.]

Snipe, Common.—[Yarrell, iii. 31; Hewitson, xcvi. 353.] *Scolopax Gallinago*, *Lin. Syst.* i. p. 244, 7; *Gmel. Syst.* ii. p. 662; *Ind. Orn.* ii. p. 715, 6; *Raii Syn.* p. 105, A. 2; *Will.* p. 214, t. 53; *Bris.* v. p. 298, 2; *Ib.* 8vo, ii. p. 285. Becassine, *Buf.* vii. p. 483, t. 26. Snipe, or Snite, *Br. Zool.* ii. No. 187, t. 68; *Ib.* fol. 121; *Arct. Zool.* ii. No. 366; *Will. Angl.* p. 290, t. 53; *Albin.* i. t. 71; *White, Hist. Selb.* p. 29; *Lath. Syn.* v. p. 134, 6; *Lewin, Br. Birds.* iv. t. 158; *Walc. Syn.* ii. t. 128; *Pult. Cat. Dorset.* p. 14. —The weight of this species is about four ounces; length near twelve inches. The bill three inches long, dusky; in some the base is lighter, flattish, and rough at the end; irides dusky. Crown of the head black, with a longitudinal light rufous line down the middle; from the base of the upper mandible another line of the same colour passes on each side over the eyes; between the bill and eye is a

dusky line; the throat white; cheeks, neck, and upper breast mottled with black and light ferruginous; the back and scapulars are black, barred with ferruginous-brown, and striped with yellowish buff-colour in longitudinal lines; quills are black, the first edged with white; the secondaries tipped with the same; those next the body are with their coverts striated and barred with light ferruginous; lower breast and belly white; vent brown; upper tail-coverts brown, barred with black; the tail consists of fourteen black feathers, barred and spotted with dull orange-red towards the end, with a narrow bar of black near the tip, where it is pale rufous; legs vary, in some dusky or lead-colour, others green. This is a plentiful species in most parts of England, and is found in all situations, in high as well as low lands, depending much on the weather. In very wet times it resorts to the hills; at other times frequents marshes, where it can penetrate its bill into the earth after worms, which are its principal food. Some few remain with us the whole year, and breed in the more extensive marshes and mountainous bogs. We have frequently taken the young before they could fly in the north of England and in Scotland. Near Penryn in Cornwall there is a marsh where several breed annually, and where we have taken their eggs, which are four in number, of an olivaceous-colour, blotched and spotted with rufous-brown; some with dusky blotches at the larger end, and some few elsewhere. The nest is made of the materials around it, coarse grass, and sometimes heath. It is placed on a tump or dry spot, near a splash or swampy place; the eggs, like those of the Lapwing, placed invariably with their smaller ends inwards, being much pointed; their weight three drams and a half. In the breeding season the Snipe changes its note entirely from that it makes in the winter. The male will keep on wing for an hour together, mounting like a Lark, uttering a shrill piping noise; then descend with great velocity, making a bleating sound not unlike an old goat, which is repeated alternately round the spot possessed by the female, especially while she is sitting on her nest. This bird has been met with in almost every part of the world.

[Snipe, Double.—A sportsman's name of the Great Snipe, which see.]

[Snipe, Dunlin.—See Snipe, Great.]

Snipe, Great.—[Yarrell, iii. 24; Hewitson, xcvii. 351.] *Scolopax major*, *Gmel.* *Syst.* ii. p. 661; *Ind. Orn.* ii. p. 714, 4. *Scolopax paludosa*, *Ind. Orn.* ii. p. 714; *Gmel.*

Syst. p. 661. *Scolopax Gallina*, *Sepp, Vog.* 3, t. 127. *Scolopax media*, *Ger. Orn.* iv. p. 416; *atra*, *Ib.* 450? *Becasse des Savanes*, *Buf.* vii. p. 481. *Great Snipe*, *Br. Zool.* ii. No. 188; *Arct. Zool.* ii. p. 470, B.; *Lath. Syn.* v. p. 133, 4; *Lewin, Br. Birds*, iv. t. 157; *Walc. Syn.* ii. t. 137; *Pult. Cat. Dorset.* p. 14; *Lath. Syn. Sup.* ii. p. 308; *Rural Sports*, t. p. 444; *Bewick, Br. Birds*, ii. p. 67. *Savanna Woodcock*, *Lath. Syn.* v. p. 132. — This bird weighs about eight ounces; length sixteen inches. The bill is four inches long, like that of the Woodcock. Crown of the head black, divided down the middle by a pale stripe; above and beneath each eye is another stripe of the same; the upper parts of the body very like the Common Snipe; the under parts white; on the neck, breast, and sides the feathers are edged with dusky; quills dusky; tail reddish brown or rust-colour, barred with black; the two middle feathers plain; legs black. This species is rarely met with in England; it was first described by Mr. Pennant from a specimen shot in Lancashire, now in the Leverian Museum. Is said to have been met with in Kent; and we are informed one was killed in Wiltshire, which weighed seven ounces and a half. It is possible this bird is sometimes killed together with the common species, and not discriminated by the sportsman, who only takes it for a fine large Snipe. Dr. Latham assures us he saved one from the hands of the cook at a friend's house, where, without discrimination, it was intended for the table with several of the common kind, and which is now in his museum.

SUPPLEMENT.—In the second Supplement to the 'General Synopsis' the Great Snipe and the Savanna Woodcock are, we think very judiciously, brought together; consequently the synonyms given in the former part of this work must be connected with the above [these synonyms are incorporated above]. In the same work is given a very full description, from a recent subject, shot in Suffolk, in the month of Sept., and which so exactly corresponds with a specimen in our collection that we shall take the liberty of transcribing it:—Weight eight ounces and a quarter: length, from the bill to the end of the tail, twelve inches; to the end of the toes sixteen: bill two inches and three-quarters (sometimes as much as four inches), black; the under mandible pale half-way from the base: the top of the head brown, mottled with rufous; down the middle a clay-coloured line; sides of the head pale clay-colour, speckled with brown: through the eye, from the bill, a dark brown streak, and a paler one curving round the under mandible: hind part of

the neck, half the back and scapulars chocolate-brown; the feathers streaked on the sides with clay-colour, and barred with ferruginous; the lower part of the back brown, crossed with numerous greyish white lines: tail-coverts pale rufous clay-colour, barred with black-brown, and so long as to cover the tail for two-thirds of its length: the tail when spread is rounded at the end; the eight middle feathers are dusky for three-fourths of their length from the base, the rest of the length rufous, crossed with two or three bars of black; but the four middle feathers are deep rufous, and the two on each side of these very pale; the two outermost feathers on each side wholly black and white in alternate bars: the wing-coverts black-brown, spotted with rufous-white; the rest of the wing dusky black; every feather but the greater quills tipped with white: beneath the wings beautifully crossed with white and dusky bars: the fore part of the neck is the same as behind: the breast, belly, and vent crossed with numerous dusky bars: inclining to a zigzag shape on the sides: legs pale bluish brown, and bare above the knee for half an inch. Two of the Great Snipes in one case, in the late Leverian Museum, were marked as having been killed in Lincolnshire; one was larger than the other, but similar in plumage. In these the breast and belly had each feather marked with an angular ferruginous bar, which gives the undulations observed in the markings on those parts. We believe this species to be really very rare in England, though it may accidentally happen that one is shot and consigned to the palate of the epicure. Mr. N. Luscombe, a gentleman to whom we are under obligations for several rare birds, and whose attention to the subject of native Ornithology may stamp authority to his observations, assures us that in hunting an alder bed for Woodcocks, in the month of February, he flushed a Great Snipe twice, but was unable to kill it. This gentleman says the flight of this bird is very different from that of the Common Snipe, resembling more that of a Woodcock: when it rose it emitted a cry something like the former, but shorter, and of a deeper tone. [A great number of instances are on record of the occurrence of the Great Snipe in Britain: the publication of the 'Zoologist' has vastly multiplied the number of observers, and with them the number of observations, so much so that in the instance of the Great Snipe the records are too numerous to recite: as a general observation it may be stated that these birds appear almost invariably to have been killed while on their vernal or autumnal migration.]

[Snipe, Grey, of Gould's 'Birds of Europe,' is the Brown Snipe of this work.]

Snipe, Half.—See Snipe, Jack.

Snipe, Jack.—[Yarrell, iii. 39; Hewitson, xcix. 355.] *Scolopax Gallinula*, Lin. Syst. i. p. 244, 8; Gmel. Syst. ii. p. 662; Ind. Orn. ii. p. 715, 8. *Gallinago minima*, Raii Syn. p. 105, A. 3; Will. p. 214. *Gallinago minor*, Bris. v. p. 303, 3, t. 26, f. 2; Ib. 8vo, ii. p. 287. *La petite Becassine*, Buf. vii. p. 490. *Gid*, Judcock, Jack Snipe, Will. Angl. p. 291; Br. Zool. ii. No. 189, t. 68; Ib. fol. 121; Arct. Zool. ii. No. 367; Albin, iii. t. 86; Lath. Syn. v. p. 136, 8; Lewin, Br. Birds, iv. t. 159; Walc. Syn. ii. t. 139; Pult. Cat. Dorset. p. 14. — This is about half the size of the Common Snipe, and weighs about two ounces: length eight inches and a half. The bill is nearly two inches long, of a lead-colour, black at the point, and the ridge of the upper mandible light horn-colour; irides dusky. The crown of the head black, slightly edged with rust-colour, bordered on each side with a yellowish streak, beneath which is a dusky one; and close above the eye is another streak of a light colour; from the bill to the eye is a dusky stroke; the neck is varied with ferruginous-brown and dusky, dashed with cinereous above; the back, rump, and scapulars of a fine glossy changeable green and purple; the exterior webs of the latter deep buff-colour, forming two very conspicuous lines from the shoulder to the tail; quills dusky; wing-coverts dusky, bordered with cinereous and brown; the lower breast and all beneath white; the tail cuneiform, consisting of twelve pointed dusky feathers, dashed more or less with ferruginous; legs greenish. The Jack Snipe is not near so numerous as the other species, but is frequently found in the same places; is a more solitary bird, and never known to be gregarious. Amongst rushes, or other thick covert, it will lie till in danger of being trod on, and when roused seldom flies far. It comes to us later than the Common Snipe, and is never known to remain in this country during the breeding season. Is found in most parts of Europe, and in North America.

Snipe, Jadreka. — *Scolopax limosa*, Lin. Syst. i. p. 245, 13; Gmel. Syst. ii. p. 666; Ind. Orn. ii. p. 719, 18; Bris. v. p. 262, 1; Ib. 8vo, ii. p. 277. *Fedoa nostra secunda*, Raii Syn. p. 105, A. 5; Will. p. 216; Ib. Angl. p. 293, II. *La Barge*, Buf. vii. p. 500, t. 27. *Lesser Godwit*, Br. Zool. ii. No. 182; Ib. fol. 120. *Jadreka Snipe*, Lath. Syn. v. p. 146, 17; Arct. Zool. ii. No. 375; Lewin, Br. Birds, iv. t. 162.

Provincial: Stone Plover. — This bird is seventeen inches in length; weight about nine ounces. Bill four inches long, dusky, the base yellowish; irides white. The head and neck cinereous; cheeks, chin, rump, and vent white; back brown; on the wings a line of white; two middle tail-feathers black, the others white at the ends, which increases on the outer feathers, making the outer one almost white; legs dusky. This species is said to have been killed in England, but we believe very rarely. Is found in Iceland, Greenland, Sweden, and Russia.

SUPPLEMENT. — Some doubts have existed whether there really is a specific distinction between this and the Red Godwit; and indeed it must be admitted that their general appearance might favour the opinion that they were varieties of the same species, especially as it is well known the latter is subject to much variation. It is true the rarity of both precludes the possibility of obtaining their habits, or of making many comparative observations. The Jadreka Snipe in our collection appears to be distinct from our specimen of the Red Godwit: it is larger, much longer in the legs and bill; and a very remarkable difference is observable in the claws, for in this they are concave and truncated, as if cut off at the ends. In the description given of this bird in the former part of this work (which it will be evident to the scientific ornithologist was borrowed from good authority, never at that time having examined the species), we were led into a mistake with respect to the disposition of the white on the tail; for instead of the feathers being white at the ends, the word *base* should be substituted. Such is the Linnean description, and is the general accepted character. It was a mere accidental mistake, and has been corrected in the subsequent works of the same highly respectable author. But in addition to what has been stated above with respect to the essential characters of distinction, the following description, from a specimen before us, will give a better idea of the bird in question. The cheeks and chin are speckled with pale ferruginous; from the upper mandible a pale streak runs over the eye; beneath that a dusky one: the neck and breast cinereous, mottled with pale ferruginous; on the latter and along the sides the ferruginous markings become less frequent, but form evident, distant, irregular, broad, transverse bars; these markings are occasioned by the ends of some of the feathers being more or less ferruginous; the belly is white, with only a few scattered spots: the thighs pale rufous-brown, mixed with white: the feathers of the back and

coverts of the wings brown, with pale margins: quills dusky, at the base of most of them more or less white, but scarcely showing any of the last colour when closed: tail a trifle forked, the feathers black for two-thirds from the end, their bases more or less white, except the middle ones; the exterior web of the outer feather white nearly to the tip: the coverts immediately impending the tail are black, and conceal the white at the base of the tail-feathers; the rump is white, as well as the under coverts of the tail: the bill of this specimen is more than four inches in length, and appears to have been reddish for two-thirds of its length from the base, with the point dusky. When we offer our opinion that the *Scolopax Limosa* and *Laponica* are really distinct, we do not pledge ourselves that they have not been confounded, and occasionally substituted one for the other: in those before us there are certainly apparent specific distinctions independent of plumage; for we are aware of the changes many of these birds are subject to from the influence of season and age.

APPENDIX. — A bird from Lord Stanley's collection, lately sent to us for inspection, has so much of the intermediate plumage between the Jadreka Snipe and the Red Godwit that we cannot see how these can any longer be separated as distinct species. Knowledge arrives by slow degrees. Supported by the opinion of other naturalists, we had supposed sufficient distinction was observable in the specimens our own collection afforded, as will be seen under Snipe, Jadreka, in this Supplement. But it will also be observed under the title of Godwit, Red, of this Appendix, that by an examination of some specimens with which Mr. Foljambe favoured us, our opinion began to waver. The present specimen from Lord Stanley possesses so much of the intermediate plumage that we have no longer any doubt of their being the same. This has the bright ferruginous neck and breast; on the latter are a few pale feathers, with brown tips, not yet changed: on the back many of the feathers are plain cinereous-brown, like the original Jadreka; but these are mixed with others that are black, with ferruginous margins: all the coverts of the wings are plain cinereous-brown; and in every other respect it is so exactly similar to the original Jadreka Snipe that we can only consider it to be a bird in that state of change which connects the *Laponica* with the *limosa*. We rejoice in having an opportunity, though late, of offering our more mature opinion upon a subject of so much intricacy. [The Jadreka Snipe of Montagu appears to be the young and winter plumage of the

Red Godwit of this work. See *ante*, p. 117.]

Snipe, Least.—See Purre.

[Snipe, Montagu's.—This name occurs in Mr. Doubleday's 'Nomenclature of British Birds': it appears from the Prince of Musignano's 'Catalogue' that that author considers the Great Snipe of Montagu as distinct from the *Scolopax major* figured at Pl. 320 of Gould's 'Birds of Europe': subsequent ornithologists have not admitted this as a species.]

Snipe, Pool.—See Redshank.

Snipe, Redbreasted.—SUPPLEMENT.—*Scolopax noveboracensis*, *Ind. Orn.* ii. p. 723; *Gmel. Syst.* 1, p. 658. Red-breasted Snipe, *Arct. Zool.* ii. No. 368; *Lath. Syn.* v. p. 153; *Lin. Trans.* ix. p. 198. *Scolopax hudsonica*, *Ind. Orn.* ii. p. 720? Hudsonian Godwit, *Arct. Zool. Sup.* p. 68? *Lath. Syn. Sup.* p. 246? — The weight of this species is seven ounces and three-quarters: length fifteen inches. Bill three inches long, a little reflected, and of a dusky colour, except at the base of the under mandible, which is pale; the upper mandible longest by almost the eighth of an inch: irides dusky: orbits white: crown of the head ferruginous, streaked with dusky: sides of the head, chin, throat, fore part of the neck, breast, belly, and sides bright bay, palest on the chin, and with a few solitary white feathers on the belly: round the vent, and under tail-coverts the feathers are white, tipped with bay, showing part of the white: upper part of the neck behind ferruginous, slightly marked down the shafts with dusky; lower part of the hind neck, upper part of the back, and scapulars dusky, spotted with ferruginous on the margin of the feathers: lower part of the back and rump white, with oblong dusky spots down the shafts: upper tail-coverts barred dusky and ferruginous, becoming white at the base of the feathers: prime quills dusky black, the six first mottled with brown and white on the inner webs towards the base; the secondaries cinereous, margined and spotted with white; the shafts of all more or less white: greater coverts of the prime quills black; from the fifth tipped with white; those of the secondaries cinereous, the inner webs spotted with white; lesser coverts a mixture of dusky, cinereous, and white, dashed with ferruginous, with a few feathers near the quills spotted ferruginous like the back: under wing-coverts white, elegantly barred, and spotted with black: tail nearly even at the end, the two middle feathers rather the

longest, the whole marked with eight or nine alternate bars of black and white quite to the base, forming, when the tail is spread, so many concentric semicircular bands: legs dusky black, two inches and a half long from the knee to the heel; bare space above the knee scarcely three-quarters of an inch: toes margined, outer one connected as far as the first joint to the middle one. This bird was shot near Kingsbridge, about the 21st of May, 1803, and proved a female. Another specimen, killed somewhat later in the same year, was sent to us by Mr. Boys, who remarked that it was shot at Sandwich. This is a male, and weighed eight ounces: length to the tail fourteen inches three-quarters; to the end of the toes sixteen inches and a half; expansion of the wings twenty-seven. About the same time another of these birds was shot at Weymouth, out of a small flock that was observed there for two or three days, and from the account favoured us by the late Mr. Bryer, there was little or no difference from the two in our possession, which are so exactly similar as to render it impossible to ascertain the sexes by the plumage, except the lower belly, vent, and under tail-coverts being more ferruginous, with scarcely any apparent white, should be a sexual mark of distinction. It should appear that these three specimens were shot out of the same small flock, as, from the accounts received, they were decreased in the proportion to those known to have been shot. From the lateness of the season it is probable this little family were hurrying from the south to the north in order to breed, and had coasted the island as far as Kent, and then perhaps the remainder crossed to the Continent, and continued to coast it into the Baltic, and so on to the arctic regions. On the 2nd of May, in the year 1810, another of this species was shot near Bridgewater; and we are informed by Mr. Anstice (who favoured us with it) that it was in company with some Whimbrels. This proved to be a remarkably fine male, weighing ten ounces: the length sixteen inches: breadth twenty-eight and a half. The colour and markings nearly correspond with those before described, but the rump and lower part of the back under the scapulars are more white, having very few spots: the under scapulars are white, marked with diagonal bars on each web, placed alternately: the ferruginous on the belly is also intermixed with rather more white than in either of the other specimens, and many of the feathers on the sides of the breast, and sides of the body under the wings, have their shafts dusky. The very superior weight of this specimen must partly be attributed to its excessive

fatness. It is not improbable this rare species has been confounded with the Red Godwit, and many circumstances not worth relating have greatly confirmed this opinion. In a small collection of birds belonging to a medical gentleman at Marazion, in Cornwall, we recollect noticing a bird very much mutilated by insects, that was supposed to be the Red Godwit, but we have now very little doubt but that it was of this species. The Red Godwit is much longer in the legs, and never of that complete bay-colour, especially on the whole under parts; besides, the tail alone would be at once a mark of discrimination, for in that bird it is invariably white at the base, with dusky or black for the greater part of their length from the end, and never alternately barred as in the Red-breasted Snipe. Many other essential distinctions in plumage might be noticed, but these may be easily discovered by a comparison of the descriptions of the two birds; but as another special guide, it will be observed that in the Red Godwit and Jadreka Snipe, the end of the tail when nearly closed is concave, or a trifle forked; whereas in the Red Snipe the middle feathers are rather the longest. With respect to the identity of the Red-breasted Snipe in this bird, we have not much to instruct us, but the little which is to be found will bear us out in our synonyms, except with respect to size. It is indeed described to be the size of the Common Snipe, but it seems to be so little known that some latitude may be granted in this particular, since the only specimen which seems to have been noticed was said to be an inhabitant of New York, and was preserved in the Blackburnian Museum, from which the description in the 'Arctic Zoology' was taken. Neither the weight nor the measure of this specimen was obtained, and therefore some allowance may be made for bad stuffing and imaginary size.

APPENDIX.—Since the former part of the work went through the press, we received a specimen of the Red-breasted Snipe from Mr. Foljambe's museum for examination, that differs in nothing essential from those before described. This was shot in May, 1812. Another specimen from the same gentleman, shot in December of the same year, on the Yorkshire coast, has the ferruginous margins of the feathers on the back and scapulars very pale, some almost white: the head and neck are paler than described in the former birds; but what is most interesting in this specimen is that the ferruginous feathers of the breast are mixed with a few that are white, each having one or two transverse dusky bars; and upon lifting up the ferruginous

feathers on the neck, a few white ones are discernible, with a dusky streak down the middle. This discovery indicates a change of which we were not before aware; and we now suspect those feathers to be the remains of the plumage of the young, previous to the first moult. From Lancashire another specimen has come under examination, corresponding with the original description. This had been mistaken for the Red Godwit, being marked *Scolopax Lapponica*. [The Redbreasted Snipe here described appears to be the summer plumage, of the Common or Bartailed Godwit of this work. See *ante*, p. 117.]

[Snipe, Sabine's. — *Yarrell*, iii. 20: *Scolopax Sabini*, *Vigors*, in *Trans. Linn. Soc.* xiv. 556; *Temm. Man. d'Ornith.* iv. 432; *Selby*, *Brit. Ornith.* ii. 118; *Gould*, *Birds of Europe*; *Yarrell*, l. c. — "Head, throat and neck brownish black, speckled with obscure chestnut-brown. Belly and vent brownish black, barred with chestnut-brown. Back and scapulars black, with obscure chestnut-brown bars and spots. Under wing-coverts brownish black. The tail consists of twelve feathers, the basal half of which are black; the remaining part chestnut-brown, with black fascia. Bill (which is two inches and seven-tenths in length) blackish brown, passing into yellowish brown at the base. Legs and feet blackish grey. Tarsus an inch and a quarter long." — *Selby*, ii. 120. This bird was described by the late Mr. Vigors, at p. 556 of the fourteenth volume of the 'Transactions of the Linnean Society,' from a specimen killed in Queen's County, Ireland, in August, 1822. A second specimen, as recorded by Mr. Selby, was shot on the banks of the Medway, near Rochester, in October, 1824; a third at Morpeth, in Northumberland, as also recorded by Mr. Selby, but without date; and Mr. Thompson, in his 'Natural History of Ireland,' gives full particulars of a fourth, killed in December, 1827, about a mile from Garvagh, in the County Londonderry. In the 'Zoologist' for 1845 Mr. Knox records, at p. 1025, the occurrence of a fifth specimen, shot early in May of that year, near one of the estuaries of Chichester Harbour: in the volume for 1846 Mr. Sclater, the active Secretary of the Zoological Society, mentions, at p. 1300, a sixth, killed on Basing Moor, in Hampshire: in the volume for 1857 Mr. Stevenson notices, at p. 5427, the occurrence of a seventh at Rainham, near Fakenham, in Norfolk, on the 17th of October, 1856: and finally, in the volume for 1862, Mr. Rodd records, at p. 7882, the occurrence of an eighth example at Carnanton, near Penzance, in 1861. After reading, with the

care which such valuable remarks deserve, the opinions of Mr. Salvin (Zool. 5593) and Mr. Rodd (Zool. 7938), I incline to the opinion suggested, but not enforced, by those accomplished ornithologists, that Sabine's Snipe is nothing more than a variety of the Common Snipe. It seems to me a remarkably apt illustration of that deviation from normal colouring which so frequently occurs in nature, not only among birds, but in every department of the animal kingdom.]

[Snipe, Solitary.—See Snipe, Great.]

Snipe, Spotted.—[Spotted Redshank, *Yarrell*, ii. 624; *Hewitson*, lxxxviii. 326.] *Scelopax Totanus*, *Lin. Syst.* i. p. 245, 12? *Gmel. Syst.* ii. p. 665; *Ind. Orn.* ii. p. 721, 24; *Bewick, Br. Birds*, ii. t. p. 88. *Totanus* alter, *Raii Syn.* p. 106, 11; *Will.* p. 221; *Ib. Angl.* p. 299. *Barker, Albin*, ii. t. 71. Spotted Redshank, *Br. Zool.* ii. No. 186. Spotted Snipe, *Lath. Syn.* ii. p. 148, 19; *Lewin, Br. Birds*, iv. t. 164. Provincial: Red-legged Godwit.—This species is about the size of the Greenshank. The head is of a pale ash-colour, marked with oblong streaks of black; back dusky, varied with triangular white spots; wing-coverts ash-coloured, spotted in the same manner; quills dusky; breast, belly, and thighs white; the first thinly spotted with black; the middle feathers of the tail ash-coloured, the side feathers whitish, barred with black; legs long, and of a bright red. In Latham's 'Synopsis' a variety of this bird is described, the length of which is sixteen inches; the bill more than two inches long, and brown; orbits, chin, and throat white, with a white line from the bill to the eye; cheeks and fore part of the neck white, with short dusky streaks; crown and upper part of the neck brown, streaked with white; wings black, marked with elegant triangular spots of white; breast and belly white; legs long and of a rich yellow; sometimes red. We do not know whether this variety has been met with in England; the other has been killed with us, though rarely. One lately came under our inspection killed in August on the south coast of Devonshire. It weighed about six ounces; length thirteen inches; the bill two inches and a half long, and very slender; the upper mandible longest, and black; the base of the under mandible red. The head and back of the neck dusky, dashed with cinereous, lightest on the latter; from the bill to the eye a dusky streak; chin and throat white; back, scapulars, and wing-coverts dusky, spotted with grey; the fore part of the neck, breast, and all the under parts mottled brown and white; lower part

of the back and rump white; the coverts of the tail barred with black and white; the six first quill-feathers dusky black, the rest more or less scalloped or barred with white on the edges of both webs; the first feather has a white shaft; the tail consists of twelve feathers; the two middle ones rather longest; all obscurely marked with numerous bars of black and brown; the edges scalloped with white; legs orange-red, four inches long from the end of the toe to the knee, and one inch bare above the knee.

SUPPLEMENT.—Since the publication of the original part of this work, we have been favoured with another specimen of this rare species from Mr. Anstice, who shot it near Bridgewater, in September, from a small flock composed of several of the same species, and many more Redshanks, which had been in association for some time. This bird is rather larger than the last described, and the legs longer. In the plumage there is also a little difference; the broad white streak above the base of the upper mandible to the eye, and partly over it, is more conspicuous; the markings on the breast and belly more distinct; the white spots on the outer margins of the secondaries and tertials, as well as other parts, being of a triangular shape, indicate an essential character: the shape of the tail, like that of the Wood Sandpiper, is rather singular, unless occasioned by feathers not being full grown; the two middle feathers are longest, and the outer feather on each side is longer than the two next. In the 'General Synopsis' and some other works the middle feathers of the tail are described to be cinereous or ash-colour, and only the lateral ones barred; whereas, in all the specimens we have examined, the middle feathers are equally barred, and exactly similar to the others. We are also told that sometimes the feathers which cover the upper part of the thighs, and those near them, are blushed with a reddish or vinous-colour. Mr. Bewick mentions a specimen shot in September, that had the upper parts more sparingly spotted than usual, and the breast, belly, and the inside of the wings of a snowy whiteness; the sides under the wings also more delicately spotted with pale brown. This last we consider to be the plumage of maturity; and consequently ours are young birds, probably in their first year's plumage; that killed in August had more brown beneath than the one killed in September, the same month in which Mr. Bewick's bird was shot.

Snipe, Summer.—See Sandpiper, Common.

[Snipe, Whole, is the Common Snipe.]

[Snipe, Yellowshanked. — See Sandpiper, Yellowshanked.]

Snite.—See Snipe, Common.

Snorter.—See Wheatear.

Snow Bird.	} See Bunting, Snow.
[Snow Bunting.]	
[Snow Flake.]	
Snow Fleak.	
Snow Fowl.	

Snow-Hammer.—See Bunting, Tawny.

[Snowy Owl.—See Owl, Snowy.]

Snyth.—See Coot.

[Soland Goose.]	} See Gannet.]
[Solent Goose.]	

[Solitary Snipe.—See Snipe, Great.]

[Song Thrush.—See Thristle.]

Sparling-fowl.—See Dun Diver.

[Sparrow, Hawk.—See Hawk, Sparrow.]

[Sparrow, Hedge.—See Accentor, Hedge.]

Sparrow, House.—[Yarrell, i. 546; Hewitson, liii. 209.] *Fringilla domestica*, Lin. Syst. i. p. 323, 36; *Gmel. Syst.* ii. p. 925; *Ind. Orn.* i. p. 432, 1. *Passer domesticus*, Raii Syn. p. 86, A.; Will. p. 182; *Bris.* iii. p. 72, 1; *Ib.* 8vo, i. p. 327. Le Moineau, *Buf.* iii. p. 474, t. 29, f. 1. House Sparrow, *Br. Zool.* i. No. 127, t. 15; *Ib.* fol. 107; *Arct. Zool.* ii. p. 382, G.; *Will.* *Angl.* p. 249; *Albin*, i. t. 62; *Lewin*, *Br. Birds*, ii. t. 77; *Lath. Syn.* iii. p. 248, 1; *Ib. Sup.* p. 163; *Walc. Syn.* ii. t. 215; *Pult. Cat. Dorset.* p. 12.—This well-known species of Finch weighs near seven drams; length about six inches. The bill is dusky; irides hazel. The crown of the head ash-colour; round the eye, and between that and the bill, is black; behind the eyes, surrounding the back part of the head, bay; cheeks white; chin and under part of the neck black, mixed with grey; belly dirty white; the coverts of the wings are chesnut and black mixed, with a whitish bar across them; the back a mixture of black and rufous; quills dusky, with rufous edges; tail dusky, edged with grey; legs brown. The bill of the female is lighter; behind the eye a line of white; the head and whole upper parts are brown, the under dirty white, dashed with ash-colour; no black on the chin or neck.

The Sparrow is too well known in every part of England; it inhabits the dwellings of the rich and poor, taking possession of the humble thatched cottage in preference to the sumptuous palace. Is rarely seen far from the habitation of man, as it delights in the spoil of his labour. The highest cultivated parts produce the greatest quantity. It might be said of this bird, as of some species of water-fowl, which, remaining always within soundings, warn the mariner of his approach to land; so on the extensive and dreary mountains not a Sparrow is ever to be seen; and the sight of one bespeaks some habitation near. It makes a nest conformable to the place it chooses for incubation, whether in a hole of a wall, in thatch, or under the tiles of a house, or in a Martin's nest, it must conform to the size of the place; but when the nest is made in a tree it is of large size, and covered at the top, composed of hay and straw, lined warmly with feathers and fragments of thread or worsted, bits of cloth, or any refuse material of that sort found about houses. It lays six eggs of a whitish colour, spotted with dusky and cinereous, weighing from forty-three to forty-eight grains. Accidental varieties, such as white, black, and yellowish specimens, are sometimes shot.

Sparrow, Mountain.—See Sparrow, Tree.

Sparrow, Reed.—See Bunting, Reed.

Sparrow, Reed, Lesser. — See Warbler, Sedge.

Sparrow, Tree. — [Yarrell, i. 541; Hewitson, liii. 207.] *Fringilla montana*, Lin. Syst. i. p. 324, 37; *Gmel. Syst.* ii. p. 925; *Ind. Orn.* i. p. 433, 2; *Bewick, Br. Birds*, i. t. p. 162. *Passer montanus*, Raii Syn. p. 87, 15; Will. p. 185; *Bris.* iii. p. 79, 2; *Ib.* 8vo, i. p. 329. *Loxia hamburgia*, *Gmel. Syst.* i. p. 854. *Pyrhula hamburgensis*, *Bris.* iii. p. 314, 2; *Ib.* 8vo, i. p. 396. *Friquet, Buf.* iv. p. 389, t. 29, f. 2. Le Hambouvreux, *Buf.* iv. p. 398. Hamburg Tree Creeper, *Albin*, iii. t. 24. Hamburg Grosbeak, *Lath. Syn.* iii. p. 149, 64. Tree or Mountain Finch, *Br. Zool.* No. 128; *Ib.* fol. 109; *Arct. Zool.* ii. No. 246; *Will.* *Angl.* p. 252, t. 25; *Albin*, iii. t. 66; *Edw.* t. 269; *Lewin, Br. Birds*, ii. t. 78; *Lath. Syn.* iii. p. 252, 2; *Sup.* p. 163; *Walc. Syn.* ii. t. 216; *Don. Br. Birds*, iv. t. 88.—This species is rather less than the House Sparrow; length five inches and a half. Bill black; irides greyish hazel. The head and nape chesnut; chin black; a spot of the same colour behind the eye; the upper parts of the body rufous-brown,

spotted with black, inclining to greenish towards the rump; sides of the neck, the breast, and under parts dusky white; wing-coverts rufous, edged with black, and crossed with two bars of white; the greater coverts black, with ferruginous edges; quills blackish, with rufous edges; tail even at the end; colour rufous-brown; legs pale yellow. The female wants the black marks on the throat and ears, and the colours are duller. The Tree Sparrow is much more local than the common species: it seems to be mostly confined to Lancashire, Yorkshire, and Lincolnshire, and said to be very plentiful in the last county, flying in large flocks in the winter season, but has never been observed farther north. It always makes its nest in trees, which is said to be composed of bents, and lined with feathers, and lays five eggs of a pale brown colour, with spots of a darker shade. Whether this bird is an inhabitant of the more southern counties we have not been able to ascertain.

SUPPLEMENT. — Having been taught to believe that the Tree Sparrow was as common in some parts of Lancashire, Yorkshire, and Lincolnshire, as the House Sparrow, we expected to have no difficulty in obtaining a more perfect knowledge of the habits of this species by actual acquaintance with them in their native state, than any books had conveyed. In a tour through Lincolnshire we eagerly sought for the Tree Sparrow, and shot into every unfortunate flock of House Sparrows we could find in our route, but without success, and began to despair of succeeding; when, by an unlucky accident which detained us several days at Wainfleet, we were in a small degree recompensed by the discovery of the bird in question in that neighbourhood. It will be recollected that authors have made a distinction between the sexes, by asserting that the female is destitute of the black on the throat and ears. It is also said to build in trees, but whether in holes or in the branches is not mentioned; these desiderata in the natural history of the species have perplexed and misguided many. Every House Sparrow that has built its nest in a tree (by no means an uncommon occurrence) has at once been pronounced to be the Tree Sparrow, and consequently that species has been supposed to be more plentiful, and more generally diffused throughout England, than we have any reason to believe is the fact. On a small estate belonging to Bethlam Hospital, close to the village of Wainfleet, a few pairs of these birds had taken possession of some large trees (the only ones deserving the name of trees for many miles round) which, after having been

condemned, were reprieved upon a representation of their very great advantage to mariners, as a conspicuous landmark in such a flat and featureless country. Here then we expected to realize all our anticipation with respect to the natural history of this species, it being the height of the breeding season (middle of May), and we soon procured a specimen by the assistance of a gun. In vain were all the trees examined for their nest; not even the House Sparrow had resorted to these trees to build amongst the foliage. Patience and perseverance, however, which overcome innumerable obstacles, let us into the secrets of these little creatures; for by concealing ourselves contiguous to some old pollard trees (much decayed, especially where limbs had been cut off, leaving the trunk pervious), to which several of these birds were observed to be more than ordinarily attached, we had the satisfaction of observing one of them enter a small hole. No doubts now remained of the place of nidification; and after suffering the bird to remain for some time it was driven out and shot, with a full expectation that it would prove a female, the other having possessed all the black marks which are asserted to characterize the male only. To our astonishment, however, this was exactly similar in markings; and we had yet to obtain the female. Two others were afterwards shot by us on the same tree, both of which corresponded exactly with those already in our possession, which occasioned a strong suspicion that there was some mistake in the usual description of the distinction of the two sexes; in consequence these four birds were instantly dissected for preservation, by a friend and companion in our tour, who was requested, while yet the gun was in hand, to send us the result of the inquiry: and, as suspected, they actually turned out to be two of each sex. Thus one point had been clearly brought to proof, and in consequence saved the lives of many others: it only now remained to enlarge the holes in the tree, in order to search for the nests, which by the assistance of a chisel was soon effected, and the nests belonging to the two pairs of birds were taken, each with four eggs. The materials with which the nest is made are the same as commonly adopted by the House Sparrow, chiefly hay and feathers. The eggs are also similar to those of that bird, but smaller, weighing from 34 to 41 grains. The Tree Sparrow appears to be much inferior in size to the House Sparrow, but the difference in weight is only about a dram, this being six drams; and the length is inferior by half an inch, being five inches and a half; with no discrimination

of sexes by size, or by colour and markings. The fact is that the young, as in the Common Sparrow, puts forth the black marks last, and consequently in the infant state of plumage it has been considered as the female. It is a much more elegant species than the House Sparrow, and differs from that bird with respect to sexual distinction in plumage, for every one knows the cock from the hen of that very common species, *Fringilla domestica*. The note of the Tree Sparrow would only be discriminated from the other by persons of experience in that science; it is, however, more shrill. So little do people in general know or discriminate the bounties of Nature with which they are surrounded, that even the best informed in the neighbourhood did not know the distinction of these two species. It is now perfectly clear this bird resides amongst trees only, and that it makes its nest in holes and cavities of such as are decayed, and never amongst the branches, nor in buildings. This species may be considered as one of the most local of our indigenous birds, and, we suspect, by no means plentiful in any part of England; but as the circumstance of House Sparrows sometimes making their nest in trees has occasioned an opinion that they are a different species, and have frequently been entitled Tree Sparrow, it is extremely difficult to trace the true *Fringilla Montana*.

Sparrow, Water.—See Bunting, Reed.

Sparrow, Water, Lesser.—See Warbler, Sedge.

[Speckled Diver.—The first and second Speckled Divers of Bewick are respectively the young bird of the year, and the adult, in winter plumage, of the Redthroated Diver, which see.]

Spency.—See Petrel, Stormy.

Spoonbill.—A genus of birds, the characters of which are: Bill long, broad, flat, and thin, the end widening into a roundish form, not unlike a spoon. Nostrils small, placed near the base. Tongue small and pointed. Feet semipalmated.

Spoonbill.—See Shoveler; and Duck, Scaup.

Spoonbill, White.—[*Yarrell*, ii. 597; *Hewitson*, lxxxv. 320.] *Platalea leucorodia*, *Lin. Syst.* i. p. 231, 1; *Gmel. Syst.* ii. p. 613; *Ind. Orn.* ii. p. 667, 1; *Bewick, Br. Birds*, 11, t. p. 25. *Platea*, sive *Pelecanus*, *Raii Syn.* p. 102, 1; *Will.* p. 212, t. 52; *Bris.* v. p. 352, 1; *Ib.* 8vo, ii. p. 300. *La*

Spatule, *Buf.* vii. p. 448, t. 24. Spoonbill, or Pelican, *Albin*, ii. t. 66; *Will. Angl.* p. 288, t. 5. White Spoonbill, *Br. Zool. App.* t. 9; *Arct. Zool.* ii. p. 441, A.; *Sup.* p. 66; *Lath. Syn.* v. p. 13, 1; *Ost. Menag.* t. p. 61; *Lewin, Br. Birds*, iv. t. 142; *Walc. Syn.* ii. t. 123; *Pult. Cat. Dorset.* p. 13.—Weight about three pounds and a half; length two feet eight inches. The bill is near seven inches long, and three-quarters of an inch broad in the narrowest part; two inches towards the point in the largest part of the spoon; colour black, sometimes brown, with an orange-coloured spot near the tip of the upper mandible; it is also crossed with several indentations and dotted protuberances; the irides in some grey, others reddish; the lore and round the eyes and throat the skin is bare and black. The whole plumage is white; sometimes the quills are tipped with black; the legs are black, six inches long; thighs bare about half-way; toes connected by a small web, extending as far as the second joint of the outer and first joint of the inner toe. The Spoonbill is rarely met with in England. Mr. Pennant mentions that a flock of these birds migrated into the marshes near Yarmouth, in Norfolk, in April, 1774. We have also been assured it is sometimes seen on the coast of Devonshire in the winter. Is said to build its nest in high trees near to the sea, and to lay three or four white eggs, powdered with a few pale red spots, about the size of that of a Hen.

SUPPLEMENT.—In the former part of this work mention was made that the Spoonbill had been sometimes seen on or contiguous to the coast of South Devon. Since that period two have been shot within a few miles of Kingsbridge, both of which are in our collection. The first is a young bird, by the colour of the bill and short feathers on the back of the head; the plumage is white, except the greater quill-feathers, and the larger coverts belonging to them, which are more or less tipped with black, and the shafts mostly of that colour; the *alulae spuriae* are marked the same. Shot in November, 1804. The other, an old bird in the highest state of beauty, being in its full plumage, was shot on the 16th of March, 1807; and though it had all the appearance of a male from the prodigious flowing crest, it turned out upon dissection to be a female. This beautiful bird weighed three pounds three ounces; measured thirty-one inches to the end of the tail, and thirty-eight inches to the end of the middle toe: length of the bill from the feathers on the forehead seven inches and a quarter; breadth of the spoon nearly two inches; the colour dusky, with

transverse undulated ridges of black; the margin formed by a groove running from the nostrils, and surrounding the bill, is punctured; the point, which for an inch is nearly smooth, is of an orange-yellow; on the inside of both mandibles, near the base, are several protuberances on each side: from the bill to the eye, and the orbits, bare of feathers, and of an orange-yellow, without any fine down, described by some authors. The whole plumage is white, except the lower part of the neck, which is yellowish buff, becoming faint behind: the feathers on the top of the head increase in length by degrees; those of the hind head are from three to five inches long, forming a most beautiful flowing crest of slender yellowish white feathers. The Spoonbill has been rarely observed with this fine flowing crest, but probably this is lost after the breeding season, and not resumed till towards the following spring; for there can be no doubt that the male is possessed of such a crest as well as the female. The trachea is somewhat compressed, and the cartilaginous rings are very fine and tender; at the lower part is a flexure, reflecting and again returning, two inches or more in length, before it enters the cavity of the breast; this convolution forms somewhat the figure of 8, but the flexures only touch, not cross each other, and the points of contact are united by fine membranes. Buffon remarks the double inflection in the trachea of this bird, and compares it to what has been observed in the Crane. Willughby says, "We did not observe in our bird those reflections of the windpipe which Aldrovandus mentions and figures." Surely Willughby must have been deceived, since it is now proved that the female has this singular flexure in the windpipe; and in no instance has that sex been observed to possess any singularity, in that part, of which the male is destitute. In the stomach of the specimen here described, there were several small fishes in a half-digested state, and some common sticklebacks perfect in the œsophagus. The flesh of this species is remarkably dark-coloured when dressed, but well-flavoured, being free from any fishy taste. It is remarkable that both these birds were killed in company with the Common Heron.

[Spotted Crake.—See Gallinule, Spotted.]

[Spotted Eagle.—See Eagle, Spotted.]

[Spotted Flycatcher.—See Flycatcher, Spotted.]

[Spotted Gallinule.—See Gallinule, Spotted.]

[Spotted Guillemot.—A variety of the Black Guillemot.]

[Spotted Redshank.—See Snipe, Spotted.]

[Spotted Sandpiper.—See Sandpiper, Spotted.]

[Spotted Snipe.—See Snipe, Spotted.]

[Spotted Water Hen.—See Gallinule, Spotted.]

Sprat Loon.—See Diver, Speckled.

Spurre.—See Tern, Common.

[Spurwinged Goose.—See Goose, Spurwinged.]

[Squacco Heron.—See Heron, Squacco.]

[Standgale.—A name given by Mudie to the Kestrel.]

Stannel.—See Kestrel.

Stare.—A genus of birds, the characters of which are: Bill strait, depressed. Nostrils guarded above with a prominent rim. Tongue hard and cloven. Toes, middle one united to the base of the outmost as far as the first joint.

Stare, or Starling. — [Yarrell, ii. 44; Hewitson, iv. 216.] *Sturnus vulgaris*, Lin. Syst. i. p. 290, 1; Gmel. Syst. ii. p. 801; Ind. Orn. i. p. 321, 1; Raii Syn. p. 67, A. 1; Will. p. 144, t. 37; Bris. ii. p. 439, 1; Ib. 8vo, i. p. 280. L'Etourneau, Buf. iii. p. 176, t. 15. Stare, or Starling, Br. Zool. i. No. 104, t. 46; Ib. fol. t. P. 2, f. 1; Arct. Zool. ii. p. 331, A.; Will. Angl. p. 196, t. 37; Albin, i. t. 40; Ib. Song Birds, t. 3, p. 11; Hayes, Br. Birds, t. 32; Lewin, Br. Birds, ii. t. 56; Lath. Syn. iii. p. 2; Sup. p. 137; Walc. Syn. ii. t. 195; Pult. Cat. Dorset. p. 8.—Weight about three ounces; length eight inches and three-quarters. The bill is not quite an inch and a half long, bluish at the base, yellow at the point, and when opened the gape extends far back in the head; the nostrils are surrounded by an oval prominent rim; irides hazel. The head, neck, and upper parts of the back are black, glossed with purple and green, as viewed in different lights; the feathers on the neck are long, narrow, and pointed; the breast, lower part of the back, coverts of the wings, and rump are black, shaded with dark green; the whole plumage, throat excepted, elegantly marked with small spots, white on the breast, and yellowish brown on the head and back; the larger quill-feathers are dusky on the

inner webs, and, except the outer one, black on their exterior webs; the other quills are of a dark ash-colour, bordered with green, and the whole edged with reddish brown; the tail is short, composed of twelve feathers, much like those of the wing; legs reddish brown. This is a plentiful species; is found in almost every part of the Old Continent; many stay with us the whole year; but the vast flocks that are seen in severe winters probably migrate to this country in search of food, and return northward in the spring. We have observed continued flights of these birds going westward into Devonshire and Cornwall in hard weather, and return eastward as soon as the frost breaks up. Their food is chiefly insects, but in defect of these will eat grain. Great numbers are frequently taken in winter in our pigeon-houses, where they roost for the sake of warmth; but we believe rarely if ever suck the eggs of that bird, which has been attributed to them. It will, indeed, sometimes build in such places, but more frequently in the hole of a tree, and sometimes in an old building. The nest is made of dry grass, on which it lays four or five light blue eggs, about one dram three-quarters in weight. The natural notes of this bird are a shrill whistle and a chattering noise; but in confinement, where it becomes very docile, is taught to imitate the human voice, and to whistle tunes. The flight of the Starling is not undulated, but smooth and even, and it walks or runs upon the ground like the Wagtail or Lark genus, and is rarely observed to hop like the Thrush. In the North of England it is called Chepster, or Chep Starling.

[Starling, Redwinged. — Yarrell, ii. 39. "*Icterus phœniceus*, Bonaparte, *Syn.* p. 52. *Icterus phœniceus* (Redwinged Blackbird), Nuttall, *Man.* i. 169. *Agelaius phœniceus* (Redwinged Maizebird, Swainson & Richardson, *Fauna Bor.-Amer.* ii. 290." *Sturnus* (*Xanthornus*) *predatorius*, Wilson, *Amer. Ornith.* i. 192, of Jameson's Edition, who gives it the name of Redwinged Starling, and mentions Swamp Blackbird, Marsh Blackbird, Redwinged Blackbird, Corn Thief, Maize Thief, &c., as provincial names.—"The Red-winged Starling is nine inches long, and fourteen inches in extent; the general colour is a glossy black, with the exception of the whole lesser wing-coverts, the first or lower row of which is of a reddish cream-colour, the rest a rich and splendid scarlet; legs and bill glossy brownish black; irides hazel; bill cylindrical above, compressed at the sides, straight, running considerably up the forehead, where it is prominent, rounding and flattish towards the tip, though sharp-

pointed; tongue nearly as long as the bill, tapering and lacerated at the end; tail rounded, the two middle feathers also somewhat shorter than those immediately adjoining. The female is seven inches and a quarter in length, and twelve inches in extent; chin a pale reddish cream; from the nostril over the eye, and from the lower mandible, run two stripes of the same, speckled with black; from the posterior angle of the eye backwards a streak of brownish black covers the auriculars; throat and whole lower parts thickly streaked with black and white, the latter inclining to cream on the breast; whole plumage above black, each feather bordered with pale brown, white or bay, giving the bird a very mottled appearance; lesser coverts the same; bill and legs as in the male. The young birds at first greatly resemble the female; but have the plumage more broadly skirted with brown. The red early shows itself on the lesser wing-coverts of the males, at first pale, inclining to orange, and partially disposed. The brown continues to skirt the black plumage for a year or two, so that it is rare to find an old male altogether destitute of some remains of it; but the red is generally complete in breadth and brilliancy by the succeeding spring. The females are entirely destitute of that ornament. The flesh of these birds is but little esteemed, being in general black, dry, and tough. Strings of them are, however, frequently seen exposed for sale in our markets."—Wilson, i. 200. Three instances are recorded of the occurrence of this familiar and destructive North-American bird in England. In the 'Zoologist' for 1843 Mr. Gurney records, at p. 317, that a specimen was shot on one of the broads or large pieces of water so common in Norfolk, on the 2nd of June, 1843: it was a male, in the plumage of the second year, and apparently approaching the period of another moult: it was in good condition, its stomach filled with the remains of coleopterous insects, and its plumage free from any marks of its having been kept in confinement. Mr. Yarrell mentions a second specimen shot among reeds at Shepherd's Bush, a swampy situation about three miles west of London, on the Uxbridge Road, in the autumn of 1844. The third is recorded by Mr. Jeffery, at p. 8951 of the 'Zoologist' for 1864: it was killed on the 25th of December, 1863, at Sidlesham, in Sussex, and was in very good condition, and exhibited no appearance of having been caged.]

Steingal, or Stonegall. — See Kestrel.

[Steller's Western Duck.—See Duck, Steller's Western.]

Stern.—See Tern, Black.

[Stilt, Blackwinged. — See Plover, Long-legged.]

Stint.—See Purre.

[Stint, American.—*Tringa Wilsonii* (Least Sandpiper), *Nuttall, Man.* ii. 1834, 121. *Tringa pusilla, Wilson, Amer. Ornith.* ii. 1812, 32, pl. 37; iii. 71 of *Jameson's Edition* (not of Linnæus); *Aud. Orn. Biog.* iv. 1838, 180, pl. 320; *Ib. Syn.* 237; *Ib. Birds of America*, v. 1842, 280, pl. 337. *Pelidna pusilla, Bon. List*, 1838. ?*Tringa minutilla, Vieill. Nouv. Dict.* xxxiv. 1819, 466. *Tringa minutilla, Rodd, Zool.* 4297. — "From the carpus to the end of the wing three inches and seven-sixteenths, which is three-eighths of an inch shorter than either the Little Stint [Sandpiper, Little, p. 285] or Temminck's Stint [Sandpiper, Temminck's, p. 294]. Tarsus the same length as that of Temminck's Stint, eleven-sixteenths of an inch. The middle toe, claw included, full three-fourths of an inch long, which is nearly one-eighth of an inch longer than that of the Little Stint or of Temminck's Stint. Primaries only an eighth of an inch longer than the tertials, whilst in *Tringa minuta* the longest primary is five-eighths of an inch longer than the tertials; and in Temminck's Stint the longest primary feather is half an inch longer than the tertials. Bill three-fourths of an inch long, a little curved, and more pointed than in either the Little Stint or Temminck's Stint. Plumage, tail included, similar to that of *Tringa minuta*, but of a darker shade throughout. Legs grayish yellow." — *Vingoe in Zoologist for 1854*, p. 4297. Mr. Rodd adds:—"I think that an undoubted example of this *Tringa*, new to the British Fauna, may be recorded as having been obtained from Mount's Bay during the month of October, 1853; and having this day minutely examined the specimen, as preserved by Mr. W. H. Vingoe, who shot the bird, and called my attention to its specific value, I have no hesitation in sending a few particulars of this new *Tringa*. The bird was found singly in a piece of wet grass-land adjoining the sea-shore; and when it rose Mr. Vingoe observed that it was silent; whereas in the other two species, *viz.*, the Little Stint and Temminck's Stint, he has always observed that both these birds uttered, on being flushed, a hurried repetition of a feeble note, which may be expressed by the word 'weet.'"]

Stint, Little.—See Sandpiper, Little.

[Stint, Temminck's.—See Sandpiper, Temminck's.]

[Stock Dove.—See Dove, Stock.]

Stone Chat, or Stone Chatter. — [*Yarrell*, i. 278; *Hewitson*, xxx. 107.] *Motacilla rubicola, Lin. Syst.* i. p. 332, 17; *Gmel. Syst.* ii. p. 969. *Rubetra, Bris.* iii. p. 428, 25, t. 23, f. 1; *Ib.* 8vo, i. p. 429. *Sylvia Rubicola, Ind. Orn.* ii. p. 523, 49. *Ænanthe, nostra tertia, Raii Syn.* p. 76, A. 4; *Will.* p. 169, t. 41. *Traquet, Buf.* v. p. 215, t. 13. Stone Chatter, Stone Smith, Moor-titling, *Br. Zool.* i. No. 159; *Ib.* fol. 103, t. S. 2, f. 5, 6; *Will. Angl.* p. 235, t. 41; *Albin*, i. t. 52; *Hayes, Br. Birds*, t. 39; *Lath. Syn.* iv. p. 448, 46; *Lewin, Br. Birds*, iii. t. 108; *Walc. Syn.* ii. t. 239; *Pult. Cat. Dorset.* p. 9; *Don. Br. Birds*, iv. t. 92. Provincial: Stone-smith; Blacky-top. — This species of Warbler weighs about five drams; length five inches and a quarter. The bill is black, broad at the base, and beset with bristles; irides dusky. The head and throat black; on each side the neck is a large white spot; the feathers on the back are black, edged with tawny; the lower part of the rump and tail-coverts white, in some spotted; the breast is of a deep rust-colour; belly lighter; quill-feathers dusky; the lesser ones edged on their exterior webs with bright rust-colour; the coverts of the wings black, slightly tipped and edged with rusty brown, except some of the larger series next the body, which are of a pure white, making a large conspicuous spot on the wing; the tail is black, slightly tipped and edged with pale brown; legs black. Male birds of the first year have the black feathers on the head mixed with rufous. The female has no black on the head, but is of the same colour as the back, which is lighter than that part in the male; on the throat is an obscure dusky spot; the white on the rump is also wanting, but it possesses that mark on the wings. The Stone Chat has much the habits of the Whinchat, frequenting commons and furzy places, where they sit upon the uppermost sprays, and dart at every fly that passes, frequently returning to the same place again, like the Flycatcher, to which they seem as nearly allied as the Cold Finch or Pied Flycatcher, insects and worms being their only food. This bird seems to be more general than the other species; it remains with us the whole year, and is one of the first birds that makes its nest in the spring. We have frequently found it with eggs before the middle of April. The nest is placed

on or very near the ground, at the bottom of a furze, or some other bush; is composed of moss and bents, lined with hair, and sometimes mixed with small feathers. The eggs are five in number, of a blue-colour, with small rufous spots at the larger end, which in some are faint, in which case it is scarcely to be known from those of the Whinchat; their weight is about thirty grains. It is probable this species quits its usual place of abode, the dreary moors and furzy commons, in very severe weather, as we have observed in some of the most temperate parts of England, Devonshire and Cornwall; for, on the fall of a considerable quantity of snow, not one was to be seen where many were the day before; nor did they return for some time after the snow was melted. It is hardly possible they should quit the kingdom in the middle of winter; and yet none were to be seen anywhere about that country. It is likely a partial migration takes place in autumn, as we do not see so many in winter as in summer. In the early part of the spring it sings very prettily, springing into the air, and suspending itself some time on wing. But as it breeds so early its song is of short duration, as few birds sing after their young are hatched. When the young leave the nest the old birds are extremely clamorous and bold, and are as artful in enticing any one from their young as they are in concealing their nest.

[Stone Curlew. — See Bustard, Thick-kneed.]

Stone Runner.—Many of the Sandpipers so-called.

Stone Smith, or Smich.—See Stone Chat.

[Stork, Black. — *Yarrell*, ii. 591; *Hewitson*, lxxxiv. 319. *Ardea nigra*, *Montagu*, *Linn. Trans.* xii. 19; *Selby*, *Brit. Ornith.* ii. 48; *Temm. Man. d'Ornith.* ii. 561. — "In the adult bird the beak and the naked skin around the eye are red, tinged with orange; the irides reddish brown; the head, neck all round, upper surface of the body, wings and wing-coverts are glossy black, varied with blue, purple, copper-coloured and blue reflections; the primary quill-feathers and the tail black; the whole of the under surface of the body, from the bottom of the neck to the end of the under tail-coverts, white; the legs and toes orange-red; the claws black. There is no difference in the plumage of the sexes. The whole length three feet four inches. From the carpal joint to the end of the wing twenty-one inches; the beak, from the point to the angle of the gape,

seven inches; length of the middle toe four inches; of the tarsus eight inches; of the naked part above, four inches and a half." — *Yarrell*, l. c. Colonel Montagu's specimen was shot in West Sedge Moor, adjoining the parish of Stoke St. Gregory, Somersetshire, on the 13th of May, 1814: he gives the following account of its habits in confinement:—"Like the White Stork, it frequently rests upon one leg; and if alarmed, particularly by the approach of a dog, it makes a considerable noise by reiterated snapping of the bill, similar to that species. It soon became docile, and would follow its feeder for a favourite morsel—an eel. When very hungry it crouches, resting the whole length of the legs upon the ground, and supplicantly seems to solicit food by nodding the head, flapping its unwieldy pinions, and forcibly blowing the air from the lungs with audible expirations. Whenever it is approached, the expulsion of air, accompanied by repeated nodding of the head, is provoked. The bird is of a mild and peaceful disposition, very unlike many of its congeners; for it never makes use of its formidable bill offensively against any of the companions of its prison, and even submits peaceably to be taken up without much struggle. From the manner in which it is observed to search the grass with its bill, there can be no doubt that reptiles form part of its natural food; even mice, worms, and the larger insects, probably add to its usual repast. When searching in thick grass, or in the mud, for its prey, the bill is kept partly open: by this means I have observed it take eels in a pond with great dexterity: no spear, in common use for taking that fish, can more effectually receive it between its prongs than the grasp of the Stork's open mandibles. A small eel has no chance of escaping when once roused from its lurking-place. But the Stork does not gorge its prey instantly, like the Cormorant; on the contrary, it retires to the margin of the pool, and there disables its prey by shaking and beating with its bill, before it ventures to swallow it. I never observed this bird attempt to swim; but it will wade up to the belly, and occasionally thrust the whole head and neck under water after its prey. It prefers an elevated spot on which to repose; an old ivy-bound weeping-willow, that lies prostrate over the pond, is usually resorted to for that purpose. In this quiescent state the neck is much shortened by resting the hinder part of the head on the back: and the bill rests on the fore part of the neck, over which the feathers flow partly so as to conceal it; making a very singular appearance. The Black Stork, perhaps, is

not more delicate in the choice of its food than the White species: fish appears to be preferred to flesh: but when very hungry any sort of offal is acceptable. All birds that pursue their migrative course by night in congregation have undoubtedly some cry by which the whole assembly is kept together: yet it would appear that at other times the Black Stork is extremely mute; not a single note has been heard to issue from the bird in question since its captivity." The following interesting correspondence between Mr. Robert Anstice and Col. Montagu was communicated to the 'Zoologist' for 1850, by the late Mr. Baker, of Bridgwater:—

"On the Capture, Habits and Change of Plumage in the Black Stork (*Ciconia nigra*).—I beg to hand copies of correspondence between the late Robert Anstice, Esq., of Bridgwater, and the late Col. Montagu, on the capture, habits, and changes of plumage of the Black Stork, which is now in the British Museum, and is the first specimen of this interesting bird recorded as a visitor to Britain. Mr. Anstice was better known as an amiable and excellent man, by his intercourse and correspondence with the distinguished men of science and eminent naturalists of his day, than by his published works. Col. Montagu is too well known as an author on various branches of Natural History to require any remark. The *Leptocephalus* mentioned by Mr. Anstice, in his letter of December 6, 1814, was taken in Bridgwater River, and was the first specimen seen by Col. Montagu.—WM. BAKER; Bridgwater, December 20, 1849."

"Bridgwater, June 4, 1814.—Dear Sir: I have just obtained a bird which is in the list of your desiderata, and I therefore hope it will be acceptable to you. . . . As the bird agrees in every respect with the description given of the Stork (*Ardea Ciconia*), except that it is brown or cinereous everywhere but on the belly, which is white, I suppose it to be the young bird of that species. I cannot indeed find, on a short examination of the books which I have on the subject, that such changes take place or appear previously to those mentioned to belong to that bird, but, reasoning from analogy, I think it is probable to be so. It was shot in one of the moors about five miles south from hence, by the same person who shot on the same spot a Spoonbill, on the 25th of November last, as I think I before mentioned to you. What injury this poor fellow has received besides a low fracture of the wing I have not time to examine before the post goes; but the man assures me it has fed on eels and other small fish since Tuesday last,

the 31st. ult. . . .—I am, my dear sir, yours obliged, &c., ROBT. ANSTICE.—To Geo. Montagu, Esq."

"Knowle, June 5, 1814.—My Dear Sir: Your kind favour is just received; and as you seem desirous of hearing from me immediately, supposing it will reach you before the bird takes its departure, I have taken my pen to say that the bird will be acceptable to me, either dead or alive. It is not easy for me to determine, by your short description, what it may be; and I confess I should not expect, from the history of the Stork, as far as I have been able to learn, that it can be of that species, because at this season most birds appear in mature plumage. It is true the Stork is brown, as well beneath as above, in its first plumage; but I suspected the whole assumed the white attire on the return of the following spring. If it should turn out to be what has been called the Black Stork (*Ardea nigra*), which is also an European species, it would be a greater rarity, as at present no instance is on record of its having been seen at large in England. The upper part of these birds is of a violet-brown, in some parts glossed with green; from the breast to the vent white; throat and neck brown, dotted with white. . . .—Yours ever, dear sir, G. MONTAGU.—To Robt. Anstice, Esq."

"Knowle, June 12, 1814.—Dear Sir: Knowing that you will be anxious to hear of the arrival of the Stork, I cannot delay repeating my best thanks for so valuable an acquisition. . . . It arrived at Knowle about 5 o'clock in the evening, when it took some fish as soon as liberated. The poor fellow was put into a walled garden, having a large pan of water. . . . If I can furnish fish enough, or by degrees induce him to eat flesh, he is likely to live and repay me by the examination of his manners, and perhaps some change of plumage, which I think a few dark glossy green feathers on his back indicate. It is certainly the Black Stork, and the only instance of this bird having varied its longitudinal flight so much to the west. . . . By drooping the left wing I conclude it has a tendonous wound, which prevents flying. . . . How fortunate it is that this solitary instance of this eastern inhabitant straying into this country should have come to the knowledge of a scientific person! Had it not been for your zeal, so valuable an acquisition to the fauna of British birds would have most probably perished in obscurity. We shall now be able to record it, and, if it lives, with many advantages. . . .—G. MONTAGU.—To Robt. Anstice, Esq."

"Bridgwater, June 18, 1814.—Dear Sir: I assure you such were the docility and appearance of superior intellect in my friend Stork, during his stay with us, that I had no small struggle with my feelings on parting with him, especially on so perilous a journey, considering the confinement necessary for the poor fellow, whose length of limb I was much afraid would make a close package very uncomfortable at the least. I am therefore delighted in no common degree, and equally obliged by your early information, of his safe arrival at Knowle, and that he proved to be the *rara avis* you suspected him to be: pleased, therefore, as I should have been to have retained him, I am much more so to have placed him in your hands. . . . I wish to lose no time in answering your inquiries, as far as my information goes. . . . Some small soles were offered it, but they were refused; however the next morning they had disappeared. Some eels were put before him during the day, and the temptation was too great for him to resist: he immediately swallowed them in my presence. I got a friend to take a likeness of Mr. Stork on Monday, and really he stood for his picture as composedly and steadily as most gentlemen sit for theirs, and looked as if he perfectly understood what was going on. . . . His manners indicate him to be in some degree domesticated; but his plumage is, I think, too perfect for a bird which had been long under confinement. . . .—ROBT. ANSTICE.—To Geo. Montagu, Esq."

"Knowle, June 25, 1814.—My Dear Sir: . . . Our friend Stork is well, become quite tame, and comes to the call when hungry. It is evidently beginning to moult, by the apparent increase of dark glossy green feathers on the back. . . . I have by degrees induced it to eat flesh, so I have no fears of its starving. Frogs, its natural food, are as scarce in Devonshire (at least in this part) as toads; it is seldom I see either. . . .—G. MONTAGU.—To Robt. Anstice, Esq."

"Knowle, September 11, 1814.—My Dear Sir: . . . Your old friend, the Stork, is in perfect health, and quite docile, consequently developing much more of its habits: unfortunately a frog in this county is nearly as rare an animal as himself, which I am sorry for, as I have no doubt, by his manner of searching in the grass; that those Amphibia constitute a great portion of its food. . . . He has been moulting slowly all the summer, and is not nearly completed now: as far therefore as I perceive, the whole upper part of his plumage will be a very dark

green, like the Green Ibis, which at a distance looks like dingy black, the head and neck excepted, which is not altered in colour.—I am, my dear sir, most truly obliged, yours, G. MONTAGU.—To Robt. Anstice, Esq."

"Knowle, December 4, 1814.—My Dear Sir: Friend Stork is well and very tame, but does not moult kindly: he is becoming much darker, and will, I expect, by the spring be all over a green-black. I have been waiting this change, in order to give in a paper to the Linnean Society concerning him.—G. MONTAGU.—To Robt. Anstice, Esq."

"Bridgwater, December 6, 1814.—Dear Sir: I am glad to find the *Leptocephali Morrisii* which I supplied you with prove so interesting. I am also pleased to hear that the Stork is well, and hope he will put on his best dress before the spring, to enable you to make a favourable report of him.—Yours affectionately, ROBT. ANSTICE.—To Geo. Montagu, Esq."

"Knowle, April 4, 1815.—My Dear Sir: The Stork is so much changed in plumage that it would scarcely be known by the drawings taken when first captured. It now better accords with *Ardea nigra* than heretofore, for at a distance the whole upper parts appear black, but on a nearer view are found to be dark glossy green, except the upper part of the back, which has a resplendence of purple, each feather margined with dark green. As its plumage is now completed, as to the usual moulting, I have sent in a paper to the Linnean Society, with an account of its capture and natural history, as far as I have been able to ascertain them. I have described three intermediate or successive changes. . . .—G. MONTAGU.—To Robt. Anstice, Esq."

In addition to Col. Montagu's specimen several others have occurred in England. In the 'Zoologist' for 1848 Mr. Rodd records, at p. 2147, that he has in his possession a specimen of the Black Stork, killed in 1831, on the River Tamar. A second specimen was killed in October, 1832, in the parish of Otley, as recorded in the 'Magazine of Natural History,' vii. 53. A third was shot on the 22nd of November, 1839, on the banks of Middleburgh Creek, at the south side of Poole Harbour. Mr. Yarrell records ('British Birds,' ii. 592) that a specimen, now in the Museum of the Yorkshire Philosophical Society, was killed on Market Weighton Common, in 1852. In the 'Zoologist' for 1856 Mr. Dennis informs us, at p. 5160,

that a fine specimen of the Black Stork was killed on or about the 5th of May, 1856, a few miles from Lydd; and in the volume for 1862 Mr. Christy Horsfall notices, at p. 8196, that a specimen was obtained near Hartlepool in August or September, 1862. The Black Stork is a migratory bird on the Continent of Europe: it occurs frequently in Poland, Hungary, Italy, Turkey and Greece, during the winter season, but goes northward on the approach of spring, and breeds in the far North, building its large nest on the highest pines: the foundation is of sticks bound together by sods of turf. The eggs are four in number, and perfectly white.]

Stork or White Stork.—[Yarrell, ii. 586; Hewitson, lxxxiv. 317.] *Ardea Ciconia*, *Lin. Syst.* i. p. 235, 7; *Gmel. Syst.* ii. p. 622; *Raii Syn.* p. 97, A. 1; *Will.* p. 210, t. 52; *Ind. Orn.* ii. p. 676, 9; *Bris.* v. p. 365, 2, t. 32; *Ib.* 8vo, ii. p. 305; *Bewick, Br. Birds*, ii. t. p. 32; *Wood, Zoography*, i. t. p. 519. *Cicogne blanche*, *Buf.* vii. p. 253, t. 12. White Stork, *Arct. Zool.* p. 455, C.; *Will. Angl.* p. 286, t. 52; *Albin*, ii. t. 64; *Lath. Syn.* v. p. 47; *Ib. Sup.* p. 234; *Lewin, Br. Birds*, iv. t. 144; *Walc. Syn.* ii. t. 125.—A species of Heron, about the size of a Turkey; length three feet three inches. The bill is seven inches three-quarters long, of a fine red-colour. The plumage is wholly white, except some of the scapulars, the greater coverts, and quill-feathers, which are black; the orbits of the eyes are bare and blackish; the skin, legs, and bare part of the thighs are red. The sexes are alike. This bird is rarely met with in England. Several instances, however, are on record; one was killed at Salisbury in February, 1790. Vast numbers resort to some parts of Holland to breed, and even as far north as Russia, and depart in autumn southward to winter in Egypt and other warmer climates. In most countries the inhabitants hold them in great veneration, probably from their property of destroying reptiles, on which they feed. They provide boxes for them on the tops of their houses. In these places the Stork is so bold as to walk the streets without fear. It makes a large nest of sticks, and lays from two to four eggs, about the size of that of a Goose, of a dirty yellowish white.

SUPPLEMENT.—The Stork, although a bird of passage, covering a vast extent of territory in its annual migration from Persia and other parts of Asia and Africa, into the northern parts of Europe as far as Sweden, and in the lower parts of Russia; spreading into Holland, and into Spain, especially about Seville; yet it is of very

rare occurrence in England. To the few instances on record we are enabled to add one shot at Sandwich in Kent, in the year 1805; unfortunately only the head and legs of this specimen were saved, and are now in our possession, giving a proof of the fact. The bill is seven inches and a half long from the tip to the feathers on the forehead, and one inch three-eighths deep at the base; it is nearly straight, with the point of the upper mandible slightly bent downwards, and rather exceeding the other in length; the colour red: the length of the legs from the middle toe to the knee is a foot; from the knee to the joint of the thigh ten inches, six of which are bare of feathers, and all the bare part of this, as well as the legs, are scaly; the toes are connected with a strong scaly membrane, the middle toe to the outer as far as the second joint, and to the inner as far as the first joint; claws extremely short and blunt. Another Stork was shot in Hampshire, in the autumn of 1808, by the gamekeeper belonging to Major Guiton. The Major had seen the bird in the morning, and shot at it without effect, being at too great a distance: in the evening it was observed by the keeper, perched upon the top of a house, where it was shot. The same bird (probably) had been noticed by some husbandmen, several times for the preceding fortnight, contiguous to the place where it was shot. [A considerable number of instances of this bird's occurring in Britain are recorded by Mr. Yarrell, to which excellent ornithologist the reader is referred for copious details. In the 'Zoologist' for 1848 Mr. Rodd records, at p. 2147, the occurrence of an adult White Stork at the Land's End, in the second week in May: in the same volume Sir William Milner mentions, at p. 2191, that a fine male was shot on the 18th of May, near the village of Riccall, about nine miles from York; at p. 2229 Mr. Higgins mentions another killed near York on the 18th of July, its stomach filled with *Dytisci* and other *Coleoptera*; and at p. 2291 Mr. Gurney records the occurrence of a specimen near Yarmouth on the 7th of June. In the volume for 1851 the Rev. James Smith records, at p. 3035, that a White Stork was killed in the severe winter of 1837—8 near the loch of Strathbeg, halfway between the towns of Peterhead and Fraserburgh: as usual with all "vermin," the countryman's generic appellation of wild animals, furred or feathered, it was nailed to the end of a barn. In the volume for 1852 Mr. Irby records, at p. 3476, the occurrence of a Stork on the 15th of March, 1852, on Breydon, near Yarmouth. In the volume for 1861 Mr. Stevenson

says, at p. 7646, that a fine old female Stork was killed at Woodbastwich, about the 17th of May, 1861.]

Storm-Cock.—See Petrel, Stormy; Throstle; and Thrush, Missel.

Storm Finch. } See Petrel, Stormy.
[Stormy Petrel.]

Strany.—See Guillemot, Foolish.

Strawmeer.—See Wren, Yellow.

[Striated Tern.—See Tern, Striated.]

Sula.—See Gannet.

[Summer Snipe.—See Sandpiper, Common.]

[Summer Teal.—See Garganey.]

[Surf Scoter and Surf Scoter Duck.—See Scoter, Surf.]

Swabie.—See Gull, Great Black-backed.

Swallow.—A genus of birds, the characters of which are: Bill short, broad at the base, the point small and a little bending. Nostrils open. Tongue short, broad, cloven. Tail forked. Wings long. Toes, three forward, one behind.

[Swallow, Cape.—See Swallow, Rufous.]

Swallow, Car.—See Tern, Black.

Swallow, Chimney.—[Yarrell, ii. 241; Hewitson, lxxv. 257.] *Hirundo rustica*, Lin. Syst. i. p. 343, 1; Gmel. Syst. ii. p. 1015; Ind. Orn. ii. p. 572, 1; Bewick, Br. Birds, i. t. p. 261. *Hirundo domestica*, Raii Syn. p. 71, A. 1; Will. p. 155, t. 39; Bris. ii. p. 486, 1; Ib. 8vo, i. p. 294. *Hirondelle de cheminée*, Buf. vi. p. 591, t. 25, f. 1. Chimney, or Common Swallow, Br. Zool. i. No. 168, t. 58; Ib. fol. 96; Will. Angl. p. 212, t. 39; Albin, i. t. 45; Arct. Zool. ii. No. 330; Lath. Syn. iv. p. 561; Ib. Sup. p. 192; Lewin, Br. Birds, iii. t. 123; Walc. Syn. ii. t. 251; Pult. Cat. Dorset. p. 13.—This species weighs between five and six drams; length six inches and a half. Bill black; irides hazel. Forehead and chin ferruginous-red; crown of the head and the whole upper parts black, glossed with purplish blue; breast and belly dusky white; the tail is much forked; the two middle feathers plain, the rest marked on their inner webs, near the end, with an oval white spot; legs dusky. The female has not the exterior feathers of the tail so long as in the other sex. The Swallow

seems to be known in most parts of the world. In England it is a very common bird, coming to us in the spring, and departing in September to more mild climates, and is said to winter in Senegal, and probably many other warm countries. It has taken the name of Chimney Swallow with us on account of breeding in our chimneys. In some countries it makes its nest against rocks; with us it is not unusual to find the nest in outhouses, upon the beams or rafters. The nest is made of mud plastered together and lined with feathers, and is open at top. The eggs are four or five in number, white, speckled with rusty red, weighing about thirty grains. The food of this bird, as of the whole genus, is winged insects, in catching which it is extremely dexterous; and, considering the velocity of its flight, the sight must be incomparably quick. It makes its first appearance with us in April, sometimes as early as the first week, if the weather is mild; and it sometimes happens that after their arrival a long easterly wind prevails, which so benumbs the insect tribe that thousands die for want of food. We recollect as late as the 9th of May the Swallows on a sudden disappeared from all the neighbouring villages around. The thermometer was at 42, and we were at a loss to conceive what was become of these birds, which a day or two before were seen in abundance. But by chance we discovered hundreds collected together in a valley close to the sea-side, at a large pool which was well sheltered. Here they seem to have found some species of fly, though scarce sufficient to support life; for many were so exhausted that after a short time on wing were obliged to pitch on the sandy shore. Why it should be necessary to account for the loss of this tribe of birds in the winter by making them to immerse during that season, is extraordinary, when at the same time no doubts have been entertained of the migration of other birds, whose powers on wing are far inferior. And yet there have not been wanting persons who have declared they have seen them drawn up in nets, and restored from their benumbed state. Others are said to lay torpid in cliffs, hollow trees, and such places: but even this more probable account is to be doubted, except perhaps with respect to a few of the latter broods, which had not strength to undertake so long a flight. If we calculate the velocity of this bird on wing, and that it can and does suspend itself in the air for fourteen or sixteen hours together in search of food, it cannot fly over a less space than between two and three hundred miles in that time. We have frequently observed upon the downs Swallows follow, and repeatedly fly round

with great ease, a horse in a full trot, at a rate not less than ten miles an hour, in order to pick up the flies roused from the grass by the motion of his feet. It is certain, however, some few are seen in the winter months before Christmas, although they had all disappeared long before. For further remarks we refer our readers to the history of the Martin.

SUPPLEMENT.—The Swallow, like other migrative birds, varies a little in the time of its appearance and disappearance; actuated wholly by the influence of season, the temperature of the atmosphere directs it when to proceed on its journey, and when to stop. It is the present sensations that influence their actions, for if the weather is mild, with a south or south-west wind, early in April, for a few days, Swallows and Martins appear. So in the autumn, if the weather is mild, from the middle of October to the middle of November, some continue with us much later than otherwise. If at these periods the weather suddenly changes to the other extreme, numbers perish for want of food. On the 5th of November, in the year 1805, we observed some hundreds of Swallows and Martins flying about in search of food, as active as at Midsummer, but the whole of their time was occupied in collecting a scanty daily subsistence, for the wind had been easterly, with boisterous and wet weather, for a fortnight preceding; so that being too weak to migrate, a great many perished or were killed, being so reduced as to be incapacitated for flight. In one instance a dozen or more were taken from a malt-kiln where they had taken shelter; some were dead, others dying, and yet a little food was found in their gizzard. Those who had discovered a more than usual sheltered situation, and were able to collect sufficient food, survived the bad weather, and continued with us (in Devonshire) till after the middle of November, when, by a little milder weather, they recruited their strength sufficient for a voyage to the Continent, where every hour would bring them a degree or two nearer to their winter quarters, and food as rapidly increase. On the 19th of November of the same year we observed the last Swallow; and in no one instance had we ever before seen any of this tribe so late; but in the 'Monthly Magazine' for March, 1808, Mr. Greig declares that he saw between thirty and forty Swallows flying across Wandsworth Common, in a south-west direction, on the 9th of last December. Mr. Bewick relates an excellent account of the experiments of a Mr. Pearson on Swallows, with a view to obtain facts with respect to the absurd obsolete opinions concerning their winter torpidity and

submersion. The result of many years' confinement of these birds was that at no time of the year did they indicate the smallest tendency to torpidity, much less to creep into an element which from their conformation would prove an everlasting sleep. This gentleman concludes his account by observing, "I have now, Jan. 20th, 1797, in my house, Great Newport-street, Long Acre, four Swallows, in moult, in as perfect health as any birds ever appear to be in when moulting." Those who wish to be informed of Mr. Pearson's treatment of these birds, in order to keep them in health for three or four years, may obtain instruction by consulting Bewick's 'British Birds,' where a full account is detailed. At present we shall leave further accounts of the natural history of this and other similar birds for another place, where the subject of migration will be considered at large.

Swallow, House.—See Swallow, Chimney.

[Swallow, Rufous.—*Hirundo rufula*, Temm. *Man. d'Ornith.* iii. 298. Cape Swallow, *Lath. Syn.* iv. 566.—In the 'Zoologist' for 1853 Mr. Rodd records, at p. 3753, that Mr. Vingoe had observed a Swallow of an uniform copper-colour over the whole of the under parts: the bird was not obtained, but Mr. Vingoe, on seeing Mr. Gould's plate of the Rufous Swallow, thought it identical with the bird he had seen.]

[Swallow, Severn.—See Martin, American.]

Swallow, Sand.—See Martin, Sand.

Swallow, Sea.—See Tern, Common.

Swallow, Sea, Lesser.—See Tern, Lesser.

[Swallow, Spinetailed.—*Fisher, Zool.* 1492. *Acanthylis caudacuta*, Gould, *Birds of Australia*, fol., vol. ii. Pl. 10; *Jerdon, Birds of India*, i. 173. *Chætura Australis*, Stephens, *Cont. Shaw's General Zoology*, xiii. 76. *Chætura caudacuta*, Gould, *Handbook of the Birds of Australia*, i. 103.—"Length eight inches. From the carpal joint to the end of the wing eight inches and a half. The first and second quill-feathers nearly equal in length, and the longest in the wing. The wings, when closed, extend full three inches beyond the spines of the tail. The length of the gape from the tip of the under mandible (which appears to be rather the longest) seven-eighths of an inch. Length of the tarsus five-eighths of an inch, and of the

middle toe to the end of the claw three-fourths of an inch. The toes placed three before and one behind, the latter being however situated not in the middle, but on the inner side of the shank. The beak short, very broad at the base, and black. Front and upper part of the eye bordered by a line of stiff, black, bristly feathers. Forehead grayish white; crown of the head, back of the neck, upper tail-coverts, and upper side of the tail-feathers shining brown, beautifully varied with purple and green reflections; back grayish brown, lightest in the centre; primary and secondary wing-feathers dull brown, lightest on the inner web; wing-coverts darker; the innermost feathers of the greater wing-coverts being more or less white on the inner web, and the whole wing being varied with reflections of purple and green. The tail in form almost square; the feathers ten in number, the shaft of each being carried beyond the web, and forming a short, sharp spine, which, in the central feathers, rather exceeds one-eighth of an inch in length, and gradually diminishes towards the outside. The chin, throat, and under tail-coverts white; breast, belly, and under surface of the tail-feathers clove-brown; flanks dark brown, spotted with white; legs, toes, and claws dark brown."—*Fisher, Zool.* 1492. This bird is a native of Australia, the south-east portion of the Himalayas, Nepal, Sikim and Bootan, occasionally wandering into Persia, Arabia, and once into England, as recorded by Mr. Catchpool in the 'Zoologist' for 1846, p. 1492. Mr. Catchpool says:—"It was shot about 9 p.m. on the 8th of this month (July), by a farmer's son, named Peter Coveney, in the parish of Great Horkesley, about four miles from Colchester; he saw it first on the evening of the 6th: he tells me it occasionally flew to a great height, was principally engaged in hawking for flies over a small wood and neighbouring trees; being only wounded, it cried very much as it fell, and, when he took it up, clung so tightly to some clover (it was in a clover-lay) as to draw some stalks from the ground: it is evidently nearly allied to the Swallow, and its late feeding would perhaps show some affinity to the Goatsucker: the protruding shafts of the tail-feathers are singular." The singular hypothesis has been started that this bird was sent over in the flesh from Australia, in order to deceive Mr. Catchpool: the bird was carefully examined by the late Mr. Yarrell, Mr. W. R. Fisher, Mr. Hall, Mr. Doubleday, and myself, without detecting any trace of deception: the ingenious hypothesis of its importation in the flesh must therefore be dismissed.]

[Swallowtailed Kite.—See Kite, Swallowtailed.]

*[Swan, Bewick's.—*Yarrell*, iii. 198 (head only); *Hewitson*, cxi. 396. "Cygnus islandicus, *Brehm, Vog. Deuts.* p. 832, t. 41, f. 1. *Cygnus minor, Keys & Bl. Wirbelth. Eur.* p. 82; *G. R. Gray, Gen. of B.* iii. p. 610. *Cygnus musicus minor, Schleg. Rev. Crit. des Ois. d'Eur.* p. 112. *Cygnus melanorhinus, Naum. Vog. Deuts.* xi. p. 497, t. 297. *Cygnus Bewickii, Yarrell, Lin. Trans.* 1830, p. 445." Synonymes cited from *G. R. Gray's Museum 'Catalogue of British Animals,' Part. iii.* p. 210.—"The adult bird is of a pure unsullied white; the base of the beak orange-yellow; the irides dark; the legs, toes, and membranes black. The whole length is from three feet ten inches to four feet two inches. From the carpal joint to the end of the longest primary twenty-one inches; the second and third quill-feathers longer than the first and fourth; tail-feathers twenty; in young birds I have found but eighteen, and in one instance nineteen."—*Yarrell*, iii. 204. This is undoubtedly distinct from the Hooper as a species, than which it is about one-third less: it appears to be equally common with the Hooper, although not so frequently observed. Mr. Blackwall, in his 'Researches in Zoology,' mentions the occurrence of several flocks, in one of which were no less than seventy-three individuals.]

[Swan, Black.—*Gould, Birds of Australia*, fol., vii. Pl. 6. *Cygnus atratus, Stephens, Cont. of Shaw's Gen. Zool.* xii. 18. *Chenopsis atrata, Wagler, in Oken's Isis*, 1832, p. 1234; *Gould, Handbook of the Birds of Australia*, ii. 346.—"The whole of the plumage brownish black, the under surface paler than the upper; the feathers of the back tipped with greyish brown; primaries and secondaries pure white; bill beautiful pinky scarlet, crossed near the tip with a broad band of white; the extremities of both mandibles are also white; irides scarlet; eyelash and lores pinky scarlet; feet black."—*Gould, Handbook of Birds of Australia*, ii. 349. This Australian Swan has been imported in such abundance, breeds so freely, and so frequently makes its escape, that it will doubtless become a denizen in Europe: it is already very frequently seen on the Danube, and some half-dozen specimens are reported to have been killed in the British Isles.]

[Swan, Changeless.—*Yarrell*, iii. 230 (head only). *Cygnus immutabilis, Yarrell, Proceedings of the Zoological Society*, 1838, p. 19.—"In the adult bird the beak is

reddish orange; the nail, lateral margins, nostrils, and base of upper mandible black; the elongated openings of the nostrils do not reach the black colour at the base of the beak on each side, but are entirely surrounded by the orange-colour of the beak; the tubercle [at the base of the upper mandible] of small size; the irides brown; the head, neck, and whole of the plumage pure white; legs, toes, and intervening membranes slate-grey."—*Yarrell, Br. Birds*, iii. 233. The cygnets, instead of being of the smoky grey-colour so familiar to all who have bred the Mute or Domestic Swan, are of a pure white. The species differentiated by Mr. Yarrell, as above, has not been adopted by continental ornithologists.]

[Swan, Common. } See Swan, Mute.
[Swan, Domestic. }

[Swan, Mute.—*Yarrell*, iii. 209 (head only). *Anas olor*, *Pennant, Br. Zool.* ii. 221. *Cygnus olor*, *Temm. Man. d'Ornith.* ii. 830, iv. 529.—"The adult bird has the nail at the point of the beak, the edge of the mandible on each side, the base, the lore to the eye, the orifice of the nostrils, and the tubercle [at the base of the upper mandible] black; the rest of the beak reddish orange; the irides brown; the head, neck, and all the plumage pure white; the legs, toes, and interdigital membranes black."—*Yarrell*, iii. 215. The Mute Swan is so universally domesticated on our ornamental waters, breeds so freely, and is allowed such perfect liberty, that it is extremely [difficult to decide on any individuals that may make their appearance, whether or not they have been bred in a wild state: It is certain that this species breeds in Eastern Europe, but as certainly not in Britain.]

Swan, Hooping.—See Swan, Whistling.

[Swan, Polish.—See Swan, Changeless.]

Swan, Whistling, or Wild Swan.—[*Yarrell*, iii. 191; *Hewitson*, cxi. 393.] *Anas Cygnus* (ferus), *Lin. Syst.* i. p. 194; *Gmel. Syst.* ii. p. 501; *Ind. Orn.* ii. p. 833, 1; *Cygnus ferus*, *Bris.* vi. p. 292, 12, t. 28; *Ib.* 8vo, ii. p. 439; *Raii Syn.* p. 136, A. 2; *Will.* p. 272, t. 69. *Cygne sauvage*, *Buf.* ix. p. 3. Wild Swan, *Br. Zool.* ii. No. 264; *Ib.* fol. 149, t. Addend.; *Will. Angl.* p. 356, t. 69; *Edw.* t. 150. Whistling Swan, *Arct. Zool.* ii. No. 469; *Ib. Sup.* p. 75; *Lath. Syn.* vi. p. 433; *Sup.* p. 272; *Lewin, Br. Birds*, vii. t. 236; *Walc. Syn.* i. t. 55; *Pult. Cat. Dorset.* p. 19; *Lath. Syn. Sup.* ii. p. 341; *Lin. Trans.* iv. p. 105, t. 12, f. 12 (trachea); *Bewick, Br. Birds*, ii. p.

272. Provincial: Elk, or Hooper. — This is a very distinct species from the Common or Mute Swan, of which we shall take notice in this place merely to show the difference; for as that bird is confined to a half-domesticated state, and is real property, it cannot claim a place amongst the wild or native birds of this country. The Whistling Swan is inferior in size to the other species; the weight from fifteen to twenty-five pounds; length four feet ten inches; breadth seven feet. The bill is between four and five inches in length, two-thirds of which is yellow from the base, and bare of feathers up to the eyes; the end part is black, running to an angle up the middle; irides of a very light yellow. The whole plumage is of a pure white; in some there are a few marks of faint rust-colour on the head; the tail consists of twenty feathers; legs black. The tame Swan is not only much superior in weight, but is at once distinguished by a large black callous knob on the base of the bill; but the more essential distinction is in the extraordinary convolution of the windpipe, peculiar to the Whistling Swan. This enters a large cavity in the breast-bone, to the depth of more than two inches; then returns and forms a junction with the lungs. Dr. Latham has given a very excellent figure of this wonderful formation, in an essay on the tracheæ of birds, in the fourth volume of the 'Linnean Transactions.' This, which both sexes possess, makes a material distinction in the two species. What peculiar use this is of we are at a loss to determine. The Common Swan is seldom heard to make any noise, and that a very faint one; whereas this bird has a prodigious loud call that may be heard to a great distance, which it frequently utters as it is flying, and resembles greatly that of the Cuckow. Having killed one of this species out of a flock of ten or twelve, its companions flew round several times, making a most melancholy cry before they flew off. This put us in mind of the solemn dirge of the dying Swan described by the ancient poets, and may possibly have given rise to those accounts; only by them it is made to be sung by the dying bird. This species visits the lakes of Scotland every winter, but comes more southward only in severe weather; some few are said to breed in the Orkney Isles. It is found in all the northern countries, Iceland, Lapland, the deserts of Tartary and Siberia, as far as Kamtschatka; also in America; and not uncommon at Hudson's Bay. Is said to lay only four eggs.

SUPPLEMENT. — Doctor Latham, on the authority of Doctor Maton, considers the Whistling Swan as indigenous to Dorset.

shire. The latter gentleman, in his 'Western Tour,' remarks that he saw them on the east side of the Chesil Bank in August. This is extremely early for the appearance of this species on our coast, and had we not such authority we should be inclined to suppose there was some mistake, especially as the Mute Swan is perhaps in greater abundance in the same neighbourhood than in any part of England. It is possible, however, that a wounded bird of this species, incapable of migrating to the arctic regions to breed, might have induced its mate to remain also; and these might find security amongst the great quantity of the mute species. Such an accident only would, we think, prevent the vernal migration of the Whistling Swan. Abbotsbury, in Dorsetshire, has been long famous for a large Swanery, at present much reduced, there not being above six or seven hundred, whereas we are told that formerly there were as many thousands. The present proprietor of these birds is Lord Ilchester. Many ridiculous stories have been told of the great strength a Swan possesses in his wings, and how dangerous it is to approach the nest of this bird, for a blow from its wing has been known to fracture a man's thigh. It is high time such absurdities should be erased in this philosophical age; and that the mind of man should reason before he continues to relate such accounts, only calculated to frighten children. Let the bones of the wing of the Swan be examined, and compared with that of the thigh of a man, or even of his arm (for it is well known the size and strength of muscles are in proportion to the size of the bone), and it will be evident that it would be as impossible for a Swan to break a man's arms as it would be to break his head with a reed. The bone of a man's arm would bear a weight or pressure fifty times as great as the bone of a Swan's wing; how then is the inferior in size and strength to break the superior without at least being itself fractured? The pectoral muscles of all birds are proportionably stronger than the same muscles in the human frame, weight for weight; but their bones, on account of their necessary levity, are thin, tubular, and consequently brittle, and ill calculated for partial concussion, though admirably suited for general and equal pressure against the yielding atmosphere. It should also be recollected that a bird is incapable of striking with any degree of force while all his quill-feathers are perfect, the resistance of the air against such a surface being too great to allow of its moving with sufficient velocity to inflict any sensible pain: to give the greatest impetus the feathers

should be cut short, as in the game Cock trimmed for fighting, the power of whose wings is greatly augmented by such a reduction of surface. When we have taken a Swan by the wing, we felt no uneasiness for the safety of our own arms, but greatly alarmed for fear in the struggle we might break the wing of the Swan: and we are quite convinced that the face alone need be guarded against the pinion of any such bird. The more enlightened part of our readers will pardon this digression, if such it can be called, as it must be their wish as much as ours to find such nursery stories abolished from the pages of Natural History. Those who, like Buffon, can suppose that the Tame or Mute Swan is descended from the Whistling species (improperly called the Wild Swan), should consult the internal structure of the two birds, as well as the external appearance, and their notes; and with such a knowledge all doubts will cease. The singular flexure in the trachea of this species has long been known to mark a strong distinction, a very good figure of which may be consulted in vol. iv. of the 'Transactions of the Linnæan Society,' showing the cavity in the keel of the breast-bone, into which it is received, and its returning to enter the chest or thorax, in order to communicate with the lungs. At the time that paper on the trachea of birds was written it was not known that there was any sexual difference in the structure and situation of the trachea; nor do we believe that any writer has noticed the very great dissimilarity of this part in the two sexes. The figure referred to represents a section of the keel of the breast-bone of the female, showing the flexure of the trachea in its cavity, which usually enters about two inches and a half, or three inches at furthest, and then returns, there being no excavation in the bone beyond. On the contrary, in the male, the trachea extends down the cavity of the keel, and afterwards enters the breast-bone, where there is no longer room at the posterior part of the keel, and there the flexure is constrained to change its direction from a vertical to a horizontal position, becoming orbicular, by being greatly extended laterally, and filling up the whole of the lower part of the breast-bone quite down to the sternum. Thus the lower part of the cavity that receives the trachea is very convex on the inside, and the bone so extremely thin and membranaceous that through it the flexuous course of the trachea is easily defined. The lower part of the keel of the breast-bone, where the trachea turns, in order to take a horizontal direction, is much broader than in the female, although the specimen from which

this description is taken is a male of the first year in its brown plumage, and the trachea is not above two-thirds of the size of that of the old female (with which we have compared it), at the part which returns from the keel and enters the thorax; and from the comparison of the other parts we are inclined to believe that part will even, in maturity, be found smaller in the male, in order to be better accommodated where it takes the horizontal flexure in the thin part of the breast-bone. The branchi, however, are larger, and the bony part at the lower extremity of the trachea, to which the branchial tubes are attached, is not so much compressed. As the trachea of the male goes down to the end of the breast-bone, which in this young bird is full six inches, and in the old female it only enters at farthest three inches, it is evident that there must be at least six inches difference in the length of the trachea between the sexes, independent of what may be occasioned by the natural superiority of size in the adult male. Several species of birds have a lengthened and flexuous trachea, and amongst the British the Wood Grouse, the Spoonbill, and the Crane, but the latter is the only one, besides the Swan, that has hitherto been observed to have the trachea enter a cavity in the breast-bone. We must not omit in this place to remark a circumstance that clearly shows what Nature will perform in order to restore her works that have been deranged by accident. A wounded Swan was sent to us by the same kind friend from whom the other living specimen was received; but this unfortunate creature had a most complicated fracture in the bone of the wing, near the body. It lived for about four months, fed heartily till within a short time of its death, and at that period the wound in the wing certainly did not affect its health; but it never got up in flesh, and the direct occasion of its decease appeared to be a flux. Curious to know what Nature had done with the fractured bone, the wound was examined, and we found a large fragment of the os humeri, about an inch in length, still projecting through the skin, but which was surrounded by a callous, like a tooth in its socket, that protected the flesh from its sharp and ragged edges. When this was removed we found that about an inch of the remaining stump of the os humeri, attached to the ulna and radius of the fore wing, had deflected, and the joint become nearly motionless; but what surprised us most was the commencement of a new joint forming at the fractured part. The joint had greatly enlarged, and had shot out strong cartilages, to unite with the fractured end of the

interior part of the os humeri, the point of which was also enlarged and closed. An union was thus formed at the lower part, and the commencement of a socket in one, to receive the head of the other, was evident, and a motion was obtained upon these points of contact, and no doubt a rude joint, properly inosculated, would have been formed so soon as the large splinter had been removed, and which in a little time would have been naturally effected, for it had risen considerably by the pressure of the enlarged joint. Upon a further dissection of the body a bullet, the size of a pea (the same probably which had fractured the wing), was found to have entered the flesh on the same side of the body, and lodged between the ribs. Within the body, in the direction of the bullet, a large unnatural substance of the size and figure of a hen's egg, and of the colour of liver, was observed between the liver and the gizzard. This was doubtless formed by the extravasated blood caused by the contusion, and had not been taken up by the absorbent vessels. This oval body was enveloped in a membrane, and was attached to both the liver and the gizzard, by an extension of its surrounding membrane, and by that means held in one place. It was tender, fragile, and more dry in its consistence than liver, though similar in colour when first divided by the knife, but by its rapid absorption of oxygen, on exposing the interior part to the air, it became in a few minutes of a bright red; a circumstance that proves its sanguineous property, as blood is known to powerfully attract oxygen, and by its chemical union the change of colour to a bright red is effected. It is an extraordinary circumstance that so large a portion of coagulated blood should have preserved its living principle without vessels, so generally necessary for the support of vitality: but as it retained the vital spark for four months there can be no reason for supposing it would have vanished but with the life of the animal. After this body had been exposed some days to the air, it became putrid like all other animal matter, divested of its vital principle. Hence we may infer that blood, or the circulating fluid of an animal, retains in itself a large portion of that which is its office to convey to the system in support of life; and that under certain circumstances it is perhaps the only animal matter capable of retaining vitality without organization, or, in other words, that is not corruptible under similar circumstances. Besides the double flexure in the trachea, and the large cavity in the keel of the breast-bone for its reception, in this species, another singular and

specific character has lately been discovered, not before noticed we believe. This is a small corneous spur at the end of the alula spuria; it is about half an inch long, and a little arcuated. To the ingenious Mr. Henry Boys we are indebted for the first notice of this circumstance, and have since observed it in a Swan of the first year, as well as in the older birds; but it is not easily discernible amongst the feathers, though sufficiently conspicuous when they are removed. The Australasian Cassowary has a similar spur at the extremity of its diminutive useless wing. A female Whistling Swan shot near Bridgewater, in the year 1805, got the better of her wound, and was kept by Mr. Stone with his Geese for nearly two years, during which time she laid one egg: and we here beg leave to record our public acknowledgment to that gentleman for his politeness in presenting to us both the bird and the egg. But we must at the same time acknowledge that much is due to the kind assistance of Mr. Anstice, at whose instigation this acceptable present was made. This beautiful and docile bird is now alive and in high health, living with many other sorts of Ducks in the greatest harmony. Towards the spring she becomes more clamorous, and impatient of confinement; but at all times will approach those persons in the habit of feeding her, and will take food from the hand, at the same time uttering those plaintive and harmonious notes for which the species have been remarkable, and which is always attended with a singular jerk of the head. She usually carries her neck straight and erect, either upon the water or when stationary on land; but in walking the head is lowered, and the neck reclining over the back. In the season of love she frequently flaps along the surface of the water, and would undoubtedly fly if the precaution of annually cutting the feathers of one wing was omitted; for whatever might have been the wound that was the cause of captivity, Nature has performed a perfect cure. Her nature is gentle, timid, and sociable; will follow those with whom she is acquainted from one side of the menagerie to the other, especially ladies of the family dressed in white; is often turned out of her course by a pugnacious male Shieldrake, and acts only offensively when food is the object, and then only where resentment is not expected. She eats but little grass on land, but will devour aquatic plants occasionally; barley, however, is her principal food, and she never attempts to touch bread which is sometimes thrown to other birds; nor will she devour small fish, which some of the diving Ducks greedily eat. The base of the bill in this

specimen is as usual in adults, of a bright yellow. Whether from age or what other cause has not been ascertained, but the Swan differs materially in the colour of its irides; in some they are pale yellow, in others dusky. It is evidently not a sexual distinction, since we have noticed both sexes with dark irides. If it is the effect of age, it is difficult to determine at what age the iris becomes pale, since the live Swan in our possession, whose irides are dusky, has never made any change in that part since it was taken, eight years since, and the bird was then matured, although its age could not be known. The egg is very small in proportion to the bird, being not near so large as that of a China Goose, and is regularly oval; about three inches long, and of a ferruginous-colour, with some white blotches about the middle, appearing as if artificially stained. The young of this species are brown in their plumage for the first year; one which we examined on the 6th of March, 1809, and which measured three feet eight inches in length, and weighed eight pounds and a quarter, had the bill flesh-colour at the base: irides dusky. The feathers on the forehead and before the eyes dull orange; the rest of the head, and upper neck behind, brown: the under parts white, tinged with rufous: the lower neck behind, the upper parts of the body, scapulars, coverts, and tail cinereous-grey.

[Swan Wild.—See Swan, Whistling.]

Swart-Back. — See Gull, Great Black-backed.

Swift.—[Yarrell, ii. 270; Hewitson, lxxv. 267.] *Hirundo Apus*, *Lin. Syst.* i. p. 344, 6; *Gmel. Syst.* ii. p. 1020; *Raii Syn.* p. 72, A. 4; *Will.* p. 156, t. 39; *Ind. Orn.* ii. p. 582, 32; *Bris.* ii. p. 512, 15; *Ib.* 8vo, i. p. 301. *Le grand Martinet*, *Buf.* vi. p. 643. *Swift*, *Br. Zool.* ii. No. 171, t. 57; *Ib.* fol. 97; *Arct. Zool.* ii. No. 334; *Will. Angl.* p. 214, t. 39; *Albin*, ii. t. 55. *Lath. Syn.* iv. p. 584, 34; *Lewin, Br. Birds*, iii. t. 126; *Walc. Syn.* t. 254; *Pult. Cat. Dorset.* p. 13. Provincial: Screech, or Screech Martin; Black Martin. — This species of Swallow is nearly an ounce in weight; length near eight inches; breadth about eighteen. The bill is black; irides dusky. The whole plumage is black, except the chin, which is whitish; the wings are extremely long in proportion, and the legs so short that it rises from the ground with difficulty; the tail is forked; legs and toes black. It has four toes, all placed forward. In this particular it deviates from one of the characters of the Swallow genus. The Swift makes its appearance

with us later than either of the other species; seldom is seen till May; frequents steeples, towers, and other lofty buildings, in the holes of which it makes its nest; but will sometimes build under the tiles of houses and barns. The nest is made of dried grass, lined with feathers, which the birds collect on wing, sweeping it off the ground in a dexterous manner; for it rarely alights on the ground for any purpose. Like the Swallow, it sips the water as it skims over the surface, and at the same time picks up flies therefrom. It lays only two white eggs, of an oblong shape, larger than that of the Swallow; and while the female is sitting the male is continually flying to and from the spot, making a screeching noise, which is the only note it has. At night both sit upon the nest, or at least roost in the same hole. In very warm weather these birds soar to a great height, but in cold or moist weather fly low in search of flies and other winged insects, which at that time cannot ascend. By the middle of August these wholly disappear, which is a month before the other species. It is said to inhabit the greater part of the Old Continent, and has been found in some parts of America, and at the Cape of Good Hope.

[Swift, Alpine. — *Yarrell*, ii. 276; *Hewitson*, lxx. 269. *Hirundo Melba*, *Linn. Syst. Nat.* i. 345. *Cypselus Melba*, *Illiger, Prod. Man. et Av.* p. 230. *Cypselus alpinus*, *Temm. Man. d'Ornith.* i. 433. — "The beak is black, and longer in proportion than in the Common Swift; the irides blackish brown; the top of the head, sides of the neck, and all the upper surface of the body, wings, and tail nearly uniform hair-brown; chin, throat, breast, and belly white; a band across the upper part of the breast; the thighs, vent, and under tail-coverts hair-brown; feathers on the legs brown; toes orange-brown; claws dark brown. The whole length of the bird, from the point of the beak to the end of the feathers of the tail, which are forked and very stiff, is eight inches and three-eighths. From the carpal joint of the wing to the end of the longest feather eight inches and five-eighths; the wings when closed reach two inches beyond the forked tail; the second quill-feather the longest in the wing; the first feather a little longer than the third; the shafts of all black." — *Yarrell*, ii. 278. This species is a native of the islands and

shores of the Mediterranean, breeding in the rocky mountains of Spain and in some parts of the Alps; but is entirely unknown in the more northern countries of Europe: it repairs to Africa at the approach of winter. Mr. Yarrell mentions the occurrence of five specimens of the Alpine Swift in Britain; the first was killed early in June, 1820, by the bailiff of Mr. Holford, at Kingsgate, in the Isle of Thanet; it is now in the possession of Mr. Hale, of Alderley. In the 'Note-book of a Naturalist,' as quoted by Mr. Yarrell, it is stated, at p. 226, that on the 20th of August, 1830, a very fine specimen of the Alpine Swift flew into a room at Dover. Mr. Yarrell mentions another specimen shot near Buckenham Church, in Norfolk, on the 13th of October, 1831, and now in the possession of the Rev. T. Fulcher, of Old Buckenham. In the 'Dublin Penny Journal' of March, 1833, there is a record of a rare bird killed at Rathfarnham, near Dublin, and now in the possession of Mr. Warren, of Dublin. Mr. Sinclaire examined it, and found it to be a specimen of the Alpine Swift: the specimen was obtained off Cape Clear, several miles from land. A specimen is recorded both by Mr. Macgillivray and Mr. Yarrell to have been picked up near Saffron Walden, in Essex, in July, 1838. Mr. Macgillivray records, in his 'History of British Birds' (iii. 613), that Mr. Harley, of Leicester, saw an Alpine Swift on the wing on the 23rd of September, 1839. Mr. Thompson records, in his 'Natural History of Ireland' (i. 418) that a specimen of the Alpine Swift was shot near Doneraile, in the County Cork, in June, 1844 or 1845. In the 'Zoologist' for 1852 Mr. Ellman informs us, at p. 3330, that a bird of this species was knocked down by a boy, while sitting on a rail, at St. Leonard's, in Sussex: the bird was stuffed, and is now in the possession of Mr. Johnson, Chemist, of St. Leonard's. In the volume for 1864 it is recorded, at p. 8955, by Dr. Alcock, that a specimen was taken during divine service in St. Mary's Church, Hulme, Manchester, on Sunday, the 18th of October, 1863: it was stuffed, and is in the possession of Mr. C. R. Jones.]

Swine-Pipe.—See Redwing.

[Swiftfoot, Creamcoloured. — See Plover, Creamcoloured.]

T.

Tang-Whaap.—See Whimbrel.

Tarney.
Tarrack or Tarret. } See Tern, Common.

Tarrook.—See Gull, Tarrock.

[Tatler, Yellowshanked.—See Sandpiper, Yellowshanked.]

[Tawny Bunting.—See Bunting, Snow.]

[Tawny Owl.—See Owl, Tawny.]

Teal.—[Yarrell, iii. 282; Hewitson, cxiv. 410.] *Anas Crecca*, *Lin. Syst.* i. p. 204, 33; *Gmel. Syst.* ii. p. 532; *Ind. Orn.* ii. p. 872, 100; *Lath. Syn. Sup.* ii. p. 360; *Lin. Trans.* iv. p. 108, t. 13, f. 1 (trachea); *Bewick, Br. Birds*, ii. t. p. 376. *Querquedula secunda* Aldr. *Raii Syn.* p. 147, A. 6; *Ib.* 192, 14; *Ib.* 148, 9 (fem.); *Will.* p. 290, t. 74. *Querquedula minor*, *Bris.* vi. p. 436, 32, t. 40, f. 1; *Ib.* 8vo, ii. p. 475. *Petite Sarcelle*, *Buf.* ix. p. 265, t. 17, 18. Common Teal, *Br. Zool.* ii. No. 290; *Ib.* fol. t. Addend.; *Arct. Zool.* ii. p. 577, P.; *Will. Angl.* p. 6, t. 74; *Albin*, i. t. 100; *Hayes, Br. Birds*, t. 29; *Lath. Syn.* vi. p. 551, 88; *Sup.* p. 276; *Lewin, Br. Birds*, vii. t. 260; *Walc. Syn.* i. t. 76; *Pult. Cat. Dorset.* p. 21. VAR.: *Anas Circia*, *Lin. Syst.* i. p. 204, 34; *Gmel. Syst.* i. p. 533; *Raii Syn.* p. 148, 7; *Will.* p. 291, t. 76. *Querquedula cæstiva*, *Bris.* vi. p. 445, 33; *Ib.* 8vo, ii. p. 477. *Sarcelle d'été*, *Buf.* ix. p. 268. *Anas Balbul*, *Gmel. Syst.* ii. p. 443, 124? Summer Teal, *Will. Angl.* p. 378, t. 76; *Albin*, ii. t. 103, 104; *Lath. Syn.* vi. p. 552, 89.—This species of Duck weighs about twelve ounces; length fourteen inches and a half. The bill is black; irides light hazel. Head and neck bay; on the side of the head a green patch passing backwards, bordered beneath with a whitish line; the lower part of the hind neck, upper part of the back, and part of the scapulars, as well as the sides of the body, a mixture of black and white in fine undulated lines; lower part of the neck before and breast whitish, marked with roundish spots of black; belly of the same colour, without spots; vent black, bounded with buff-colour; wing-coverts brown; quills dusky; some of the secondaries wholly black, and others glossy green, on their outer webs, forming a speculum on the wing; the coverts immediately over these are tipped with white; the tail is cuneiform, consisting of sixteen

brown feathers, edged with whitish; legs dusky brown. The female has the head, neck, back, and sides of the body brown, the feathers more or less edged with whitish; belly and vent white; speculum in the wing like the male. The male of this species has a bony labyrinth in the lower part of the windpipe. The Teal is the smallest of the Duck tribe. It comes to us in winter, and frequents our fresh waters in small flocks. Many are caught in the decoys; some few breed with us. Mr. White, in his 'Natural History of Selborne,' mentions young Teal having been taken on the verge of a pond in Wolmer Forest. It is also said to breed in the mosses about Carlisle; and we are informed they have been known to breed in confinement. The nest is not uncommon in France. It is made of rushes lined with down, placed on the side of a pond so as to rise or fall with the water. The eggs are about the size of those of a Pigeon, of a dirty white, spotted with brown. This bird, like most of the Duck tribe, is subject to variety, which has occasioned it to be made into two or three species, to one of which has been given the name of Summer Teal.

SUPPLEMENT.—The labyrinth at the bottom of the trachea of the Teal is very small, of a bony texture, but very thin, and of a suborbicular shape, about the size of a pea.

Teal, African.—SUPPLEMENT.—*Anas Africana*, *Gmel. Syst.* i. p. 529; *Ind. Orn.* ii. p. 876. *Sarcelle d'Egypte*, *Buf.* ix. p. 273; *Pl. Enl.* 1000. African Teal, *Lath. Syn.* vi. p. 555.—There appears much reason for believing that this and the Nyroca Duck are varieties of the same species, and which it will be seen in the preceding pages were considered as differing only in sex from the Ferruginous Duck of Mr. Pennant. We are assured that several of the Nyroca have been lately bought in London.

Teal, Cricket.—See Garganey.

Teal, Summer.—See Teal and Garganey.

Teeting.—See Lark, Tit.

Tee-Whaap.
Teewit or Teuchit. } See Lapwing.

[Temminck's Sandpiper, Stint or Tringa.—See Sandpiper, Temminck's.]

[Tengmalm's Owl. — See Owl, Tengmalm's.]

Tern.—A genus of birds, the characters of which are: Bill strait, slender, sharp-pointed. Nostrils linear. Tongue slender, sharp. Wings very long. Tail forked. Feet small, webbed. Back toe small.

[**Tern, Arctic.**—Yarrell, iii. 512; Hewitson, cxxxiii. 481. *Sterna arctica*, Temm. *Man. d'Ornith.* ii. 458; Selby, *Brit. Ornith.* ii. 473.—“Bill from the forehead to the tip one inch and two-eighths long, with the upper mandible arched; colour arterial blood-red (in some specimens the extreme tip is blackish red). Forehead, crown, and long occipital feathers intense black. Chin, and line bordering the black cap, white. Neck, breast, and the whole of the upper and under plumage, deep pearl-grey. Outer web of the first quill black, except about an inch near to the tip, which is grey; those of the other quills having pearl-grey tips, and exhibiting a silky lustre. Tail white and much forked; the exterior feather on each side having its outer web blackish grey; those of the rest being pale pearl-grey. Wings, when closed, reaching to the end of the tail. Legs and feet deep arterial blood-red. Tarsi five-eighths of an inch in length. Claws black. The winter plumage of this bird has not yet been ascertained. The young, when fully fledged, have the auriculars and occiput greyish black. The upper parts pearl-grey, with the tips of the feathers pale yellowish grey. The under parts white.”—Selby, ii. 474. Although the Arctic Tern is not mentioned by Montagu, it appears to be a regular summer visitor in the North of England and in Scotland. It breeds in great numbers on the Fern Islands, where it was for many years supposed to be the Common Tern (*Sterna Hirundo*). The eggs—two, three or four in number—are laid on the bare sand or gravel, and are placed so near together that it is difficult to walk without treading on them. The colony occupies a large space on the islet selected, and the eggs vary much; the prevailing colour is olive-green, with dark blotches and markings.]

Tern, Black.—[Yarrell, iii. 528; Hewitson, cxxxv. 488.] *Sterna fessipes*, Lin. *Syst.* i. p. 228, 7; *Gmel. Syst.* ii. p. 610; *Ind. Orn.* ii. p. 810, 23. *Sterna nigra*, Bris. vi. p. 211, 4; *Ib.* 8vo, ii. p. 417; *Ind. Orn.* ii. p. 810; *Lin. Syst.* *Larus niger* Gesneri, *Raii Syn.* p. 131, A. 3; *Will.* p. 269. *Larus niger fessipes* alis longioribus Aldr. *Raii Syn.* p. 131, 4; *Will.* p. 270, v. t. 68. *Larus minor*, *fessipes nostras*, *Raii Syn.* p.

132, A. 6; *Will.* p. 270, iv. *Hirondelle de mer noire*, ou l'Epouventail, *Buf.* viii. p. 341. Black Tern, *Br. Zool.* ii. No. 256; *Ib.* fol. 145, t. L.* 1, f. 1; *Arct. Zool.* ii. No. 450; *Lath. Syn.* vi. p. 366, 22,—p. 367, A.; *Sup.* p. 267; *Lewin, Br. Birds*, vi. t. 206; *Walc. Syn.* i. t. 122; *Don. Br. Birds*, iv. t. 74; *Bewick, Br. Birds*, ii. p. 203. Lesser Sea Swallow, *Albin*, ii. t. 89. Provincial: Cloven-footed Gull; Scare Crow; Stern; Car Swallow.—This species is less than the Common Tern; weight about two ounces and three-quarters; length ten inches. Bill black; irides dusky. Forehead, sides of the head beneath the eyes, throat, and fore part of the neck white; the rest of the head, back of the neck, and under part of the body black; back, wings, and tail deep ash-colour; vent and under tail-coverts white; the tail is less forked than in either of the other species; the outer feathers edged with white; legs dull red, the webs much indented or semipalmated. In some the forehead and fore part of the neck are mottled with black; and as most authors have omitted, or at least have not made mention of, any white on the forehead, such is probably another variety. The female has no white about the head. The Black Tern has all the actions and manners of the other species, but seems to prefer fresh-water fish and insects to marine. It breeds on the verge of pools in swampy places, and never, that we could trace, on the sea-shore, but frequently remote from the sea. It is found on the fenny parts of Lincolnshire and Cambridge-shire, and is called at this last place Car Swallow. Is plentiful about the reedy pools on Romney Marsh in Kent, where they first appear the latter end of April or beginning of May, and breed in the sedgy places on the verge of the pools; and though very near the sea, is rarely seen on the shores till after the breeding season, and then not commonly. It lays three or four light olive-brown eggs, blotched and spotted with brown and black, about the size of those of the Magpie. On the sea-shore that bounds the above extensive marsh all the other species are found during the incubating season.

SUPPLEMENT.—The whole tribe of the Terns generally leave this country before the middle of October, but we obtained a specimen of this bird the beginning of November, 1802, in Devonshire; it was a young bird, we may conclude from the plumage. The head was mottled with black and white; the back and scapulars brown and grey; dusky at the setting on of the wings and the ridge; the neck almost white, both behind and before;

the under parts of the bird mostly white, except a little patch of black on the breast; quills dusky grey; tail paler grey. The *Sterna nigra* of Linnæus is without doubt only a variety of fissipes, and has been thought so by others, though lately made distinct without sufficient reason. The bird here described will show the propriety of bringing all the synonyms of *Sterna nigra* together with those of fissipes. It is remarkable that the under parts of this bird, when young or in its first plumage, should be white, so contrary to that of the Gull genus, which never become white in those parts till after the first, and some not till the third or fourth, moult. The black on the under parts of this species does not appear till after the first moulting. In the breeding season both sexes of this species have the head, neck, and all the under parts as far as the vent, entirely black, with now and then a few white feathers at the base of the upper mandible: the legs dusky, with a tinge of red. We observed great abundance of Black Terns on the fens of Lincolnshire during the breeding season, and could not discern any difference in plumage between the sexes: many that had no white on the head were opened, and males as well as females ascertained. About the middle of May this species prepares a nest of flags or broad grass, in the most marshy places, upon a tuft just above the surface of the water; and lays almost invariably four eggs, weighing about three drams each. The flight of the Black Tern is not very unlike that of the Goatsucker; its evolutions are rapid, and its turns short, by which means it sometimes escapes the talons of predaceous birds, as we had once an opportunity of witnessing. In a very hard gale of wind many Terns were sporting over the water, when a Peregrine Falcon passed like a shot, singled out his bird, and presently coming up with the chase, made a pounce, but the great dexterity of the Tern avoided the deadly stroke, and took a new direction. The Falcon, by his superior velocity, soon regained sufficient elevation to successively repeat his pounces, but at last relinquished the pursuit.

Tern, Brown. — *Sterna obscura*, Gmel. *Syst.* i. p. 608; *Ind. Orn.* ii. p. 810, 25. *Sterna fusca*, *Raii Syn.* p. 131, A. 15; *Will.* p. 268, VIII. **Brown Tern**, *Br. Zool.* ii. No. 253; *Ib.* fol. 143; *Will. Angl.* p. 352; *Lath. Syn.* vi. p. 368, 23.—This we believe to be no other than the young of the Common Tern, having seen them in the plumage described by Ray and Willughby, and copied by various authors since. The head is black; wings partly brown and ash-

colour; the rest of the plumage above brown, beneath white; the tail not forked. Mr. Pennant has placed this amongst his Gulls, no doubt from its not having a forked tail; but he expresses a suspicion that it is the young of the Greater Tern. Dr. Latham has done the same.

SUPPLEMENT. — In the second Supplement to the 'General Synopsis' the synonyms of *Sterna obscura* have been affixed to a species of *Larus*, under the title of Brown Gull. This Gull we have before shown is not a distinct species, but the young of the Black-headed Gull, to which we beg leave to refer. With respect to the Brown Tern of Ray, it ever has and ever will be in obscurity; but there cannot be the least doubt that it is one of the Terns in its immature plumage, most likely the common species (*Sterna Hirundo*), which is at first brown above, and the tail scarcely forked. See the last species and the following [Tern, Black; and Tern, Common.] Upon the subject of this and the Brown Gull we have been more diffuse under the article Black-headed Gull, both in this work and in vol. vii. of the 'Transactions of the Linnean Society,' to which we refer the curious reader.

[Tern, Caspian. — *Yarrell*, iii. 497; *Hewitson*, cxxxi. 477. *Sterna caspia*, *Temm. Man. d'Ornith.* ii. 733; *Selby, Brit. Ornith.* ii. 463.—"In the adult summer or nuptial plumage the bill is of a rich vermilion, and the legs and feet black. The forehead, crown of the head, and lengthened occipital feathers velvet-black. Back, scapulars, and wing-coverts pearl-grey. Sides of the head, fore part of the neck, and the whole of the under plumage pure white. Quills brown, tinged with grey. Tail pearl-grey. In winter the forehead and crown of the head are white, and the occiput is varied with black and white. In other respects as above described. The young of the year have the upper parts of a pale wood-brown, tinged with grey, and varied by the transverse blackish bars and spots. Quills blackish brown, and the end of the tail of the same colour. The under plumage white." — *Selby*, ii. 464. A considerable number of this large species of Tern have occurred at intervals on the eastern coast of England. Mr. Yarrell mentions ten, and four others are recorded in the 'Zoologist.' It breeds annually on a Danish islet called Sylt, off the coast of Jutland, and lays two or three eggs, either on the bare sand or rock: they are of an ochreous-yellow colour, blotched and spotted with gray and ferruginous-brown.]

Tern, Common. — [*Yarrell*, iii. 509; *Hew-*

itson, cxxxiii. 480.] *Sterna Hirundo*, *Lin. Syst.* i. p. 227, 2; *Gmel. Syst.* ii. p. 606; *Ind. Orn.* ii. p. 807, 15. *Nævia*, *Lin. Syst.* i. p. 228; *Gmel. Syst.* i. p. 609; *Bris.* vi. p. 216,—6, t. 20, f. 2; *Id.* 8vo, ii. p. 418. *Sterna Boysii*, *Ind. Orn.* p. 806, B. *Hirundo marina*, *Raii Syn.* p. 131, A. 1; *Will.* p. 268, t. 68. *Sterna major*, *Bris.* vi. p. 203, 1, t. 19, f. 1; *Ib.* 8vo, ii. p. 415. *La grande Hirondelle de mer*, *Buf.* viii. p. 331, t. 27. *La Guifette*, *Buf.* viii. p. 339; *Pl. Enl.* 924. *Sea Swallow*, *Albin*, ii. t. 88; *Will. Angl.* p. 352. *Sandwich Tern*, *Lath. Syn.* vi. p. 358, A. *Clovenfooted Gull*, *Albin*, ii. t. 82. *Kamtschatkan Tern*, *Arct. Zool.* ii. p. 525; *Phil. Trans.* lxii. p. 421; *Bewick, Br. Birds*, ii. p. 207. *Common or Greater Tern*, *Br. Zool.* ii. No. 254, t. 90; *Ib.* fol. 144, t. L.*; *Lath. Syn.* vi. p. 361, 14; *Lewin, Br. Birds*, vi. t. 204; *Walc. Syn.* i. t. 119; *Don. Br. Birds*, i. t. 23; *Pult. Cat. Dorset.* p. 18; *Bewick, Br. Birds*, [ii.] t. p. 199. *Provincial: Gull-Teazer; Kirmew; Picket; Tarney, or Pictarne; Tarrack, or Tarret; Rittock, or Rippock; Spurre; Scraye.*—The weight of this species is about four ounces and a quarter; length fourteen inches. Bill two inches and a half long, of a crimson-colour, black at the end, and very sharp-pointed; irides dusky. The top of the head, taking in the eyes and nape, black; beneath the eyes, and from thence to the nostrils, the neck, and all the under parts white; the back and wings are ash-colour; quills grey; the outer ones darkest, shafts white; tail much forked, and white, except the outer web of the exterior feather, which is black; legs crimson; claws black. Of the four species of Terns which visit this country in spring, this is the most plentiful. It frequents our flat, sandy, or shingly shores, preferring the latter; amongst which it lays three or four eggs, without any nest. These are about the size of a Pigeon's, of an olivaceous-brown, blotched and spotted with dusky. It is found in great abundance on part of the Sussex and Kentish coasts, particularly about Winchelsea, and from thence to Dungeness; is a noisy, restless bird, constantly on wing in search of insects and small fish, after which it darts into the water with great force, seizes, and instantly returns; for though it is web-footed is never seen to swim or dive. It is commonly known by the name of Sea Swallow, from its actions on wing being similar to that bird. On the south coast of Devonshire is called Gull-Teazer, as it is frequently seen to pursue and persecute the lesser Gulls till they disgorge, which it dexterously catches before it reaches the water. Whether this property is common to the other species we have not been able to ascertain; but in

general their manners and habits are very similar; none of which have ever been observed to settle on the water. This is sometimes, on its first arrival, found skimming over fresh-water rivers and lakes for a few days; but we do not find they breed in such places in England. It is found in most of the northern parts of Europe during the breeding season, even as far as Greenland and Spitzbergen, as well as North America, where in New England it is called Mackarel Gull; and at Hudson's Bay is known by the name of Black-head. Mr. Pennant calls it the Greater Tern. The young birds are mottled with brown and white, and are most probably the Brown Tern described by Ray and other ornithologists.

SUPPLEMENT.—Several young birds of this species were sent to us by our late friend Mr. Bryer, of Weymouth, which had the head partly black; the back mottled with brown; the wings partly brown, intermixed with ash-colour; and the under parts white, with the tail nearly even at the end. A specimen from Senegal, in Africa, in the collection of Mr. Vaughan, corresponds partly with the above in plumage, and is, without doubt, of the same species, but farther advanced, being a medium between this and one hereafter described. It will be observed by the critical Ornithologist that this species, in its first or nestling feathers, so nearly answers the description given of the Brown Tern, that we think their synonyms should be inseparable. It is unfortunate for Science when obscure accounts are handed down to posterity by respectable authors who claim no small share of deference. But here it does not appear that Mr. Ray ever had seen the bird he denominated *Sterna fusca*, but that the short account of the bird was communicated to him by a friend, the Rev. Mr. Johnson, Vicar of Brignal, in Yorkshire, who died in the year 1695; so that it is high time this ambiguous bird should be identified in the young of the Common Tern above described. Mr. H. Boys assures us this species is common in Scotland, especially in the Isle of May, in the Frith of Forth, where it is called Pictarne, and where it is esteemed a good relish when split and broiled, and their eggs excellent when boiled hard and eaten cold. Extends to the Orkney and Zetland Islands, where we are assured by Mr. Fleming they are known by the several names of Tarrock, Tarrick or Tarret, Rittock or Rippock. The plumage of the Terns, like that of the Gulls, differs so much between the infant and adult state, that it is extremely difficult to assign to each their proper synonyms: indeed, so perplexing is the genus from this circum-

stance, and so much confusion has arisen from it, that it will scarcely ever be possible to bring them into their proper places; some which are actually distinct have been confounded; while, without doubt, many varieties of others have been described as distinct species. In this place, however, it is only our business to elucidate the subject as far as relates to British species. Amongst the obscure *Sterna*, that of the Linnæan *nævia* particularly claims our attention here, because we have no doubt that it is really belonging to this species, and it is no other than the *Hirundo* of Linnæus in the state of adolescence. Buffon has also described a bird under the title of *Guifette*, figured in the 'Planches Enluminées,' and which is now with great reason considered as the Linnæan *nævia*; but we cannot agree with our friend Doctor Latham and others in considering these birds as varieties of the Sandwich Tern (*Sterna Boysii*): the vast disproportion of size at once forbids it. Buffon's bird is said to be a middle size between the Lesser Tern (*Sterna minuta*) and Common Tern (*Sterna Hirundo*). The Linnæan bird is described to be eleven inches and a half in length, which is also a medium between the two last mentioned species, and greatly inferior to the Sandwich Tern, which measures eighteen inches: and we cannot suppose that these could have been brought together on any other account than that of the bill and legs being dark-coloured. Mr. Pennant, in the 'Arctic Zoology,' describes his Kamtschatkan Tern to have the bill and crown black, forehead and space over the eye white; and says, "A bird, seemingly of this species, was shot on the Severn, a few miles below Shrewsbury, and it is among the elegant drawings of my friend Joseph Plymly, Esq., of Longnor." For this supposed species Mr. Pennant refers, with great reason, to the *Guifette* of Buffon, figured in the 'Planches Enluminées.' This is without doubt the same bird as Doctor Foster mentions as a variety of the Common Tern, found at Hudson's Bay, having the legs black, and the tail shorter and less forked. In the year 1802, on the 2nd of September, a Tern was shot near Bath, as it was flying about the Avon; a sketch of which we were favoured with by the late Mr. Robins of that place, accompanied with the following short description:—"The weight was three ounces; the length twelve inches; breadth twenty-seven and a half. The bill, legs, and feet black; in other respects much like the Common Tern." We have no doubt that had Mr. Robins carefully compared this bird with the *Sterna Hirundo* in the adult plumage, he would have observed that it differed

from it in possessing the white forehead, and also in other parts of the plumage. But from all these accounts, though imperfect, we are quite clear that the bird in question is now before us, and that it is, without doubt, the *Sterna Hirundo* in the adolescent state of plumage; of which the following is a description:—Length nearly twelve inches: the bill dusky black, rather exceeding an inch in length to the feathers on the forehead, shaped like that of the Common Tern: irides dusky: the forehead is white, the top of the head the same, streaked with black, by being intermixed with black feathers; the back of the head, taking in the eyes and extending down part of the neck behind, black, like that of the adult; before the eye the feathers are streaked as on the crown, but close to the orbit is a full black line, extending half-way round it; the hinder half close to the orbit is white: the back and sides of the neck, and whole under parts, white: the back is cinereous, like the adult, but differs in having the margins paler: the scapulars the same, with dusky brown borders, tipped like the last; the longest of these feathers that reach over the rump are tipped with white: the lesser coverts of the wings, from the ridge, are dusky black, with pale margins, becoming gradually lighter, till the two largest series of coverts are cinereous, with pale margins like the back: all the quills are cinereous, rather darker than in the adult; the primaries darkest, or what has been termed blue-grey, and slightly tipped with white; the tertials have a brown tinge: the tail is less forked than in the adult, and white, with the outer webs of the three exterior feathers more or less of the same colour as the primary quills: the legs and feet dusky black, but, like the bill, possess a rufous tinge: the wings exceed the tail in length rather more than those of the adult, because the lateral tail-feathers have not acquired their full length. This and other similar birds were shot in the month of November, on the south coast of Devon; and we think there can be no doubt that it is the Buffonian, as well as the Linnæan, bird referred to; and there is as little doubt that it is also the *Sterna Hirundo* immaturely feathered, but further advanced than that state in which we conceive the same species has been described under the title of *Sterna obscura*. The appearance of this bird is infantine; the light margins of the feathers are characteristic marks of immaturity, observable in almost every species of birds, and well exemplified in the whole race of Gulls, which has till lately caused such perplexity in that genus. With respect to the

habits of the Guifette of Buffon, we have no doubt he was deceived by those who gave him the information, or at least the habits of the *Hirundo* must be very different in Picardy than in Sussex and Kent, the opposite coast, and at no great distance from each other. It is therefore probable the manners of *Sterna fissipes* have been confounded with this, when the Guifette is said to make a nest in the marshes on a tuft of grass or moss. Such habits are peculiar to the *fissipes* or Black Tern, and we believe to no other European species. It is, however, not the first time we have discovered where that great naturalist has been deceived. It will be observed that in the former part of this work we had prefixed all the synonyms of the Linnæan *nævia* to the Sandwich Tern, upon the authority of the 'Index Ornithologicus;' but it must be evident that the disproportion of size is so great as to preclude all possibility of their being the same species. Having now the good fortune to identify the Buffonian Guifette, and which has been, with great probability, considered to be the Linnæan *nævia*, we beg those synonyms attached to the Sandwich Tern, as a variety, may be cancelled, having brought them to this species.

Tern, Greater.—See Tern, Common.

Tern, Gullbilled.—[Yarrell, iii. 520; Hewitson, cxxxi. 476.]—SUPPLEMENT.—*Sterna Anglica*.—As we have in some of the preceding Terns been reducing the species, so we trust it will clearly appear that there are two very distinct species confounded for the Sandwich Tern. Before we enter into a comparative definition of the two species, it will be proper to remark, that amongst several birds which Doctor Latham spared to Mr. Vaughan from his collection, we recognized the original Sandwich Tern, from which the drawing was taken by the daughter of the Doctor, and afterwards engraved for Mr. Boys's 'History of Sandwich.' This identical bird was sent by Mr. Boys to Doctor Latham as a new species, and as such was denominated Sandwich Tern in the 'General Synopsis,' and afterwards, in the 'Index Ornithologicus,' *Sterna Boysii*, making it known, by those appropriate names, the original discoverer and the place where found. Doctor Latham assures us he never had but two Sandwich Terns, the one sent to him by Mr. Boys, and the other by Doctor Leith of Greenwich, and that they were similar. The specimen, however, before mentioned is evidently the one from which the original drawing and description were taken, as the attitude evinces. This specimen having been presented to us by our friend

Mr. Vaughan, has been the occasion of the fortunate discovery that a distinct species, apparently more common, has been erroneously considered to be that bird; an error we confess to have fallen into, in common with all other naturalists. From the general resemblance of these two species, it is probable that the one in question would have long remained confounded, had it not been for the means of bringing the two together (being in possession of the new species), which, from the shape of the bill, is denominated the Gull-billed Tern, a prominent character of distinction between the two: and as it has originated in England we have added the more scientific name of *Sterna Anglica*. Our specimen of this species was shot in Sussex, and have known others to have been killed about Rye. Two of these birds are in the collection of Mr. Vaughan, both sent to him for the Sandwich Tern. Now, in order to define the distinction of these two species, we shall make a comparative description. The bill of the *Boysii* is two inches long, slender, and almost regularly subulate, and is black, with a pale horn-coloured tip. That of the *Anglica* is not above an inch and a half long, thick, strong, and angulated on the under mandible like the bill of a Gull, and wholly black: upper part of the head of the *Boysii* is black, spotted with white on the forehead and part of the crown. In the *Anglica* the upper part of the head, taking in the eyes, is also black, and extends much farther down the back of the head and part of the neck; and in the several specimens examined there have been only two or three white feathers on the crown. The upper parts of the body of the former are of a paler grey, or, as Dr. Latham terms it, hoary lead-colour; and the tail, as well as their upper coverts, quite white. The general plumage of the *Anglica* above is darker, being cinereous, and the tail and its upper coverts like the back, the outer feather on each side only being white. The greater quills of the *Boysii* are hoary black on the outer webs, and more than half of the inner, near the shafts, from the points, but gradually becoming less towards the base, the shafts and interior margins quite to the tip white. In the *Anglica* the quills are hoary, but the tips of the first five are black for an inch or more, without the smallest margin of white on that part; in other respects the wings are somewhat similar, except that part of the inner webs which is white does not quite reach the margin, the very edge being dusky for half the length of the feathers. In their legs and feet there is as great a difference as in their bills; the legs of the *Boysii* are nearly one-third shorter, black with a

slight rufous tinge, measuring scarcely one inch and a half in the tibiae; the foot is small, and the claws remarkably hooked. The legs of the *Anglica* rather exceed two inches in length from the heel to the knee, their colour rufous-black; the toes longer than in the other species, especially the middle toe; and the claws unusually straight. It will be observed that in the former part of this work this species was described for the Sandwich Tern, from a specimen in our possession, having been, like others, led into the error for want of comparison: but the instant we had an opportunity of bringing the two birds together the distinction was evident. The bill and legs alone are so pointedly characteristic that at first sight the species may now be determined, independent of plumage. The size of the two species is nearly the same, but the Sandwich is a longer bird, being about eighteen inches in length, and two feet nine inches in breadth. [See also Tern, Sandwich, under which name it appears Montagu described the present species.]

Tern, Lesser.—[*Yarrell*, iii. 524; *Hewitson*, cxxxiv. 484.] *Sterna minuta*, *Lin. Syst.* i. p. 228, 4; *Gmel. Syst.* ii. p. 608; *Ind. Orn.* ii. p. 809, 19; *Bewick, Br. Birds*, ii. t. p. 201. *Sterna minor*, *Bris.* vi. p. 206, 2, t. 19, f. 2; *Ib.* 8vo, ii. p. 416. *Larus piscator*, *Raii Syn.* p. 131, A. 2; *Will.* p. 269, II. La petite Hirondelle de mer, *Buf.* viii. p. 337. Lesser Sea Swallow, *Albin*, ii. t. 90; *Will. Angl.* p. 353, t. 68. Lesser Tern, *Br. Zool.* ii. No. 255, t. 90; *Ib.* fol. 144, t. L. 2; *Arct. Zool.* ii. No. 449; *Lath. Syn.* vi. p. 364, 18; *Lewin, Br. Birds*, vi. t. 205; *Walc. Syn.* i. t. 121; *Don. Br. Birds*, iv. t. 96; *Pult. Cat. Dorset.* p. 18. Provincial: Richel-bird.—This is the smallest of the tribe, measuring about eight inches and a half in length; weight about two ounces. Bill yellow, tipped with black; irides dusky. The forehead is white; the rest of the head above and the nape black; from the bill to the eye a black streak; the sides of the head beneath the eyes, the neck, and all the under parts pure white; the back, scapulars and wings pale grey, darkest on the quills; tail white; legs yellow. This elegant little species has all the habits of the Common Tern, and breeds in the same places, but is far less numerous. We have with no small difficulty found their eggs amongst the shingle, which were always two in number, placed in a small depression, without any nest; they are about the size of those of the Black Tern, of a very pale brown, spotted all over with cinereous and dusky, but not so pointed as the eggs of that bird. What has been said

of the manners and habits of the Common Tern will equally answer for this; to that species therefore we refer our reader. It is not, however, always found with that bird, as this is sometimes found to breed where the other is not.

SUPPLEMENT.—The very great difference in the plumage of this species, between the nestling and the adult, will show the necessity of great caution in ascertaining the several species of the genus. The young are seldom capable of flying till the first or second week in July; at which time the plumage of the upper part is more or less of a pale yellow-brown, intermixed with cinereous; and on the back and scapulars each feather has an angular bar near the end; on the back of the head the feathers are black tipped with grey: the quill-feathers are of an elegant cinereous-grey, white at the edges, and slightly tipped with yellowish brown: the tail is nearly even at the end, almost white, with a dash of cinereous; in the middle of each feather a dusky spot on each web, and the tips yellowish: the whole under parts white; the bill dusky, tinged with yellow: legs dull yellow. This species is not considered so plentiful as the *Sterna Hirundo*, but in some places it is extremely common: on the coast of Lincolnshire it appears to exceed the other in number, especially about Skegness. At that place we sometimes observed three eggs together, for they make no nest. The weight of the egg is from two drams forty grains to three drams.

[Tern, Moustache.—See Tern, Whiskered.]

[Tern, Noddy.—*Yarrell*, iii. 537; *Hewitson*, cxxxiv. 486. *Sterna stolidus*, *Temm. Man. d'Ornith.* iv. 461; *Yarrell*, l. c.—“In the adult bird the bill is black; from the base of the bill to the eye is also black; irides brown; the forehead and crown buff-colour; occiput smoke-grey; the whole of the body above and below, and all the wing-coverts, dark chocolate-brown; primaries and tail-feathers brownish black; legs, toes, membranes, and claws black. The whole length is fourteen inches and a half to the end of the tail, which is graduated, the middle pair of feathers being the longest; the wing, from the carpal joint to the end of the first quill-feather, ten inches and a half.”—*Yarrell*, iii. 542. Two specimens of the Noddy were recorded by Mr. Thompson, of Belfast, in the ‘Transactions of the Linnean Society’ for 1835, as having occurred between Wexford and Dublin: about four years previously Mr. Thompson observed these birds when casually looking over a collection belonging to Mr. Warren, of

Dublin. The species appears to be cosmopolitan, and its occurrence on the coast of Ireland must be regarded as a mere accident. It will be seen, by a reference to Gould's 'Handbook of the Birds of Australia,' that Mr. Gilbert says that the Noddy "breeds on the Houtmann's Abrolhos in prodigious numbers: it lays its egg in November and December, on a nest constructed of sea-weed, about six inches in diameter, and four to eight inches in height, but without anything like regularity of form: the top is nearly flat, there being but a very slight hollow to prevent their single egg from falling off." Audubon thinks the Noddy lays "three eggs of a reddish yellow-colour, spotted and patched with dull red and faint purple." It is probable three or four species are confounded by naturalists under the name of *Sterna stolida*, and certainly as many by seamen under that of Noddy.]

Tern, Roseate.—[Yarrell, iii. 505; Hewitson, cxxxii. 479. *Sterna Dougalli*, Temm. *Man. d'Ornith.* ii. 738; Selby, ii. 470.]—

SUPPLEMENT.—*Sterna Dougalli*.—It will be seen we have already given a new species of *Sterna* [see Tern, Gullbilled], which has most commonly been confounded with the Sandwich Tern: and it may appear extraordinary that another new species of this tribe should lately be discovered in this country. To Dr. M'Dougall, of Glasgow, the amateurs of Science are indebted for this valuable discovery, several of which were shot in the West Highlands of Scotland, and of two preserved in that gentleman's collection he was so obliging as to favour us with one of them, accompanied with a full description, taken upon the spot while the birds were fresh. Of this description, therefore, we shall give the substance as nearly as possible, occasionally introducing anything that may have occurred to us upon examination. Length fifteen inches and a half: the bill one inch five-eighths long to the feathers on the forehead, slender, slightly curved, and of a jet-black colour, except at the base, which is of a bright orange, extending about the eighth of an inch in breadth on the upper mandible from the corner of the mouth, round the front, and round the nostrils; and on the under mandible, extending from the angle of the mouth along the sides as far as the feathers on the chin, and rather beyond on the under part: the inside of the mouth and throat bright orange, becoming darker towards the end of the bill: irides black: the tongue one-half the length of the bill, of a pale red-colour, and bifurcated at the point: the forehead, crown, hind part, and sides of the head,

taking in the eyes, except a small portion of the lower part of the orbit, jet-black; the black feathers on the hind head thinly diffused, and flowing over the white down the back of the neck; the feathers on the sides of the head, extending in a narrow line along the upper mandible to the nostrils, and on the sides of the neck, white: the whole under parts are white, but the fore part of the neck, breast, and belly to beyond the vent, are tinged with a most delicate rosy blush: the back, scapulars, and coverts of the wings pale cinereous-grey: the quill-feathers are narrow; the first has the exterior web black, with a hoary tinge; the others are hoary on that part; and part of the inner web next to the shaft of the first three or four is hoary black, becoming by degrees paler in the succeeding feathers, all deeply margined with white quite to the tip, and the shafts of all are white: length of the wing from the elbow to the extremity of the first quill-feather nine inches and a quarter: the tail is greatly forked; the outer feather is seven inches long, extending two inches beyond the wings when closed, extremely slender, and the end for an inch or more slightly ciliated; the middle feathers are scarcely three inches in length, they are all white, destitute of any markings: the legs and feet, including the bare space above the knee, which is nearly half an inch, are of the brightest orange-colour; the claws black and hooked. Such is the description of this interesting species of Tern; but we must not withhold Dr. M'Dougall's very correct comparative observations, which we shall transcribe:—"This Tern is of a light and very elegant figure, differing from the *Sterna Hirundo* in the size, length, colour, and curvature of the bill; in the comparative shortness of the wing in proportion to the tail; in the purity of the whiteness of the tail, and the peculiar conformation and extraordinary length of the lateral feathers. It also differs from that bird in the length, colour, and size of the legs and feet. From the Sandwich Tern it differs essentially in the shortness of the wings in proportion to the tail, and completely in the colour of the legs and feet." From these notes, which Dr. M'Dougall took upon the spot where the bird was killed, we might collect sufficient information to consider it as distinct from any of the known British species, although many of its characters are very similar to those of *Sterna Boysii*. With the *Sterna Hirundo* its principal and almost only similarity is that of size, if anything, rather inferior in bulk, but of greater length by reason of the extraordinary long feathers of the tail. The length of the bill is not only rather

superior, but is more subulate or slender, and not so much curved, independent of the difference in colour, as noticed in Dr. M'Dougall's remarks. With respect to the colour of the plumage, they are so essentially different as to render it scarcely worth comparing; the upper parts of the *Hirundo* are much darker, and the under parts destitute of any roseate tinge: the quills are darker and longer, and have no margin of white near the end; and the tail is less forked, the feathers not white, but pale cinereous, with the outer feathers black on the exterior web. With all the British species of *Sterna* before us in several of their usual changes, we can have no difficulty in agreeing with Dr. M'Dougall, that his bird is distinct from either of those recorded as British, and we really believe is entirely a new species. In plumage, shape of the bill, and general appearance, except in its very inferior size, it bears a great resemblance to the Sandwich Tern: but the colour of the bill and legs, as well as the extraordinary length of tail in this, would be sufficient marks of distinction, even if the size had not been so greatly different. The circumstance, too, of the Sandwich Tern possessing a tinge of blush on the feathers of the breast towards their base, though not apparent till they are lifted up, is another singular affinity in two species, which in some respects are widely distinct. We mention these circumstances in order to guard such persons who may fancy they know better than those who have strictly compared them, and hereafter suppose them as varieties. It will be recollected that in this tribe there is no distinction of sexes by size or plumage, though, if anything, the males are rather the largest. Now the length of the Roseate Tern is only fifteen inches and a half, including the extraordinary length of tail, whereas the Sandwich Tern, with a much shorter tail, is eighteen inches in length, and the former is a male, which Dr. M'Dougall proved by dissection. It may also be added that the present subject was shot with many others, on the 24th of July, 1812, all of which are exactly alike. The season of the year, therefore, as well as the plumage and sexual distinction, make it evident that the bird is in its fullest maturity, and consequently as distinct from the Sandwich Tern as the Rook is from the Raven, or the Lesser Black-backed from the Greater Black-backed Gull, and with more specific characters of distinction, as have been noticed. In a subsequent letter from Dr. M'Dougall, in reply to several queries with which we troubled him concerning the habits of the bird, there are many remarks of great interest, as tending to

discriminate the species from its congeners, even when on wing, and which we shall in substance relate. The places of resort of the Roseate Tern are two small flat rocky islands in the Firth of Clyde, called Cumbrey Islands, in Milford Bay. On these islands the Common Tern swarms, so that the Doctor and his companions could scarcely step without treading upon the young birds or eggs; of the latter two were usually together, but sometimes as many as twenty, which bespeaks a congregate incubation. The first of the new species was shot by accident by one of the Doctor's companions, and, happening to fall close to him on the rocks, he was attracted by the beautiful appearance of its breast, and immediately pointed out the peculiarity of the species, and requested the gentlemen who accompanied him to shoot others. Two more were procured, and several escaped wounded, for it was easy to perceive the difference between this and the Common Tern, even on wing. After having attentively examined the actions of the Roseate Tern, and its appearance when flying, the Doctor computes that there was not above one in two hundred of the Common Tern, but that they were easily singled out by the sportsmen amidst thousands of the other species, from the following circumstances, which we give in the Doctor's own words, being highly illustrative of the distinction of the species:—"The new species was discerned by the comparative shortness of wing, whiteness of plumage, and by the elegance and comparative slowness of motion; sweeping along, or resting in the air, almost immovable, like some species of the Hawk; and from the size being considerably less than that of *Sterna Hirundo*." From the continual alarm of these birds, by the presence of the Doctor and his companions on these little islands, neither the eggs nor the young of the Roseate Tern could be clearly ascertained; but several eggs were collected that differ in size, colour, and shape. It is more than probable this bird will be found hereafter to congregate in other places not remote from the longitudinal line in which it has been first discovered, but hitherto passed unnoticed amongst a host of the Common Tern. We now beg leave to make our public acknowledgments to Dr. M'Dougall for the very liberal and handsome manner in which the history of this interesting bird was communicated to us, and more particularly for the specimen that accompanied it, the actual inspection of which enables us to bear record of it as a distinct species upon ocular evidence, if such could be wanting, in addition to the excellent history given by the Doctor. In our

acknowledgment we must also include Captain Laskey, by whom we were first made acquainted that such a bird had been taken by and was in the collection of Dr. McDougall, to whom he kindly communicated our wishes to examine it. Were all collectors of the works of Nature equally liberal, how much more rapidly would knowledge increase upon us! but, unfortunately for Science, there are some who withhold the little information they could give.

Tern, Sandwich. — [Yarrell, iii. 501; Hewitson, cxxxii. 478.] *Sterna cantiaea*, Gmel. Syst. ii. p. 606. *Sterna Boysii*, Ind. Orn. ii. p. 806, 10; Bewick, Br. Birds, ii. t. p. 204. Sandwich Tern, Lath. Syn. vi. p. 356, 9; Sup. p. 266; Boys, Sandwich, t. p. 851; Lewin, Br. Birds, vi. t. 203; Walc. Syn. i. t. 120; Don. Br. Birds, v. t. 120. VAR.: La Guifette, Buf. viii. p. 339. Cloven-footed Gull, Albin, ii. t. 82? *Sterna naevia*, Lin. Syst. i. p. 228, 5; Gmel. Syst. ii. p. 609; Bris. vi. p. 216, 6, t. 20, f. 1; Ib. 8vo, ii. p. 418. Kamtschatkan Tern, Arct. Zool. ii. p. 525, A.; Lath. Syn. vi. p. 358, 9, var. A. — This is the largest of the British species; length about eighteen inches. The bill is black; irides dusky. The upper part of the head and nape, taking in the eyes, is black; the rest of the head, neck, under parts of the body, and tail white; back, scapulars, and wings cinereous-grey; the first five or six prime quills are tipped with black; the inner webs more or less white towards the base; tail considerably forked; the outer feathers dashed with cinereous on the exterior webs; legs dusky, with a tinge of red. Young birds not maturely feathered are more or less clouded with brown on the upper parts of the body and wings, and the head spotted with white. This bird was first noticed by Mr. Boys of Sandwich, where it is not uncommon, and communicated to Dr. Latham, who first gave it to the world. It does not appear to be so plentiful as either of the other species, for in a whole summer's residence on the coast of Sussex and Kent, where the others are in plenty, we were not able to procure more than two specimens; nor could we ever find where it bred. It comes to us and retires about the same time as the others, and has no doubt been confounded with the Common Tern, to which it bears very great resemblance, except in size, and in the colour of the bill and legs; the bill of this is also much stronger, the legs much longer, and the tail not so much forked. It has, however, all the manners and habits of the common species, as far as we have been able to collect. We are informed it breeds on the Sand-

wich coast, but have never with certainty heard of its eggs being found. We were favoured with an egg, said to belong to this bird, from Mr. Lewin, and have seen another from the same gentleman in the cabinet of Dr. Latham; both of which appear in size and colour to be that of the Common Tern.

SUPPLEMENT. — The ingenious Mr. Bewick has evidently traced this species of Tern to the coast of Northumberland. The figure alone which this author has given would have been sufficient to have identified the bird; but we also obtain some interesting observations. "A pair of these birds (says the author), male and female, were shot on the Fern Islands, on the coast of Northumberland, in July, 1802. 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 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 Dr. Latham's accurate description that to attempt giving any other would be useless." Thus, while we have to lament the want of the complete habits of this species with respect to the nature and situation of its nest and colour of the eggs (which evidently might have been ascertained, since they breed on the islands before mentioned), yet we learn some essential characters. First, that the tip of the bill being of a light colour is an invariable character: Mr. Bewick says yellow, so that we may conclude ours is only faded to a pale horn-colour. Secondly, the blush of red, observed on lifting up the feathers of the breast and fore part of the neck, appears to be an essential character; for even our specimen, which must have been killed nearly thirty years, retains a slight degree of this blush-colour beneath the surface of the feathers on those parts. We have only now to observe that without doubt this and the Gull-billed Tern both breed upon the coast of Britain, and we think, with great probability, differ from the other species of Terns in the choice of place for the purpose of nidification, breeding upon rocky elevated parts, instead of the shores, just above high-water mark. There is every reason for believing that one or both of these birds breed on the coast of France, especially that of Bretagne, on the isles off Ushant, and the small isolated rocks and promontories in that neighbourhood; for the eggs, apparently belonging to a large species of Tern, have been

given to us that were taken on the Black Rock, and where the birds to which they belong are in vast abundance, and are called by the British sailors Boatswain-bird. This subject has been mentioned before, under the article of Boatswain, and therefore we only notice it here in hopes of stimulating some persons who may have an opportunity to investigate this matter, and rescue it from obscurity.

[Tern, Swift. — *Ruppell*, pl. 13: *Baron R. K. von Warthausen*, *Ibis*, 1860. *Sterna velox*, *Ruppell*, *Atlas*, pl. 13; *Thompson*, *Annals of Natural History* for September, 1847, xx. 170; *id.* *Natural Hist. of Ireland*, iii. 266; *Schlegel*, *Revue Crit. des Ois. d'Europe*, p. 115; *Degland*, *Ornith. Europ.* p. 335. ? *Sterna cristata*, *Swainson*, *Birds of Western Africa*, p. 247, pl. 30. — "Wings and longest tail-feathers about of equal length; outer or longest tail-feathers exceed the middle by three inches. Bill wholly yellowish horn-colour; legs and toes wholly black; Colour of the entire plumage the same as that of the Common Tern (*Sterna Hirundo*), but the back is of rather a darker shade than that of the latter when adult. The black on the head does not reach within one-third of an inch of the bill; space between the termination of the black plumage and the bill pure white." — *Thompson*, l. c. A specimen of this bird was shot by Mr. Lynch, of Cork Street, Dublin, near Sutton, a place between Dublin and Howth, at the end of December, 1846: two others of the same species were seen: full details are given in the 'Annals of Natural History,' in the 'Zoologist' for 1847, at p. 1878, and in *Thompson's* 'Natural History of Ireland,' as cited above. It is known as an inhabitant of the Red Sea, Eastern and Western Africa, and the Mediterranean as far west as Sicily. "Found breeding on the low treeless sand island off the Luabo mouth of the Zambesi, in the month of January. The nests, which were placed a few yards from the tide-mark, consisted of slight hollows in the sand, with a few sticks gathered round. They were quite open and exposed, or placed occasionally under shelter of any log of wood cast up, but never in the centre of the island. This place is well protected from visits of monkeys by a wide extent of water." — *Dr. J. Kirk on the Birds of the Zambesi Region*, *Ibis*, 1864, p. 337. The following particulars of its eggs leave nothing to be desired: — "I have fourteen eggs in a good state of preservation, and five injured ones, collected on the island of Lobo (Archipelago of Dahalak), 1st Aug. 1857. They are distinguished from all the eggs of *Sterna* hitherto known by their consider-

able size, and beautiful and very varied coloration. Their length reaches 25—29, their breadth 17½—18½, lines; their weight amounts to 57—70, generally to 60, grains. The ground-colour is greenish white, greenish grey, reddish white, incarnate or violet-rose. The greenish specimens have, as in *Alca torda*, large blackish brown burnt spots and grey clouds; the reddish ones mostly smaller, rounded, sometimes also burnt spots, the colour changing from the centre to the margin, as stated above, and frequently short and numerous flourishes of a chesnut-brown (rarely entirely black or light brown), nearly red colour. In several specimens the flourishes are as large and as well-developed as in the finest eggs of *Uria troile*. Bluish grey markings lie deeper in the substance of the shell, and sometimes little conspicuous in the whitish specimens. They generally correspond to the external spots in size, form and situation, and appear rarely as larger clouds in dotted eggs. One specimen is uniform greenish white. Reddish eggs held against a light are transparent yellowish green, greenish ones bluish green. The granulation is strong, coarse, flat, longitudinal, with rounded pores and deep pits." — *Baron R. K. von Warthausen on the Nidification of certain Birds in North-Eastern Africa*, *Ibis*, 1860, pp. 127, 128.]

[Tern, Sooty. — *Yarrell*, iii. 543. *Sterna fuliginosa*, *Wilson*, *Amer. Ornith.* iii. 160 of *Jameson's* Edition. *Onychoprion fuliginosus*, *Gould*, *Birds of Australia*, vol. vii. pl. 32; *Handbook of the Birds of Australia*, ii. 408. — "The length of Sooty Tern sixteen inches, extent three feet six inches; bill an inch and a half long, sharp-pointed and rounded above, the upper mandible serrated slightly near the point; nostril an oblong slit; colour of the bill glossy black; irides dusky; forehead, as far as the eyes, white; whole lower parts and sides of the neck pure white; rest of the plumage black; wings very long and pointed, extending, when shut, nearly to the extremity of the tail, which is greatly forked, and consists of twelve feathers, the two exterior ones four inches longer than those of the middle, the whole of a deep black, except the two outer feathers, which are white, but towards the extremities a little blackish on the inner vanes; legs and webbed feet black; hind toe short. The secondary wing-feathers are eight inches shorter than the shortest primary. This bird frequently settles on the rigging of ships at sea, and, in common with another species, *S. stolidus*, is called by the sailors the Noddy." — *Wilson*, iii. 160. In the 'Zoologist' for 1853 Mr. Edwin Brown,

of Burton-on-Trent, records, at p. 3755, the occurrence of this bird at Tutbury, near that town: the bird is now in the collection of Mr. H. W. Desvœux. This is the only record I have seen of the occurrence of the species in England. Wilson records it as native in the United States, and Gould in Australia; and Dr. Naumann, in his 'Birds of Germany,' mentions a specimen killed at Proedd, near Magdeburgh. Mr. Audubon, in his 'Birds of America,' has given some interesting particulars of the habits of this species. "On landing," he writes, "I felt for a moment as if the birds would raise me from the ground, so thick were they all round, and so quick the motion of their wings: their cries were indeed deafening. . . . This species never forms a nest of any sort, but deposits its three eggs in a slight cavity which it scoops in the sand under the trees: several individuals which had not commenced laying I saw scratch the sand with their feet in the manner of the common fowl while searching for food. In the course of this operation they frequently seated themselves in the shallow basin, to try how it fitted their form, or find out what was still wanted to ensure their comfort: the eggs measure two inches in length by one and a half in breadth; have a smooth shell; the ground-colour a pale cream, sparingly marked with various tints of lightish umber and lighter marks of purple."]

[Tern, Striated.—Mr. Yarrell informs us that this is the young of the Sandwich Tern.]

[Tern, Whiskered.—Yarrell, iii. 517; Hewitson, cxxxiv. 483. *Sterna leucopareia*, Gould, *Birds of Europe*; Temm. *Man. d'Ornith.* ii. 746; Yarrell, l. c.—"The bill is red, inclining to dark brown on the edges of both mandibles towards the point; the bill rather stout, with the inferior angle of the under mandible prominent, an approximation to the form of the under mandible in the Gull-billed Tern. The irides brownish black; forehead, crown, and nape black; from the base of the upper mandible, in a line below the eye to the ear-coverts, a stripe of white, forming the whisker or moustache; back, wing-coverts, upper tail-coverts and tail-feathers uniform dark grey, almost slate-grey; first quill-feather lead-grey on the outer web, and over a considerable portion of that part of the inner web nearest to the white shaft, the other part of the inner web white; the outer webs of the other primary and secondary feathers lighter grey than the inner webs; chin and throat greyish white; neck and breast slate-grey,

and as dark as the back; abdomen, thighs, and flanks lead-grey; under wing and tail-coverts white; legs, toes, and membranes red, the membranes deeply indented. From the point of the beak to the first feathers on the forehead one inch and one-eighth; from the point of the beak to the end of the middle or short tail-feathers ten inches and a half, to the end of the outside and longest tail-feather one inch more, making the whole length eleven inches and a half. From the carpal joint of the wing to the end of the first quill-feather, which is the longest, nine inches and a quarter; length of the tarsus seven-eighths of an inch; of the middle toe three-quarters of an inch; claw of the middle toe three-eighths of an inch, strong and curved. Adult birds in winter have the forehead, crown, occiput, neck, and all the under parts pure white; a black spot behind the eyes; mantle, back, wings, tail-coverts and tail-feathers uniform ash-grey; bill, legs, and feet deep lake-red. Young birds of the year have the crown of the head varied with red and brown; occiput and ear-coverts greyish black; the feathers of the back, scapulars, and secondaries brown in the middle, bordered and tipped with dirty flesh-colour; tail-feathers blackish grey towards the end, but tipped with white; beak brown, red at the base; legs and feet flesh-colour."—Yarrell, iii. 518. Five or six examples of this bird have been killed in England; the first is that mentioned by Mr. Yarrell as shot at Lyme Regis in August, 1836; and the last is recorded by Mr. Rodd at p. 3280 of the 'Zoologist' for 1851: it was shot near Trescoe Abbey, on one of the Scilly Isles, in August of that year. It has repeatedly been killed in Europe according to Temminck. Mr. Yarrell describes the egg as "asparagus-green, spotted with brownish black and a few spots of bluish grey."]

[Tern, Whitewinged Black.—Yarrell, iii. 532. *Sterna leucoptera*, Temm. *Man. d'Ornith.* ii. 747, and iv. 463; Thompson, *Birds of Ireland*, iii. 307.—"An adult male specimen in its summer plumage has the beak reddish brown; the irides greyish black; the head, neck, and middle of the back black, the feathers becoming lighter in colour towards the rump; upper tail-coverts and tail-feathers white; anterior portion of the outside of the wing white, passing into a light grey on the larger wing-coverts; the first, second, third, and sometimes as many of the first five of the primary wing-feathers, black, the number depending on age; these have all white shafts, and with a considerable portion of white along the base of the broad inner

web; the other primaries light grey; the secondaries, tertials, and the scapular feathers slate-grey. The chin, neck in front, breast, belly, sides, and flanks black; under wing-coverts, some black, others slate-grey; under tail-coverts and under surface of the tail-feathers white; legs, toes, and their membranes pale yellow in the preserved bird, coral-red in the living bird; the claws black, the interdigital membranes very much indented. The whole length of the specimen described is nine inches and a half; the wing from the anterior joint to the end of the first primary, which is the longest in the wing, eight inches and a quarter."—*Yarrell, Br. Birds*, iii. 535. This very beautiful species of Tern inhabits the Mediterranean, and according to Temminck is very common about Gibraltar and the lakes of Lucarno, Lugano, Como, Isco and Guarda, and is occasionally seen on the Lake of Geneva. Very few specimens have occurred in this country; one is mentioned in the 'Annals of Natural History,' vol. xv. p. 271, as killed by Mr. Hill on the Shannon in 1841; and another, at page 3911 of the 'Zoologist' for 1853, as killed by Mr. Rising's keeper, at Horsey, near Yarmouth.]

Terrick.—See Tern, Common.

Tewit.—See Lapwing.

[Thickbilled Guillemot.—See Guillemot, Brunnich's; it is the Guillemot a gros bec of Temminck, *Man. d'Ornith.* ii. 924.]

[Thickkneed Bustard.	} See Bustard,
[Thickkneed Plover.	
[Thickknee.	
	Thickkneed.]

[Threetoed Quail.—See Quail, Andalusian.]

Throstle.—[*Yarrell*, i. 212; *Hewitson*, xxiii. 81.] *Turdus Musicus*, *Lin. Syst.* i. p. 292, 2; *Gmel. Syst.* i. p. 809; *Raii Syn.* p. 64, A. 2; *Will.* p. 138, t. 37; *Ind. Orn.* i. p. 327; *Bewick, Br. Birds*, i. t. p. 104. *Turdus minor*, *Bris.* ii. p. 205, 2; *Ib.* 8vo, i. p. 214. La Grive, *Buf.* iii. p. 280. Throstle, Mavis, or Song Thrush, *Will. Angl.* p. 188; *Br. Zool.* i. No. 107; *Ib.* fol. 91, t. P. f. 2; *Arct. Zool.* ii. p. 342, C.; *Albin*, i. t. 34; *Ib. Song Birds*, t. 2; *Lewin, Br. Birds*, ii. t. 58; *Lath. Syn.* iii. p. 18, 2; *Sup.* p. 139; *Walch. Syn.* ii. t. 198; *Pult. Cat. Dorset*, p. 10.—This common species of Thrush weighs about three ounces; length nine inches. The bill is nearly an inch long, dusky, the under mandible yellowish at the base; irides hazel. The head and whole upper parts

are of a yellowish brown, with a few obscure dusky lines on the former; the throat, neck, and sides yellowish; breast and belly white, elegantly spotted on the former with triangular dusky spots, somewhat resembling arrow-heads pointing upwards; the under coverts of the wings dull orange-yellow; legs light brown. This well-known bird is admired by every one for its song. Every wood and grove re-echoes with its melodious notes in the spring, frequently beginning its tuneful lays as early as February if the weather is mild, contending with the Missel in its love-strained notes. As the song is a prelude to incubation, so this species makes its nest in March, composed of dried grass and green moss externally, and plastered within with rotten wood mixed with cowdung or clay, which is so compact as to hold water, and sometimes proves fatal to their eggs, for in a rainy season we have often found it full. It lays four or five blue eggs, spotted with black at the larger end; their weight from eighty to ninety grains. The nest is placed sometimes on a stool or stump of a tree, very near the ground, or against the side of a tree, and frequently in a hedge or solitary bush. The Throstle remains in England the whole year, but is supposed to quit the more northern parts in winter. It is not, however, gregarious with us at any time, although it has been observed to pass through Livonia, Courland, and Prussia, together with the Missel and Fieldfares, in prodigious quantities about Michaelmas, in their flight to the Alps. Is said to be migratory in France, visiting Burgundy when the grapes are ripe, and doing great damage to the vineyards. In various parts of England is known by the names of Song Thrush, Mavis, and Greybird. A species of Thrush has been mentioned under the denomination of Heath Throstle; is said to have the breast darker and the tail shorter than this bird; but we have not sufficient grounds to believe it is distinct from this. The food of the Throstle is insects and berries of various kinds; but it is particularly fond of shelled snails, especially the *Helix nemoralis*, which it breaks by reiterated strokes against some stone. It is not uncommon to find a great quantity of fragment-shells together, as if brought to one particular stone for that purpose.

SUPPLEMENT.—This in some parts is called Grey-bird and Storm-cock; the last name is also applied to the Missel Thrush. The Throstle, like others, is subject to some accidental variety; one in our possession is of a dun-colour above, paler beneath, with the usual-shaped spots of the same colour as the back.

Throstle, Cock.—See Thrush, Missel.

Throstle, Heath. — SUPPLEMENT. — See Ouzel, Ring. — In the second Supplement to the 'General Synopsis' the author remarks that "in 'Ray's Letters,' p. 137, a bird is mentioned by the name of Heath Throstle, taken from the 'Epitome of Husbandry,' the author of which first noticed it. Mr. Ray supposes it to be the Ring Ouzel, as that bird is called Heath Throstle in Craven." Doctor Latham adds, "Be this as it may, the late Mr. Lewin showed me a pair of Thrushes similar to the Song Thrush in colour, but they were darker, and the tail seemed rather shorter: they were shot near Dartford, in Kent; I remember to have made some remarks upon these birds at the time, but having mislaid them I cannot venture here to say more on the subject." At present we have no reason to believe these birds of Mr. Lewin other than the Common Throstle rather darker in plumage than usual, or than he had before noticed; but this is a circumstance common to all when in full feather newly moulted, and is very conspicuous in the Throstle when compared with specimens killed and preserved at a different season.

Thrush. — A genus of birds, the characters of which are: Bill nearly strait, but bending a little towards the point, and slightly notched near the end of the upper mandible. Nostrils oval, naked. Tongue slightly jagged at the end. Mouth furnished with a few slender hairs at the corners. Toes, the middle one connected to the outer one as far as the first joint.

Thrush, Golden.—See Oriole.

[Thrush, Goldvented. — *Yarrell*, i. 234. *Turdus aurigaster*, *Vieill*, *N. Dict. d'Hist. Nat.* xx. 258. *Turdus chrysorrhœus*, *Lesson*, *Man. d'Ornith.* t. 1, p. 231. *Pycnonotus aurigaster*, *G. R. Gray*, *Gen. of Birds*, i. 297.—"The beak black; the head, neck, back, wings, and tail-feathers uniform umber-brown; the feathers on the forehead and crown slightly elongated, forming a crest when elevated, the plumage of the whole head being a shade darker in colour than that of the body; throat and neck in front clove-brown, becoming lighter on the breast, and passing into a dull white on the belly; vent and under tail-coverts brilliant king's yellow; legs, toes, and claws black. The whole length of the bird seven and a half inches; the wing, from the anterior joint to the end of the longest quill-feather, three and a half inches; the first quill-feather very short, about one inch in length; the second three-quarters

of an inch longer than the first, but shorter than the third; the fourth feather the longest in the wing; the tail very slightly forked."—*Yarrell*, i. 236. This is an African bird, which is unknown as a visitor to Europe. At the meeting of the British Association, held at Cork, in 1843, Mr. W. Thompson exhibited a specimen, with the following particulars:—Dr. Burkett purchased it from a country lad who brought it into Waterford in January, 1838, with a number of Blackbirds and Snipes: he took it for a hen Blackbird: he shot it at Mount Beresford, three miles and a half from Waterford.]

Thrush, Holm.—See Thrush, Missel.

[Thrushlike Warbler. — See Warbler, Thrushlike.]

Thrush, Missel.—[*Yarrell*, i. 197; *Hewitson*, xxiii. 79.] *Turdus viscivorus*, *Lin. Syst.* i. p. 291, 1; *Gmel. Syst.* ii. p. 806; *Raii Syn.* p. 64, A. 1; *Will.* p. 137, t. 36; *Ind. Orn.* i. p. 326, 1; *Bewick, Br. Birds*, i. p. 100. *Turdus major*, *Bris.* ii. p. 200, 1; *Ib.* 8vo, i. p. 213. *La Draine, Buf.* iii. p. 295, t. 19, f. 1. Missel Thrush, *Br. Zool.* i. No. 105; *Ib.* fol. 90, t. P. f. 1; *Aret. Zool.* ii. p. 341, B.; *Will. Angl.* p. 187, t. 36; *Albin*, i. t. 33; *Lewin, Br. Birds*, ii. t. 57; *Lath. Syn.* iii. p. 16, 1; *Walc. Syn.* ii. t. 197; *Pult. Cat. Dorset.* p. 10. Provincial: Throstle-cock; Screech or Shrietch Thrush; Holm Thrush; Misseltoe Thrush. — This is the largest species of Thrush; weight near five ounces; length eleven inches. The bill is dusky; the base of the lower mandible yellowish; irides hazel. The whole upper parts of the bird are of a light brown, a little inclined to rufous on the rump; sides of the head and throat yellowish white, spotted with brown; from thence to the vent white; the breast marked with triangular spots, belly and sides with roundish ones of a dusky colour; the two largest series of wing-coverts are tipped with white; quills brown, dashed with cinereous on the outer webs; tail the same; the three or four outer feathers tipped with white, and the inner web of the exterior one almost white; legs are of a light colour, inclining to yellow. There is very little difference in the plumage of the sexes, but the female is not quite so bright in colours. The Missel Thrush is by no means plentiful in England, and seems to be less so in winter. It begins to sing in January, if the weather is mild, but ceases so soon as the thermometer sinks below 40 degrees. About the middle of March it makes a nest in the fork of some tree, especially such as are covered with white moss, particularly

apple trees; frequenting orchards more than any other place in the spring; and never builds in a bush. The nest is invariably made of white moss and coarse grass, wove together with wool, and lined with fine dry grass. The eggs are four or five, and rarely six, in number, of a flesh-colour, marked with deep and light rust-coloured spots; their weight something more than two drams. The song of this bird is much louder and superior to that of the Thristle; frequently perching upon the uppermost branch of a tall tree, it sings while the female is making her nest, and during incubation; but becomes silent as soon as the young are hatched, and is no more heard till the beginning of the new year. If the young are taken, its song continues as before; and if the female is destroyed, it continues in song the whole summer. This experiment we have tried upon this and several other song birds, and always found it invariable. The Missel is a very bold bird during the breeding season, drives all others from the neighbourhood of its nest, and will even attack the Magpie and Jay. Its food, like the other species, is insects and berries, particularly that of the misseltoe, which has been supposed necessary to pass through the body of this bird to make it vegetate. That the seed of the berry will propagate after passing the organs of digestion, is no more wonderful than that corn should grow when voided whole by a horse. But such a preparation is no more necessary in the one than in the other, but may be considered as one of the methods Nature takes to disperse the seeds of various plants.

SUPPLEMENT.—The name of Storm-cock appears to be given both to this and the Thristle: the Missel is also called Holmscreech in some parts of Devonshire. In defect of other food the Missel and Thristle feed on the roots of plants and on ivy-berries, and by such means are able to subsist, while the Fieldfare and Redwing are starving, in severe weather.

[Thrush, Ring.—See Ouzel, Ring.]

[Thrush, Rock. — Yarrell, i. 245; Hewitson, xxvi. 95. *Turdus saxatilis*, Temm. *Man. d'Ornith.* i. 172, iii. 102. *Petrocincla saxatilis*, Gould, *Birds of Europe*, fol.; Yarrell, l. c. — "The male bird has the beak black, the irides hazel; the whole of the head and the neck all round bluish grey; upper part of the back the same, but passing into brownish black on the scapularies; the greater part of the back white, varied with a few bluish grey feathers; tail-feathers chestnut-brown, the two in the middle rather darker in colour

than the others: wings and wing-coverts dark brown, almost blackish brown; the greater wing-coverts and the secondaries tipped with buffy white; the whole of the under surface of the body, and under tail-coverts, light chestnut-brown or bay; legs and toes dark reddish brown. The whole length of the bird seven and a half inches; the wing, from the anterior joint to the end of the longest quill-feather, four inches and three-quarters. The female has all the upper surface of the body of a dull brown; on the back are some large white spots edged with brown; throat and sides of the neck pure white, some of the feathers occasionally varied with ash-brown; all the other under parts reddish white, with fine transverse lines at the end of each feather; tail light bay, the two middle feathers ash-brown." — Yarrell, i. 247. This Thrush is Asiatic and European, breeding in rocky places in Spain, Southern France and Northern Italy, and wintering in the Islands of the Mediterranean and Africa. It builds in the rocky situations which are its usual residence, the nest being composed externally of mosses and lichens, and lined with hair: it lays five eggs of a pale unspotted greenish blue. Mr. Yarrell's figure, above referred to, is drawn from a specimen obtained on the 19th of May, 1843, at Thorfield, near Royston, in Hertfordshire.]

[Thrush, Rosecoloured.—See Ouzel, Rose-coloured.]

Thrush, Sand.—See Ouzel, Water.

Thrush, Screech.—See Thrush, Missel.

Thrush, Solitary. — **SUPPLEMENT.** — *Turdus solitarius*, Ind. Orn. i. p. 345; Gmel. Syst. i. p. 834. *Passer solitarius*, Raii Syn. p. 66, 4; Will. p. 140. *Merula solitaria*, Briss. ii. p. 268, 30; Id. 8vo, i. p. 233. *Le Merle solitaire*, Buf. iii. p. 358. *Passera solitaria*, Olin. uc. t. p. 14; Klein. Av. p. 67, 11. *Turdus solitarius*, Hasselq. Act. Ups. 1750, p. 21; Id. Voy. (ed. Angl.) p. 26. Solitary Thrush, Lath. Syn. iii. p. 52; Will. (Angl.) p. 191, t. 36, 37. — This species is about nine inches in length. The bill is dusky, nine-tenths of an inch long to the feathers on the middle of the forehead, straight, except at the tip, where the upper mandible is a little deflected and projects beyond the lower; the base is rather broad, but there is scarcely any appearance of a notch at the end: the nostrils are placed at the base of the bill, and are partly covered by the feathers, which come rather more forward on the sides than on the ridge of the bill. The general colour of the plumage is brown; the upper

part and sides of the head, back, scapulars, rump, and upper tail-coverts plain, except the tips of the feathers on the back being paler, giving that part a slightly spotted appearance: the chin is sullied white: above and behind the eyes the feathers are paler than those adjacent: from the bill to the eye dusky: the feathers on the throat and neck beneath are pale yellowish brown at their tips, whitish at their base, which gives that part a mottled appearance: the upper part of the breast plain brown, but rather paler than the back; the sides under the wings nearly the same: the lower breast and belly down to the vent mottled, or streaked with brown and white, the middle of the feathers being of the former colour: the under tail-coverts pale brown, with a rufous tinge: the quills and greater coverts of the wings are brown, margined with rufous: the tail is a little forked; the feathers are brown, their margins tinged with rufous: the legs are rather long in proportion, strong, and, with the toes and claws, are of a yellowish brown colour; the middle toe is closely connected to the outer as far as the first joint. We are happy in being able to add this species to the catalogue of British birds, upon the most indisputable authority. It is an elegant bird, not quite so large in the body, but as long as the Thrush. The head is remarkably small, and the crown almost straight with the bill, there being scarcely any elevation on the forehead, but formed like that of the Stare; this shape, together with a straight and proportionably long bill, gives the head a lengthened appearance: the legs are remarkably strong in proportion to the bulk of the bird, being larger than those of the Thrush: the vibrissæ or bristles between the base of the bill and the eye are black, but short and not very conspicuous: the mouth is large, and opens as far back nearly as the hinder part of the eye. The form of the Solitary Thrush greatly resembles that of the Stare, to which genus it seems as nearly allied as to that of the Thrush. The bird here described was shot about the middle of June, 1810, at Copgrove, in Yorkshire, the seat of the Rev. James Dalton, who obligingly sent it to us. The bird had originally been sent by Mr. Dalton to his brother, who was forming a collection, but who most liberally, at Mr. Dalton's request, permitted it to be added to our collection. To both these gentlemen, therefore, we beg leave to return our public acknowledgments. We can find nothing described to which this bird so nearly approaches as the female *Turdus solitarius*; we therefore venture to give it as a trifling variety of that species, and are

happy to have the concurrence of our friend, and able ornithologist, Dr. Latham, in this opinion. The Solitary Thrush is described as common in France, Italy, and in the islands of the Mediterranean, and Archipelago; and yet neither Buffon nor Brisson appear to have given a figure of it. *Le Merle Solitaire*, figured in Planc. Enl. 250, appears to be the female of *Turdus Cyanus*. Dr. Latham concludes that it has rarely been brought to this country, as he never saw but one, and that was in the late Leverian Museum. It is said to frequent mountainous and rocky places, and to be always seen alone, except in the breeding season. Like the Stare it prepares its nest in old ruined edifices, church-towers, and other similar places, and lays five or six eggs, but two nests are never found near the same place. The young are easily brought up, and repay the trouble by their sweet native song; they may be also taught to whistle, and articulate words. When confined this species sings as well by candle-light as by day. Its food is principally insects, grapes, and other fruit. It is observed to change its abode with the seasons, coming into those parts where it usually breeds in April, and retiring in August. The specimen here described was solitary, and attracted the servant of Mr. Dalton by its singular cry. It was sitting on the ground in a meadow, and suffered the man to approach it without fear, and in that situation it was shot. The colour of the irides was not noticed (those of the Solitary Thrush are said to be reddish), but upon dissection for preserving two enlarged eggs were discovered. Mr. Anstice (an accurate observer of objects in Natural History) noticed a bird near Bridgewater, in the summer of 1811, that from his description appears to be of this species. He was very near to it as it was running in the road, and had the advantage of a telescope with which he examined it, and therefore was perfectly clear that the bird was new to him. [This bird, thus carefully and minutely described, is now universally regarded as the young of the Common Starling.]

Thrush, Water.—See Ouzel, Water.

[Thrush, White's.—See White's Thrush.]

Thrush, Wind.—See Redwing.

Tidley.—See Wren.

Tidley Goldfinch. — See Wren, Gold-crested.

Tinkershire.—See Guillemot, Foolish.

Tirma.—See Oyster-catcher.

[Tit. — An abbreviated form of the word Titmouse, adopted by Gould and Yarrell. Pennant, Bewick, Montagu, Fleming, Selby and Jenyns, correctly employ the more familiar name of Titmouse. Tit is also applied to designate the Pipits.]

[Titlark.—See Lark, Tit.]

Titling.—See Warbler, Hedge [also Accentor, Hedge.]

Titmouse. — A genus of birds, the characters of which are: Bill strait, a little compressed, strong, hard, sharp-pointed. Nostrils round, and covered with reflected bristles. Tongue truncated, the end terminated by three or four bristles. Toes divided to their origin; back-toe long and strong.

* Titmouse, Bearded. — [Yarrell, i. 406; Hewitson, xl. 161.] *Parus biarmicus*, Lin. Syst. i. p. 342, 12; Gmel. Syst. ii. p. 1011; Ind. Orn. ii. p. 570, 23. *Parus barbatus*, Bris. iii. p. 567, 12; Ib. 8vo, i. p. 468. Le Mesange barbe, ou la Moustache, Buf. v. p. 518, t. 18. Least Butcher-bird, Edw. t. 55. Bearded Titmouse, Br. Zool. i. No. 167; Ib. fol. 74, t. C. 2; Arct. Zool. ii. p. 428, H.: Albin, i. t. 48; Lath. Syn. iv. p. 552, 20; Ib. Sup. p. 190; Don. Br. Birds, i. t. 1; Ost. Menag. p. 78, t.; Lewin, Br. Birds, iii. t. 122; Walc. Syn. ii. t. 148. — This very elegant species is about the size of the Blue Titmouse, but, on account of the length of tail, is much longer, measuring about six inches and a quarter. The bill is near half an inch long, of an orange-colour, differing somewhat from the rest of the genus, being a little arcuated; the upper mandible longest; irides yellow. The head is pale ash-colour; beneath the eye is a tuft of loose black feathers, ending in a point downwards; the hind part of the neck and back light rufous-orange; scapulars whitish; throat white; breast cinereous flesh-colour; belly, sides, and thighs like the back, but paler; vent black; quill-feathers dusky; the inner webs of the primaries white; the secondaries edged, and those next the body tipped with the same colour as the back; the tail is about three inches long, and very cuneiform, nearly the colour of the back; the three outer feathers more or less tipped with white; legs black. The female differs in having no black mark under the eye or at the vent; the head is light ferruginous, spotted with black; between the bill and eye a dusky spot. The history of this species is very little known, although it breeds with us, and continues

the whole year. It is found in the marshes amongst the reeds between Erith and London, in Gloucestershire, and amongst the great reedy tracks near Cowbit in Lancashire. We have also killed it near Winchelsea in Sussex, amongst the reeds close to the sea-shore, in the month of June; there were five together, doubtless the brood of that year. One of the young which we procured had its nestling feathers much the colour of the female; but the feathers were of a looser texture, as in all young birds. We took much pains to find the nest, but without success, unless it is so like that of the Reed Wren's as not to be distinguished, as that bird bred in the same place, and many such nests were taken. Authors have differed with respect to the shape and composition of the nest, as well as in the place of nidification; one making it the shape of a purse suspended to a branch of a willow; another gives it placed on the ground amongst sedge of a loose texture, composed of the down of the reed intermixed with narrow leaves; and that it lays four eggs of a reddish white, spotted with brown; others have undoubtedly taken the nest of the Reed Wren for it; so that no certain conclusion is to be drawn from these various accounts. The Bearded Titmouse does not appear to inhabit any other places but such where reeds grow in abundance, where it no doubt makes its nest; and on the seeds of which, as well as insects, it feeds; and we may attribute this desideratum in the natural history of this bird to the inaccessible swampy places they frequent. It has been by various authors ranked with the Butcher-bird or Shrike, and was called Least Butcher-bird in a former edition of the 'British Zoology,' but afterwards removed, by that celebrated author Mr. Pennant into this genus.

SUPPLEMENT.—In a recent edition of Pennant's 'British Zoology' we observe that by some unaccountable mistake our description of the nest and egg of the Long-tailed Titmouse has, in a marginal note, been transferred to this species. We therefore take this opportunity of correcting the error, as we still consider that part of the natural history of the Bearded Titmouse to be in great obscurity, and should be much obliged for any authentic information upon that head. The necessity of noticing this little error is obviously that of a rigid regard for Science. [The nest of this species is now well known; it is built of coarse grass or rushes, on or near the ground; the eggs are white, sparingly marked with pale red lines and scratches.]

Titmouse, Blue. — [Yarrell, i. 387;

Hewitson, xxxix. 151.] *Parus cæruleus*, *Lin. Syst.* i. p. 341, 5; *Gmel. Syst.* ii. p. 1008; *Raii Syn.* p. 74, A. 4; *Will.* p. 175, t. 43; *Ind. Orn.* ii. p. 566, 12; *Bris.* iii. p. 544, 2; *Ib.* 8vo, i. p. 462; *Nat. Miscel.* t. 138; *Bewick, Br. Birds*, i. t. p. 248. La Mesange bleue, *Buf.* v. p. 413. Blue Titmouse, *Br. Zool.* i. No. 163, t. 57, f. 2; *Ib.* fol. 114, t. W. f. 5; *Arct. Zool.* ii. p. 427, D.; *Will. Angl.* p. 242, t. 43; *Albin*, i. t. 47; *Hayes, Br. Birds*, t. 38; *Lath. Syn.* iv. p. 543, 10; *Don. Br. Birds*, t. 57; *Lewin, Br. Birds*, iii. t. 120; *Walc. Syn.* ii. t. 245; *Pult. Cat. Dorset.* p. 10. Provincial: Tomtit; Nun; Hickmall; Blue-cap; Titmal; Tinnock; Willow-biter. Length about four inches and a half; weight three drams. The bill is dusky; irides dark hazel. Forehead and cheeks white; that on the former inclines backwards, and forms a line round the crown of the head, which is of a fine blue; behind the circle of white is another of a deep blue, surrounding the head entirely, and joining the base of the under mandible, where it is nearly black; from the bill through the eye is a small black line; the back is of a yellowish green; wings and tail blue; breast and belly yellow; legs lead-colour. This bird would be much more admired for its beauty if it was less common. In winter it frequents houses for the sake of plunder; will devour flesh greedily, whether fresh or putrid; and indeed is omnivorous. Is a constant attendant where horse-flesh is kept for hounds, as well as the farm-yard, being partial to oats, which it plucks out, and, retiring to a neighbouring bush, fixes the grain between its claws, hammers it with the bill to break the husk. In the summer insects are their chief food, in search of which it plucks off a number of young buds from fruit and other trees. The nest is always made in some hole either of a tree or wall, composed of moss, lined with feathers and hair. The eggs are six or seven in number, rarely eight, white, speckled with rust-colour at the larger end; their weight seventeen grains. It has been said this bird will sometimes lay as many as twenty eggs in the same nest; but this is certainly an error, for in the great abundance of nests we have seen with eggs and young, never more than eight were found. The female is tenacious of her nest, and will often suffer herself to be taken rather than quit it, and will frequently return again after being taken out. Upon such an occasion it menaces the invader in a singular manner, hissing like a snake, erecting all its feathers, and uttering a noise like the spitting of a cat; and if handled bites severely. It has no song, but makes a shrill note quickly repeated. It is found in every part of Europe.

Titmouse, Cole.—[*Yarrell*, i. 394; *Hewitson*, xxxix. 156.] *Parus ater*, *Lin. Syst.* i. p. 341, 7; *Gmel. Syst.* ii. p. 1009; *Raii Syn.* p. 73, A. 2; *Will.* p. 175, t. 43; *Ind. Orn.* ii. p. 564, 8. *Parus atricapillus*, *Bris.* iii. p. 551, 5; *Ib.* 8vo, i. p. 464. La petite Charbonniere, *Buf.* v. p. 400. Colemouse, *Br. Zool.* i. No. 164, t. 57, f. 3; *Ib.* fol. 114; *Arct. Zool.* ii. No. 327; *Will. Angl.* p. 241, t. 43; *Lath. Syn.* iv. p. 540, 7; *Lewin, Br. Birds*, iii. t. 180; *Walc. Syn.* ii. t. 246; *Don. Br. Birds*, iv. t. 79; *Pult. Cat. Dorset.* p. 10. — This species weighs about two drams and a quarter; length four inches and a quarter. The bill is dusky; irides hazel. Crown of the head glossy black, divided on the hind part with a white spot; the throat and under side of the neck black; cheeks white; back, rump, and tail of a bluish grey, inclining on the rump to a buff-colour; breast and belly of a yellowish white; the sides more yellow; quill-feathers like the tail; the coverts of the secondaries, and the smaller coverts immediately above them, are tipped with white; legs lead-colour. As this bird has been considered by some naturalists to be the same as the Marsh Titmouse, we shall remark that the head of this is invariably of a glossy black, that of the other is of a dull sooty black; the black under the chin extends much lower down in this, in both sexes, than in the other species; the white mark on the head in this is never to be found in either sex of the other; and the tail of this is nearly a quarter of an inch shorter. It must also be observed that in the numerous specimens we have examined no white was ever to be found on the coverts of the wings in the Marsh Titmouse, which is constantly met with in this. But in the young of this species, before the white spot is thrown out on the head, some white in the wings is visible; in which state a figure is given in the folio edition of the 'British Zoology' for the Marsh Titmouse. Mr. Willughby has well defined the distinction of these birds. Dr. Latham seems to have doubted the distinction, and appears to be the more confirmed in the opinion from an error in Sepp, who has given a figure of each as male and female. We can, however, with certainty refute this opinion from various opportunities of attending to the nests of both species. The nest of this bird is placed in some hole, either in a wall or a tree; is composed of moss and wool, lined with hair; the eggs are six or seven in number, less than those of the Marsh Titmouse, of the same colour, white spotted with rusty red; but the spots are smaller and more numerous; their weight fourteen or fifteen grains. The Colemouse is not

so plentiful a species as the Marsh, keeps more in woods, and seems to live entirely on insects, as we have never been able to discover it partaking of flesh or grain with the other species; its note is also different.

SUPPLEMENT. — Lest any spark of scepticism should still exist with respect to the distinction between this and the Marsh Titmouse (*Parus palustris*), it may be proper to remark that we have repeatedly taken the nests of both species, and have invariably noticed the distinction of the conspicuous white spot on the head of both sexes of the *ater*; and in no instance had either sex of the *palustris* that mark. Last summer [1812] a pair of these birds had taken possession of a hole in the garden wall, which gave an opportunity of examining both the old birds and the young, and we observed that all the young had the appearance of the mark on the head before they could fly, but not so pure a white as in the adults. These were put into a cage, and were fed by the old birds; and it was noticed that their principal food was little green caterpillars.

Titmouse, Crested. — [Yarrell, i. 391; Hewitson, xxxix. 154.] *Parus cristatus*, *Lin. Syst. i. p. 340, 2*; *Gmel. Syst. ii. p. 1005*; *Raii Syn. p. 74, 6*; *Will. p. 175, t. 43*; *Ind. Orn. ii. p. 567, 14*; *Bris. iii. p. 558, 8*; *Ib. 8vo, i. p. 466*; *Lath. Syn. Sup. ii. p. 255*. La Mesange huppé, *Buf. v. p. 447*. Crested Titmouse, *Arct. Zool. ii. p. 427, F.*; *Will. Angl. p. 242, t. 43*; *Albin, ii. t. 57*; *Lath. Syn. iv. p. 545, 12*; *Don. Br. Birds, ii. t. 26*; *Walc. Syn. ii. t. 250*. — The weight of this species is about two drams and a half; length four inches three-quarters. The bill is dusky; irides hazel. Forehead and crown white, prettily undulated with black lines; on the hind-head the feathers are very long and black, which the bird erects in form of a conic crest; cheeks dirty white, spotted with black; a black stroke crosses the cheek under the eye, which turns back in an acute angle under the ear, forming the letter V; behind that is a bed of white surrounding the cheeks, and bounded externally by a black edge, which forms a peak on the hind-head, and also joins the black on the throat and chin; the back is greenish brown; breast and belly pale buff; wings and tail much like the back, but deeper coloured; legs bluish lead-colour. The Crested Titmouse is a solitary retired species, inhabits only the gloomy forest, particularly those which abound with evergreens. It has not been found in South Britain, but is not uncommon amongst the large tracts of pines in the north of Scotland, particularly in the forest

of Glenmoor, the property of the Duke of Gordon, from whence we have seen it. The eggs are said to be white, with small spots of red; the nest we do not find to be described by any one. Is said to be found in Normandy, and in many parts between that and Sweden.

SUPPLEMENT. — In the work referred to [*Lath. Syn. Sup.*] the author says, "We have heard of this species being plentiful in some parts of Scotland, especially in the pine forests, from whence I have received a specimen now in my possession."

Titmouse, Great. — [Yarrell, i. 383; Hewitson, xxxix. 149.] *Parus major*, *Lin. Syst. i. p. 341, 3*; *Gmel. Syst. ii. p. 1006*; *Raii Syn. p. 73, A. 1*; *Will. p. 174, t. 43*; *Ind. Orn. ii. p. 562, 1*; *Bris. iii. p. 539, 1*; *Ib. 8vo, i. p. 461*. La grosse Mesange, ou Charbonniere, *Buf. v. p. 392, t. 17*. Great Titmouse, or Ox-eye, *Br. Zool. i. No. 162*; *Ib. fol. 113, t. W. f. 4*; *Arct. Zool. ii. p. 425, A.*; *Will. Angl. p. 240, t. 43*; *Albin, i. t. 46*; *Hayes, Br. Birds, t. 38*; *Lath. Syn. iv. p. 536, 1*; *Don. Br. Birds, t. 69*; *Lewin, Br. Birds, iii. t. 117*; *Walc. Syn. ii. t. 244*; *Pult. Cat. Dorset. p. 10*. Provincial: Great Black-headed Tomtit; Blackcap. — This species weighs about ten drams; length five inches and three-quarters. The bill is black; irides dusky. The head and throat black; cheeks white; back olive-green; the rump bluish grey; belly yellow, tinged with green, divided down the middle to the vent by a broad black list, most conspicuous in the male; quill-feathers dusky; coverts bluish, the larger tipped with white; tail dusky; the outer feathers white on the exterior webs, the others margined with bluish grey; legs lead-colour. The Great Titmouse has all the habits of the Blue Titmouse. The nest is made of moss, lined with hair, placed in the hole of a wall or tree. We once found it in the barrel of a garden-pump. It lays sometimes as many as eight eggs, but more commonly six, white, spotted with rust-colour, which are so exactly like those of the Nuthatch as not to be distinguished; their weight about thirty grains. We have known this bird deposit its eggs in the hole of a decayed tree upon the rotten wood, without the least appearance of a nest: probably the nest had been destroyed just at the time the bird was compelled to lay, and had not time to make another. The common note of this bird is a sort of chatter, but in the spring it assumes a greater variety, a shrill whistle, and a very singular noise, something like the whetting of a saw; but these cease with incubation. It is a common species in almost every part of England, as well

as throughout Europe; said also to inhabit the Cape of Good Hope.

Titmouse, Longtailed.—[Yarrell, i. 401; Hewitson, xl. 158.] *Parus caudatus*, Lin. Syst. i. p. 342, 11; Gmel. Syst. ii. p. 1010; Raii Syn. p. 74, A. 5; Will. p. 176, t. 43; Ind. Orn. ii. p. 569, 20; Bewick, Br. Birds, i. t. p. 251. *Parus longicaudatus*, Bris. iii. p. 570, 13; Ib. 8vo, i. p. 469. La Mesange à longue queue, Buf. v. p. 437, t. 19. Long-tailed Titmouse, Br. Zool. i. No. 166; Arct. Zool. ii. p. 428, G.; Will. Angl. p. 242, t. 43; Albin, ii. t. 57, f. 1; Hayes, Br. Birds, t. 33; Lath. Syn. iv. p. 550; Ib. Sup. p. 190; Don. Br. Birds, t. 16; Lewin, Br. Birds, iii. t. 121; Walc. Syn. ii. t. 249; Pult. Cat. Dorset, p. 10. Provincial: Huckmuck; Bottle-tom; Longtail-mag; Longtail-capon; Longtail-pie; Mumruffin.—This is the smallest of the tribe; the weight about two drams; length five inches and a quarter. The bill is very short and black; irides hazel, edges of the eyelids yellow. On the crown of the head is a white streak surrounded by black, which, rising at the base of the bill, passes over each eye, and, joining behind the head, forms a broad list down the back to the rump; the rest of the plumage above is of a purplish hue; the sides of the head, throat, and under part of the neck white, mixed with grey; from that to the vent dull purplish; quill-feathers black, those next the body edged with grey; coverts black; the tail consists of twelve feathers of unequal length; the four middle ones are wholly black, the next has a small white mark on the outer web near the point, the others tipped and obliquely marked with white on the exterior webs; the second feathers from the middle are the longest, measuring three inches and a half; the outer feathers on each side only one inch and three-quarters; the legs black. In some the whole upper part of the neck is black, the under parts greyish white, except on the sides and vent, which are of a pale vinaceous-colour; and across the breast is an obscure dusky band. This very elegant and singular species is confined chiefly to the woods and thickets, where it makes a curious oval nest in the fork of some bush or branch of a tree. In this particular it deviates from the rest of the class, which invariably build in some hole, the Bearded and Crested Titmice perhaps excepted; but which remains to be discovered. The nest of this bird, however, is equally well secured, being made of white moss and liverwort curiously and firmly wove together with wool, covered at the top, with only a small hole on the side, and lined with a prodigious quantity of feathers.

This singular fabric is a work of time, taking four or five weeks to complete it. Low situations seem to be its delight, especially about such trees and hedges as are covered with white moss and lichen, amongst which it most commonly places its nest. The egg is less than any British bird, except the Golden-crested Wren, weighing about twelve grains; colour white, sparingly marked with small rust-coloured spots towards the larger end. We are frequently told this little creature will lay upwards of twenty eggs before it sits; but we have never been able to find more than twelve, and more frequently only nine or ten. Even this is a surprising quantity of prolific matter to be produced from so small a body in so short a space of time as ten days, equal to the weight of the bird. To supply this great expenditure of animal matter, as well as the ordinary excretion, a supply of food considerably more than its own weight in that time is absolutely necessary. Its food principally consists of insects and their larvæ, in search of which it picks off the buds from the trees. After the young are fled they keep with the parent birds till the returning spring; are continually in motion in search of food, shifting their quarters daily. When in motion it is always uttering a small note, by which means they keep together.

SUPPLEMENT.—In the month of July we observed a brood of these birds, consisting of about twelve, to constantly frequent a small plantation to roost, for a long time after they quitted their nest. Just as it became dusk in the evening they were apparently extremely restless; but by a singular note uttered by one, and as instantaneously repeated by the whole, they assembled in a moment, and huddled so close together on a branch as to appear like a ball of down. This assemblage in close contact during the night is probably common to most of the smaller birds for a long time after they leave their nest; for we have observed the same nocturnal attachment in young birds brought up in confinement.

Titmouse, Marsh.—[Yarrell, i. 397; Hewitson, xl. 157.] *Parus palustris*, Lin. Syst. i. p. 341, 8; Gmel. Syst. ii. p. 1009; Raii Syn. p. 73, A. 3; Will. p. 175, t. 43; Ind. Orn. ii. p. 565, 9; Bris. iii. p. 555, 7; Ib. 8vo, i. p. 465. La Mesange de marais, Buf. v. p. 403. Marsh Titmouse, or Blackcap, Br. Zool. ii. No. 165, t. 57, f. 4; Ib. fol. 114, t. W. f. 3; Arct. Zool. ii. p. 427, E.; Will. Angl. p. 241, t. 43; Albin, iii. t. 58, f. 1; Lath. Syn. iv. p. 541, 8; Ib. Sup. p. 189; Lewin, Br. Birds, iii. t. 119; Walc. Syn. ii. t. 247; Pult. Cat. Dorset, p. 10.

TITMOUSE.

Provincial: Little Black-headed Tomtit.—The length of this species is about four inches and a half; weight two drams and a half. The bill is dusky; irides dark hazel. Crown of the head black, but not glossy; cheeks of a dirty white; chin black, in some spotted with white; the back of a rusty grey; breast and belly of a light brownish buff-colour; quills and tail bluish grey, lightest on their outer margins; legs lead-colour. We must here again remark that this species is not to be confounded with the Cole Titmouse. If no other marks of distinction were wanting than the white on the back of the head and wing-coverts, it would be sufficient; but this is a larger bird, the colour on the back is not of that bluish cast, and the tail is longer. We shall, however, refer our reader to the history of that species, where we have more copiously defined the distinction. The Marsh Titmouse has more the habits of the Blue species, partaking with it of flesh, and attending the oat-ricks. It appears partial to low wet ground, where old willow-trees abound, in the holes of which it frequently makes its nest. We have seen it artfully excavating the decayed part of that tree, carrying the chips in its bill to some distance, always working downwards, making the bottom for the reception of the nest larger than the entrance. The nest is composed of moss and thistle-down, sometimes a little wool, and lined with the down of the thistle. It lays five or six white eggs, spotted with rusty red, mostly at the larger end; their weight from nineteen to twenty-one grains. We shall here remark that all the species of Titmice, whose eggs are known, are similar in colour, and only to be distinguished from each other by size and weight. Those of the Nuthatch, Creeper, Wren, Yellow Wren, Wood Wren, and Lesser Pettychaps, all agree in their markings, and so like those of the Titmice that it is scarce possible to separate them with certainty if once mixed together; and it is somewhat remarkable, all these birds breed in holes, or make a covered nest. This bird is not so common as the Great or Blue species, but more plentiful than the Cole Mouse. It is also found in many other parts of Europe, especially in Sweden and Italy. The notes of the three species with black heads are much alike, especially that which is like the whetting of a saw, and the whistle made use of only in the spring; but the chatter is to be distinguished.

Titmouse, Wood. — See Wren, Golden-crested.

[Thomas Gierdet.—See Redbreast.]

TURNSTONE:

[Tommi-liden.—See Redbreast.]

Tommy, Tomnoddy, Tomnorry, or Taminorie.—See Puffin.

Tomtit.—See Titmouse, Blue.

Tomtit, Blackheaded. — See Titmouse, Great, and Marsh.

Toney Hoop.—See Finch, Bul.

Tope.—See Wren, Common.

[Tor Ouzel.—See Ouzel, Ring.]

Towwille. }
[Towwilly.] } See Sanderling.

Tree-Climber or Creeper.—See Creeper; and Sparrow, Tree.

[Tree Pipit.—See Lark, Tit.]

[Tree Sparrow.—See Sparrow, Tree.]

Trittichan.—See Oyster-catcher.

[Tufted Duck. }
[Tufted Pochard. } See Duck, Tufted.]

Tuliac.—See Gull, Skua.

Turnstone.—[Yarrell, ii. 520; Hewitson, lxxix. 303.] *Tringa Interpres*, *Lin. Syst.* i. p. 248, 4; *Gmel. Syst.* ii. p. 671; *Ind. Orn.* ii. p. 738, 45. *Tringa Morinella*, *Lin. Syst.* i. p. 249, 6. *Morinellus marinus*, *Raii Syn.* p. 112, A. 5; *Will.* p. 231, t. 58. *Arenaria*, *Bris.* v. p. 132, 1; *Ib.* 8vo, ii. p. 246. *Arenaria cinerea*, *Bris.* v. p. 137, 2, t. 11, f. 2; *Ib.* 8vo, ii. p. 247. *Le Tourne-pierre*, *Buf.* viii. p. 150, t. 10. *Hebridal Sandpiper*, *Br. Zool.* ii. No. 200; *Arct. Zool.* ii. No. 382. *Turnstone, or Sea Dotterel*, *Br. Zool.* ii. No. 199; *Ib.* fol. 125, t. E. 2, f. 2; *Will. Angl.* p. 311; *Edw.* t. 141; *Lath. Syn.* v. p. 188, 37; *Sup.* p. 249; *Lewin, Br. Birds.* v. t. 179; *Walc. Syn.* ii. t. 153; *Pult. Cat. Dorset.* p. 15.—This species of Sandpiper is about the size of a Thrustle; length nine inches and a half; weight rather more than four ounces. The bill is black and strong, about an inch in length, and turns a little upwards; irides hazel. Forehead and chin white; across the breast a broad band of black; the fore part of the neck black, joining to that on the breast, and encircling the upper part of the neck; a black streak from the eyes, and another from the bill, meet in an angle at the collar on the side of the neck; above the eye a streak of white, on the ears a spot of the same; the back part of the neck is white, mixed with brown,

which passes down each side of the breast; the crown of the head, upper part of the back, and scapulars is a mixture of black and ferruginous; the latter whitish on their exterior edges; lesser wing-coverts nearly the same, but lighter; lower part of the back under the scapulars white; quills dusky, the secondaries tipped with white; the greater coverts edged with the same; the shafts of the primary quills white; belly, vent, and under tail-coverts white; upper tail-coverts white, crossed with a bar of black; tail black, tipped with white, except the middle feathers; legs orange. The bird from which the above description is taken was killed in September on the coast of South Wales; another in my collection, killed in Cornwall the beginning of August, has a faint collar round the neck, which, with the band on the breast, is dusky brown; the chin is white, but the whole head is brown, with dusky streaks; the back and scapulars black, each feather deeply margined with light ferruginous; the exterior feather of the tail white on the outer web; legs light yellowish brown. This is undoubtedly a young bird. The Turnstone is subject to great variety in respect to the markings about the head and neck; but the black on the breast, and more or less round the neck, at once distinguish it from any other species. In some the base half of the tail is white, and the quills next the body the same, as well as the base of the rest, except the four first. In others the lower part of the back, rump, and upper tail-coverts are wholly white. This bird is sometimes met with on the coast in small flocks of five or six; probably the brood, which in most, if not in all, of this class, consists of four young. It is not known to breed with us, but visits some of our shores in August, and departs in the spring. It is said to breed in Hudson's Bay, makes a slight nest on the dry ground, and lays four olive-coloured eggs, spotted with black. Departs from thence in September. The name has been given it from its manner of turning up the stones in search of marine insects.

Turtle. }
[Turtle Dove.] } See Dove, Turtle.

Turtle, Sea.—See Auk, Little.

Twink.—See Finch, Chaf.

Twite. — [Yarrell, i. 596; Hewitson, li.

203.] *Fringilla montium*, *Gmel. Syst.* ii. p. 917, 68; *Ind. Orn.* i. p. 459, 84. *Linaria montana*, *Bris.* iii. p. 145, 33; *Ib.* 8vo, i. p. 346; *Raii Syn.* p. 91, A. 4; *Will.* p. 191. Mountain Linnet, *Br. Zool.* No. 133, t. 53; *Ib.* fol. 111; *Will. Angl.* p. 261; *Arct. Zool.* ii. p. 380, C.; *Lewin, Br. Birds*, ii. t. 86; *Lath. Syn.* iii. p. 307, 76; *Pult. Cat. Dorset.* p. 13.—This species of Finch is rather larger than the Linnet or Greater Redpole; length about six inches. The bill is yellowish, brown at the tip; irides hazel. The top of the head and rump red; upper parts dusky black, edged with rufous; beneath rufous-white, with blackish spots on the throat; belly white. In some the whole head is light rufous, streaked on the top with dusky; the back, scapulars, and wing-coverts dark rufous-brown, with paler edges; rump tinged with red; greater quills and tail dusky black, more or less edged with white on the exterior webs; upper part of the breast and sides rufous-white, spotted and streaked with dark rufous-brown; lower part of the breast, belly, and under tail-coverts white; tail forked; legs dusky. Like the Redpole, this bird is subject to much variety in respect to the red markings. Some are described to have the top of the head, breast, and rump red. In its general appearance it is much like the female of that bird, but darker on the upper parts, as well as more rufous on the cheeks and throat; the red on the rump is never found in that bird. The Twite is gregarious, accompanying the Linnet in large flights, and is taken about London together by the birdcatchers. A variety has been given as the Mountain Linnet; it has a twittering note, but has not been observed to sing. Dr. Latham favoured me with the nest and eggs, which he received out of Yorkshire. The nest is formed of moss and roots of plants mixed with heath, and lined with finer heath and fibrous roots. The egg is the size of that of the Linnet, of a blue-white, faintly spotted with purplish red at the larger end. The female is said to want the red mark on the rump, and may therefore be frequently mistaken for the common Linnet before it has thrown out the other red markings. It is possibly found in many other parts of England in the winter season, but not generally distinguished from the Linnet.

Tyste, Taiste, Teisty, or Toist. — See Guillemot, Black.

U, V.

[Uyler Owl.—The word not confined to any particular species. See p. 226.]

[Velvet Duck. } See Duck, Velvet.
[Velvet Scoter. }

Velvet Runner.—See Rail, or Water Rail.

[Virginian Colin.—See Quail, American.]

[Virginian Cuckoo.—See Cuckoo, American Yellowbilled. Mr. Eyton calls this bird the Virginian Cuckoo (*Rarer Brit. Birds*, p. 23.)

[Virginian Partridge.—See Quail, American.]

[Vulture.—A genus of birds, having the head more or less divested of feathers; the beak straight at the base and covered by a cere, sometimes thinly clothed with hair, sometimes naked and carunculated; tarsi and feet naked; claws strong, but not much hooked. Feed on carrion and putrefying substances: their office in hot climates is that of scavengers, clearing away all matter which emits odours or gases injurious to man.]

[Vulture, Egyptian.—*Yarrell*, i. 6; *Hewitson*, ii. 5. *Vultur percnopterus*, *Bewick*, *Br. Birds*, i. 51. *Cathartes percnopterus*, *Temminck*, *Man. d'Ornith.* i. 8. *Neophron percnopterus*, *Selby*, i. 4; *Gould*, *Birds of Europe*; *Yarrell*, i. 6.—The following description is made from the specimen killed in Somersetshire, as hereafter noticed:—"When killed it measured two feet seven inches in length, and in extent of wing five feet nine inches. From the forehead to the tip its bill measured two inches and a half; the tarsus three inches, and the middle toe, with its claw, the same. Bill brownish black or horn-coloured; the cere (which bulges a little at the base, and occupies half the length of the bill) wine-yellow; nostrils situated near the middle of the cere, large and open in front. Crown of the head, cheeks, and throat covered with a naked skin, of a livid flesh-coloured red, with a few straggling bristles between the bill and eyes, and upon the margins of the mandibles. Ears round, open, and large. Occiput and nape covered with a close thick-set white down, with small black feathers intermingled. Neck clothed with long, arched, and acuminate feathers, forming a kind of ruff, of a deep

umber-brown, tipped with cream-yellow. Back and scapulars cream-white; the latter intermixed and varied with umber-brown. Lesser wing-coverts, nearest the body, deep umber-brown, margined with a paler shade; these are succeeded by two rows of cream-coloured sharp-pointed feathers. Greater coverts umber-brown, varied with cream-white. Secondaries pale umber-brown, with their tips and margins yellowish white. Quills black. Tail wedge-shaped, umber-brown at the base, with the tips yellowish white, hinder parts mixed with umber-brown. Legs strong and fleshy, of a pale yellowish grey. The tarsi covered with a rough reticulated skin. The middle toe having four entire scales upon the last point; the outer and inner toes each with three; hind toe short and strong. Claws blackish brown, strong, and but slightly curved. In the adult state the whole of the plumage, with the exception of the greater quills, is white; the space between the bill and eyes covered with a white down; the base of the bill, forehead, cheeks, and throat naked, and of a pale flesh-coloured red; the feathers upon the occiput long and narrow, forming a kind of crest; irides red; legs and feet pale grey."—*Selby*, i. 7. A specimen of this Vulture was shot near Kilve, in Somersetshire, in October, 1825. It has no claim whatever to a place in the list of British birds, but so many authors have included it that it would appear negligent to pass it over without notice.]

[Vulture, Griffon.—*Yarrell*, i. 1; *Hewitson*, i. 3. *Vultur fulvus*, *Gm. Syst. Nat.* i. 249; *Gould*, *Birds of Europe*; *Temminck*, *Man. d'Ornith.* i. 5; *Newman*, *Zool.* 1845, p. 986; *Yarrell*, *Hist. Br. Birds*, i. 1; *Thompson*, *Birds of Ireland*, i. 84. *Gyps fulvus*, *Savigny*, *Descr. de l'Egypte*, *Hist. Nat.* i. 71.—"The head and upper parts of the neck are covered with a short white down; the lower part of the neck is surrounded with long slender white feathers, which appear to stand out almost perpendicularly from the skin and form a kind of ruff; on the breast is a considerable space bare of feathers and covered with short down, generally whitish, but often approaching to brown; the primary feathers of the wing, and also the feathers of the tail, are dark brown, nearly black, but, with these exceptions, all the feathers of the back, breast and wings are brown,

shaded at the edges and tips to fulvous-grey. The beak is very strong, hooked, and of a bluish lead-colour; the cere dark, and all the region surrounding the eyes approaches to black; the eyes are hazel, and the feet brown. The length from the tip of the beak to the extremity of the tail is full four feet, and the expansion of the wings not less than eight feet. The young birds differ in colour considerably from the adult; the plumage being spotted, and the down of the head and neck conspicuously marked with brown. Tem-

minck thinks that in this state it is the *Vultur Kolbii* of Latham, and the *Vautour chasse-fiente* of Vaillant." — *Newman*, l. c. This Vulture is said to have been taken alive on a rock in Cork Harbour: it was kept in confinement for a year or more at the Earl of Shannon's, at Castlemartyr, before the capture was published in the 'Fauna and Flora of Cork.' It has no claim whatever to a place in the list of British birds, but so many authors have included it that it would appear negligent to pass it without notice.]

W.

Wagel. — *Larus nævius*, *Lin. Syst.* i. p. 225, 5; *Gmel. Syst.* ii. p. 598; *Bris.* vi. p. 167, 5, t. 15; *Ib.* 8vo, ii. p. 406. *Wagellus Cornubiensium*, *Raii Syn.* p. 130, A. 13; *Will.* p. 266, t. 66. *Larus marinus*, *Ind. Orn.* ii. p. 814, No. 6, γ. *Le Goéland varié*, *Grisard, Buf.* viii. p. 413, t. 33. *Wagel Gull*, *Br. Zool.* ii. No. 247, A. t. 88; *Ib.* fol. ii. 422; *Arct. Zool.* ii. No. 453; *Ib. Sup.* p. 70; *Will. Angl.* p. 349, t. 66; *Lath. Syn.* vi. p. 375, 6; *Lewin, Br. Birds.* vi. t. 209; *Walc. Syn.* i. t. 111; *Pult. Cat. Dorset.* p. 18.—There is no bird which seems to have puzzled ornithologists more than this. Indeed all the Gull tribe are difficult to discriminate until they arrive at maturity, by reason of the various plumage they assume, and the length of time arriving to their full plumage; some not under three years. We have at this time a live Gull mottled brown and white, the size of the Herring Gull, which we have had near two years, and which is certainly that bird; and yet all the change perceived is, that it has now less brown on the head and neck. From these circumstances no doubt the species have been multiplied; and as the Winter Gull has been proved to be no other than the Common Gull in its first feathers, and the Red-legged Gull the young of the Black-headed Gull, so we have no doubt but that the Wagel is no other than the Great Black-backed Gull. For a description, therefore, we refer our readers to that bird, where the plumage of the young is described. Those who wish to consult other authors upon this head we refer to such as we have here quoted. [This is the young of the Great Black-backed Gull, which see.]

Wagtail. — A genus of birds, whose characters are: Bill weak and slender, slightly notched at the end. Tongue lacerated at the tip. Legs slender. Their tail is long, and constantly in motion; their pace is

running, not hopping; their flight undulated. [British ornithologists formerly agreed that we had only three species of Wagtail in this country, but of late years two others have been added, and the names of two of the familiar ones changed, under the impression that the species are not identical with those bearing the same names on the Continent: thus the White Wagtail (*Motacilla alba* of Montagu and others) has become the Pied Wagtail (*Motacilla Yarrellii* of Gould and Yarrell); and the Yellow Wagtail (*Motacilla flava* of Montagu and others) has become the Ray's Wagtail (*Motacilla Rayi* of Yarrell); the familiar name of Yellow Wagtail has been altogether abandoned, and the name Grey-headed Wagtail given in its place. The now prevalent idea that our familiar birds, formerly known as the White and Yellow Wagtails, are not identical with the *Motacilla alba* and *M. flava* of the Continent, requires much more serious consideration than it appears hitherto to have obtained, since it is certain that our birds are regular migrants, both of them arriving from the Continent at the period of the vernal migration, the only difference being that a portion of one of the species, the White Wagtail of Montagu, remain here throughout the year, while the whole of the other species, the Yellow Wagtail of Montagu, leave us on the approach of winter. Under each of the critical species about to be described the altered synonyms are given at the end of the description, those cited by Montagu being also retained unaltered, although according to modern views they are incorrect.]

Wagtail.—See Purre.

[Wagtail, Blueheaded.—See Wagtail, Grey-headed.]

Wagtail, Grey.—[*Yarrell*, i. 432; *Hewitson*,

xlii. 167.] *Motacilla boarula*, *Lin. Mant.* 1771, p. 527; *Gmel. Syst.* ii. p. 997; *Ind. Orn.* ii. p. 502, 4; *Bewick, Br. Birds*, i. t. p. 196. *Motacilla cinerea*, an *flava* altera *Aldr. Raii Syn.* p. 75, 3; *Will.* p. 172, 3. *Motacilla flava*, *Bris.* iii. p. 471, 41, t. 23, f. 3; *Ib.* 8vo, i. p. 439. *Bergeronette jaune*, *Buf.* v. p. 268. Yellow Wagtail, *Albin*, ii. t. 58. Grey Wagtail, *Br. Zool.* i. No. 144; *Ib.* fol. 105; *Will. Angl.* p. 238; *Edw.* t. 259; *Lath. Syn.* iv. p. 398, 4; *Sup.* p. 178; *Don. Br. Birds*, t. 40; *Lewin, Br. Birds*, iii. t. 95; *Walc. Syn.* ii. t. 227; *Pult. Cat. Dorset.* p. 8. Provincial: Winter Wagtail.

— This very elegant species weighs about five drams; length seven inches and three-quarters. Bill dusky; irides dark hazel. Crown of the head, cheeks, back of the neck, back, and scapulars dark cinereous; greenish yellow on the rump; the eyelids, chin, throat, and breast buff-coloured yellow; behind the eye a stroke of the same; belly pale yellow; the wing-coverts and quills black, the former bordered with light brown, the latter slightly edged on the exterior webs of the primaries, and the three next the body deeply margined on their outer webs with yellowish white; the inner webs of all, except the three or four largest, are white at the base; the vent, sides of the upper and the under tail-coverts bright yellow; the tail is four inches long, the feathers of which bend a little downwards; the outer feather is entirely white; the second white, except on the outer web, which is black to within half an inch of the end; the third like the last, with the addition of a small streak of black on the edge of the interior web; the fourth and fifth black; middle ones dusky, tinged with ash-colour, and edged with yellow towards the base; legs dusky brown. This is the winter plumage. About the beginning of March some spots of black are seen on the throat and chin, which increases till those parts are wholly black, except the tips of the feathers, which are slightly edged with white. All authors seem to agree in the mistake that the female does not possess the black mark on the throat, and that such is the distinguishing mark of the male sex; but observing that none had that mark till after the month of February, we were led to dissect several before the black appeared, and afterwards, and found both sexes with and without that mark. The Grey Wagtail visits us about the latter end of September, and departs in April. At first not one is to be seen with the black throat, and in the month of March none are to be found without more or less black on that part; but in the female it is not so conspicuous. At this season the breast and belly of the male becomes of a bright

yellow; the other sex is also brighter on those parts than in the winter; and each has a white streak from the base of the bill passing down the neck on the edge of the black. It is more than probable this and the Yellow Wagtail have been sometimes confounded. In the 'British Zoology' mention is made of that bird remaining all the year in Hampshire; probably taken from Mr. White's 'Natural History of Selborne,' p. 38, who says, "Wagtails, both white and yellow, remain with us all winter." And in the 'Naturalist's Calendar' it says, p. 8, "Grey and White Wagtails appear January the 2nd;" again, p. 12, "Yellow Wagtails appear from January 25th to April 14th." It seems evident, therefore, this author did not discriminate the two species. In the 'Linnæan Transactions,' p. 126, Vol. I., Mr. Markwick says, "The White, Grey, and Yellow Wagtails are often seen in the middle of winter, although the generality of them disappear in autumn." From this account it should seem this bird was found in those parts during summer. We have, however, never been able to have ocular proof of this bird remaining with us in summer, and are inclined to believe the confusion of the species has given rise to that idea, at least in the South of England. Dr. Latham, in his 'Synopsis,' says he has been informed these birds breed in Cumberland, where they first appear in April; that young ones have been shot in June; and that they depart again in October. The nest is said to be made of dried fibres and moss, lined with hair, feathers, or wool; the eggs from six to eight in number, of a dirty white, marked with yellow spots. This species with us is solitary, frequenting watery places, especially small shallow streams, for the sake of insects, on which it feeds. Albin seems to have given a figure of this bird for the female Yellow Wagtail.

SUPPLEMENT. — We must have been extremely unfortunate in our constant personal researches into the secrets of Nature, never to have found either the Grey Wagtail in summer, nor the Yellow Wagtail in winter, since we are told of such occurrences. We have resided in a part of the country where the Yellow species was extremely common during the summer months, and where the Grey was as plentiful as we ever observed them to be in any part of England during the winter; but in no instance could we find that either appeared in the other season. Mr. Bolton says the Grey Wagtail appears in April, and retires in September: this confirms what has before been asserted, that they breed in Cumberland; and as the author of 'Harmonia Ruralis' resided in

Yorkshire, it should seem that his observations regarded that county. The nest and eggs appear to greatly resemble those of the Yellow Wagtail. In the southern promontory of Devon we have seen this bird in April, but never at any time between that and September: but we are assured by Mr. Tucker that in his neighbourhood, about Ashburton, in the same county, it is not uncommon throughout the year; and that in the summer of 1808 he saw two pairs, to one of which belonged four young birds that had recently left their nest; the manners of the other pair indicated that they had a nest. These were observed in June, upon the borders of the Dart, not far from Ashburton. So powerful an evidence as this of the Grey Wagtail being indigenous to Devonshire must induce us to consider that its extreme locality in the southern parts of England, in the breeding season, has caused so many doubts; and these doubts were strengthened by having had ocular proof that the two species, this and the Yellow, have been frequently confounded; and that in no instance has the Grey species occurred to us in the incubating season within the southern provinces.

[Wagtail, Greyheaded.—*Yarrell*, i. 437; *Hewitson*, lxii. 168.—“Distinguished from our common summer Yellow Wagtail (*M. Rayi*) by the white elongated line over the eyes and ear-coverts, which appears to be permanent at all seasons, and by the grey head, which is more or less conspicuous also at all seasons, but particularly in summer. In *Ray's* Wagtail the line over the eye and the ear-coverts is yellow; and the head I believe invariably of the same colour as the back of the bird. The females of the two species most resemble each other.”—*Yarrell*, l. c. Mr. Doubleday added this species to the British list by shooting a specimen on Walton Cliffs, near Colchester, in October, 1834; and others have subsequently been obtained on the banks of the water at Leith; in the parish of Stoke Nayland, in Suffolk; at Newcastle; near London; and at Sherringham, in Norfolk.—Synonymes of this species: “*Motacilla flava*, *Linn. S. N.* i. 331; *Temm. Man. d'Ornith.* i. 260, iii. 181. *Motacilla neglecta*, *Gould, Proc. Zool. Soc.* p. 129; *Jenyns, Man. B. Vert. An.* p. 116. *Budytes Gouldii*, *Macgill. Man. N. H. Ornith.* i. 163. Grey-headed Wagtail, *Yarr. Brit. B.* 2nd edit. i. 412; *Gould, Birds of Europe*, pl. 146.”—*G. R. Gray, List of Brit. An.* Part iii. Birds, p. 72.]

Wagtail, Pied, or Black and White.—See Wagtail, White.

[Wagtail, Ray's.—See Wagtail, Yellow.]

Wagtail, Spring, or Summer.—See Wagtail, Yellow.

Wagtail, Water.—See Wagtail, White.

Wagtail, White.—[*Yarrell*, i. 420; *Hewitson*, xli. 163, under name of Pied Wagtail. *Motacilla Yarrellii*, *Gould, Birds of Europe*, pl. 142; *Temm. Man. d'Orn.* iv. 620.] *Motacilla alba*, *Lin. Syst.* i. p. 331, 11; *Gmel. Syst.* ii. p. 960; *Raii Syn.* p. 75, A. 1; *Will.* p. 171, t. 42; *Ind. Orn.* ii. p. 501, 1; *Bris.* iii. p. 461, 38; *Ib.* 8vo, i. p. 437; *Lath. Syn. Sup.* ii. p. 230; *Nat. Miscel.* t. 207; *Bewick, Br. Birds*, i. t. p. 194. *La Lavandiere, Buf.* v. p. 251, t. 14, f. 1. White Wagtail, *Br. Zool.* i. No. 142, t. 55; *Ib.* fol. 104; *Arct. Zool.* ii. p. 396, B.; *Will. Angl.* p. 237; *Albin*, i. t. 49; *Lath. Syn.* iv. p. 395, 1; *Sup.* p. 178; *Lewin, Br. Birds*, iii. t. 95; *Walc. Syn.* ii. t. 226; *Pult. Cat. Dorset.* p. 8; *Don. Br. Birds*, i. t. 5. *Motacilla albida*, *Gmel. Syst.* ii. p. 961. Collared Wagtail, *Lath. Syn.* iv. p. 396. Provincial: Water Wagtail; Dishwasher; Washerwoman; Pied, or Black and White Wagtail.—The weight of this species is near six drams; length seven inches and a half. The bill is black; irides dusky. The forehead, cheeks, and side of the neck white; the back of the head, upper and under side of the neck, chin, and breast black; back dusky, dashed with cinereous, in some nearly black; lower part of the breast and belly white; quill-feathers dusky, two or three next the body excepted, which are black, deeply bordered on their exterior webs with white; the greater coverts black, tipped with white; the others black, dashed with ash-colour; the tail-feathers are black, except the two outmost on each side, which are black at the base, the other part white. The female is dusky where the male is black, with more cinereous on the back and rump. This is the summer plumage; in the autumn the black feathers on the chin and throat fall off, and are replaced by white ones, leaving only a black patch, somewhat in form of a crescent, on the breast. The young birds have no black on the throat till the returning spring. In this state it has been described as a variety, but is in fact the constant winter plumage, regaining this black mark about the month of March. The White Wagtail is a very active bird, and continually in motion, running after flies. In winter they change their abode, but do not quit the kingdom. As the weather becomes severe they haunt marshes subject to the flow of the tide. In such places on the

coast we have seen them in abundance when none were to be found inland. Early in the spring they return to their usual summer situations, and from the number that are sometimes seen together at this time attending sheepfolds and new-ploughed fields, it should seem they were gregarious in their flights. In the breeding season they seem to prefer pleasure-grounds that are constantly mowed, on which they run unincumbered, and where the insects have not sufficient cover to evade their sight. The nest is found in various places; sometimes on the ground in a heap of stones, the hole of a wall, or on the top of a pollard-tree. It is composed of moss, dried grass and fibres, put together with wool, and lined with feathers or hair. The eggs are four or five in number, white, spotted all over with light brown and ash-colour, weighing about forty grains. They exactly resemble that of the Cuckoo, which bird frequently makes choice of its nest to deposit her egg in. It sings very prettily early in the spring, and frequently gives the alarm on the appearance of a Hawk, which it pursues in company with the Swallows.—[Synonymes of this species: "*Motacilla alba*, *Flem. Brit. An.* p. 72; *Jenyns, Man. B. Vert. An.* p. 114. *Motacilla Yarrellii*, *Gould; Macgill. Hist. Brit. B.* ii. p. 225. *Motacilla lugubris*, *Pall. & Temm. Man. d'Ornith.* i. 253. *White Wagtail*, *Penn. Brit. Zool.* i. 489; *Mont. Orn. Dict.* The *Pied Wagtail*, *Bewick, Brit. B.* i. 188; *Selby, Brit. Orn.* i. 208; *Yarrell, Brit. B.* 2nd edit. i. p. 395; *Gould, Birds of Europe*, pl. 142."—*G. R. Gray, List of Brit. An.* Part iii. Birds, p. 71.]

SUPPLEMENT.—The author of the work first referred to [*Lath. Syn. Sup.*] very justly remarks as follows:—"However authors may multiply this genus, we have certainly no more than three in England, viz., the *White Wagtail*, common almost everywhere at all seasons; the *Grey Wagtail*, inhabiting all the southern counties the winter half of the year, departing northward as the spring approaches; and the *Yellow Wagtail*, which is not observed anywhere, except in the summer season." To this opinion we do subscribe, except that in a few local instances the *Grey* species has been known to breed in the south. See *Wagtail, Grey*.

[*Wagtail, White*.*—*Yarrell*, i. 428; *Hewitson*, xli. 165. *Motacilla alba*, *Gould, Birds of Europe*, pl. 143; *Temm. Man. d'Orn.* i. 255, iii. 178.—"In the adult male in summer the beak is black; the forehead, region of eyes, and part of the side of the neck as low as the wing, pure white; top of the head and a square patch at the back of the

neck black; the scapularies, and all the back and upper tail-coverts, pearl-grey or very light ash-grey; wing-primaries, tertials, and wing-coverts nearly black, with broad outer margins of white; the two outside tail-feathers on each side white, with a narrow line of black on the inner margin; the other tail-feathers black; the chin, neck in front, and the upper part of the breast black; under surface of the body white; legs, toes, and claws black. The whole length is seven inches and three-eighths; the wing from the anterior bend rather more than three inches: this bird always appears rather smaller than the *Pied Wagtail*."—*Yarrell*, i. 430. The *Pied Wagtail* to which Mr. Yarrell here alludes is described above as the *White Wagtail* of Montagu. Ornithologists, in treating of this species and the preceding as distinct, seem to consider one more peculiarly a British, the other a continental, bird, seeming to overlook the fact that there is an enormous immigration of the so-called *Pied Wagtail* from the Continent every spring. In consequence of the discovery or supposed discovery of a second species, two names were required in order to distinguish them, and as the commoner species had been called "*Pied Wagtail*" by Bewick, Selby and Jenyns, and "*White Wagtail*" by Pennant, Montagu and Fleming, it has been thought desirable to preserve both names, and apply them severally to the two species: this is an error, for as the two names were always intended to designate a single species, it is contrary to all rules of nomenclature to make them serve for two species.—Synonymes of this species: "*Motacilla alba*, *Linn. S. N.* i. 331; *Leach, Syst. Cat. Mam. and Birds B. M.* p. 22; *Macgill. Hist. Brit. B.* ii. 221; *Temm. Man. d'Ornith.* i. 255, iii. 178. The *White Wagtail*, *Yarrell, Brit. B.* 2nd edit. i. 403."—*G. R. Gray, List of Brit. An.* Part iii. Birds, p. 70.]

Wagtail, Winter.—See *Wagtail, Grey*.

Wagtail, Yellow.—[*Yarrell*, i. 443; *Hewitson*, xlii. 170, under the name of Ray's *Wagtail*.] *Motacilla flava*, *Lin. Syst.* i. p. 331, 12; *Gmel. Syst.* ii. p. 963; *Raii Syn.* p. 75, A. 2; *Will.* p. 172, t. 68; *Ind. Orn.* ii. p. 504, 8; *Bewick, Br. Birds*, i. t. p. 198. *Motacilla verna*, *Bris.* iii. p. 468; *Ib.* 8vo, i. p. 438. *Bergeronette de Printemps*, *Buf.* v. p. 265, t. 14, f. 1. *Yellow Wagtail*, *Br. Zool.* i. No. 143; *Ib.* fol. 105; *Arct. Zool.* ii. p. 396, F.; *Will. Angl.* p. 238, t. 68; *Edw.* t. 258; *Lath. Syn.* iv. p. 400, 6; *Ib. Sup.* p. 179; *Lewin, Br. Birds*, iii. t. 97; *Walc. Syn.* ii. t. 228; *Don. Br. Birds*, i. t. 15; *Pult. Cat. Dorset.* p. 8. *Provincial: Spring, or Summer Wagtail*.—Weight

about five drams; length six inches and a half. The bill is black; irides hazel. The upper part of the head and back of the neck pale olive-green; back, scapulars, rump, and wing-coverts of the same colour, but darker: the whole under parts, from chin to vent, full bright yellow; the coverts of the ears like the upper part of the head; over the eye a yellow streak; quill-feathers dusky, those next the body, and the greater coverts, edged with yellowish white; tail dusky, the two middle feathers dashed with olive, two outer feathers on each side white full half-way from the end of the second feather, and running obliquely upwards leaves the outer web of the first entirely white; legs black; hind claw very long, and but little curved. The female is less bright in colour, the yellow underneath in some appearing almost white at a little distance. There appears no doubt but many authors have confounded this species with the Grey Wagtail, which we have remarked more fully in the history of that bird. The male of this species, it is said, possesses a few black spots on the throat; but such a mark we have never observed in more than a hundred specimens. It must therefore be rare, if not a mistake in describing the Grey Wagtail for this. If no other mark of distinction were to be found but the length and straitness of the hind claw in this, it would be sufficient to know it from the Grey Wagtail, [in] which [the hind claw] is very short and and crooked. The tail of this bird is also an inch shorter, and has only two feathers on each side, partly white. The under parts of the male are of a much fuller yellow, and the upper parts never possess any of the cinereous-colour. The Yellow Wagtail visits us about the time the other departs, and migrates again in September. It frequents arable land, especially in the more champaign parts; sometimes uncultivated ground interspersed with furze; is also partial to bean fields: in all such places it breeds, and does not seem to regard water so much as either the other species. The nest is always placed on the ground, composed of dried stalks and fibres, lined with hair. The eggs are four or five in number, not very unlike those of the Sedge Warbler, of a pale brown, sprinkled all over with a darker shade, in some very obscurely, weighing about twenty-seven grains. It has all the actions and notes of the other species; the cry is more shrill than the White, and less so than the Grey Wagtail, but does not seem to have much of a song. Said to be found in Siberia and Russia in summer, and to continue in France the whole year. —

[Synonymes of this species: "Motacilla flava (Ray), *Flem. Brit. An.* p. 74; *Jenyns, Man. B. Vert. An.* p. 115. Motacilla flaveola, *Temm. Man. d'Orn.* iii. 183. Motacilla campestris, *Pall. It.* iii. p. 696. *Budytes Rayii, Macgill. Hist. Brit. B.* ii. 212. The Yellow Wagtail, *Bew. Brit. B.* i. 191; *Mont. Orn. Dict.*; *Penn. Brit. Zool.* i. 491; *Selby, Brit. Ornith.* i. 255. Ray's Wagtail, *Yarr. Brit. B.* 2 edit. i. 418; *Gould, B. of Europe*, pl. 145." Motacilla campestris, Ray's Wagtail, *G. R. Gray, List of Brit. An.* Part iii. Birds, p. 73. The names Yellow Wagtail and Motacilla campestris must be used for this species, having a decided priority over those used by Mr. Yarrell.]

SUPPLEMENT. — It is singular that this species should appear in considerable flocks in the south of Devon in the autumn, in their route of migration, and yet it is a rare occurrence that any are seen on their return in the spring, and more rare for them to breed in that part; indeed we do not recollect an instance of seeing this bird in any part of Devonshire in the nesting season. The autumnal visits of the Yellow Wagtail are, like other birds, somewhat irregular. In the year 1802 we first observed a flock on the 8th of September; these were in a valley, on pasture-land, attending sheep, and picking up the flies which were disturbed by the browsing of the cattle, and were so close to their feet as to appear in danger of being trod upon. In 1803 a flock appeared in the same situation rather earlier. In 1804 we observed one flock as early as the 25th of August, and another, on the lawn before the house, on the 25th of September. In 1805 larger flocks than usual appeared, attending on cattle as early as the 26th of August, and every succeeding year they were observed sooner or later in the southern promontory of Devon. Mr. Tucker informs us that he has constantly observed these flocks farther from the coast at the same season, especially about Ashburton; but he never heard of their breeding in those parts. The young birds of most species are of course less vivid in their colours than the old, but we suspect that the adults of the Yellow Wagtails change at that season and become more plain; for in none could we observe the bright yellow appearance so conspicuous in the male in spring; and they all seem to possess an olivaceous band across the breast. Devonshire appears to be in the line of migration for other species of birds which are rarely found to breed there, or even to stop on their passage in their vernal flight long enough to be much noticed, but in autumn return by slow degrees. Thus the Land Rail or Crake Gallinule is

sometimes found in considerable abundance in the autumn in particular districts, but is rarely known to breed in the South of Devon, or even to visit that part in the spring.

Warbler.—A genus of birds, the characters of which are: Bill slender and weak. Nostrils a little depressed and small. Tongue cloven. Toes, the extreme one joined at the under part to the middle one at the base.

[**Warbler, Bluethroated.**—*Yarrell*, i. 264; *Hewitson*, xxix. 102. "*Motacilla suecica*, *Linn. S. N.* i. 336; *Bewick, Br. Birds*, i. 244. *Sylvia suecica*, *Lath. Ind. Orn.* ii, 521; *Temm. Man. d'Ornith.* i. 216; *Jenyns. Man. B. Vert. An.* p. 104. *Ficedula suecica*, *Eyton, Rarer, Brit. Birds*, p. 9. *Phœnicura suecica*, *Selby, Brit. Ornith.* i. 195; *Gould, Birds of Europe. Cyanecula suecica*, *Brehm, Vog. Deuts.* p. 350; *Bonap. Geogr. List*, p. 15."—*G. R. Gray, List of Brit. An.* Part iii. Birds, p. 63.—"Crown of the head umber-brown. Feathers at the base of the bill and the eye-streak yellowish white. Upper plumage hair-brown, tinged with grey, with the margins of the wing-coverts and scapulars paler. Chin, throat, and upper part of the breast rich azure-blue, with a central spot of silky white; the lower margin of the blue being bounded by a narrow gorget of black, which is succeeded by another of reddish brown. Abdomen and under tail-coverts dirty white, or inclining to smoke-grey. Tail with two middle feather shair-brown; the rest having the basal half orange-brown. Bill brown, paler towards the base; in form nearly the same as that of *Phœnicura Tithys*. Tarsi upwards of an inch in length; toes slender; claws but slightly curved. The female has the feathers of the head finely margined with grey, and the upper part of her plumage lighter in tint than the male. Chin pale azure-blue, mixed with white. Upper part of the breast, and the streak on each side of the neck, black intermixed with azure-blue, and surrounding a large patch of white. Abdomen and tail as in the male."—*Selby*, i. 196. A migratory bird on the Continent of Europe, and, according to Mr. Hoy, arriving at its breeding stations a few days before the Nightingale: in this country nothing is known of its migratory habits. It selects low swampy ground, borders of boggy heaths, and banks of streams running through wet meadows, where willows and alders are abundant; the nest is placed amongst plants of *Myrica Gale* (the bog-myrtle), in places overgrown with coarse grass, especially on the sides of sloping banks, and is so carefully

concealed as to be difficult to discover: it is composed on the outside of dead grass and a little moss, and lined with finer grass; the eggs are four, five or six in number, and of a uniform olive-green colour, minutely speckled with reddish brown and sometimes olive-brown, like that of the Nightingale, and unspotted. It inhabits the Continent of Europe very generally throughout the breeding season, but is rare, or little observed, in Britain. The first notice of its occurrence here is recorded in the 'Transactions of the Natural History Society of Northumberland, Durham, &c.; the specimen was killed on the boundary-hedge of Newcastle Town Moor, in May, 1826. A second specimen is recorded, at page 275 of the 'Naturalist,' as having occurred in Dorsetshire. Mr. Yarrell mentions four other examples—one obtained by Mr. Methuen, near Birmingham; another by Mr. Gurney, picked up dead near Yarmouth in 1841; and two by Mr. Gardner, of Oxford Street, in September, 1844. In the 'Zoologist' for 1852 the Hon. T. L. Powys records, at p. 3709, that a specimen was shot by Mr. Buller about the 15th of September of that year, in a furze-brake near Whimble, South Devon. In the volume for 1853 Mr. J. W. Stephenson records, at p. 3907, that a Bluethroated Warbler was shot near Worthing on the 2nd of May, 1853. In the volume for 1862 Mr. Henry Pratt gives, at p. 8281, a minute account of the occurrence of a male specimen at Brighton, on the 1st of October of that year. In this specimen the usually white spot on the neck was replaced by one of a dark chestnut-red. This discrepancy, or abnormal character, has been observed on the Continent, and it is a matter of conjecture whether two allied species are not mixed up and included under one specific name: the subject requires much more careful examination than the materials within reach at present admit. In the 'Zoologist' for 1865, at pp. 9605, 9724 and 9846, Captain Hadfield gives the result of a series of observations made by himself on a living specimen, perfectly at liberty, at Ventnor, in the Isle of Wight; and this bird is no longer solitary, having been joined by a companion in 1866, as recorded in this year's monthly numbers of the same journal.]

[**Warbler, Cetti** (*Sylvia Cetti*), described in Buffon's 'Histoire Naturelle des Oiseaux,' and figured in the 'Planches Enluminées' of the same work, pl. 655, f. 2, under the name of "Bouscarle," is admitted by Mr. Gray, in his 'Catalogue of British Birds in the Collection of the British Museum,' p. 48, and also by Mr.

Jenyns, in his 'Manual of British Vertebrata,' p. 107. It is probably a case of mistaken identity, and is therefore omitted.]

Warbler, Dartford. — [Yarrell, i. 365; Hewitson, xxxvii. 143.] *Motacilla provincialis*, Gmel. *Syst.* ii. p. 958, 67. *Sylvia dartfordiensis*, Ind. Orn. ii. p. 517, 31; *Lin. Trans.* ix. p. 191; *Id.* vii. p. 280; *Bewick, Br. Birds*, i. t. p. 210; *Lath. Syn. Sup.* ii. p. 241. Le Pitchou de Provence, *Buf.* v. p. 158. Dartford Warbler, *Br. Zool.* i. No. 161, t. 56; *Lath. Syn.* iv. p. 437, 27; *Ib. Sup.* p. 181; *Don. Br. Birds*, t. 10; *Lewin, Br. Birds*, iii. t. 106; *Walc. Syn.* ii. t. 237. — This species is rather larger than the common Wren, and much longer by reason of the tail, which is one-half its length nearly; the weight is about two drams and a half; length five inches and a half. Bill black, at the base of the upper mandible whitish; the upper mandible a little curved; irides and eyelids yellow. The whole upper parts are of a dusky brown; cheeks dark cinereous; throat, neck, and breast fine deep ferruginous; sides the same, but not so bright; middle of the belly white; quills dusky, slightly edged with dark cinereous on the outer webs, those next the body and coverts with dark ferruginous-brown; at the bend of the wing, under the alulae spuriae, is a spot of white; the tail is considerably cuneiform; the outer feather is tipped with white, and edged with the same on the exterior web; the next slightly tipped with white; the remainder of these and all the others dusky; the middle ones edged with cinereous; legs yellowish. In some the throat is speckled with white. The female and young birds are of a lighter colour and more rufous. The Dartford Warbler, so called from having been first discovered in England near that place; it is, however, a scarce species, rarely noticed in this country. Dr. Latham seems to have been the first discoverer of this bird in England, and communicated it to Mr. Pennant, who first published it in his 'British Zoology,' a pair having been killed on Bexley Heath, near Dartford, on the 10th of April, 1773. Since that time, Dr. Latham informs us, several were shot in the winter of 1783 on a common near Wandsworth in Surrey, now in the Leverian Museum; from which circumstance that author very justly observes, that if it is found here only as a winter migrant, he cannot reconcile the circumstance of its breeding in France (which has been said to be the case), as all migratory birds go northward to breed, not to a warmer climate. In the month of September, 1796, we observed many of these birds

about Falmouth, in Cornwall, frequenting the furzy hills, and killed several from that time to the 24th of December, when a sudden fall of snow, that covered the ground for some time, drove them from that part. Many of these birds, on their first appearance, were in their nestling feathers, from which some hopes were entertained of their breeding in those parts; but with the most diligent search not one was to be found the following summer; nor indeed did they ever return after the snow had driven them away. Where they could go to from that most southern part of England, unless they crossed the sea (which is very improbable), is impossible to guess, except they sought some more sheltered situation further in the peninsula of that country towards the land's-end; and even in that case it was natural to expect them on their return northward; for undoubtedly they must breed in some more northern parts. As yet the nest and eggs are unknown. It is a shy bird, concealing itself amongst the thickest furze on the least alarm, and creeping from bush to bush; is said to perch on the top of a bush in the spring, and from thence are seen darting into the air after flies, and returning again to the same spot. Their food is small insects of all kinds; in the stomach of one we dissected was the larvæ of a large Cimex. The shortness of the wing and length of tail give it a singular manner of flying, which is in short jerks, with the tail thrown up. The note is a weak but shrill piping noise several times repeated.

SUPPLEMENT. — In the former part of this work it will be observed that we had discovered this species in Cornwall, and from the appearance of some, shot in the month of September, evidently in their nestling feathers, we had little doubt but that they were bred in that county. Since that period the Dartford Warbler has been noticed by us to be by no means uncommon in the South of Devon, and to be truly indigenous to that part, continuing the whole year amongst the thick furze, where it breeds. The discovery of their nests with eggs and young induced us to lay the subject before the 'Linnean Society,' who have honoured it with a place in their 'Transactions' above quoted; for the benefit, therefore, of our general readers, we cannot do better than extract the essential parts of that paper. "In a paper which I had the honour to lay, some time since, before the Linnean Society, some notice was taken of the discovery of this little bird in the southern parts of Devonshire: and I there remarked, that as it had been so frequently observed to be a winter inhabitant, a circumstance not

favourable to its being a migrative species (as it is said to breed in Provence, on the Continent, so much farther south). * I was not without hopes of ultimately proving it indigenous to this part of England. My opinion that this species of Warbler bred with us was greatly strengthened by a letter which I had the pleasure of receiving from a scientific friend in Cornwall, well known in the literary world (Mr. Stackhouse, of Pendarvis), who assured me that his brother had observed these birds for several years to inhabit furze near Truro; that last year, as well as the present, they were plentiful during the summer season; and that he had not only seen them every month in the year, but had observed young ones soon after they had left the nest, though his search for the nest and eggs had been in vain. This information redoubled, if possible, my ardour, and I visited a large furze common in my neighbourhood where I had seen several the preceding autumn; and upon close search on the 16th of July three pairs of old birds were observed, two of which had young, evidently, by their extreme clamour, and by frequently appearing with food in their bills. On the 17th my researches were renewed, and, after three hours watching the motions of another pair, I discovered the nest with three young: it was placed amongst the dead branches of the thickest furze, about two feet from the ground, slightly fastened between the main stems, not in a fork. On the same day a pair were observed to be busied carrying materials for building; and by concealing myself in the bushes I soon discovered the place of nidification, and upon examination I found the nest was just begun. As early as the 19th the nest appeared to be finished; but it possessed only one egg on the 21st, and on the 26th it contained four, when the nest and eggs were secured. The nest is composed of dry vegetable-stalks, particularly goose-grass, mixed with the tender dead branches of furze, not sufficiently hardened to become prickly; these are put together in a very loose manner, and intermixed very sparingly with wool. In one of the nests was a single Partridge's feather. The lining is equally sparing, for it consists only of a few dry stalks

* Provence is situated between 33 and 34 degrees north latitude, and 5 and 7 east longitude; and therefore, as these birds have been also found in England in latitude 51, and west longitude 5, there can be no doubt but all the intermediate space, taking in nearly the whole of France, is inhabited by them, more or less, wherever the situation is congenial to their habits.

of some fine species of *Carex*, without a single leaf of the plant, and only two or three of the panicles. This thin flimsy structure, which the eye pervades in all parts, much resembles the nest of the Whitethroat. The eggs are also somewhat similar to those of *Sylvia cinerea*, but rather less, weighing only twenty-two grains; like the eggs of that species, they possess a slight tinge of green; they are fully speckled all over with olivaceous-brown and cinereous, on a greenish white ground; the markings becoming more dense, and forming a zone at the larger end. The young were considered no small treasure, and were taken as soon as the proper age arrived for rearing them by hand, which is at the time the tips of the quills and the greater coverts of the wings expose a portion of the fibrous end. By experience, grasshoppers (which at this season of the year are to be procured in abundance) are found to be an excellent food for all insectivorous birds; these, therefore, at first were their constant food, and after five or six days a mixture of bread and milk, chopped boiled meat, and a little finely powdered hemp and rape-seed, made into a thick paste, were sometimes given, to wean them from insect food by degrees; this they became more partial to than even grasshoppers, but they afterwards preferred bread and milk, with pounded hemp-seed only, to every other food, the smaller house or window-flies excepted. Before these birds left their nest I put them into a pair of scales, and found that they weighed about two drams and a quarter each. At this time they ate in one day about one dram and a quarter each, so that in two days each consumed more than its own weight. Such a repletion is almost incredible, and doubtless greatly beyond what the parent birds could usually supply them with, which by observation appeared to consist of variety, and not unfrequently small *Phalænæ*: their growth, however, was in proportion to the large supply of food. This interesting little family began to throw out some of their mature feathers on each side of the breast about the middle of August, and the sexes became apparent. At this time they had forsaken their grasshopper food, feeding by choice on the soft victuals before mentioned. The nestling attachment of these little birds was very conspicuous towards the dusk of the evening; for a long time after they had forsaken the nest they became restless, and apparently in search of a roosting-place, flying about the cage for half an hour, or until it was too dark to move with safety, when a singular soft note was uttered by one which had chosen a convenient spot for the night,

at which instant they all assembled, repeating the same plaintive cry. In this interesting scene, as warmth was the object of all, a considerable bustle ensued, in order to obtain an inward birth, those on the outside alternately perching upon the others and forcing in between them: during this confusion, which sometimes continued for a few minutes, the cuddling note was continually emitted, and in an instant all was quiet. Nothing can exceed the activity of these little creatures; they are in perpetual motion the whole day, throwing themselves into various attitudes and gesticulations, erecting the crest and tail at intervals, accompanied by a double or triple cry, which seems to express the words 'cha, cha, cha.' They frequently take their food while suspended to the wires with their heads downwards, and not unusually turn over backwards on the perch. The males, of which there were three out of the four,* began to sing with the appearance of their first mature feathers, and continued in song all the month of October, frequently with scarcely any intermission for several hours together: the notes are entirely native, consisting of considerable variety, delivered in a hurried manner, and in a much lower tone than I have heard the old birds in their natural haunts: This song is different from anything of the kind I ever heard, but in part resembles most that of the Stone-chat. The Dartford Warbler, like the White-throat, will sometimes suspend itself on wing over the furze, singing the whole time; but is more frequently observed on the uppermost spray, in vocal strain for half an hour together. Buffon, who appears to have been the first, if not the only, person on the Continent, who knew anything of the Dartford Warbler, as a naturalist, seems to have known very little more than that such a bird existed, and that it had been found in Provence (as his name of *Le Pitchou de Provence* evinces), but knew nothing of its habits. If he had not figured it in *Pla. Enl.* 655, f. i., it would scarcely be conceived that the history given by that author could be intended for this species. We must, therefore, conclude that he, like other great men, was deceived in that part of its natural history related by M. Guys, of Marseilles, from whom he seems to have collected that this bird not only feeds amongst cabbages on the smaller Lepidopterous

* To account for four, as there were only three in the nest, it is proper to remark that another young one, belonging to some other nest, had been found amongst the furze, and bred up with the other three.

insects, but that it roosts amongst their leaves to secure itself against the bat, its enemy. To this curious account implicit faith cannot be given; for as on the Continent furze is by no means uncommon, except in the more northern part, there can be no reason for believing that the nature of this little bird is so different in Provence from what it is in England, where it is only found to inhabit the more extended tracts covered with that shrub. If indeed it were necessary to hide itself at night from the bat, furze is better calculated for that purpose than cabbages; but I believe there is no species of that genus in Europe sufficiently large to attack even our most diminutive bird, the Golden-crested Wren, which we may safely conclude has no occasion to hide itself from any European species of *Vespertilio*. Science unfortunately is too frequently blended with fiction occasioned by too large a share of credulity; the detection of such errors is a work of time, and a series of years are often required to correct what, according to the general merit of an author, has more or less been stamped with credit. Experience from ocular demonstration has at last been able to collect materials concerning the natural history of *Sylvia Provincialis*, which clearly evinces that M. de Buffon was misled, and that, in fact, little was known of the habits of this elegant little Warbler till the present discoveries." These birds are not, as we at first supposed, confined to the South of Devon, contiguous to the coast, but have been observed in the more central parts of that county. In the autumn of 1809 several were noticed by Mr. Comyns at least fifteen miles north of Exeter, amongst furze, one of which was shot and sent to us for examination. We have very little to add to the above account, but that we find, by recent observation, the Dartford Warbler is rather an early breeder, so that they either breed twice in the summer, or some accident must have caused their breeding so late as that before mentioned. In 1805 we observed a pair of these birds carrying food in their bills early in the month of May; from which, and their continual vociferations, there could be no doubt of their having young; and it was also evident the young had quitted their nest, and were skulking amongst the thick furze. Carefully did we examine every part for the nest, where the birds were most clamorous, but in vain; but there was no doubt that the young were frequently very near by the temerity of the parent birds. The artifices these little creatures made to induce us to follow them, in order to entice us from the spot, were highly amusing: their usual cry was

changed into a scream of distress; they would almost suffer the hand to touch them, and then fall from the spray, and tumble along the ground, as if fluttering in their last struggle for existence.

[Warbler, Garden. — See Pettychaps, Greater.]

Warbler, Grasshopper.—[Yarrell, i. 295; Hewitson, xxxi. 112.] *Alauda trivialis*, Gmel. Syst. p. 796, 5. *Sylvia Locustella*, Ind. Orn. ii. p. 515, 25; Lath. Syn. Sup. ii. p. 240. *Locustella avicula*, Raii Syn. p. 70, A. 7; Will. p. 151. La Locustelle, Buf. v. p. 42. Fauvette tachetée, Pl. Enlum. 581. Titlark that sings like a Grasshopper, Will. Angl. p. 207. Grasshopper Lark, Warbler, Br. Zool. i. No. 156; Ib. fol. 95, t. Q. f. 5; Arct. Zool. ii. p. 419, L.; White, Hist. Selb. p. 45. Grasshopper Warbler, Lath. Syn. iv. p. 429, 20; Lewin, Br. Birds, iii. t. 98. — This species is less than the Whitethroat; length five inches and a half; weight about three drams and a quarter. The bill is dusky above, whitish beneath; irides light hazel. The whole upper parts of the bird are olivaceous-brown; the middle of each feather dusky, except on the back of the neck, which gives it a pretty spotted appearance; eyelids, chin, throat, and belly yellowish white; breast, sides, and thighs inclining to brown, the two last faintly streaked with dusky; under tail-coverts very pale brown, marked down the shafts with long pointed streaks of a dusky colour; quills and tail dusky brown, lighter on their exterior edges, tinged with olive; the tail is much cuneiform, and the feathers somewhat pointed; legs very pale brown; claws light horn-colour; hind claw short and crooked. In shape the Grasshopper Warbler very much resembles the Sedge Warbler; is rather inferior in size, and at once distinguished by its spotted back. It is not a plentiful species, but probably appears less so by its habit of concealing itself amongst furze and thick hedges, discovering their place of concealment only by their singular cricket-like note, which is so exactly like that of the Grilla-Talpa as scarce to be distinguished. We have found it in Hampshire, in South Wales, and in Ireland, but nowhere so plentiful as on Malmsbury Common in Wiltshire, to which place the males come about the second week in April. At this time only they expose themselves upon the top branches of the furze, and are continually making their singular chirping notes, their only song. In this situation we have killed several. As soon as the females arrive, which is in about ten days after, the males no longer expose them-

selves, and are almost silent till about the dusk of the evening, when they are incessantly crying; possibly to decoy the larger species of grasshoppers, or the Grilla-Talpa, which begin their chirping with the setting sun. The female very much resembles the other sex; is so shy as to be obtained with difficulty. On the 18th of May we found the nest of this bird in a patch of thick brambles and furze, with two eggs; but as they had not been incubated, probably more would have been laid. The nest is of a flimsy texture, like that of the Whitethroat, composed of dried stalks and goosegrass, lined with fibrous roots. The eggs are of a spotless bluish white, weighing twenty-one grains. From the scarcity of the bird, and the artful manner in which it conceals its nest, it is rarely found; nor has any author noticed it.

SUPPLEMENT. — By some unaccountable accident the *Alauda trivialis* of Linnaeus and Gmelin was referred to for the Grasshopper Warbler, as well as for the Pipit Lark, in the 'Ornithological Dictionary'; whereas it should appear both these authors were unacquainted with *Sylvia Locustella*. Some confusion still exists with respect to this bird, from an idea that it is a Lark and not a Warbler; we therefore beg leave to observe that the *Sylvia Locustella* has not a single character of a Lark, and is not in anything similar to the Pipit or Tit Larks. It has no long claw behind, resides always in thickets, is incapable of running on the ground like a Lark, but moves by hopping; so that we can only ascribe the confusion to a want of real knowledge of the bird. The tail is a remarkable character of this bird, differing entirely from that of any of our Larks; it is more cuneiform than that of the Sedge Warbler, the outer feather being full an inch shorter than the middle ones, which are sharp-pointed at the end; the others becoming less sharp towards the outer ones, which are nearly rounded at the tips: the wings are remarkably short, reaching very little beyond the base of the tail; and the first feather is shorter than the second. If these characters are attended to, in addition to what has already been given, the bird cannot possibly be mistaken. We have not been able to trace this species far north, nor into all the south-eastern counties: the borders of Gloucestershire and Hampshire have hitherto been the utmost of their known range eastward; and from thence probably in all the western counties, as it extends into Ireland. In a tour through Bath to London, and from thence into the eastern counties; and lastly from Lincolnshire in a direct line to Somersetshire; in the

spring of the year the well-known note of this species of Warbler never once assailed our ears, although every other migrative species of the genus we heard in various parts. In the same year several were observed about Kingsbridge, in Devonshire, one of which we afterwards saw in the collection of Mr. Vaughan, that was shot on the 19th of May. We have more than once had auricular proof of its inhabiting Devonshire; but it certainly is by no means common anywhere in England, and extremely local. It has been said that, besides the grinding note, it utters a very agreeable kind of warble, and that the male is said to entertain its mate with a nocturnal song. On the contrary, we believe the Grasshopper Warbler has no other note than the sibilous one, from whence the name is derived; and this is uttered more frequently about dusk than at any other time, but not after it is quite dark. If it had any song we must have heard it, from our long attention, and daily acquaintance with the species for some years during the spring.

[Warbler, Melodious Willow.—Yarrell, i. 357; Hewitson, xxxvi. 141. *Sylvia hippolais*, Temm. *Man. d'Ornith.* i. 222; Gould, *Birds of Europe*; Yarrell, i. 357.—“The bill is brown above, the under mandible paler, its base yellowish white; from the gape to the eye a small streak of yellow; irides brown; top of the head, neck, and all the back to the ends of the upper tail-coverts green, tinged with ash-brown; upper wing-coverts, wing, and tail-feathers darker ash-brown, with rather broad lighter coloured external edges; chin, neck, and all the under surface of the body sulphur-yellow; legs and toes slate-colour. The whole length of the bird is five inches and one-quarter; the wing, from the anterior bend, two inches and three-quarters.”—Yarrell, i. 359. This bird is said by Temminck to inhabit France, Germany, England, Sweden and Holland, in woods, and less frequently in gardens: it feeds on insects and caterpillars, and builds its nest in woods of tall trees and on firs: it lays five eggs of a pinkish white, sprinkled with small red specks. At the time Temminck published this information the bird now described had certainly never been observed in England; the great continental ornithologist must therefore have referred to our Chiffchaff, which has frequently been described under the name of *Sylvia hippolais*. A single specimen of this bird is recorded by Dr. Plomley as having been killed at Eythorne, near Dover, on the 15th of June, 1848: the record occurs at p. 2228 of the ‘Zoologist’ for 1848, and was transferred by Mr. Yarrell

to his excellent work on British Birds. In the Preface to the ‘Zoologist’ for the year in question is an editorial notice of the occurrence of this interesting stranger, and a solicitation for a more minute description. Mr. Yarrell does not state whether he has seen this unique British specimen, and his description above cited appears to be derived from Temminck, although not a verbatim translation.]

[Warbler, Orpheus.—Yarrell, i. 343; Hewitson, xxxv. 133. *Sylvia Orpheus*, Temm. *Man. d'Ornith.* i. 198. *Currucula Orpheus*, Gould, *Birds of Europe*; Yarrell, i. 343.—The only record of this bird's occurrence in Britain is from the pen of Sir William Milner, Bart., by whom it was contributed to the ‘Zoologist’ for 1849, and is printed at p. 2588. The notice is here reprinted entire, and leaves nothing to be desired. “My bird is evidently a female, and was observed in company with its mate for a considerable time before it was shot. The other bird had a black head, and the description I received left no doubt on my mind that it was a male bird of *Sylvia Orpheus*. The bird of which I send you a description was shot in a small plantation near the town of Wetherby, on the 6th of July, 1848, and was, unfortunately, very ill set-up by the man who obtained it: it had the appearance of having been engaged in incubation from the state of the plumage. Mr. Graham, my bird-stuffer, at York, hearing that a very uncommon bird had been shot, went over to Wetherby, and, fortunately, obtained the specimen for my collection. It has the beak black and very strong, eight lines in length, the upper mandible very much grooved. The whole upper part of the plumage dark ash-coloured brown. The outer feather of the tail white; the second on each side edged with dirty white; the rest of a brownish black. Chin dirty white; throat and belly brownish white; under surface of the wings and vent light brown. Legs very strong; toes and claws black. Total length six inches three lines. Since procuring this specimen, I have received a male bird from France, with four eggs, and send you a description in case any other specimen may fall into the hands of your readers. The head and cheeks to behind the eyes black; on the top of the head the black blends itself into ash-coloured grey, and so continues over the upper parts of the plumage. Wings almost black, edged with ash-coloured brown; the external feathers on each side of the tail white, the inside edges light brown; the second tipped with white, the rest blackish brown. Throat and belly of a pure white; breast

and flanks of a white, with very delicate rose tint; vent and under coverts of the tail of a light brownish red. The lower mandible of a yellowish brown at its base; the upper one black, much grooved and thick. The legs, claws, and toes black and strong. The length same as the female. This bird is very common in Italy, and the southern parts of France and Piedmont, and sometimes is found in Switzerland. It builds its nest sometimes in low bushes, and not uncommonly in holes of rocks and walls, also on the roofs of deserted houses, and lays four to five eggs; white, irregularly marked with yellowish brown spots, chiefly at the larger end, about the size of the Garden Warbler, but more pointed at the small end."]

Warbler, Reed. — SUPPLEMENT. — *Sylvia arundinacea*. Wren, Reed, *Orn. Dict.* Lesser Fauvette, Bewick, *Br. Birds*, i. p. 220. — It is not unusual to find this and the Sedge Warbler confounded together. Mr. Bewick has certainly described and figured the Reed Warbler, which is erroneously called the Passerine Warbler (*Motacilla Passerina* of Linné), a species that has never yet been discovered so far west in Europe as England, although probably farther north. This author has also attached the name of Reed Fauvette to the Sedge Warbler, which serves only to continue the confusion between these two species. We have never been able to ascertain this bird in the West of England; indeed its manners and habits are so similar to those of the Sedge Warbler that it becomes difficult to trace it, especially as it is undoubtedly more rare and more local. [See Wren, Reed, to which species this supplementary note applies.]

[Warbler, Rufous Sedge — *Yarrell*, i. 314. *Sylvia galactotes*, *Temm. Man. d'Ornith.* i. 182. *Salicaria galactotes*, *Gould, Birds of Europe*; *Yarrell*, i. 314. — "The beak is slightly curved, measuring from point to gape five-eighths of an inch in length; upper mandible brown above; lateral edges and under mandible pale yellowish brown; irides reddish brown, over and under the eye, and passing backward over the ear-coverts, creamy white; from the gape to the eye a dark streak; upper surface of the head, neck, shoulders, wing-coverts, and back fawn-colour; wing-primaries and secondaries brocoli-brown; outer edges reddish buff; upper tail-coverts and the two long central tail-feathers uniform reddish buff; the outer five tail-feathers on each side reddish buff over two-thirds of their diminishing length; then a broad band of black extending over both webs of the feather; the remainder

of the length pure white; each extreme outside feather with the most elongated portion of white; chin, throat, and all the under surface of the body, and under tail-coverts, dull white; under surface of the wings, the sides and flanks delicate fawn-colour; under surface of the tail-feathers marked like the upper surface, but the colours not so bright; legs, toes, and claws pale wood-brown. The plumage in colour resembles that of our well-known Bearded Tit. The whole length of the specimen seven inches; from the bend of the wing to the end of the longest quill-feather three-and-a-half inches; the first wing-feather short; the second and sixth feathers about equal in length; the third, fourth, and fifth feathers equal in length, and the longest in the wing." — *Yarrell*, i. 316. This species inhabits the South of Europe, but little or nothing is known of its habits. The only record of its occurrence in Britain is from the pen of Mr. Borrer, in the 'Zoologist' for 1854, at p. 4511; as it is complete in itself, it is here extracted entire. "As G. Swaysland, a bird-stuffer, of Cranbourne Street, West Street, Brighton, was driving on the South Downs, about six miles from Brighton, near a part of the Downs known as Plumptre Bosthill, he noticed a bird which he at first took for a cream-coloured variety of the Nightingale. Having no gun with him, he proceeded about four miles to obtain one, and, returning to the spot, found the bird about twenty yards from where he first observed it. It was very wary, flying always to the further side of some furze-bushes, and settling on the side furthest from him, mounting to some fifteen yards. Swaysland describes its flight as resembling that of the young of the Red-backed Shrike. He at last got a shot at about forty yards, and killed it: this was on the 16th of September last. The bird, on dissection, proved to be a male, and would shortly have moulted, one or two young feathers of the primaries having made their appearance on each wing; these are darker than the old ones. The feathers also on the back and tail, especially the central ones of the latter, are much worn. I borrowed the bird and sent it to Mr. Yarrell, who returned it with various references, stating also that he was not aware of its having previously occurred in Britain."]

[Warbler, Savi's. — *Yarrell*, i. 307; *Hewitson*, xxxi. 115. *Sylvia luscinioides*, *Temm. Man. d'Ornith.* iii. 119; *Gould, Birds of Europe*. *Salicaria luscinioides*, *Yarrell*, i. 307. — "The beak is brown; the head, neck above, back, wings, and tail-feathers reddish brown; the latter indistinctly

barred across with narrow darker bands; chin and throat almost white; front of neck and breast pale brown; under parts of the body rather darker, but lighter in colour than the upper surface of the body; legs and toes pale brown. The whole length of the bird five inches and a half; the wing, from the anterior bend, two inches and a half. This bird resembles the Reed Warbler, and was at first mistaken for it; the plumage is, however, more like that of the Nightingale."—*Yarrell*, i. 308. This species occurs in the South of Europe, more especially near the shores and in the islands of the Mediterranean. It has been obtained repeatedly in the eastern counties of England, but is not common. Its nest has been found at Backsbite, in the parish of Milton, as was communicated by Mr. Bond to the 'Zoologist' for 1846, at p. 1212: three nests were found, all of them built on the ground; they are perfectly cup-shaped, and compactly formed of the long narrow leaves of the common reed, wound round and interlaced, but without any other lining. The eggs are somewhat like those of the Grasshopper Warbler, of a whitish pink colour, covered with minute specks of pale red and light ash-grey: a very exact and admirable figure of the nest is given at p. 1307 of the 'Zoologist' for 1846.]

Warbler, Sedge.—[*Yarrell*, i. 303; *Hewitson*, xxxi. 117.] *Motacilla salicaria*, *Lin. Syst.* i. p. 330, 8; *Gmel. Syst.* ii. p. 955. *Sylvia salicaria*, *Ind. Orn.* ii. p. 516, 26. *Curruca arundinacea*, *Bris. iii.* p. 378, 5; *Ib.* 8vo, i. p. 415. *Avis consimilis Stoparolæ*, et *Magnanimæ*, *Raii Syn.* p. 81, 6; *Will.* p. 153; *Will. Angl.* p. 217. *Salicaria*, *Raii Syn.* p. 81, 11; *Will.* p. 158. La Fauvette de roseaux, *Buf.* v. p. 142. Willow Lark, or Sedge Bird, *Br. Zool.* i. No. 155. Sedge Warbler, *Arct. Zool.* ii. p. 419, M.; *White, Hist. Selb.* pp. 67, 71, 74; *Albin*, iii. t. 60; *Lath. Syn.* iv. p. 430, 21; *Sup.* p. 180; *Lewin, Br. Birds*, iii. t. 105; *Walc. Syn.* ii. t. 236; *Don. Br. Birds*, ii. t. 48; *Pult. Cat. Dorset.* p. 9. Reed Fauvette, *Bewick, Br. Birds*, i. t. p. 223. Provincial: Sedge Wren; Lesser Reed Sparrow.—The weight of this species is about three drams; length five inches and a half. Bill dusky above, whitish beneath; irides hazel. Crown of the head and whole upper parts of a yellowish brown, plain on the back and sides of the neck, rump, and upper tail-coverts; the rest obscurely marked with dusky; the coverts of the wings more dusky, edged with olivaceous-brown; quills the same, but slightly edged; over the eye a whitish stroke; all the under parts, from the chin to the under tail-coverts, yellowish white, darkest on the breast and sides; tail like

the quills, a little cuneiform, which, when spread, gives it a rounded shape; legs dusky. The Sedge Warbler comes to us about the middle of April, and leaves us again in September. It has a variety of notes, which it delivers in a hurried manner, and which partake of that of the Sky Lark and the Swallow, as well as the chatter of the House Sparrow. Is frequent by the sides of rivers and watery places, where sedge and reeds grow, amongst which it makes a nest composed of a little moss intermixed with dried stalks, and lined with dried grass, occasionally a few hairs; sometimes it is fastened between two or three reeds; others we have found in a tuft of rushes on the ground, or very near it, fastened round the bottom of them; at other times in a low bush, or on the tump of a willow. The eggs are five or six in number, of a light brown-colour, mottled with darker shades of the same; their weight from twenty-four to twenty-eight grains. The song of this bird has been erroneously given to the Reed Bunting by various authors, whereas that bird has no notes that deserve the name of song; but as they frequent the same places to breed, and that is conspicuous on the upper branches, while this little Warbler, concealed in the thickest part, is heard aloud, the song has been confounded. It has been justly remarked, that, if it is silent, a stone thrown into the bush will set it singing instantly; it will also sing of a moon-light night. The similitude in colour, size, manners and habits of this and the Reed Wren is so great that they have been most times confounded; but on comparison that bird will be found not to possess the broad white streak over the eye, nor any of the feathers on the back and wing-coverts dusky. The nest and eggs are also essentially different, as may be found by comparing the descriptions. This is also a much more plentiful species, at least is not so local; is to be met with in most parts of England, whereas the other is confined to certain tracts, especially to such where quantities of reeds grow. They are, however, frequently found together, for wherever the Reed Wren is, the Sedge Warbler also inhabits; but the reverse is not the case.

SUPPLEMENT.—Had the author referred to [Bewick] called this species Sedge Fauvette, it would not have continued that confusion in names which has already caused the two species to be confounded. If, however, attention is paid to the white mark over the eye, it is a criterion of distinction between the Sedge and the Reed Warblers, for the latter has it not.

[Warbler, Thrushlike. — *Yarrell*, i. 299;

Hewitson, xxxii. 122 (the latter under name of Great Sedge Warbler and *Salicaria arundinacea*). ? *Sylvia turdoides*, *Temm. Man. d'Ornith.* i. 181, iii. 109. ? *Salicaria turdoides*, *Gould, Birds of Europe; Yarrell*, i. 299. — "The whole of the plumage above, including the tail, is reddish brown, beneath yellowish white, becoming deeper towards the vent; throat whitish; a yellowish white band passes above the eyes; the beak is yellow at the base, brown towards the tip; irides brown, surrounded by a yellowish gold ring; tail rounded; length eight inches: the male and female are alike." — *Temminck*, l. c. It is extremely difficult to reconcile this description with Mr. Yarrell's figure and description, and a doubt arises whether our bird is really the *Sylvia turdoides* of *Temminck*. *Temminck* gives Borneo, Japan, Tripoli, Dalmatia and Holland as localities of his bird; and he informs us he finds no difference in the skins from these widely-separated countries. The first record of Mr. Yarrell's bird is in the 'Annals of Natural History' for 1847, at p. 135: the bird was shot three or four miles west of Newcastle, near the village of Swanwell, by Mr. Thomas Robson, of that place, on the 28th of May, 1847. A second specimen was obtained near Dartford, by Mr. Green, a London bird-stuffer, on the 8th of May, 1852: I examined this bird very carefully in the flesh, and recorded its occurrence at page 3476 of the 'Zoologist' for 1852, under the name of the "Thrush Nightingale:" this specimen very much resembled a Nightingale on a large scale, and possessed neither the hooked beak nor the wedge-shaped tail represented in Yarrell's figure; nor had it a yellow or yellow-white or white band over the eye, as described by *Temminck*: the upper surface of the bird was of a rich brown, and the under surface gray; the tail was rounded at the extremity: in calling this bird the "Thrush Nightingale" I was guided by Mr. Green, not having previously seen a specimen, and being unacquainted with its name. Mr. Gould says that the nest of this bird is supported, like that of our Reed Warbler, amongst reeds; and Mr. Hewitson informs us it is composed almost altogether of the fine flowering-tops of reeds and other grasses, an inch thick, and bound round outside by their stalks and ribband-leaves. The same author says the eggs are four or five in number, pale greenish white, spotted and sprinkled with ash-gray and reddish brown. It must be admitted that the history of this bird is unsatisfactory, especially as regards British examples.]

Washerwoman.—See Wagtail, White.

Water Colly.—See Ouzel, Water.

Water Crake.—See Ouzel, Water; and Gallinule, Spotted.

Water Craw.—See Ouzel, Water.

Water Hen.—See Gallinule.

Water Hen, Spotted.—See Gallinule, Spotted.

[Water Ouzel.—See Ouzel, Water.]

[Water Rail.—See Rail or Water Rail.]

[Water Sparrow.—A name of the Black-headed Bunting.

Water Wagtail.—See Wagtail, White.

Waxen Chatterer. } See Chatterer,
[Waxwing.] } Bohemian.

[Western Duck. } See Duck, Steller's
[Western Pochard. } Western.]

Whaup or Stock Whaup.—See Curlew.

Wheatear.—[*Yarrell*, i. 286; *Hewitson*, xxx. 110.] *Motacilla Cenanthe*, *Lin. Syst.* i. p. 332, 15; *Gmel. Syst.* ii. p. 966; *Raii Syn.* p. 75, A. 1; *Will.* p. 168, t. 41. *Sylvia Cenanthe*, *Ind. Orn.* ii. p. 529, 79. *Vitiflora*, *Bris.* iii. p. 449, 33; *Ib.* 8vo, i. p. 434. *Le Cul blanc*, *Vitree*, ou *Motteux*, *Buf.* v. p. 237. *Wheat-ear*, *Br. Zool.* i. No. 157; *Ib.* fol. 102, t. S. 1, f. 5, 6; *Arct. Zool.* ii. p. 420, P.; *Will. Angl.* p. 133, t. 41; *Albin*, i. t. 55 (M.), 3, t. 54 (F.); *Edw.* pref. p. 12; *Lath. Syn.* iv. p. 465, 75; *Sup.* p. 182; *Lewin, Br. Birds*, iii. t. 110; *Walc. Syn.* ii. t. 241; *Pult. Cat. Dorset.* p. 9. *White-rump*, *Bewick, Br. Birds*, i. t. p. 238. *Provincial*: Fallow Finch, or Fallow Smich; White-tail; Snorter; Chickell; Hedge-chicker, Chack, Check, Chacker, or Chack-bird.—This species weighs about six drams and a half; length near six inches and a half. The bill is black, and considerably broad at the base, where it is beset with bristles; irides hazel. From the nostril a black streak through the eye, taking in the coverts of the ear; over each eye a white stroke meeting on the forehead; the upper part of the head and back cinereous-grey; rump, upper and under tail-coverts white; quill-feathers dusky, mostly edged with light rust-colour; coverts black, tipped with rusty yellow; under part of the neck buff; breast and belly yellowish white; tail white, the two middle feathers black at the end for about an inch, the rest tipped half an inch with the same; legs and claws black. The female is about

a dram heavier than the male; has all the markings of that sex, but less vivid; the white on the forehead and over the eye, as well as the black streak, is very obscure; and the cinereous-grey on the back is mixed with brown. The Wheatear is a migrative species, appearing with us the latter end of March; some few probably remain the whole year, as we have now and then seen it in the month of February. It principally frequents rabbit-warrens, or such parts as are enclosed with stone walls; makes its nest in a deserted rabbit-burrow, or in an old stone quarry; sometimes in a heap of stones, or the hole in a wall; but most times on the ground. It is composed of moss and dried stalks and fibres put together with wool, and lined with hair or wool. The eggs are five or six in number, of a uniform pale blue colour, weighing about forty-three grains. The number that breed in this country must be very considerable, but so dispersed that few are seen at that season in the same situation. In September they begin to retire, and seem to assemble from all parts to the Sussex and Dorset downs contiguous to the coast, preparatory to their departure. The quantity taken annually about East-bourn is prodigious; Mr. Pennant says 1840 dozen. These are caught in a singular manner, by placing two turfs on edge; at each end a small horse-hair noose is fixed to a stick, which the bird, either in search of food or to evade a storm of rain, attempts to get under, and is caught. Upon inquiry of the shepherds, whose trade it is, we have been informed fifty or sixty of these traps have had a bird in them of a morning; sometimes several mornings together, and then for a day or two scarce one is to be seen; and yet they are never observed to come in flocks; and it is the general opinion that they come in the night. These birds usually sell for a shilling a dozen; and it is a common custom, in those parts where they are taken, to visit the traps, take the bird out, and leave a penny in each as a reward for the shepherd. It is esteemed a great delicacy, not much inferior to the Ortolan; are sometimes sent to the London poulterers ready picked. This bird sings very prettily, and not unfrequently on wing, hovering over the female; in the courting season displays its tail in a singular manner. A variety has been described by some authors to have a mixture of whitish and fulvous on the upper parts, and very small grey spots on the lower part of the neck; and the two middle feathers of the tail wholly black. Such is called by Mr. Pennant, in his Appendix to the 'British Zoology,' Grey Wheat-Ear.

SUPPLEMENT.—On the 24th of March,

1804, a vast number of these birds made their first appearance on the south coast of Devon, near Kingsbridge, in a low sheltered situation, and continued in flock the whole of the day, busied in search of food: the flock consisted entirely of males, without a single female amongst them. For some time the wind had been fluctuating and the weather cold, attended with hail and snow, for a day or two preceding their appearance, and a strong gale of wind from the east obliged these birds to make a landing so much farther to the westward than usual in such numbers. The Wheatear is by no means common in Devonshire or Cornwall in the breeding season, and never plentiful in either of the migrative seasons; but is most frequently observed on the fallow lands in the autumn. The Wheatear is scattered over every part of Great Britain more or less. Mr. Pennant, in his Voyage to the Hebrides, observed it in the Isle of Rum. Mr. Fleming assures us it breeds in Orkney and Zetland, and retires before winter. On the Continent it extends farther northward, and is also known in Southern Asia.

Wheel Bird.—See Goatsucker.

Whewer or Pandle Whew.—See Wigeon.

[Whet-ile.—A name of the Green Woodpecker.]

Whilk.—See Scoter.

Whim.—See Wigeon.

Whimbrel.—[Yarrell, ii. 616; Hewitson, lxxxvii. 324.] *Scolopax Phæopus*, Lin. Syst. i. p. 243, 4; Gmel. Syst. ii. p. 657. *Numenius Phæopus*, Ind. Orn. ii. p. 711, 6. *Numenius minor*, Bris. v. p. 317, t. 27, f. 1. *Arquata minor*, Raii Syn. p. 103, A. 2; Will. p. 217. Corlieu, ou petit Courlis, Buf. viii. p. 27. Whimbrel, Br. Zool. ii. No. 177; Ib. fol. 119; Arct. Zool. ii. p. 462, B.; Will. Angl. p. 294; Edw. t. 307; Lath. Syn. v. p. 123; Lewin, Br. Birds, iv. t. 154; Walc. Syn. ii. t. 134; Don. Br. Birds, iii. t. 72. Provincial: Curlew-knot; Curlew Jack; Half Curlew; Stone Curlew.—The weight of this species of Curlew is about fourteen ounces; length eighteen inches. The bill is above three inches in length, arcuated; upper mandible dusky, under part whitish at the base, in some of a reddish flesh-colour. The head, neck, and breast pale brown down the middle of each feather, margined with white, lightest on the forehead, and darkest on the crown of the head; chin and belly white; the irides are dusky, eyelids white; sides of the body barred with dusky; the upper

parts of the body, scapulars, and wing-coverts dusky, margined with pale brown; quill-feathers dusky; the borders of the internal webs barred with white; the tail is dusky ash-colour, the middle feathers darkest, marked with six or seven dusky bars; legs dusky. The Whimbrel has all the manners of the Curlew, and indeed is so very like in plumage that in some parts it has obtained the name of Jack Curlew, from a supposition that it is the male of that bird; but it is by no means so plentiful a species. It is a migrative bird, visiting our coasts in August, and continuing the winter, keeping together in small flocks of five or six; has been suspected to breed on the coast of Sussex and Kent, especially about Romney Marsh; but that has not been ascertained with certainty.

Whimbrel, Brazilian. — SUPPLEMENT. — See Curlew, Brazilian. — Doctor Turton, in his 'British Fauna,' informs us this species was shot a year or two since in Anglesea. This is without doubt the same bird we have mentioned under the articles Curlew, Brazilian, and Ibis, Glossy. For further remarks see those birds.

Whin-Chat. — [Yarrell, i. 282; Hewitson, xxx. 108.] *Motacilla Rubetra*, *Lin. Syst.* i. p. 332, 16; *Gmel. Syst.* ii. p. 967; *Ind. Orn.* ii. p. 525, 58. *Rubetra major*, sive *Rubicola*, *Bris.* iii. p. 432, 26, t. 24, f. 1; *Ib.* 8vo, i. p. 430. *Enanthe secunda*, *Raii Syn.* p. 76, A. 3; *Will.* p. 234. Grand Traquet, ou Tarier, *Buf.* v. p. 224. Whin-Chat, *Br. Zool.* i. No. 158; *Ib.* fol. 103, t. S. 2, f. 3, 4; *Will. Angl.* p. 234; *Hayes, Br. Birds*, t. 39; *Lath. Syn.* iv. p. 454, 54; *Don. Br. Birds*, t. 60; *Lewin, Br. Birds*, iii. t. 109; *Walc. Syn.* ii. t. 140; *Pult. Cat. Dorset.* p. 9. Provincial: Furze-Chat. — This species of Warbler weighs about four drams and a half; length full five inches. The bill is black, the base beset with bristles; irides dark hazel. Crown of the head, cheeks, hind-neck, back, and upper tail-coverts black, each feather margined with rufous-brown, which gives the bird a pretty spotted appearance; from the upper mandible a broad white streak passes over the eye on each side to the back of the head, where it almost meets; from the chin another white streak passes down each side the neck; throat and breast light ferruginous; sides the same, but less bright; belly and under tail-coverts white, tinged with the same; wing-coverts and quills dusky black, partly edged with rufous-brown; on the wing near the shoulder is a large patch of white, and a smaller one of the same colour on the greater coverts of the primaries; tail short, the feathers

white more than half-way from the base; the rest dusky black, slightly tipped and margined with pale rufous-brown; legs black. This is a migrative species, appearing with us about the middle of April, inhabiting the same places as the Stonechat, corresponding with that bird in all its habits, except that this does not remain with us the winter; most frequently found about furzy places, where it breeds. It places its nest on the ground, amongst the grass at the bottom of a bush, very artfully concealed, generally forming a path through the grass to it; is composed of dried grass and stalks, with very little moss externally, and lined with fine dried grass. The eggs are generally six in number, entirely blue, without a spot; in which it differs from those of the Stonechat, which have a faint appearance of rufous, disposed in small close-set spots at the larger end. This elegant little bird sings very prettily, and that not unfrequently suspended on wing over the furze. It always sits on the top branches of a bush, watching for flies, its principal food; and, like the Flycatcher, will dart into the air, and return to the same spray repeatedly. It seems a more local species than the Stonechat; is found rarely in the further part of Devonshire and in Cornwall, but is plentiful in Somersetshire, Wiltshire, and Gloucestershire, and the more eastern parts. It is remarkable that many of the summer migrative species of Warblers are not to be found in the West of England, and yet the whole of them are met with in Wiltshire, and from thence to the eastern coast, especially about London and the adjoining counties; from this it should appear that they come to that coast first from the Continent; that some species, finding all their nature requires, do not ramble far, while others spread to a greater distance. The female is much less bright in colour; the white over the eye is yellowish; the wing-coverts brownish, with scarce any marks of white as in the male; weight about a dram more than the other sex.

[Whiskered Tern.—See Tern, Whiskered.]

[Whistling Swan.—See Swan, Whistling.]

White Baker.—See Flycatcher, Spotted.

[Whitebellied Swift.—See Swift, Alpine.]

[Whiteeyed Duck.—A name of the Ferruginous Duck.]

[Whitefronted Goose.—See Goose, Whitefronted.]

White Game.—See Ptarmigan.

[White Grouse.—Bewick gives this name to the Ptarmigan.]

[White Heron.—See Heron, Great White.]

[Whiteheaded Goosander.—Dr. Fleming gives this name to the Smew.]

White Nun.—See Smew.

[White Owl.—See Owl, White.]

White-rump.—See Wheatear.

[White Spoonbill.—See Spoonbill, White.]

[White Stork.—See Stork or White Stork.]

White-tail.—See Wheatear.

[Whitetailed Eagle.—See Eagle, Sea.]

Whitethroat. — [Yarrell, i. 335; Hewitson, xxxv. 130.] *Motacilla Sylvia*, Lin. Syst. i. p. 330, 9? *Gmel. Syst.* ii. p. 956. *Sylvia cinerea*, Ind. Orn. ii. p. 514, 23. *Parus cinereus*, Bris. iii. p. 549, 4; *Ib.* 8vo, i. p. 463; *Buf.* v. p. 409, iii. *Ficedula affinis*, an *Spipola prima*, *Raii Syn.* p. 77, A. 6; *Will.* p. 171. First *Spipola* of Aldrovandus, *Will. Angl.* p. 210. VAR.: *Curruca cinerea sive cineraria*, Bris. iii. p. 376, t. 21, f. 1? *Ib.* 8vo, i. p. 415. *Spipola Aldr.*, *Raii Syn.* p. 77, A. 1? *Will.* p. 153; *Ib. Angl.* p. 210. Fauvette grise, ou la Grisette, *Buf.* v. p. 132. White-Throat, *Br. Zool.* i. No. 160; *Ib.* fol. 104, t. S. f. 4; *Arct. Zool.* ii. p. 422, S.; *Albin.* iii. t. 58; *Lewin, Br. Birds*, iii. t. 104; *Hist. Selb.* p. 103; *Walc. Syn.* ii. t. 235; *Lath. Syn.* iv. p. 428, 19; *Pult. Cat. Dorset.* p. 9.—Provincial: Nettle-creeper. — This species weighs about four drams; length five inches and three-quarters. The bill dusky brown above, whitish beneath; irides yellowish. The whole upper parts, from head to tail, cinereous-brown; coverts of the wing darkest, bordered with brown, inclining to rufous; quills dusky, slightly edged with cinereous-brown; under parts, from chin to tail, greyish white, darkest on the breast and thighs; in some the breast has a rosy tinge; tail like the quills; outer feather white, except at the base of the inner web; legs pale brown. The female is like the male. This is a very common species, visits all parts of the kingdom which are inclosed, about the middle of April, and constantly enlivens our hedges with its song, at which time it erects the feathers on the crown of the head. The nest is made of goose-grass lined with fibres, and sometimes a few long hairs, but is of so flimsy a texture that it can afford no warmth to

the eggs or young: this is generally placed in some low bush amongst nettles or other luxuriant herbs. The eggs four or five in number, of a greenish white, speckled all over with light brown or ash-colour; weight about thirty grains. It is proper in this place to remark, that we have more than once killed a bird somewhat resembling the above; weight and length the same; irides not so yellow; the whole upper parts rufous-brown; the coverts of the wings and quills next the body deeply margined with bright rufous; throat and belly silvery white; breast inclining to brown, darker on the sides; outer feathers of the tail like the above. In Latham's 'Synopsis' a variety of the White-throat is mentioned, as described by Buffon; but that author considered it a different species; a plate of it is also given in the 'Planches Enluminees.' We confess this bird has puzzled us not a little, more especially as the nest from which we shot one of them contained four white eggs, except a few grey specks at the point of the larger end; the shape nearly round; their weight rather more than those given above. The nest was the same; it was placed very low in a hedge of white-thorn; another was found on bean-stalks, on which the male was killed. Possibly this may prove hereafter to be a distinct species, and the same as Dr. Latham speaks of being found in Provence. The Common White-throat feeds on insects and berries, frequenting our gardens in the summer for the sake of the cherries and currants. The birds here given have, it should seem, been made two distinct species by some authors, while others have made several varieties of the White-throat; so that we are not a little at a loss in respect to the quotations, some of which we give with doubts.

Whitethroat, Lesser. — [Yarrell, i. 339; Hewitson, xxxv. 132.] *Sylvia Sylviella*, Ind. Orn. ii. p. 515, 24; *Lath. Syn. Sup.* ii. p. 239. Lesser Whitethroat, *Lath. Syn. Sup.* p. 185, t. 113; *Don. Br. Birds*, iv. t. 86.—This species of Warbler was first noticed by Mr. Lightfoot in Buckinghamshire, and communicated to Dr. Latham, who first gave it to the world as a British species in the Supplement to his 'Synopsis.' It is less than the Common White-throat; length five inches and a quarter; weight about three drams and a quarter. The bill is dusky; irides yellowish, with a dash of pearl-colour. The upper part of the head, taking in the eyes, is dark ash-colour; all the other parts above cinereous-brown; quills and tail dusky, edged with ash-colour; from throat to vent, including the under tail-coverts, silvery white; the

exterior feather of the tail whitish almost to the base; the outer web quite white; legs dusky lead-colour. This and the preceding species have doubtless been confounded; nor is it easy to determine which of them is the *Sylvia* of Linnæus. We observed the arrival of this bird for several years together, in Wiltshire, to be from the 21st of April to the 10th of May. It is not uncommon in the north of that county, and is easily discovered by its shrill note, which is scarcely to be called a song, as it is only a repetition of the same whistling note several times in a hurried manner; besides which it has a soft pleasing song not to be heard unless very near. It conceals itself in the thickest hedges, and when the foliage is complete is very difficult to be shot. In such situations the nest is placed not very distant from the ground, composed of goose-grass, neatly but flimsily put together, with a small quantity of wool, very much like that of the Common White-throat. The eggs are four or five in number, of a bluish white, speckled with brown and ash-colour at the larger end, and sometimes a few distant spots all over; their weight about twenty-five grains. The great distinction between this and the Common White-throat and its varieties is, that this is inferior in size; the bill is shorter, the under as well as upper mandible is dusky; the legs darker; the whole under parts of the plumage much whiter; and the upper parts do not possess the least appearance of rufous-brown, which in the other is more or less invariably found, especially on the wing-coverts. The Lesser White-throat does not appear to be a plentiful species in this country, and is confined to the eastern parts of the kingdom, from Gloucestershire and Wiltshire, in both which counties we have found them, and is probably in part of Somersetshire, but not in Devonshire or Cornwall.

SUPPLEMENT. — If this is the *Motacilla longirostra*, Der Spisskopf of Beckstein, Naturf., 27, S. 43, 2, which Dr. Latham quotes; we have not been able to find anything in the bill or head that should entitle it to such a name. The bill is indeed longer than that of the Yellow Wren or the Lesser Pettychaps, as the bird is larger; but it is not so long as that of the Reed Warbler or the Greater Pettychaps. The Doctor says that he received this bird from Sweden, under the name of *Motacilla Curruca*, but whether it is the bird which goes by the name of *Kruka* in that country, and is described under that head in the 'Fauna Suecica,' is scarcely to be determined. The Lesser White-throat, like the Greater Pettychaps, seems to increase in number towards the eastern coast of the

South of England; and is more abundant in the enclosed parts of Lincolnshire than in any other, as far as our observation has gone; and though the Greater Pettychaps has been rarely found as far north as Lancashire, and westward in Devonshire, the Lesser White-throat has never yet been noticed so far in either direction.

[White's Thrush.—Yarrell, i. 202. *Turdus varius*, Temminck, *Man. d'Ornith.* iv. 602; Horsfield, *Linn. Trans.* xiii. 149; Jenyns, *Man. B. Vert.* p. 101; Macgill, *Hist. Brit. Birds*, ii. 146. *Oreocincla Whitei*, Gould, *Proc. Z. S.* 1837, p. 45; Pr. Bonap. *Geogr. Comp. List of B.* p. 17. *Turdus Whitei*, Eyton, *Hist. Rarer Brit. Birds*, p. 92; Gould, *Birds of Europe*, pl. 81; Yarrell, i. 202. *Turdus aureus*, Holandre, *Faune de la Moselle*, p. 60.—"The beak is dark brown, except the base of the under mandible, which is pale yellow-brown; the space beneath the beak and the eye pale wood-brown; the irides hazel; the feathers on the upper part of the head and neck yellow-brown, tipped with black; those of the back, scapulars, and the upper tail-coverts darker brown, with a crescentic tip of black, the shaft of each feather yellow; the smaller wing-coverts have broad pale yellow ends, the lateral webs black, the shafts yellow-brown; the greater wing-coverts dark brown, with light yellow-brown ends, together forming two oblique descending bars; the feathers of the spurious wing are light yellow-brown, tipped with black, forming an ascending oblique bar; the wing-feathers pale brown on the outer web, brownish black on the inner web, with dark brown ends and the shafts black; the four central tail-feathers uniform pale brown; the others darker in the webs, but lighter at the ends, and of these the outer tail-feathers are the lightest. The chin and throat are white; from the lower edge of the under mandible descends a narrow dark streak; the neck, breast, and all the under surface white, tinged on the breast and flanks with yellow-brown, all the feathers having a black semilunar tip; before the wing, on each side, the brown colour of the back extends a little forward toward the breast; anterior under wing-coverts white at the base, and black at the tip; under tail-coverts white; under surface of the tail-feathers greyish brown, the shafts white; legs and toes pale brown, the shafts white; legs and toes pale brown, the claws rather lighter."—Yarrell, i. 206. A specimen of this Thrush was shot by Lord Malmesbury, at his Lordship's seat, Heron Court, near Christchurch, in January, 1828. Mr. Yarrell mentions a second example, "said to have been shot in the New Forest, Hampshire, by one of the

forest-keepers." In the 'Annals and Magazine of Natural History' it is stated that a third specimen was killed near Bandon, County Cork, in 1842. A doubt has been expressed whether this bird is a mere variety of our Song Thrush, a doubt that can extend to British specimens only. The eastern *Turdus varius* is an inhabitant of Japan, Java and Australia, and has been also obtained occasionally in Asia and Europe: it has no claim to a place in the British list.]

[White Wagtail.—See Wagtail, White.]

White-Whisky-John. — See Shrike, Cinereous.

[Whitewinged Black Tern. — See Tern, Whitewinged Black.]

[Whitewinged Crossbill. — See Crossbill, American; and European, Whitewinged.]

Whit Finch.—See Finch, Chaf.

Whitwall. } See Oriole; and Woodpecker,
[Witwall.] } Great Spotted.

Wierangle.—See Shrike, Cinereous.

Wigeon. — [Yarrell, iii. 287; Hewitson, cxiv. 412.] *Anas Penelope*, *Lin. Syst.* p. 202, 27; *Gmel. Syst.* ii. p. 527; *Raii Syn.* p. 146, A. 3; *Will.* p. 288, t. 72; *Ind. Orn.* ii. p. 860, 71; *Lath. Syn. Sup.* ii. p. 354; *Lin. Trans.* iv. p. 111, t. 13, f. 9 (trachea); *Bewick, Br. Birds*, ii. t. p. 352. *Anas fistularis*, *Bris.* vi. p. 391, 21, t. 35, f. 2; *Ib.* 8vo, ii. p. 464. Canard siffleur, *Buf.* ix. p. 169, t. 10, 11. Wigeon, Whewer, Whim, *Br. Zool.* ii. No. 268; *Ib.* fol. 157, Addend. t. Q. 157; *Arct. Zool.* ii. p. 574, K.; *Will. Angl.* p. 375, t. 72; *Albin*, ii. t. 99; *Lath. Syn.* vi. p. 518, 63; *Lewin, Br. Birds*, vii. t. 251; *Walc. Syn.* i. t. 71; *Pult. Cat. Dorset.* p. 21. Provincial: Pandle Whew; Yellow-pole.—This species of Duck weighs about twenty-four ounces; length twenty inches. The bill is narrow, of a bluish lead-colour, tipped with black; irides hazel. The top of the head, from the bill and chin, yellowish cream-colour; the rest of the head and upper part of the neck bay, speckled with black; breast vinaceous; belly white; upper and under tail-coverts black, edged with rufous above and with white beneath; back, scapulars, and sides under the wings black and white in fine undulated lines; coverts of the wings dusky brown, with pale edges; quills dusky; secondaries green on the outer webs, tipped with black; those next the body have the margin of the outer webs more or less white; the tail is cunei-

form; the two middle feathers pointed, and considerably longer than the rest; these are dusky, dashed with cinereous, the rest cinereous, edged with rufous-brown; legs and feet dusky lead-colour, the latter small. This bird, like all the Duck tribe, is subject to variety, according to age; in some the forehead is almost white, and the feathers on the back and sides mottled with brown; the wing-coverts mixed with white. The female is brown; the middle of each feather darkest; fore part of the neck and breast pale brown; wings and belly like the male. This species has a small labyrinth in the lower part of the trachea, peculiar to the male sex. The Wigeon is found in most parts of Europe; breeds in the more northern parts. Visits England in the autumn, when great numbers are caught in our decoys for the table, being esteemed an excellent bird. It also frequents our rivers and salt-water inlets in small flocks.

SUPPLEMENT. — The female of this species is about seventeen inches in length: the bill is like that of the male, but not quite so blue: irides similar: the head and neck speckled with dusky and ferruginous, by reason of each feather being minutely barred: the feathers of the upper part of the back dusky, with two or three slender bars of ferruginous-brown: scapulars dusky black, with ferruginous margins: breast plain vinaceous-brown: the speculum of the wing is not green as in the male, but wholly black, except the tips, which are white; two of the tertials are margined with white on the outer web; those next the body with rufous margins; many of the smaller coverts, which are brown, are margined with white: the tail consists of fourteen feathers: legs like those of the male. — VAR. 1: The bill as usual; the head a mixture of ferruginous and cream-colour, speckled with black; on the crown a few yellow feathers: the upper part of the neck behind marked like the hinder part of the head, but paler: chin dusky, becoming mottled on the throat with white: the fore part of the neck is a mixture of black and pale ferruginous, the former predominating: the lower part of the neck and sides of the breast pale vinaceous; on the former are a few scattered brown feathers, barred with dusky, in semi-lunar lines, one or two large bars on each feather: the back and scapulars are mixed with some plain brown feathers, others elegantly marked in small undulating lines of alternate black and white: the coverts of the wings very pale brown, inclining to white towards the last series; the largest covering the secondary quills are white on the outer webs, tipped with black and edged with white: the speculum

green and black, as in the Common Wigeon: the first tertial white on the outer web as usual, the two next dusky edged white: the sides marked with fine undulating lines of dusky and white: from the upper breast to the vent white, behind the vent brown; under tail-coverts and part of those above are black: the primary quills and tail as usual: the latter is cuneiform, and the feathers cinereous and pointed. — VAR. 2: In this the whole head and neck is rufous, becoming ferruginous on the hind head, nape and cheeks; and all parts marked with small spots of black; each feather has a black tip: the upper breast and sides of the body down to the tail deep ferruginous, the former obscurely barred, the latter intermixed with scattered feathers, marked with fine undulating lines of black and white: the back and scapulars mottled and varied with ferruginous and dusky feathers in large bars, and black and white feathers in fine undulating lines: the under parts to the vent white, with broad dark ferruginous bars: the upper tail-coverts similar, but not so ferruginous: all the coverts of the wings, except at the elbow for half an inch, and round the ridge, are pure white; the greatest series that impend the speculum are tipped with black: the primary and secondary quills and the tertials are as usual; in the latter the first feather has the whole outer web pure white, the inner web brown; in the two next the outer web is deep black with a broad margin of white, the inner web brown: the bill, legs, and tail as usual; the latter having fourteen pointed cinereous feathers, pretty long and cuneiform, extending a little beyond the tips of the wings when closed. The former of these appears to be a young male bird in its first change of plumage, attended with some *lulus* feathers, especially the black on the fore part of the neck, and the general paleness of the other colours. It will be observed that the size, as well as the bill, legs, tail, speculum, and tertials are similar to those of the Wigeon. The few remaining nestling feathers on the neck, and the yellow ones just putting forth on the crown, all prove it to be that bird. The second variety is only the usual summer change of plumage, differing in nothing but a little individual variation, as no two are ever observed to be exactly alike. The great patch of white on the coverts of the wings is probably occasioned by age. In both these the mottled appearance of old and new feathers are evident; the former is a bird of the first year beginning his male plumage; the other is an old bird throwing off its spring plumage. The labyrinth at the bottom of the trachea of the male very much resembles

that of the Pintail, being bony and globular; but differs in some respects, when examined together, in its attachment to the side of the windpipe, but which the figures given in the 'Linnean Transactions' quoted will better explain. It has been generally asserted that the Wigeon will not breed in confinement, or at least that the female will not make a nest and perform the act of incubation, but that she will lay eggs, which are generally dropped into the water. Lord Stanley informs us that he procured a female Pintail in London that had (he was told) bred in confinement: this bird paired with a male Wigeon in his Lordship's menagerie, and produced the first year nine or ten young, all of which were destroyed by the rats. The second year she produced six young, four of which are now [1813] living, and are above a year old. It is remarkable that this Pintail was so tenacious of her nest in the advanced state of incubation, as to suffer herself to be lifted to examine the eggs, and continued to effect the hatching of them. In the last year the same bird produced eggs, but from some unknown cause forsook them. The hybrid birds are much plainer than the male Pintail, but more like the female, with a little of the head of the male Wigeon. The male has the posterior parts somewhat like the male Pintail, but the middle feathers of the tail are not so long. In these hybrid Pintail Wigeons there is an evident sexual distinction in plumage as well as in size, from which it was natural to conclude that the organs of generation were capable of susceptibility; and this has been incontrovertibly proved. The males have been frequently observed to tread the female, and she has laid eggs two successive years; but as no young were produced, his Lordship concluded some sexual defect existed in the female. Under the circumstances related, it should appear that each had the natural stimulus to propagation, which could not exist without perfection of the sexual organs. It is perfectly clear the female has all the requisites for continuing the breed; eggs must originate in the ovaries, and be perfected in the uterus, which, together with their exclusion, prove the female to possess sexual perfection. With respect to the male, his actions prove him to have concupiscential inclination; it is, therefore, reasonable to conclude no generative defect existed in either sex, but that from some unknown cause the female did not sufficiently perform the act of incubation, especially as she was very wild, and was frequently observed sitting on the edge of the nest, not on the eggs. This is a reasonable inference, but as all the necessary means were not taken to ascertain

whether any of the eggs had the appearance of prolificacy, we dare not determine hypothetically the laws by which these extra-natural beings are governed. We do not recollect a single instance on record where hybrid birds have bred; the Goldfinch and Canary-bird frequently produce a spurious breed, but no instance occurs of the hybrid birds constituting a species by their union. It has generally been considered that mules of any kind are incapable of procreation; if, however, there is any dependence on public records, apparently well attested, there have been two instances of the offspring between the horse and the ass having produced young, the one in Scotland, the other in the West Indies. It may, however, be presumed that although in these hybrid animals the parts of generation are sometimes perfect, the excitability to propagation is extremely torpid. Domestication and confinement is undoubtedly the cause of such unnatural connection, but it would be highly interesting to discover how far it might be carried. For the only instance of a hybrid bird having laid eggs, we are indebted to Lord Stanley, and we take this opportunity to publicly acknowledge our obligations to his Lordship for many interesting observations from personal experience concerning many other birds; and as he is an experimental ornithologist, we doubt not but that by the love of Science, and the extensive practical means with which his Lordship is furnished, the public will considerably benefit by his experiments. It is a remarkable circumstance that in the pond where the male Wigeon paired with the female Pintail, there were female Wigeons. The Wigeons in our aquatic menagerie continue in pairs almost the whole year. They are extremely garrulous and pugnacious; scolding and fighting (especially with birds of their own species) occupy much of their time. Their call-note is an extremely clear and shrill whistle. Lord Stanley has had a male Wigeon pair with a dun-coloured variety of the Common Duck, the eggs of which were prolific. The Wigeon appears to be the most plentiful species of Duck that is taken in our decoys; more are caught in the decoys of Somersetshire and Devonshire than Duck, Teal, and all other wild-fowl collectively, as we are assured by an old and experienced decoy-man. The same person asserts that Wigeon and Teal rarely assemble together in the pool; nor frequently with Duck; but when Ducks come to the pool, Teal frequently follow. The male Wigeon, like the Pintail and Shoveler, makes a double moulting in the course of a few months. In the month of July he loses the varied colours, and

becomes dark ferruginous on the back, scapulars, and sides, but not so much like the female as the male Pintail. Baillon makes a remark on the change of plumage of this species, and says the same changes take place in the Pintail, the Gadwall, and the Shoveler.

[Wigeon, American. — *Yarrell*, iii. 293. *Anas Americana*, *Wilson*, *Amer. Ornith.* iii. 198 of *Jameson's Edition*; *Audubon*, *Ornith. Biog.* iv. 337; *Yarrell*, iii. 293.—“The beak is black; the irides hazel; behind the eye a green streak passing backward; forehead and top of the head dull white; neck, cheeks, and occiput pale brownish white, freckled with black, the occipital feathers a little elongated; upper part of the back, the scapulars, and part of the wing-coverts reddish brown, each feather crossed with minute zigzag blackish lines, some of the elongated scapulars falling over the wing-coverts; lower part of the back hair-brown; upper tail-coverts brown, barred with pale brown; tail-feathers uniform brown, slightly elongated and pointed; wing-coverts white, slightly varied with brown; the greater coverts tipped with black; the primaries uniform brown; the outer webs of the secondaries forming a green speculum, tipped with black; outer webs of the tertials blackish brown, inner web hair-brown; lower part of the neck in front reddish brown, extending along under the wing to the flanks, which are barred with dark lines; breast, belly, and vent white; under tail-coverts brownish black; legs, toes and their membranes dark brown. The whole length is nineteen inches. From the carpal joint to the end of the wing ten inches; the second quill-feather the longest in the wing, but the first almost as long. *Wilson* says, ‘The female has the whole head and neck yellowish white, thickly speckled with black; very little rufous on the breast; the back is dark brown. The young males, as usual, very much like the females during the first season, and do not receive their full plumage until the second year. They are also subject to a regular change every spring and autumn.’” — *Yarrell*, iii. 296. Mr. *Yarrell* informs us that a specimen of this American bird was bought in the London market in the winter of 1837–8, and Mr. *Thompson* records that another was shot in Strangford Lough, in February, 1844. It has very small claim to be regarded as even a visitor in England.]

Wigeon, Black.—See Duck, Tufted.

Wigeon, Blackheaded.—See Duck, Scaup.

Wigeon, Cur.—See Pochard.

Wigeon, Greatheaded.—See Pochard.

Wigeon, Pheasant-tailed. — See Duck, Longtailed.

Wigeon, Pied.—See Garganey, and Golden Eye.

Wigeon, Redheaded.—See Pochard.

Wigeon, Ringeyed Diving. — See Duck, Scaup.

Wigeon, Tufted.—See Duck, Tufted.

Wigeon, White. } See Smew.
Wigeon, Vane. }

Wigeon, Vaneheaded.—See Pochard.

[Wild Duck. — See Duck, Common or Wild.]

[Wild Goose.—See Goose, Grey-lag.]

[Wild Swan.—See Swan, Whistling.]

Willoek.—See Auk, Razorbilled; Puffin; and Guillemot.

Willowbiter.—See Titmouse, Blue.

[Willow Locustelle. — Gould gives this name to Savi's Warbler.]

[Willow Warbler. — Yarrell and others give this name to the Yellow Wren of Montagu.]

[Willow Wren.—Bewick gives this name to the Yellow Wren of Montagu.]

[Wilson's Petrel.—See Petrel, Wilson's].

Windhover.—See Kestrel.

[Wind Thrush.] }
Windle. } See Redwing.
Winnard. }

[Winter, Gull.—Montagu gives this name to the young of the Common Gull. See Gull, Winter.]

Winter Mew.—See Gull, Winter.

Witwall.—See Woodpecker, Greater Spotted.

Wood-Chat.—See Shrike, Wood.

Woodcock. — [Yarrell, iii. l.; Hewitson, xvi. 348.] *Scelopax rusticola*, *Lin. Syst.* i. p. 243, 6; *Gmel. Syst.* ii. p. 660; *Ind. Orn.* ii. p. 713, 1. *Rural Sports*, ii. t. p.

434; *Bewick, Br. Birds*, ii. t. p. 60. *Scelopax*, *Raii Syn.* p. 104, A. 1; *Will.* p. 213, t. 53; *Bris.* v. p. 292, 1; *Ib.* Svo, ii. p. 284. La Becasse, *Buf.* vii. p. 462, t. 25. Woodcock, *Br. Zool.* ii. No. 178, t. 65; *Ib.* fol. 119; *Arct. Zool.* ii. p. 470, A.; *Ib. Sup.* p. 68; *Will. Angl.* p. 289, t. 53; *Albin*, i. t. 70; *Borlas. Cornw.* p. 245, t. 24, f. 12; *Lath. Syn.* v. p. 129, 1; *Lewin, Br. Birds*, iv. t. 156; *Walc. Syn.* ii. t. 136; *Pult. Cat. Dorset.* p. 14.—This well-known species of Snipe needs little description. The length is fifteen inches; weight from twelve to fifteen ounces. The bill is about three inches long, furrowed along the side of the upper mandible. Forehead cinereous; the rest of the upper parts of the bird is a mixture of ferruginous, black, and grey, disposed in bars; the under parts are yellowish white, with dusky streaks; the tail consists of twelve feathers, black on the inner web, the outer bordered with rufous; tips above cinereous, beneath white. This bird is subject to great variety; some are very dark-coloured and small, others are large and the plumage much more rufous. These have been thought two different sexes, but without foundation. The Woodcock appears first in the beginning of October, some few the latter end of September, but never in quantity till the middle of November. They generally come to us with northerly or easterly winds, when the more northern countries become frozen; and if the frost in those countries where they breed is suddenly severe, large flights are sometimes met with on our coasts, where they remain for one day to recruit their strength, and then disperse. With us it is not near so plentiful as formerly, when the art of shooting flying was less practised; a great many, however, are yet to be found in the more uncultivated parts of Devonshire, Cornwall, and Wales, as well as in the North of Scotland; but nowhere so plentiful as in the large tracts of woods in Ireland. In severe weather they accumulate from the moors and inland counties to the woods in the West of England. It is amongst the few winter birds that occasionally breed with us, many instances of which are recorded. The young birds have been killed in August, and eggs taken in June, both of which we can speak of from our own knowledge. In the year 1795 we were favoured with two eggs from the Rev. Mr. Wheatear of Hastings, who informed us they were found in a wood near Battel in Sussex, and that there were four in the nest. These are larger than those of a Pigeon, of a yellowish white, spotted and blotched with rufous-brown and ash-colour, most so at the larger end. The food of this bird is insects and worms, for which

it bores with its bill into moist places, feeding principally at night. They quit the woods in the dusk of the evening, and then only make a noise something like the Snipe, but not so shrill. At this time numbers were formerly caught in nets placed across the glades of a wood, now much out of practice, except in the western counties. Sometimes a net is placed by the side of a hedge, near to a wood, where they are taken, either morning or evening, as they fly from or to the wood. They are also taken in springes placed on the ground in swampy places, where they are known to feed; and so much is their flesh sought after, that since the introduction of mail-coaches to all parts the price of them in the country has increased more than double. We have known more than a hundred taken to London by one coach from the South of Wales. It is found in all parts of the old Continent, from north to south, in some places remaining the whole year, only changing their situation in the breeding season from the plains to the mountains. We have been informed it visits some parts of America in the winter; but we suspect the Little Woodcock of that country has been confounded for it, as we have seen that species in plenty, during summer, about the temperate parts, which changes its situation with the season to the warmer provinces.

SUPPLEMENT. — By dissecting many Woodcocks, we have observed that the female is generally the largest, and most commonly partaking more of the ferruginous-colour, with less of the cinereous, than the males. The first feather in the wing of the male is not always white on the outer web, but sometimes has two or three faint bars on that part, which in the female is barred like the other quill-feathers. Continual proofs of the partial residence of this species with us the whole year are given, amongst which Mr. Foljambe, of Osberton, Nottinghamshire, informs us that he has a specimen of a half-fledged young Woodcock, taken in May, 1802, in Brodsworth Wood, near Doncaster, in Yorkshire. The same gentleman says that on the 5th of April, 1805, a brood of four was hatched in a wood at Shireoaks, near Worksop, Nottinghamshire; that the old bird had been frequently seen upon the nest, which was composed of moss, bents, and dry leaves; and that the shells of the eggs were taken very soon after hatching, as the bird had been seen on the nest the same day the shells were picked up, and frequently before. *Lusus* Woodcocks have been frequently killed, most of which are pale brown or cream-colour, retaining the greater part of their markings of a fainter hue; and rarely white. A fine

specimen of the former was obligingly sent to us by Mr. Bulteel, of Fleet, in Devonshire; it was shot the latter end of Dec. 1808, and proved a male. Woodcocks have for some centuries been in high estimation, and consequently before the art of shooting flying had made much progress they were sought for on the ground by the fowler: but by far the greater quantity were taken in nets and springes, both of which are still in partial use, but the former is the most destructive. The glade in a wood is the usual place selected, across which a net is suspended by pulleys fixed to opposite trees, and the person attending it is concealed, holding the cord in his hand. When a Cock strikes against the net the shock is felt, and the cord instantly let go, by which means the net falls over and entangles the bird. Sometimes the side of a high hedge, in certain situations, has been fatal to Woodcocks, by the means of net suspended between a tree in the hedge and a pole erected at the distance of twenty or thirty feet; for it is observable that these birds fly low and under shelter as much as possible, both going to and coming from feed in the evening and morning just about dusk. Springes or springers are usually set in moist places on the verge of woods, especially where the fowler perceives perforations made by the bill of a Woodcock, termed borings; or the mutings, called the splash. In such places a common ground springe is formed of an elastic stick, to which is fastened a horse-hair noose, which is put through a hole in a peg fastened into the ground, to which a trigger is annexed. And in order to compel the Woodcock to walk into the trap, an extended fence is made on each side, by small sticks set up close enough to prevent the bird passing between; these concentrate at the trap, so that in this funnel-shaped fence the Woodcock, in feeding, is compelled to pass through the narrow passage, and is almost to a certainty caught by the legs. The Woodcock is naturally a very shy and retired bird, rarely taking wing by day, except disturbed; but just at the close of day all, as if by common consent, quit the woods nearly at the same instant, and wander over the meadows in search of splashy places and moist ditches for food, retiring to their hiding-places again just at the dawn of day. Thus, when most other land birds are recruiting exhausted nature by sleep, these are rambling through the dark, directed, by an exquisite sense of smelling, to those places most likely to produce their natural sustenance; and, by a still more exquisite sense of feeling in their long bill, collect their food. The eye is not called into use, for, like the mole, they actually feed

beneath the surface, and, by the sensibility of the instrument which is thrust into the soft earth, not a worm can escape that is within reach. The eyes of the Woodcock are large in proportion, and, like those of some other nocturnal birds, are the better calculated for collecting the faint rays of light in the darkened vales and sequestered woodlands in their nocturnal excursions, and thus enable them to avoid trees and other obstacles which continually occur. The nerves in the bill, as in that of the Duck tribe, are numerous, and highly sensitive of discrimination by the touch. A Woodcock in our menagerie very soon discovered and drew forth every worm in the ground, which was dug up to enable it to bore; and worms put into a large garden-pot, covered with earth five or six inches deep, are always cleared by the next morning, without one being left. The enormous quantity of worms that these birds eat is scarcely credible; but really it would be the constant labour of one person to procure such food for two or three Woodcocks. The difficulty of collecting a sufficiency of such precarious aliment determined us to try if bread and milk would not be a good substitute; and we found that by putting clean washed worms into that mess the bird soon acquired a taste for this new food, and will now eat a large bason of bread and milk in twenty-four hours, besides worms. Lord Stanley has had a Woodcock in confinement these three years, which is frequently fed on raw flesh. From experience there appears great probability that many birds of a similar habit, to the Woodcock or the Ruff, might be induced to change their diet by degrees in the manner stated, that would otherwise starve by a total change at first. The Common Godwit is, like the Ruff, usually fattened by such soft food; but the Knot will starve before he will touch it, and therefore requires inducement to change his diet. In this manner we induced a Curlew to change its natural food, as before related. It is observable that previous to the flirting or rising of a Woodcock from the ground, which in the language of sportsmen is termed flushing, the tail is thrown up in a perpendicular direction, and by spreading the feathers the white tips all appear distinct. Few naturalists at present will be found to doubt the actual migration and re-migration of birds, and that many repair annually to the same haunts and same nest to breed. So many instances of this have been related upon good authority, that it scarcely requires strengthening by further proof; but a circumstance so well authenticated as that related by Mr. Bewick is deserving of note. "In the winter of 1797 the game-

keeper of E. M. Pleydell, Esq., of Watcombe, in Dorsetshire, brought him a Woodcock, alive and unhurt, which he had caught in a net set for rabbits. Mr. Pleydell 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 same wood where it had been first caught. Communicated by Sir John Trevelyan, Bart." The same author mentions, from the same authority, that a White Woodcock was seen three successive winters in Penrice Wood, Glamorganshire. It is generally admitted that Woodcocks are more plentiful in Devonshire and Cornwall than in any other part of England, but they are not near so numerous as in Ireland, and they seem to increase in number in the western parts of that kingdom. From this circumstance it should appear that the great column of Woodcocks, in their passage to and from the north, fly in that latitudinal direction which is intersected by the western parts of Ireland. Those which continue their route further south, would find their next resting-place in Portugal; and as that part of the continent of Europe is nearly in the same latitudinal direction with Ireland, we should expect to find them equally plentiful in that country. In this we have not been disappointed; for we have lately been assured by our friend Capt. Latham, who is with the combined army in Portugal, that Woodcocks are very plentiful in the month of November. This gentleman, in a letter to the author, says, "We have been so much in motion that I have not had much time for shooting, but I have some days killed fourteen or sixteen couple of Woodcocks to a pointer in low shrubs." It seems they become scarcer as the winter advances, even in that country, so that we may reasonably infer that a large portion continue the same latitudinal direction southward until they arrive in Africa. In the beginning of March, on their return northward, Woodcocks are again observed in Portugal in great abundance, but disappear as the warmer season approaches. We shall not discuss the subject of migration here, as we propose to enlarge upon that interesting part of physiology in another place.

Woodcock, Sea.—See Godwit.

Woodcracker.—See Nuthatch.

[Wood Grouse.—See Grouse, Wood.]

[Wood Lark.—See Lark, Wood.]

Woodpecker.—A genus of birds, the

characters of which are: Bill strait, strong, angular, and cuneated at the point. Nostrils covered with reflected bristles. Tongue much longer than the bill, cylindric; the end horny and jagged, missile. Toes, two forward, two backward. Tail consisting of ten stiff sharp-pointed feathers.

[Woodpecker, Barred.—See Woodpecker, Least Spotted.]

[Woodpecker, Downy.—*Wilson*, pl. ix. fig. iv. *Picus pubescens*, *Linn.*; *Wilson*, *Amer. Ornith.* i. 162 of *Jameson's Edition*.—"The length of the Downy Woodpecker is six inches and three-quarters, and its extent twelve inches; crown black; hind head deep scarlet; stripe over the eye white; nostrils thickly covered with recumbent hairs or small feathers of a cream-colour; these are thick and bushy, as if designed to preserve the forehead from injury during the violent action of digging; the back is black, and divided by a lateral stripe of white, loose, downy, unwebbed feathers; wings black, spotted with white; tail-coverts, rump, and four middle feathers of the tail black; the other three on each side white crossed with touches of black; whole under parts, as well as the sides of the neck, white; the latter marked with a streak of black, proceeding from the lower mandible, exactly as in the Hairy Woodpecker; legs and feet bluish green; claws light blue, tipped with black; tongue formed like that of the Hairy Woodpecker, horny towards the tip, where for one-eighth of an inch it is barbed; bill of a bluish horn-colour, grooved and wedge-formed, like most of the genus; eye dark hazel. The female wants the red on the hind head, having that part white, and the breast and belly are of a dirty white."—*Wilson*, i. 166. The only British-killed example of this North-American Woodpecker was shot by Mr. E. P. Cambridge, at Bloxworth Rectory, Dorsetshire, in December, 1836. It was stuffed by Havell, of 77, Oxford Street, and is still in the collection of the Rev. Octavius Pickard-Cambridge, who recorded the occurrence at page 644 of the 'Zoologist' for 1859, giving ample details and a minute description, in which the differential characters between this and allied species are given with a masterly hand.]

[Woodpecker, Goldenwinged.—*Wilson*, pl. iii. fig. i. *Picus auratus*, *Linn.*; *Wilson*, *Amer. Ornith.* i. 141 of *Jameson's Edition*.—"Back and wings above of a dark umber, transversely marked with equi-distant streaks of black; upper part of the head an iron-gray; cheeks and parts surrounding the eyes a fine cinnamon-colour; from

the lower mandible a strip of black an inch in length passes down each side of the throat, and a lunated spot, of a vivid blood-red, covers its hind head, its two points reaching within half an inch of each eye; the sides of the neck, below this, incline to a bluish gray; throat and chin a very light cinnamon or fawn-colour; the breast is ornamented with a broad crescent of deep black; the belly and vent white, tinged with yellow, and scattered with innumerable round spots of black, every feather having a distinct central spot, those on the thighs and vent being heart-shaped and largest; the lower or inner side of the wing and tail, shafts of all the larger feathers, and indeed of almost every feather, are of a beautiful golden yellow; that on the shafts of the primaries being very distinguishable even when the wings are shut; the rump is white and remarkably prominent; the tail-coverts white, and curiously serrated with black; upper side of the tail, and the tip below black, edged with light loose filaments of a cream-colour, the two exterior feathers serrated with whitish; shafts black towards the tips, the two middle ones nearly wholly so; bill an inch and a half long, of a dusky horn-colour, somewhat bent, ridged only on the tip, tapering, but not to a point, that being a little wedge-formed; legs and feet light blue; iris of the eye hazel; length twelve inches; extent twenty. The female differs from the male chiefly in the greater obscurity of the fine colours, and in wanting the black moustaches on each side of the throat."—*Wilson*, i. 147. A migratory North-American bird, passing northward and arriving at Hudson's Bay in April, and leaving in September: it has unusual powers of flight for a Woodpecker. In the 'Zoologist' for 1859 Mr. Marsh records, at p. 6327, the only instance of this bird's occurring in England: it was killed in Amesbury Park, in the autumn of 1836. Mr. Marsh adds, "My brother, now member for Salisbury, saw this bird in the flesh before it was preserved; it was brought to him just after it was shot. . . . It was preserved by Mr. Edwards, of Amesbury, and has never been out of my possession."]

Woodpecker, Great Black.—[*Yarrell*, ii. 137; *Hewitson*, lxi. 238.] *Picus martius*, *Lin. Syst.* i. p. 173, 1; *Gmel. Syst.* i. p. 424; *Ind. Orn.* i. p. 224, 1. *Picus niger*, *Bris.* iv. p. 21, 6; *Ib.* 8vo, ii. p. 47. *Picus maximus*, *Raii Syn.* p. 42, 1; *Will.* p. 92, t. 21. Le Pic noir, *Buf.* vii. p. 41, t. 2. Great Black Woodpecker, *Albin*, ii. t. 27; *Will. Angl.* p. 135; *Arct. Zool.* ii. p. 276, A.; *Lewin, Br. Birds*, ii. t. 46; *Lath. Syn.*

ii. p. 552, 1; *Ib. Sup.* p. 104; *Don. Br. Birds*, i. t. 13; *Walc. Syn.* i. t. 45; *Pult. Cat. Dorset.* p. 6. — We give this bird as a British species with considerable doubt; but as Dr. Latham says he has been informed it is sometimes met with in the south, and in particular Devonshire, a description of it to the English ornithologist may be acceptable. It must, however, be observed that the author does not speak of it as such from his own knowledge, nor have we been able to ascertain the fact. It is about the size of a Jackdaw; length seventeen inches and a half; irides pale yellow. Bill near two inches and a half long, of a dark ash-colour, and whitish on the sides. The whole bird is black, except the crown of the head, which is vermilion; the two middle feathers of the tail are longer than the rest; the legs are lead-coloured, covered with feathers on the fore part for half their length. The female has only the hind part of the head red, and the whole plumage has a tinge of brown. In some the red on the head is wholly wanting; but this marking in both sexes is subject to much variation. This species is found in many parts of the European Continent, but nowhere so plentiful as in Germany. It has all the habits of the Green Woodpecker, and is said to be a great destroyer of bees. Makes its nest deep in some tree which it has excavated for the purpose, and lays two or three white eggs, which seems peculiar to the whole genus.

SUPPLEMENT.—In Doctor Pulteney's Catalogue of the Dorsetshire Birds this is noticed as having been more than once killed in that county; one in particular is said to have been shot in the nursery at Blandford, and another at Whitchurch. Lord Stanley assures us that he shot a *Picus martius* in Lancashire [This is an error, as his Lordship subsequently stated]; and we have heard that another was shot in the winter of 1805, on the trunk of an old willow tree in Battersea Fields. [There is no British-killed specimen of this handsome bird, and our ornithologists, all of whom give the species as British, fail to suggest any hypothesis to account for its immigration: the Rev. A. C. Smith, one of our very best observers, watched it narrowly in Norway, and in the 'Zoologist' for 1850 relates, at p. 2946, his experience of its habits: he says, "I never saw birds fly more heavily, or with such apparent difficulty and such clumsy motion, as these Great Black Woodpeckers."]

Woodpecker, Green. — [Yarrell, ii. 142; Hewitson, lxi. 239.] *Picus viridis*, *Lin. Syst.* i. p. 175, 12; *Gmel. Syst.* i. p. 433;

Raii Syn. p. 42, A. 2; *Will.* p. 93, t. 21; *Ind. Orn.* i. p. 234, 27; *Bris.* iv. p. 9, 1; *Ib.* 8vo. ii. p. 44. *Pic verd.* *Buf.* vii. p. 7, t. 1. Green Woodpecker, *Br. Zool.* i. No. 84; *Ib.* fol. p. 78, t. E.; *Arct. Zool.* ii. p. 277, B.; *Albin.* i. t. 18; *Will. Angl.* i. p. 135, t. 21; *Hayes, Br. Birds*, t. 10; *Lewin, Br. Birds*, ii. t. 51; *Lath. Syn.* ii. p. 577, 25; *Sup.* p. 100; *Walc. Syn.* i. t. 46; *Pult. Cat. Dorset.* p. 6; *Don. Br. Birds*, ii. t. 37. Provincial: Wood-spice; Rain-bird, or Rain-fowl; High-hoe; Hew-hole; Awl-bird; Yappingale; Yaffle, or Yaffler; Woodwall; Poppinjay. — This species weighs about six ounces; length thirteen inches. The bill is dusky, two inches long; the tongue near six inches; irides white. The feathers on the crown of the head dusky, tipped with crimson; the eyes surrounded with black; beneath which, in the male, is a crimson spot bordered with black, which in the female is wholly black; the neck, back, lesser coverts of the wings, and scapulars are green; the rump pale yellow; quill-feathers dusky, the greater spotted on each web with white, the lesser very faintly spotted on the exterior webs, and deeply bordered with green; the coverts of the ears and whole under parts are of a very pale yellow-green; the tail-feathers are stiff, pointed, alternately barred with dusky and green, tipped with black, except the outer feathers; legs ash-colour; claws much hooked. This species is not uncommon about most of the wooded parts of England; its food is entirely insects. The formation of the whole of this tribe is admirably adapted to their mode of life. The bill, which is strong, and formed like a wedge at the point, enables them to force their way through the sap of a tree, when by instinct it is discovered to be decayed at heart. With this instrument it dislodges the larvæ of a numerous tribe of the coleopterous insects, as well as that stinking caterpillar the larva of the goat-moth (*Phalæna Cossus*), of which they frequently smell. The tongue is no less wonderfully formed for insinuating into all the smaller crevices to extract the hidden treasure, by transfixing the larger insects, or by adhesion withdraw the smaller; for, like the Wryneck, it is furnished with a glutinous substance for that purpose. Nor can we less admire the short and strong formation of the legs, and the hooked claws, so well calculated to enable them to climb and affix themselves against the body of a tree, either to roost, or perforate a hole; to assist which the stiff tail is of infinite use. The jarring noise so frequently heard in woods in the spring is occasioned by one or other of this genus, which, from frequent observa-

tion, we have no doubt is used as a call by both sexes to each other. It is curious to observe them try every part of a dead limb till they have discovered the most sonorous, and then the strokes are reiterated with such velocity that the head is scarcely perceived to move, the sound of which may be distinctly heard half a mile. Dr. Plot was mistaken when he conceived this noise to be produced by the Nuthatch, who says, in describing that bird, "that by putting their bill into a crack in the bough of a tree can make such a violent sound as if it was rending asunder." Woodpeckers are commonly seen climbing up a tree, but never down, as some have asserted. The hole which they make is as perfect a circle as if described by a pair of compasses. For the places of nidification the softer woods are attacked, the elm, ash, and particularly the asp, but rarely the oak. These are only perforated where they have symptoms of decay; and the excavations are frequently deep, to give security to their eggs. This species lays four or five white eggs, weighing about two drams, which are placed on the rotten wood, without any nest. The young birds have the appearance of crimson on their heads, but not so bright as in adults. Ants and their eggs are a favourite repast of this species, for which they are frequently seen on the ground searching the emmet-hills. The tongue is here made use of instead of the bill, similar to that of the Wryneck. Its note is harsh, and its manner of flying undulated.

Woodpecker, Hairy. — [Newman, *Zool.* 2986.] *Picus villosus*, *Lin. Syst.* i. p. 157, 16; *Gmel. Syst.* i. p. 435; *Ind. Orn.* i. p. 232, 19; [Wilson, *Amer. Ornith.* i. 159 of Jameson's Edition; *Flem. Brit. An.* p. 92; *Jenyns, Man. B. Vert. An.* p. 151; *Eyton, Cat. Brit. B.* p. 66; *G. R. Gray, Gen. of B.* ii. 434; *List of Brit. An.* Part iii. Birds, p. 123.] *Picus varius virginianus*, *Bris.* iv. p. 48, 17; *Ib.* 8vo, ii. p. 54. *Pic chevelu de Virginie*, *Buf.* vii. p. 74. *Hairy Woodpecker*, *Arct. Zool.* ii. No. 164; *Lewin, Br. Birds*, ii. t. 48; *Lath. Syn.* ii. p. 572, 18; *Ib. Sup.* p. 108; *Walc. Syn.* i. t. 47; [Pennant, *Brit. Zool.* i. 324.] — This species is rather less than the Spotted Woodpecker; weight about two ounces; length eight inches and three-quarters. The bill is an inch and a quarter long, of a horn-colour. The head is black; on each side the head are two white streaks, one over the eye, the other along the lower jaw, both arising from the base of the bill; across the hind part of the head is a red band; the upper part of the body are black, divided down the middle of the back with a list of white hair-like feathers; the wings are spotted

with white; under parts of the body wholly white; the four middle feathers of the tail are black; the next on each side obliquely marked with white at the tip; the last but one white, with the base black; outer one wholly white; legs and claws greyish brown. The female wants the red on the head, in other respects like the male. The Hairy Woodpecker is said to be not uncommon in the North of England. Dr. Latham mentions having seen a pair in the collection of the Duchess of Portland, which were shot near Halifax in Yorkshire. It is common in America. Said to be a great destroyer of apple-trees by pecking holes in them. [Colonel Montagu may possibly be wrong in stating that "the Hairy Woodpecker is said to be not uncommon in the North of England." There is, however, a well-authenticated instance of its occurrence near Whitby early in 1849: the record is from the pen of Mr. Higgins, and is published at p. 2496 of the 'Zoologist' for 1849, a full description, but without a name. Mr. Yarrell and Mr. Bird, both of whom gave the description a most careful examination, pronounced the bird to be *Picus villosus*. In the same journal for 1851 I cited, at p. 2985, Wilson's description, and gave a very exact figure of the Whitby specimen, which still remains in the possession of Mr. Higgins. It must, however, be admitted that this North-American species has little or no claim to a place in the British list; and although its status differs from that of *Picus martius*, inasmuch as two specimens exist, yet it is equally difficult to account for its immigration into the British Isles.]

[Woodpecker, Pied.—Bewick's name for the Great Spotted Woodpecker.]

Woodpecker, Greater Spotted. — [Yarrell, ii. 153; Hewitson, lxi. 240.] *Picus major*, *Lin. Syst.* i. p. 176, 17; *Gmel. Syst.* i. p. 436; *Ind. Orn.* i. p. 228, 13; *Bewick, Br. Birds*, i. t. p. 122. *Picus varius major*, *Raii Syn.* p. 43, A. 4; *Will.* p. 94, t. 21; *Bris.* iv. p. 34, 13; *Ib.* 8vo, ii. p. 51. *L'Epeiche, ou Pic varié*, *Buf.* vii. p. 57. *Greater Spotted Woodpecker*, *Br. Zool.* i. No. 85; *Ib.* fol. p. 79, t. E.; *Arct. Zool.* ii. No. 162; *Will. Angl.* p. 137, t. 21; *Albin*, i. t. 19; *Hayes, Br. Birds*, t. 9; *Lewin, Br. Birds*, t. 47; *Lath. Syn.* ii. p. 564, 12; *Sup.* p. 107; *Walc. Syn.* i. t. 48; *Pult. Cat. Dorset.* p. 6. — The weight of this species is about two ounces and three-quarters; length nine inches. The bill is dusky, an inch and a quarter long; irides reddish brown. The forehead dirty white; crown of the head black; hind part of a deep crimson; the cheeks are white, beneath which is a black line from the lower

mandible to the back of the head, from the middle of which another line of the same colour runs down on each side, and almost meets at the upper part of the breast; on each side the back of the neck is a white spot; the back, rump, coverts of the tail, and lesser coverts of the wings are black; the scapulars, and some of the greater coverts adjoining, are white; the quill-feathers are black, marked with white spots on each web; the throat and under parts are dirty white; vent bright crimson; the four middle feathers of the tail are black, the rest more or less white towards the point, marked with black spots; legs lead-colour. The female differs only in having that part of the head black which in the male is red. The Spotted Woodpecker is less frequent in England than the Green. Its habits and manners nearly the same, except that it rarely descends to the ground in search of food, and that it more frequently makes that jarring noise than either of the other species, especially when disturbed from the nest, which we had the opportunity of observing. It was with difficulty the bird was made to quit her eggs; for notwithstanding a chisel and mallet were used to enlarge the hole, she did not attempt to fly out till the hand was introduced, when she quitted the tree at another opening. The eggs were five in number, perfectly white and glossy, weighing about one dram, or rather more. These were deposited two feet below the opening, on the decayed wood, without the smallest appearance of a nest. As soon as the female had escaped, she flew to a decayed branch of a neighbouring tree, and there began the jarring noise before mentioned, which was soon answered by the male from a distant part of the wood, but soon joined his mate, and both continued these vibrations, trying different branches till they found the most sonorous.

SUPPLEMENT.—It will be seen in the former part of this work, under the article of Woodpecker, Middle Spotted, that *Picus medius* of Linnæus was considered as only the young of this species in its nestling feathers; and we there took notice of a specimen which we supposed was in the intermediate state of plumage. We are now happy to have it in our power to decide this matter most satisfactorily, by the kind communication of Lord Stanley, who took five young of this species just as they were about to leave their nest, and found them to be the *Picus medius*. The old birds attended and fed them for some time in confinement. Both sexes have the crown of the head red for some time after they leave the nest. This point having been determined upon such good authority, we

beg that the synonyms of the *Picus major* and *medius* may be consolidated.

Woodpecker, Lesser Spotted.—[Yarrell, ii. 159; Hewitson, lxi. 241.] *Picus minor*, *Lin. Syst. i. p. 176, 19*; *Gmel. Syst. i. p. 437*; *Ind. Orn. i. p. 229*; *Nat. Miscel. t. 225*; *Lath. Syn. Sup. ii. p. 140*; *Bewick, Br. Birds, i. p. 124*. *Picus varius tertius*, *Raii Syn. p. 43, 6*; *Will. p. 94, t. 21*. *Picus varius minor*, *Bris. iv. p. 41, 15*; *Ib. 8vo, ii. p. 53*. *La petite Epeiche*, *Buf. vii. p. 62*. Lesser Spotted Woodpecker, *Br. Zool. i. No. 87, t. 37*; *Ib. fol. 79, t. E.*; *Arct. Zool. p. 278, E.*; *Albin, i. t. 20*; *Lewin, Br. Birds, t. 49*; *Lath. Syn. ii. p. 566, 14*; *Sup. p. 107*; *Walc. Syn. i. t. 50*; *Pult. Cat. Dorset. p. 6*; *Don. Br. Birds, ii. t. 36*.—The weight of this small species is not quite five drams; length five inches and a half. The bill is lead-colour; irides red-brown. Forehead, breast, and belly dirty white; the cheeks and sides of the neck white, bounded by black above and below; crown of the head crimson, bounded on each side with black, which, joining behind, runs down in a peak on the back of the neck; the back and scapulars are barred with black and white; the quill-feathers and some of the larger coverts are black, spotted with white, the lesser coverts wholly black; the four middle feathers of the tail are black, the rest more or less white at the ends, spotted with black; the outer one almost white; legs lead-colour. The female resembles the other sex in plumage, except on the crown of the head, which is white where the male is red; neither sex has any red at the vent. The male sometimes has a few dusky streaks on the sides of the breast. Young male birds possess the red on the head before they leave their nest; a circumstance not usual in birds that have such vivid colours. This is by much the scarcest species; it possesses all the habits of the preceding; the note is also the same, but not so strong. The eggs are white, and weigh about thirty-three grains, five of which we took out of a decayed tree, deposited on the rotten wood, without any nest, at a considerable distance below the entrance. The aperture corresponded with the size of the bird, but did not appear recently made. It is probable, however, it is able to perform this work for itself; and instinct points out the insecurity in making choice of a larger opening to their place of incubation, as they would then be liable to be dislodged by the larger species, the Daw and the Stare. We have received it from Gloucestershire by the names of Hickwall and Crank-bird; have also seen it in Wiltshire, where we took its eggs.

SUPPLEMENT.—There is much probability that the young of this species, like those of the last, possess red crowns in their nestling plumage, without regard to sex.

Woodpecker, Middle Spotted.—*Picus medius*, *Lin. Syst.* i. p. 176, 18; *Gmel. Syst.* i. p. 436; *Ind. Orn.* i. p. 229, 14. *Picus varius minor*, *Raii Syn.* p. 43, 5. *Picus varius major*, *Will. t.* 21. *Picus varius*, *Bris.* iv. p. 38, 14, t. 2, f. 1; *Ib.* 8vo, ii. p. 52. Middle Spotted Woodpecker, *Br. Zool.* i. No. 86, t. 37; *Arct. Zool.* ii. p. 278, D.; *Lewin, Br. Birds*, t. 48; *Lath. Syn.* ii. p. 565, 13; *Ib. Sup.* p. 107; *Walc. Syn.* i. t. 49; *Pult. Cat. Dorset.* p. 6.—This bird, which we consider as the young of the Greater Spotted Woodpecker, but described by Linnæus and others as a distinct species, differs only from that bird in having the whole crown of the head red; the black marking about the head and neck not so large, and the white on the cheeks more dusky; that on the breast inclining to brown; the length and weight nearly the same. It should seem that the young males of the Greater Spotted Woodpecker have at first the whole crown of the head red; but that in two or three months after they leave the nest the red feathers on the top of head are displaced by black ones. In this state of change we have now one before us, which was killed in November. The back of the head is crimson; the crown black, spotted with crimson feathers; and what strengthens this opinion is, that these birds are only to be met with from July to the latter end of November, as far as we have been able to collect; at least we have never been able to procure such at any other time. Dr. Latham seems to favour this opinion. Buffon also appears to consider it as a variety only of the Greater Spotted species. The reason why this should appear scarcer is, that few Woodpeckers are killed when the trees are in full foliage, and by the time the leaves are fallen these have assumed their full plumage. [This name has been dismissed by general consent from the British list: but the question appears to require farther consideration. In Harting's 'Birds of Middlesex,' a work now in the press, and one which will prove equally creditable to the industry and ornithological acumen of the writer, the following passage occurs under this name:—"In June, 1846, Mr. Spencer shot a pair of birds at Caen Wood, Hampstead, which he believes to be the Middle Spotted Woodpecker (*Picus medius*). This species is somewhat smaller than *P. major*, and considerably larger than *P. minor*. The red on the head extends to the top of the crown, which is not the case

with *P. major*. There is rather more white also on the scapulars, and the red of the under tail-coverts is not so brilliant. On obtaining this pair of birds Mr. Spencer skinned them, and sent the bodies to Mr. John Askew, who took them to Mr. Yarrell, and he decided they were the bodies of *old* birds. This would seem a sufficient answer to the argument that they were the *young* of *P. major*. When Mr. Spencer, however, produced the skins, Mr. Yarrell suggested that the young of *P. major* did not attain the adult plumage until after the second or third year, and that consequently the birds in question might be old birds, and yet the young of *P. major*. It has been ascertained, however, beyond doubt that the young of this species assume the adult plumage at the first moult, and that they are completely moulted by the end of October. The birds in question were shot in June. The young of *P. major*, obtained in July, were in deep moult."—*Birds of Middlesex*, p. 108.]

[**Woodpecker, Threetoed.**—*Edwards' Birds*, pl. 114. *Picus tridactylus*, *Linn. S. N.* i. 177; *Temm. Man. d'Ornith.* i. 401, iii. 283; *Jenyns, Man. B. Vert. An.* p. 151; *Gould, Birds of Europe*, pl. 232; *G. R. Gray, List of Brit. An. Part.* iii. Birds, p. 121.—**MALE**: Forehead varied with black and white; crown of the head golden yellow; occiput and cheeks glossy black; a black moustache, which is prolonged downwards to the breast; a straight white line behind the eye, and a broader one beneath it; front of the neck and the breast pure white; upper part of the back, sides of the breast, flanks, and belly streaked with black and white; wings dull black, having only a few small white spots on the quills; the upper portion of the tarsus covered with feathers; upper mandible brown; lower mandible whitish; irides blue; length nine inches. **FEMALE**: Crown of the head shining white or silvery, variegated with slender narrow black streaks. Inhabits the vast forests and mountains of the North of Europe, Asia, and America; it is very common in Switzerland, but is not found at a greater elevation than 4000 feet above the level of the sea. It is rare in France and Germany, and has not been observed in Holland. It lives on wood-boring insects, and nests in holes in the trunks of trees, and lays four or five eggs, which are white and glossy."—*Temminck*, i. 401. Edwards mentions its occurrence in Scotland, but it certainly is not of frequent occurrence there, since no recent record of its appearance has been noted.]

[**Wood-pie.**—A name of the Great Spotted Woodpecker.]

[Wood Pigeon.] } See Dove, Ring.
Woodquest.

[Wood Sandpiper.—See Sandpiper, Wood.]

Woodspite.—See Woodpecker, Green.

[Woodwall.—A name of the Green Woodpecker.]

[Wood Warbler.] } See Wren, Wood.
[Wood Wren.] }

Wren, Common.—[Yarrell, ii. 174; Hewitson, lxii. 244.] *Motacilla Troglodytes*, *Lin. Syst.* i. p. 337, 46; *Gmel. Syst.* ii. p. 993; *Raii Syn.* p. 80, A. 11; *Will.* p. 164, t. 42. *Sylvia Troglodytes*, *Ind. Orn.* ii. p. 547, 148. *Regulus*, *Bris.* iii. p. 425, 24; *Ib.* Svo, i. p. 428. *Troglodyte Roitelet*, *Buf.* v. p. 352, t. 16, f. 1. Wren, *Br. Zool.* i. No. 154; *Ib.* fol. 102, t. 42; *Arct. Zool.* ii. No. 322; *Albin*, i. t. 53, B.; *Ib. Song Birds*, t. p. 64; *Will. Angl.* p. 229, t. 42; *Hayes, Br. Birds*, t. 38; *Lath. Syn.* iv. p. 506, 143; *Lewin, Br. Birds*, iii. t. 111; *Walc. Syn.* ii. t. 242; *Pult. Cat. Dorset.* p. 9.—This species of Warbler weighs about two drams and three-quarters; length near four inches and a quarter. The bill is slender, full half an inch in length, a little curved, and of a dusky brown colour; irides dark hazel. The head, neck, and upper parts of the body are of a deep reddish brown, obscurely marked with transverse dusky lines; over the eye a light-coloured streak; quills and tail dusky brown; the former spotted on the outer webs with light brown, the latter crossed with dusky black lines; the under parts light rufous-brown; the sides and thighs crossed with darker lines; under tail-coverts obscurely spotted with black and white; legs pale brown. This pretty little Warbler, like the Redbreast, frequently approaches the habitation of man, and enlivens the rustic garden with its song the greater part of the year. It begins to make a nest early in the spring, but frequently deserts it before it is lined, and searches for a more secure place. It is frequently made under the thatch of out-buildings, against the side of a mossy tree, or against an impending bank that secures it from the rain; sometimes in a low thick bush. But what is remarkable, the materials of the nest are generally adapted to the place: if built against the side of a hay-rick, it is composed of hay; if against the side of a tree covered with white moss, it is made of that material; and with green moss if against a tree covered with the same, or in a bank. Thus instinct directs it for security. The lining is invariably feathers. The eggs are seven or

eight in number, white, sparingly marked with small reddish spots, most commonly at the larger end; their weight about twenty grains. The Wren does not begin the bottom of its nest first, which is usual in most birds, but first, as it were, traces the outlines if against a tree, which is of an oval shape, and by that means fastens it equally strong to all parts, and afterwards encloses the sides and top, leaving only a small hole near the top for entrance. If the nest is placed under a bank, the top is first begun, and well secured in some small cavity, by which the fabric is suspended. The food of this species is insects, which it finds in sufficient abundance to support life even in the severest winters.

[Wren, Dalmatian.—Yarrell, i. 380, under name of Dalmatian *Regulus*. *Motacilla proregulus*, *Pall. Zoogr.* i. 499. *Regulus proregulus*, *Keys & Bl.* p. 55; *G. R. Gray, Gen. of Birds*, i. 175; *Id. List of Brit. An.* Part iii. Birds, p. 58. *Reguloides proregulus*, *Jerdon, Birds of India*, ii. 197. *Regulus modestus*, *Temm. Man. d'Ornith.* iv. 618; *Gould, Birds of Europe*, pl. 149; *Yarrell*, i. 380. — "Above olive-green, brightest on the rump, wings, and tail; crown dusky, with a pale mesial line, not always very distinct; two conspicuous yellowish white bars on the wings, the hind one the broader of the two; and behind this is a dark patch; tertiaries conspicuously margined with whitish; secondaries and some of the primaries slightly tipped with the same; axillaries, with the fore part of the wing underneath, pale yellow; supercilia and plumage beneath greenish albescent; bill dusky above, yellow beneath; legs pale brown; irides dark; length four inches and a quarter; extent six inches and a half; wing two inches and an eighth to two inches and a quarter; tail an inch and a half to an inch and three-quarters."—*Jerdon*, ii. 197. Nothing certain is known of the nest or eggs of this little bird, which is tolerably common in most parts of India during the cold weather, and at all times in the Himalayas. Gould, on the authority of Colonel Felders, states that a specimen has been obtained in Dalmatia, whence Mr. Yarrell's name of Dalmatian. A second specimen is recorded by Mr. Hancock to have been shot in Northumberland, on the 26th of September, 1838 ('Annals of Natural History,' ii. 310). This Indian species has little, if any, claim to a place either in the British or European list.]

[Wren, Firecrested.—Yarrell, i. 376 (under name of Firecrested *Regulus*); *Hewitson*, xxxviii. 148. *Sylvia ignicapilla*, *Temm.*

Man. d'Ornith. i. 231. *Regulus ignicapillus*, *Jenyns, Man. B. Vert.* p. 113; *Gould, Birds of Europe*, pl. 148, fig. 2; *Yarrell*, i. 376; *G. R. Gray, List of Brit. An.* Part iii. Birds, p. 58. — "On the cheeks are three longitudinal bands, two of them white and one black; the crest of the male very bright orange; beak compressed, stout at the base."—*Temminck*, l. c. *Temminck*, in his first edition, described the male of this species as that of the Goldcrest, and it is not a little remarkable that no one detected the error until pointed out by himself in the second edition. The two species are very similar, and it has been thought best to avoid unnecessary repetition by simply giving the terse and admirable distinctive characters from *Temminck*. It is common in the great forests of Central Europe, and occurs not very uncommonly in England, as recorded in so many volumes of the 'Zoologist,' the records themselves proving that the species is not considered abundant. Its nest is suspended beneath a branch, like that of the Goldcrest, and is said to contain from five to ten eggs, of which the ground colour is pink, densely irrorated with minute speckles of reddish brown.]

Wren, Goldencrested.—[*Yarrell*, i. 371, under name of Goldencrested *Regulus*; *Hewitson*, xxxviii. 146.] *Motacilla Regulus*, *Lin. Syst.* i. p. 338, 48; *Gmel. Syst.* ii. p. 995. *Sylvia Regulus*, *Ind. Orn.* ii. p. 548, 152; *Bewick, Br. Birds*, i. t. p. 233; *Regulus cristatus*, *Raii Syn.* p. 79, A. 9; *Will.* p. 163, t. 42; *Bris.* iii. p. 579, 17; *Ib.* 8vo, i. p. 472. *Roitelet*, *Poul, Souci, Buf.* v. p. 363, t. 16, f. 2. Golden-crested Wren, *Br. Zool.* No. 153; *Ib.* fol. 101, t. S. f. 3; *Arct. Zool.* ii. No. 321; *Ib. Sup.* p. 64; *Will. Angl.* p. 227; *Edw.* t. 254, 1; *Albin*, i. t. 53; *Hayes, Br. Birds*, t. 38; *Lath. Syn.* iv. p. 508, 145; *Lewin, Br. Birds*, iii. t. 112; *Walc. Syn.* ii. t. 243; *Pult. Cat. Dorset.* p. 9; *Don, Br. Birds*, i. t. 4. Golden-crested Wren, *Nat. Miscel.* t. 165. Provincial: Marygold Finch.—This elegant little species of Warbler is the smallest British bird. Its weight seldom exceeds eighty grains; length three inches and three-quarters. The bill is slender and black; irides hazel. The crown of the head is singularly beautiful; the crest is composed of a double series of feathers arising from each side, and almost meet at their points; the exterior are black, the interior bright yellow; between which, on the crown, the feathers are shorter, and of a fine deep orange; the forehead, chin, and round the eyes whitish; the hind part of the head, neck, and back green; the two first dashed with ash-colour; quills dusky, edged with green;

at the base of the secondary quills is a black bar, above which the coverts are tipped with white, forming a narrow bar of that colour; above that the smaller coverts are black, tipped with white, which form two other small obscure bars; the under parts of the body are brownish white, lightest on the belly, a little tinged with yellow; the tail is somewhat forked, the feathers dusky, edged with yellowish green. The female has the head rather less crested, and the crown is bright yellow where the male is orange. The young birds do not possess the crest and yellow feathers till autumn. The nest is not made with an opening on one side, as described by some, but is in form and elegance like that of the Chaffinch, composed of green moss, interwoven with wool, and invariably lined with small feathers, with which it is so well bedded as to conceal the eggs. It is sometimes placed against the body of a tree covered with ivy, but most times underneath a thick branch of a fir. The eggs are from seven to ten in number, of a brownish white, rather darker at the larger end; their weight nine or ten grains. This minute species braves the severest winters of our climate, being equally found in all parts in that rigorous season; and is by no means so scarce a bird as it appears, but from its smallness is seldom noticed. It would in all probability be much more plentiful, but from some cause we have not been able to discover, the female is frequently destroyed at the time of incubation, and the nest with eggs left to decay. For a further account of this beautiful little bird see the Introduction. In Cornwall it is called Wood Titmouse; in Devonshire, Tidley Goldfinch.

SUPPLEMENT.—A pair of these birds in the collection of Mr. Luscombe, of Kingsbridge, are of a cream-colour, with the usual yellow crown, by which the two sexes are distinguished. This species appears to be common throughout Europe, and is said to have been found both in Asia and America. The song of the Golden-crested Wren (which is short, weak, and with little variety) is repeated, with small intervals, almost through the day in the spring, and until it has young. It is always busy and active amongst the trees, especially firs, to which it is extremely partial.

Wren, Green.—See Wren, Wood.

Wren, Ground.—See Wren, Yellow.

Wren, Kitty or Chitty.—See Wren, Common.

Wren, Reed.—[*Yarrell*, i. 309; *Hewitson*,

xxxii. 119, under name of Reed Warbler.] *Motacilla arundinacea*, *Gmel. Syst.* i. p. 992. *Sylvia arundinacea*, *Ind. Orn.* ii. p. 510, 12. *Passer arundinaceus minor*, *Raii Syn.* p. 47, A. 3? *Will.* p. 99? Bouscarle de Provence, *Buf.* v. p. 134? Lesser Reed Sparrow, *Will. Angl.* p. 144? Reed Wren, *Lath. Syn. Sup.* p. 184; *Lewin, Br. Birds*, iii. t. 114. — The length of this species of Warbler is scarce five inches and a half; weight nearly three drams. The bill is about half an inch in length, dusky above, yellowish beneath, and broad at the base; at the corner of the mouth are three strong bristles; irides hazel. The plumage of the whole upper parts of the bird are of a plain olive-brown; the under parts yellowish white, lightest on the throat and down the middle of the belly; the sides a little inclining to rufous-brown; from the bill to the eye is an obscure lightish streak; eyelids lighter, but no stroke over the eye; the tail is cuneiform; the feathers, like those of the quills, dusky brown, edged with the same colour as the back; legs dusky brown. This bird has been in general confounded with the Sedge Warbler; its form, size, manners, and habits are alike, and are both migrative species; so that it is difficult to discover which of these birds most authors mean by their descriptions. The Reed Wren, however, may at once be distinguished from the other by the base of the bill being broader; in having no light stroke over the eye, which in the other is broad and conspicuous; and in the whole upper parts being of one plain colour. Its nest and eggs are also different. The nest is composed of long grass and the seed-branches of reeds, and lined with the finer parts of the latter; it is very deep, and conceals the bird when sitting. This is generally fastened by long grass to several reeds which are drawn together for that purpose, and generally placed over the water. The eggs are four or five in number, rather larger than those of the Sedge Warbler, of a greenish white, blotched all over with dusky brown. This species is much more local than the Sedge bird, but are sometimes found together. Their notes are similar. We have found both species all along the coasts of Kent and Sussex, from Sandwich to Arundel, amongst the reedy pools and ditches, especially on Romney Marsh; but in Wiltshire and Somersetshire, where the Sedge Warbler is found in abundance throughout the banks of the Avon, not a single Reed Wren is to be found. The nest of this bird being deep gives security to the eggs, which would otherwise be thrown out by the wind. We have seen the bird sitting on her nest when the wind blew hard, and at

every gust forced it almost to the surface of the water. It makes its first appearance with us the latter end of April, or beginning of May, and departs in September. Is said to be found in the fens of Lincolnshire, and the banks of the river Coln in Buckinghamshire.

Wren, White. } See Wren, Yellow.
Wren, Willow. }

Wren, Wood. — [*Yarrell*, i. 346; *Hewitson*, xxxvi. 135, under name of Wood Warbler.] *Sylvia Sylvicola*, *Lin. Trans.* iv. p. 35; *Lath. Syn. Sup.* ii. p. 237. *Regulus non cristatus major*, *Will.* p. 164; *Ib. Angl.* p. 228; *White, Hist. Selb.* p. 55; *Bris. Orn.* 3, 482, A.; *Ind. Orn.* ii. p. 550, d. Wood Wren, *Lin. Trans.* ii. p. 245, t. 24. Green Wren, *Albin*, ii. t. 86, 6? Yellow Willow Wren, *Bewick, Br. Birds*, i. p. 229. Larger not crested Wren, *Will. Angl.* p. 228. Larger Yellow Wren, *White, Selb.* p. 55; *Lath. Syn.* iv. p. 514, C. *Motacilla Sibalatrix*, *Das Laubvogelchen*, *Naturf.* 27, p. 47, 4. — This species of Warbler weighs about two drams forty grains; length five inches and a quarter. The bill is dusky; irides hazel. The upper part of the head, back, scapulars, wing-coverts, and upper coverts of the tail are of a lively yellow-green; over the eye is a bright brimstone-coloured streak; the cheeks and throat are yellow; the upper part of the breast white, tinged with yellow; the lower part, the belly, and under tail-coverts pure white; the quill-feathers are dusky, edged on their exterior webs with yellow-green; the tail a little forked, coloured like the quills, except the two outmost feathers, which want the yellow margin; the legs yellowish brown. The female is rather larger, weighing about three drams; the plumage exactly like the male. The Wood Wren is a migrative species, appearing with us first about the latter end of April, the females ten days or a fortnight later, and depart again in September. The reason this bird has been so little noticed as a distinct species is from its great similitude to the Yellow Wren, for which it has been confounded, and probably likewise for the Lesser Pettychaps. But its superior size to the latter, and the pure whiteness of the under tail-coverts, are characteristic marks of distinction; which part in both the others is tinged with yellow; the colour of the upper parts is also much more vivid, and the stroke above the eye brighter yellow. It differs also from those birds in manners and habits: this is found to inhabit woods only in the breeding season. The nest is placed on the ground, in form like both that of the other birds, being oval, with a small hole near the top,

constructed of dry grass, a few dead leaves, and a little moss; and invariably lined with finer grass and a few long hairs. The other species always line their nests with feathers. The eggs are six in number, white, sprinkled all over with purplish spots. In some these markings are confluent, inclining to rust-colour; their weight from eighteen to twenty-two grains. This is not an uncommon species, having met with it in most parts of the South of England and Wales, and as far westward as Cornwall. It seems partial to oak and beech woods, where it may be found by its singular note, which seems to express the word "twee," drawn out to some length, and repeated five or six times successively, terminating with the same notes delivered in a hurried manner, at which time it shakes its wings. This seems to be the extent of its song, the latter part of which is chiefly left out after the breeding season. It is also found in Germany, where it is likewise a migrative bird. Dr. Beckstein describes it in the 27th volume of 'Naturforscher,' under the title *Der Laubrogelchen* (Little Leaf-bird). In the Leverian Museum, case No. 271, we observed it inscribed Green Wren.

SUPPLEMENT.—This species of Warbler appears to be found occasionally in most parts of Great Britain, in situations congenial to its habits.

Wren, Yellow.—[Yarrell, i. 351, under name of Willow Warbler; Hewitson, xxxvi. 137.] *Motacilla Trochilus*, *Lin. Syst.* i. p. 338, 49; *Gmel. Syst.* ii. p. 995. *Sylvia Trochilus*, *Ind. Orn.* ii. p. 550, 155; *Lath. Syn. Sup.* ii. p. 238; *Nat. Miscel. t.* 189. *Asilus*, Small Yellow Bird, *Bris.* iii. p. 479, 45; *Ib.* 8vo, i. p. 441; *Raii Syn.* p. 80, A. 10; *Will.* p. 164; *Ib. Angl.* p. 228. Le Pouillot, *Buf.* v. p. 344. Yellow Wren, *Br. Zool.* i. No. 151; *Ib.* fol. 101, t. S. f. 2, S. 2, f. 1; *Arct. Zool.* ii. No. 319; *White, Hist. Selb.* pp. 28, 55; *Hayes, Br. Birds*, t. 38; *Lath. Syn.* iv. p. 512, 147; *Don. Br. Birds*, i. t. 14; *Lewin, Br. Birds*, iii. t. 113; *Pult. Cat. Dorset.* p. 9. VAR.: *Motacilla acredula*, *Lin. Syst.* i. p. 338, 49, β . *Ficedula Carolinensis*, *Bris.* iii. p. 486, 48; *Ib.* 8vo, i. p. 443. *Ceanthe fusco-lutea minor*, *Raii Syn.* p. 186, 39. Le Fiquier brun et jaune, *Buf.* v. p. 295. Yellow Wren, *Edw.* t. 278, f. 2. Scotch Wren, *Br. Zool.* ii. No. 152; *Arct. Zool.* ii. p. 420, N.; *Ib. Sup.* p. 64; *Lath. Syn.* iv. p. 513. Provincial: Willow Wren; Ground Wren; Ground Huckmuck.—This species weighs about two drams and three-quarters; length five inches and a quarter. The bill is dusky above, yellowish beneath; irides hazel. The whole upper parts of the plumage are of a greenish yellow-

brown; the under parts are white, tinged with yellow; on the breast are a few yellow streaks; quills dusky brown, edged with yellow; coverts yellow, thighs the same; tail like the quills, slightly edged the same; over the eye a faint yellowish stroke; legs light brown. This is a plentiful species in some parts. Frequents wooded and enclosed situations, especially where willows abound. Is frequently found with the Wood Wren, but does not extend so far to the west in England, as it is rarely met with in Cornwall. It comes to us early in April, and soon begins its usual song, which is short, with little variety. About the latter end of the same month, or beginning of May, it makes a nest of an oval shape, with a small opening near the top, composed of moss and dried grass, and lined with feathers. This is placed in the hollow of a ditch, or in a low bush close to the ground. The eggs are six or seven in number, white, spotted with light rust-colour towards the larger end; others are sprinkled all over; their weight sixteen or eighteen grains. The plumage of this bird is so like that of the Lesser Pettychaps that, were it not for its superior size, it would be scarcely distinguishable. The colour of the legs, however, is an unerring mark of distinction. It has also been frequently confounded with the Wood Wren; but each have their essential characters; we therefore refer our readers for further particulars to those species. The egg of this bird is readily distinguished from that of the Lesser Pettychaps, the spots in this being of a rust-colour, those in the other invariably dark purple.

SUPPLEMENT.—It has been asserted that this is the smallest of the European birds, the Golden-crested Wren excepted; but this is a part of the general confusion between several of these little yellow species. In fact it is considerably larger than the Lesser Pettychaps, and equal in size to the Wood Wren, which has been improperly called the largest Yellow Wren, when in truth they are both of equal weight and length. On the contrary, the Lesser Pettychaps is full one-fifth less weight than either of the others, being only about two drams, the others two drams and a half: the length four inches and a half; the others measure about five inches and a quarter. We repeat this in order to clear up as far as possible the confusion in these birds. The Yellow Wren rarely, if ever, precedes the Lesser Pettychaps in its vernal migration, but does so usually in its autumnal; indeed the latter has been known to remain with us the whole winter, the other never.

[Writing Lark. — Mr. Yarrell refers this name to the Yellow Bunting.]

Wryneck. — This genus consists of only a single species, no other having as yet been discovered in any part of the world. the characters are as follows: Bill roundish, slightly incurvated, and not very strong. Nostrils bare of feathers, and somewhat concave. Tongue three times the length of the bill, slender, and armed at the point with a horny substance. Tail consists of ten flexible feathers. Toes placed two backwards, two forwards.

Wryneck. — [Yarrell, ii. 163; Hewitson, lxii. 242.] *Yunx torquilla*, *Lin. Syst. i. p. 172*; *Gmel. Syst. i. p. 423*; *Raii Syn. p. 44, A. 8*; *Will. p. 95, t. 22*; *Ind. Orn. i. p. 223, 1*; *Bris. iv. p. 4, t. 1, f. 1*; *Ib. 8vo, ii. p. 43*; *Nat. Miscel. t. 156*; *Bewick, Br. Birds, i. t. p. 115*. Le Torcol, *Buf. vii. p. 84, t. 3*. Wryneck, *Br. Zool. i. No. 83*; *Ib. fol. 80, t. F. G.*; *Arct. Zool. ii. p. 267, B.*; *Will. Angl. p. 138, t. 22*; *Albin, i. t. 21*; *Lewin, Br. Birds, ii. t. 43*; *Lath. Syn. ii. p. 548, t. 24*; *Ib. Sup. p. 103*; *Walch. Syn. i. t. 44*; *Pult. Cat. Dorset. p. 6*; *Don. Br. Birds, iv. t. 83*. Provincial: Long-tongue; Emmet-hunter. — The Wryneck seems to be the link between the Woodpecker and the Cuckow; it has the tongue and feet of the former, but not the strong angular bill or stiff tail; it has also the feet, and somewhat the bill, of the latter; as well as the same number of flexible feathers in the tail. The weight of this beautiful bird is about ten drams; the length seven inches; the bill is three-quarters of an inch long, nearly strait, and sharp-pointed; tongue cylindric, two inches and a quarter in length; irides light hazel, inclining to yellow. The upper part of the head and neck, back, rump, and upper tail-coverts are ash-colour, marked with numerous fine dusky, transverse, undulated lines; from the crown of the head a black list runs half-way down the back, disposed in four indistinct lines; the wing-coverts like the back, but inclining to rufous, and spotted with grey; the greater quills dusky, marked on their exterior webs with quadrangular rust-coloured spots; the chin and fore part of the neck yellowish white, crossed with dusky lines; lower part of the breast, belly, and sides white, with small triangular dusky spots; under tail-coverts rufous-white, crossed with dusky lines; the tail-feathers are broad, and rounded at their ends, and of the same colour as the back, with four distinct black bars; legs brown. The pen or the pencil can only give a very inadequate idea of the elegant markings of this bird. The name of Wryneck seems

to have been given it from the singular manner of turning its head over its shoulder alternately, at which time the black list on the back of the neck gives it a twisted appearance; it also erects all the feathers on the crown of the head in a terrific manner. It has been called the Emmet-hunter with great propriety, that insect being its chief food. The bill of this bird seems to be of little use in procuring subsistence, the tongue being the chief instrument used for such purposes. We were enabled to examine the manners of this bird minutely by taking a female from her nest, and confining her in a cage for some days. A quantity of mould with emmets and their eggs were given it; and it was curious to observe the tongue darted forward and retracted with such velocity, and with such unerring aim, that it never returned without an ant or an egg adhering to it, not transfixed by the horny point, as some have imagined, but retained by a peculiar tenacious moisture, by Nature provided for that purpose. While it is feeding the body is motionless, the head only is turned to every side, and the motion of the tongue is so rapid that an ant's egg, which is of a light colour, and more conspicuous than the tongue, has somewhat the appearance of moving towards the mouth by attraction, as a needle flies to a magnet. The bill is rarely used, except to remove the mould in order to get more readily at these insects; where the earth is hollow the tongue is thrust into all the cavities to rouse the ants; for this purpose the horny appendage is extremely serviceable, as a guide to the tongue. We have seen the Green Woodpecker take its food in a similar manner; and most probably every species of that genus does the same. The Wryneck makes a noise very much like the smaller species of Hawks, which it frequently repeats in the spring, soon after its arrival, which is generally about the middle of April, sometimes earlier in that month. Appearing at the same time with the Cuckow, it has been termed that bird's servant or attendant. If this bird is surprised in its nest, it has a singular action of defence: stretching itself at full length, and erecting the feathers on the head, it suddenly rises, making at the same time a short hissing noise, something like that of a cock Turkey. This was frequently done in the cage when it was approached. It is not uncommon in the southern and eastern parts of the kingdom, but is more scarce westward, and rarely if ever found in Cornwall. It chiefly inhabits woods, or thickly-enclosed countries, where trees abound, or orchards; is seldom observed to climb trees, although the feet seem calculated for that purpose. It makes no

nest, but deposits its eggs, to the number of nine or ten, in the hole of a decayed tree, on the rotten wood; these are perfectly white, weighing about thirty-seven grains.

SUPPLEMENT. — How far this species is found northward in England we have not been able to clearly ascertain, but, as Mr. Bewick speaks of having found emmets in the gizzard of one he dissected, we may conclude it is met with in Northumberland, though probably rare so far north. It is more common in the eastern than in the western counties, and we observed it near the coast in Lincolnshire; but we

believe it is rarely found, except where there are old and decayed pollard elm trees. With us it is by no means so generally diffused as the Cuckow; nor do we believe it extends so far north on the Continent as that bird. It is, however, known in Asia and Africa, as well as in Europe. Is said to sometimes make a nest of dry grass; but the eggs, which we have more than once taken, were placed on the bare decayed wood in the hole of a tree.

Wynkernel.—See Gallinule, Spotted.

Y.

Yaffle, or Yaffler. — See Woodpecker, Green.

Yarwhelp. }
Yarwip. } See Godwit, Common.

[Yellow Ammer.]—See Bunting, Yellow.

Yellow Bird.—See Oriole, [Golden.]

Yellow Bird, Little.—See Wren, Yellow.

[Yellow Bunting.] }
Yellow Hammer. } See Bunting, Yellow.

[Yellowlegged Gull, — Dr. Fleming calls

the Lesser Blackbacked Gull by this name.]

[Yellow Owl. — Bewick's name for the White Owl, in early editions.]

[Yellow Plover.—One of the names of the Golden Plover.]

[Yellow Wagtail.—See Wagtail, Yellow.]

[Yellow Warbler.—See Wren, Yellow.]

Yellow Yowley.—See Bunting, Yellow.

Yelper.—See Avoset.

A LIST OF BIRDS

RECORDED AS HAVING OCCURRED IN BRITAIN.

ARRANGED AND NAMED IN ACCORDANCE WITH THE THIRD EDITION OF YARRELL'S
'HISTORY OF BRITISH BIRDS.'

EXPLANATIONS OF THE LIST.

1. When a numeral is placed before the name, it is intended to imply the number of preserved British specimens supposed to exist in Collections: all such birds I believe to have no claim whatever to a place in the British list.

2. The numerals following the name indicate the page in this work in which the bird is described.

3. The letters following the name show the additions to Colonel Montagu's 'Dictionary,' and the source whence the record has been obtained. S. Selby's 'British Ornithology;' Y. Yarrell's 'History of British Birds;' Z. 'Zoologist.'

4. Those birds described by Montagu as species, but which the Editor of this Edition declines to consider such, are omitted altogether from the List, since they would have greatly extended it without corresponding advantage: instances of this occur in the Sea Eagle, Ringtailed Eagle, Gentil Falcon, Spotted Falcon, Lanner, &c.

5. Mr. Yarrell's "Families" are also omitted, from the Editor's inability to understand them; for instance, the "Family" Certhiadae includes four species,—the Creeper, Wren, Hoopoe and Nuthatch,—the affinity amongst which is not known to the Editor, and the reasons for associating them are not given. Again, the Family Meropidae includes the Roller and Bee-eater, birds that do not seem naturally associated. Although in many instances Mr. Yarrell has not adopted the earliest specific name, it has been thought best to follow him.

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ADDITIONS.

In this list are inserted the names of five birds not described in the body of the work: neither of the descriptions was intentionally omitted, but it may also be said that neither of the birds has the slightest claim to be considered British.

TEMMINCK'S THRUSH, *Ixos obscurus*.—A British-killed specimen is recorded at p. 228 of the 'Zoologist' for 1866. It is supposed to be a native of Africa and the Islands of the Eastern Archipelago. It is described by Temminck, vol. iv. p. 608.

PAINTED BUNTING, *Spiza Ciris*.—A British-killed specimen is recorded by Col. Montagu, at p. 136 of this work. It is a native of North America, and is more abundant in Lower Louisiana, where it is called "le Pape" by the French and "Nonpareil" by the English. It is described in Wilson's 'American Ornithology,' vol. ii. p. 289 of Jameson's Edition.

MINOR GRACKLE, *Gracula religiosa*.—A British-killed specimen is recorded at p. 2391 of the 'Zoologist' for 1849. It is

native of Southern India, found in the forests of Malabar, and is most abundant in the Ghâts. It is described in Jerdon's 'Birds of India,' vol. ii. p. 337.

REDNECKED GOATSUCKER, *Caprimulgus ruficollis*.—A British-killed specimen is recorded at p. 39 of the 'Ibis' for 1862. It is a native of Africa, and has been killed at Algesiras. It is described by Temminck, vol. i. p. 438.

KILLDEER PLOVER, *Ægialites vociferus*. A British-killed specimen is recorded at p. 275 of the 'Ibis' for 1862. It is a native of North America, and is familiar to every inhabitant of the United States. It is described in Wilson's 'American Ornithology,' vol. iii. p. 9, of Jameson's Edition.



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1. In this work the whole of Colonel Montagu's 'Dictionary,' 'Supplement' and 'Appendix' are reprinted in a combined and alphabetical order, the words SUPPLEMENT and APPENDIX being prefixed to whatever is derived from these two sources. Nothing that Montagu has published is omitted or altered.

2. Observation and discovery are incessantly at work: it is no more possible for our knowledge to remain stationary than for this earth to discontinue its rotation; hence the additions which Colonel Montagu found it necessary to make between 1802, the date of the 'Dictionary,' and 1813, the date of the Supplement: these additions, now incorporated, exceed the original work in bulk. In 1833 Mr. Selby published his 'Illustrations of British Ornithology,' and in this work twenty-four species unknown to Colonel Montagu were described. In 1843 Mr. Yarrell published the first edition of his 'History of British Birds;' in 1846 a second edition, and in 1856 a third and final edition: in these three editions that amiable and most painstaking author added, from various sources, no less than fifty-nine species. The 'Zoologist' has added twenty-one species to those mentioned by Montagu, Selby and Yarrell: and here it is but fair to those gentlemen who have made their discoveries known through the medium of that journal, to state that many of Yarrell's species were first published in the 'Zoologist,' and thence transferred to the 'History;' but the credit of such additions is given to the latter work, on account of its systematic character. The descriptions of these added species are extracted from the works of Temminck, Selby and Yarrell, are marked by inverted commas, and accompanied by a reference to the volume and page.

3. Immediately after the name is inserted a reference to a figure of the *bird* and a figure of the *egg*: these references are added both to the original and the new descriptions. For this purpose Yarrell's 'History of British Birds' and Hewitson's 'Oology' have been selected: these works are at present, and for the next half-century will certainly continue, our standard authorities: these interpolations are also enclosed in editorial brackets.

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
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
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